

OFFERING MEMORANDUM



Metinvest B.V.

(incorporated in The Netherlands with limited liability)

**U.S.\$944,515,000 7.750 per cent. Senior Notes due 2023 and
U.S.\$647,661,000 8.500 per cent. Senior Notes due 2026**

Guaranteed on a joint and several basis by the Guarantors named herein

Metinvest B.V. (the "**Issuer**" or the "**Company**") is offering (the "**Offering**") U.S.\$944,515,000 7.750 per cent. Senior Notes due 2023 (the "**2023 Notes**") and U.S.\$647,661,000 8.500 per cent. Senior Notes due 2026 (the "**2026 Notes**" and, together with the 2023 Notes, the "**Notes**"). The issue price of the 2023 Notes and the 2026 Notes is 99.014 per cent. and 98.583 per cent., respectively, of their respective principal amount. References to the "**Conditions**" are to the terms and conditions of each of the 2023 Notes (set out in "*Terms and Conditions of the 2023 Notes*") and the 2026 Notes (set out in "*Terms and Conditions of the 2026 Notes*"), as applicable.

The Notes will be senior unsecured obligations of the Issuer. The Guarantors named herein (together with any Additional Guarantors (as defined below), the "**Guarantors**") will, jointly and severally, unconditionally and irrevocably guarantee (each a "**Guarantee**" and, together with any Additional Guarantees (as defined below), the "**Guarantees**") the due and punctual payment of all amounts becoming due and payable by the Issuer in respect of each series of the Notes, the Trust Deeds and the Agency Agreements (each as defined below). Each Guarantee will be senior unsecured obligations of the relevant Guarantor. The Guarantors will grant the Guarantees pursuant to and on the terms set out in the relevant surety or guarantee agreements to which each of them will be a party in relation to each series of the Notes (together, the "**Surety Agreements**") to be dated on or about the Issue Date (as defined below) between, in each case, the Guarantors and Madison Pacific Trust Limited in its capacity as trustee (the "**Trustee**"). Each suretyship pursuant to the Surety Agreements shall not constitute a guarantee obligation (in Ukrainian: *garantiya*) as that term is interpreted under Ukrainian law. Each series of the Notes will be constituted by a trust deed to be dated on or about the Issue Date between the Issuer, the Guarantors and the Trustee (each a "**Trust Deed**" and together, the "**Trust Deeds**").

The Issuer will, in accordance with Condition 3.2 (*Addition of Guarantors*) and Condition 4.15 (*Additional Guarantors and Limitations on Guarantees*) of the relevant Conditions and upon occurrence of the conditions set forth therein, cause certain other person or persons (the "**Additional Guarantors**") to execute and deliver to the Trustee one or several Surety Agreements pursuant to which such persons will, jointly and severally, unconditionally and irrevocably, guarantee (the "**Additional Guarantees**") the due and punctual payment of all amounts becoming due and payable by the Issuer in respect of each series of the Notes, the Trust Deeds and the Agency Agreements. The Guarantees will be subject to legal limitations under relevant local law. See "*Risk Factors—Risks Relating to the Notes and the Guarantees—The claims of Noteholders under the Guarantees may be limited under Ukrainian laws in the event that one or more of the Guarantors is declared bankrupt*". A Guarantee of any Guarantor will be automatically and unconditionally released under certain circumstances; see Condition 4.15 (*Additional Guarantors and Limitations on Guarantees*).

Interest on the 2023 Notes is payable semi-annually in arrear on 23 February and 23 August in each year, commencing on 23 August 2018 (there will be a first Interest Period (as defined below) of 120 days from and including the Issue Date to but excluding 23 August 2018 and a final Interest Period of 60 days from and including 23 February 2023 to but excluding 23 April 2023). Interest on the 2026 Notes is payable semi-annually in arrear on 23 April and 23 October in each year, commencing on 23 October 2018. Payments on the Notes and under the Guarantees will be made without withholding or deduction for or on account of taxes of The Netherlands and Ukraine to the extent described under Condition 8 (*Taxation*) of the relevant Conditions.

The 2023 Notes mature on 23 April 2023 (the "**2023 Notes Maturity Date**"). The 2026 Notes mature on 23 April 2026 (the "**2026 Notes Maturity Date**" and, together with the 2023 Notes Maturity Date, each a "**Maturity Date**"). Each series of the Notes matures at their principal amount together with accrued interest. At any time prior to the relevant Maturity Date for the relevant series of the Notes (other than where Condition 6.2.2 (*Optional Redemption at Par*) of the relevant Conditions applies), the Issuer may, at its option, on giving not more than 60, nor less than 30 days' notice to the Noteholders (as defined in the relevant Conditions), redeem the Notes of such series in whole or in part, at their principal amount, plus the Applicable Premium (as defined in the relevant Conditions) as of, and accrued and unpaid interest and Additional Amount (as defined in the relevant Conditions), if any, to (but excluding) the date of redemption, as further described in Condition 6.2.1 (*Redemption at Make-Whole*) of the relevant Conditions. At any time on or after the date falling three months prior to the relevant Maturity Date for the relevant series of the Notes, the Issuer may, on giving not more than 60 nor less than 30 days' notice to the Noteholders, redeem the Notes of such series in whole or in part, at the principal amount thereof, plus accrued and unpaid interest and Additional Amounts, if any, on the Notes so redeemed to (but excluding) the date of redemption, as further described in Condition 6.2.2 (*Optional Redemption at Par*) of the relevant Conditions. At any time prior to the date falling three months prior to the relevant Maturity Date for the relevant series of the Notes, the Issuer may also redeem at its option up to 35 per cent. of the originally issued aggregate principal amount of the relevant series of Notes using the net proceeds from certain equity offerings at the redemption price set forth in the relevant Conditions, plus accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of redemption, if at least 65 per cent. of the originally issued aggregate principal amount of the Notes remain outstanding, as further described in Condition 6.2.3 (*Optional redemption from Equity Offering proceeds*) of the relevant Conditions. Upon the occurrence of certain change of control events, each Noteholder shall have the right to require that the Issuer repurchase such Noteholder's Notes at a purchase price in cash equal to 101 per cent. of the outstanding principal amount thereof on the date of purchase plus accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of purchase, as further described in Condition 6.3 (*Redemption at the Option of the Noteholders Upon a Change of Control*) of the relevant Conditions. Additionally, the Issuer may redeem the Notes of each series in whole, but not in part, at a price equal to 100% of the aggregate principal amount thereof plus accrued and unpaid interest and Additional Amounts, if any, upon the occurrence of certain changes in applicable tax law.

This Offering Memorandum comprises listing particulars for the purpose of the application to the Irish Stock Exchange plc trading as Euronext Dublin for the listing of each series of the Notes and does not constitute a prospectus for the purposes of Directive 2003/71/EC, as amended (the "**Prospectus Directive**"). Application has been made for this Offering Memorandum to be approved by the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") as listing particulars (the "**Listing Particulars**"). Application has also been made to Euronext Dublin for each series of the Notes to be admitted to the official list (the "**Official List**") and to trading on the Global Exchange Market of Euronext Dublin (the "**Global Exchange Market**"). The Global Exchange Market is not a regulated market for the purposes of Directive 2014/65/EU (as amended, "**MIFID II**").

Each series of the Notes is expected to be rated "B" by Fitch Ratings Inc. and "B-" by Standard and Poor's Financial Services LLC. A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

PROSPECTIVE INVESTORS SHOULD HAVE REGARD TO THE FACTORS DESCRIBED UNDER THE SECTION TITLED "RISK FACTORS" IN THIS OFFERING MEMORANDUM.

THE NOTES AND THE GUARANTEES (TOGETHER, THE "SECURITIES") HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933 (THE "SECURITIES ACT") AND, SUBJECT TO CERTAIN EXCEPTIONS, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT ("REGULATION S")). THE SECURITIES ARE BEING OFFERED AND SOLD OUTSIDE THE UNITED STATES TO NON-U.S. PERSONS IN RELIANCE

UPON REGULATION S AND WITHIN THE UNITED STATES TO "QUALIFIED INSTITUTIONAL BUYERS" IN RELIANCE ON RULE 144A UNDER THE SECURITIES ACT. FOR A DESCRIPTION OF THESE AND CERTAIN FURTHER RESTRICTIONS ON OFFERS, SALES AND TRANSFERS OF THE NOTES AND DISTRIBUTION OF THIS OFFERING MEMORANDUM, SEE "SUBSCRIPTION AND SALE" AND "TRANSFER RESTRICTIONS".

The Notes will be issued in registered form in the denomination of U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof. Delivery of the Notes will be made on or about 23 April 2018 (the "**Issue Date**"). The Regulation S Notes for each series of Notes will upon issue be represented by a global note certificate (each, a "**Regulation S Global Note Certificate**" and together, the "**Regulation S Global Note Certificates**") in registered form, which will be deposited with a common depository (the "**Common Depository**") for, and registered in the name of a nominee of, Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking S.A. ("**Clearstream, Luxembourg**") on or about the Issue Date for the accounts of their respective accountholders. The Rule 144A Notes for each series of Notes will upon issue be represented by one or more global note certificates (each, a "**Rule 144A Global Note Certificate**" and together, the "**Rule 144A Global Note Certificates**" and, together with the Regulation S Global Note Certificates, the "**Global Note Certificates**"), which will be registered in the name of a nominee of, and deposited with a custodian for, The Depository Trust Company ("**DTC**"). Ownership interests in the Global Note Certificates will be shown on, and transfers thereof will be effected only through, records maintained by DTC, Euroclear and Clearstream, Luxembourg and their respective participants.

Joint Global Coordinators, Joint Bookrunners and Joint Lead Managers

DEUTSCHE BANK

ING

Joint Bookrunners and Joint Lead Managers

NATIXIS

UNICREDIT BANK

The date of this Offering Memorandum is 19 April 2018

*The Issuer and the Guarantors (the "**Responsible Person(s)**") accept responsibility for the information contained or incorporated by reference in this Offering Memorandum. Having taken all reasonable care to ensure that such is the case, the information contained or incorporated by reference in this Offering Memorandum, to the best of the knowledge of each of the Issuer and the Guarantors, is in accordance with the facts and contains no omission likely to affect its import.*

This Offering Memorandum is to be read in conjunction with the document which is incorporated herein by reference (see "Document Incorporated by Reference"). This Offering Memorandum shall be read and construed on the basis that such document is incorporated in and forms part of this Offering Memorandum.

*The Issuer and the Guarantors, having made all reasonable enquiries, confirm that: this Offering Memorandum contains or incorporates by reference all information with respect to the Issuer, the Guarantors, the Issuer and its consolidated subsidiaries taken as a whole ("**Metinvest**" or the "**Group**"), the Notes and the Guarantees, which is material in the context of the issue and Offering of the Notes; the statements contained or incorporated by reference in this Offering Memorandum relating to the Issuer, the Guarantors and Metinvest are true and accurate in all material respects and not misleading; the opinions, intentions and expectations expressed in this Offering Memorandum with regard to the Issuer, the Guarantors and Metinvest are honestly held, have been reached after considering all relevant circumstances and are based on reasonable assumptions; there are no other facts in relation to the Issuer, the Guarantors, Metinvest, the Notes or the Guarantees the omission of which would, in the context of the issue and offering of the Notes, make any statement in, or incorporated by reference into, this Offering Memorandum misleading; this Offering Memorandum does not contain or incorporate by reference any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements herein or incorporated by reference, in light of the circumstances under which they were made, not misleading; and all reasonable enquiries have been made by the Issuer and the Guarantors to ascertain the facts, information and statements contained or incorporated by reference in this Offering Memorandum.*

This Offering Memorandum may only be used for the purposes for which it has been published.

This Offering Memorandum does not constitute an offer of, or an invitation by or on behalf of, the Issuer, the Guarantors or the Joint Lead Managers (as defined in "Subscription and Sale") to subscribe for or purchase any of the Notes. The distribution of this Offering Memorandum and the offering of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Memorandum comes are required by the Issuer, the Guarantors and the Joint Lead Managers to inform themselves about and to observe any such restrictions.

For a description of further restrictions on offers and sales of the Notes and distribution of this Offering Memorandum, see "Subscription and Sale".

No person is authorised to give any information or to make any representation not contained or incorporated by reference in this Offering Memorandum and any information or representation not so contained or incorporated by reference must not be relied upon as having been authorised by or on behalf of the Issuer, the Guarantors or the Joint Lead Managers. Neither the delivery of this Offering Memorandum nor any sale made in connection herewith shall, under any circumstances, create any implication that there has been no change in the affairs of the Issuer, the Guarantors or Metinvest since the date hereof or the date upon which this Offering Memorandum has been most recently amended or supplemented, or that there has been no adverse change in the financial position of the Issuer, the Guarantors or Metinvest since the date hereof or the date upon which this Offering Memorandum has been most recently amended or supplemented, or that the information contained or incorporated by reference in it or any other information supplied in connection with the Notes is correct as of any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing or incorporating by reference the same.

To the fullest extent permitted by law, neither the Joint Lead Managers nor the Trustee accept any responsibility whatsoever for the contents of this Offering Memorandum or for any other statement made or purported to be made by any Joint Lead Manager or the Trustee or on its behalf in connection with the Issuer, the Guarantors, Metinvest or the issue and offering of the Notes. Each Joint Lead Manager and the Trustee accordingly disclaims all and any liability whether arising in tort or contract or otherwise (save as referred to above) which it might otherwise have in respect of this Offering Memorandum or any such statement.

Prospective investors should not construe anything in this Offering Memorandum as legal, business or tax advice. Each prospective investor should consult its own advisers as needed to make its investment decision and determine whether it is legally able to purchase the Notes under applicable laws or regulations.

No representation or warranty, express or implied, is made by the Joint Lead Managers, the Trustee or the Agents as to the accuracy or completeness of the information set forth or incorporated by reference in this Offering Memorandum, and nothing contained or incorporated by reference in this Offering Memorandum is, or shall be relied upon as, a promise or representation, whether as to the past or the future. Neither the Joint Lead Managers nor the Trustee or the Agents assumes any responsibility for the accuracy or completeness of the information set forth or incorporated by reference in this Offering Memorandum. Each person contemplating making an investment in the Notes must make its own investigation and analysis of the creditworthiness of the Issuer and the Guarantors and its own determination of the suitability of any such investment, with particular reference to its own investment objectives and experience, and any other factors which may be relevant to it in connection with such investments.

None of the Issuer, the Guarantors, the Joint Lead Managers, the Trustee or any of their respective representatives is making any representation to any offeree or purchaser of the Notes regarding the legality of an investment by such offeree or purchaser under appropriate legal investment or similar laws. Each investor should consult with its own advisers as to the legal, tax, business, financial and related aspects of a purchase of the Notes.

The Notes have not been recommended by or approved by the U.S. Securities and Exchange Commission or any other federal or State securities commission or regulatory authority in the United States, nor has any such commission or regulatory authority passed upon the accuracy or adequacy of this Offering Memorandum. Any representation to the contrary is a criminal offence in the United States.

The Securities have not been and will not be registered under the Securities Act. Subject to certain exceptions, the Securities may not be offered, sold or delivered within the United States or to U.S. persons. The Regulation S Notes are being offered and sold outside the United States to non-U.S. persons in reliance on Regulation S and the Rule 144A Notes are being offered and sold within the United States to QIBs in reliance on the exemption from registration under the Securities Act provided by Rule 144A. Prospective purchasers are hereby notified that sellers of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. For a description of these and certain further restrictions on offers, sales and transfers of the Notes and distribution of this Offering Memorandum, see "Subscription and Sale" and "Transfer Restrictions".

This Offering Memorandum has been prepared solely for use in connection with the proposed offering of the Notes described in this Offering Memorandum. This Offering Memorandum is personal to each offeree and does not constitute an offer to any other person or to the public generally to subscribe for or otherwise acquire Notes. Distribution of this Offering Memorandum to any person other than the prospective investor and any person retained to advise such prospective investor with respect to its purchase is unauthorised, and any other disclosure of any of its contents, without the prior written consent of the Issuer, the Guarantors and the Joint Lead Managers, is prohibited. Each prospective investor, by accepting delivery of this Offering Memorandum, agrees to the foregoing and to make no photocopies of this Offering Memorandum or any documents referred to in this Offering Memorandum.

*In connection with the issue of any series of the Notes, ING Bank N.V., London Branch (the "**Stabilisation Manager**") (or persons acting on its behalf) may over-allot Notes of such series or effect transactions with a view to supporting the market price of the Notes of such series at a level higher than that which might otherwise prevail. However, stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant series of the Notes is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the closing date of the relevant series of the Notes and 60 days after the date of the allotment of the relevant series of the Notes. Any stabilisation action or over-allotment shall be conducted by the Stabilisation Manager (or any person acting on behalf of the Stabilisation Manager) in accordance with all applicable laws and rules.*

DISTRIBUTION

MIFID II PRODUCT GOVERNANCE/PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET

*– Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of each series of the Notes has led to the conclusion that: (i) the target market for each series of the Notes is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "**MiFID II**"); and (ii) all channels for distribution of each series of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.*

PRIIPs REGULATION/PROHIBITION OF SALES TO EEA RETAIL INVESTORS – *The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "**Insurance Mediation Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently, no key information document required by Regulation (EU) No 1286/2014 (the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.*

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AVAILABLE INFORMATION

The Issuer and the Guarantors have agreed that, for so long as any Securities are "**restricted securities**" as defined in Rule 144(a)(3) under the Securities Act, the Issuer and the Guarantors will, during any period that they are neither subject to section 13 or 15(d) of the U.S. Securities Exchange Act of 1934 (the "**Exchange Act**"), nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder, provide to any holder or beneficial owner of such restricted securities or any prospective investor designated by any such holder or beneficial owner, in each case upon the request of such holder, beneficial owner, prospective investor or the Trustee, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

FORWARD-LOOKING STATEMENTS

This Offering Memorandum contains "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act which relate, without limitation, to any of the Issuer's or the Guarantors' plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditures, financing needs, plans or intentions relating to acquisitions, competitive strengths and weaknesses, plans or goals relating to financial performance and future operations and development, business strategy and the trends in the industry and the political and legal environment in which Metinvest operates and other information that is not historical information. The words "anticipates", "estimates", "expects", "believes", "intends", "plans", "may", "will", "should" and any similar expressions to identify forward-looking statements may be used herein. Prospective investors in the Notes are cautioned that actual results could differ materially from those anticipated in forward-looking statements. Also, where estimates relating to Metinvest's reserves and resources are presented, these estimates may differ from comparable estimates in the technical reports dated 1 January 2010 and 15 March 2016 (the "**Reserves Reports**") prepared by SRK Consulting (UK) Limited, a company registered at 21 Gold Tops, Newport, South Wales, NP20 4PG ("**SRK**") and Cardno, Inc. (formerly Marshall Miller & Associates, Inc.), a company registered at 534 Bluefield Industrial Park, Bluefield, VA 24605, United States ("**Cardno**"), respectively. The forward-looking statements contained in this Offering Memorandum are largely based on Metinvest's expectations, which reflect estimates and assumptions made by Metinvest's management and by SRK and Cardno in the Reserves Reports. These estimates and assumptions reflect Metinvest's best judgement based on currently known market conditions and other factors, some of which are discussed below. Although Metinvest believes such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond Metinvest's control. In addition, assumptions about future events may prove to be inaccurate. Metinvest cautions prospective investors in the Notes that the forward-looking statements contained in this Offering Memorandum are not guarantees of outcomes of future performance and Metinvest cannot assure any prospective investors in the Notes that such statements will be realised or the forward-looking events and circumstances will occur.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, many of which are beyond Metinvest's control, and risks exist that the predictions, forecasts, projections and other forward-looking statements will not be achieved. These risks, uncertainties and other factors include, among other things, those described in the section headed "*Risk Factors*", as well as those included elsewhere in this Offering Memorandum. Prospective investors in the Notes should be aware that a number of important factors could cause actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward-looking statements.

When relying on forward-looking statements, the prospective investors should carefully consider the foregoing factors and other uncertainties and events, especially in light of the political, economic, social and legal environment in which Metinvest operates. Such forward-looking statements speak only as of the date on which they are made. Accordingly, Metinvest does not undertake any obligation to update or revise any of them, whether as a result of new information, future events or otherwise. Metinvest does not make any representation, warranty or prediction that the results anticipated by such forward-looking statements will be achieved and such forward-looking statements represent, in each case, only one of many possible scenarios and should not be viewed as the most likely or standard scenario. These cautionary statements qualify all forward-looking statements attributable to Metinvest or persons acting on its behalf.

ENFORCEABILITY OF JUDGMENTS

The Issuer is incorporated under the laws of The Netherlands. Each of the Guarantors as of the Issue Date is incorporated under the laws of Ukraine and certain of the officers and members of the management board of the Issuer (the "**Management Board**" and each member, a "**Director**") and certain other persons referred to herein are residents of Ukraine. All or a substantial portion of the assets of such persons, the Issuer and the Guarantors are located outside the United Kingdom and the United States. As a result, it may not be possible for investors to effect service of process upon such persons in the United Kingdom or the United States or to enforce against them, the Issuer or the Guarantors judgments obtained in the courts of the United Kingdom and the United States.

The courts of Ukraine will not recognise or enforce any judgment obtained in a court established in a country other than Ukraine unless such enforcement is envisaged by an international treaty to which Ukraine is a party providing for enforcement of such judgments, and then only in accordance with the terms of such treaty. There is no such treaty between the United Kingdom and Ukraine or between the United States and Ukraine providing for enforcement of judgments.

In the absence of an international treaty providing for enforcement of judgments, the courts of Ukraine may only recognise or enforce a foreign court judgment on the basis of the principle of reciprocity. Unless proven otherwise, reciprocity is deemed to exist in relations between Ukraine and the country where the judgment was rendered. Ukrainian law does not provide any clear rules on the application of the principle of reciprocity and there is no official interpretation or court practice in this respect. Accordingly, there can be no assurance that the courts of Ukraine will recognise or enforce a judgment rendered by the courts of the United Kingdom or the United States on the basis of the principle of reciprocity. Furthermore, the courts of Ukraine might refuse to recognise or enforce a foreign court judgment on the basis of the principle of reciprocity on the grounds provided in applicable Ukrainian legislation.

As Ukraine and The Netherlands do not currently have a treaty providing for reciprocal recognition and enforcement of judgments (other than arbitral awards) in civil and commercial matters, a final and conclusive judgment for the payment of money rendered by any courts in Ukraine based on civil liability would not automatically be enforceable in The Netherlands. However, a final judgment obtained in a court of Ukraine and not rendered by default, which is not subject to appeal or other means of contestation and is enforceable in Ukraine with respect to the payment of obligations of a Dutch company expressed to be subject to Ukrainian law, may be upheld and be regarded by a competent Dutch court as conclusive evidence when asked to render a judgment in accordance with that judgment by a court of Ukraine, without substantive re-examination or re-litigation of the merits of the subject matter thereof, if: that judgment has been rendered by a court of competent jurisdiction, in accordance with the principles of due justice; its contents and enforcement do not conflict with Dutch public policy (*openbare orde*); it has not been rendered in proceedings of a penal or revenue or other public law nature; it was not rendered by default; it is not subject to appeal or other means of contestation; and it is enforceable in Ukraine with respect to the payment of obligations expressed to be subject to Ukrainian law. The United States and The Netherlands do not currently have a treaty providing for reciprocal recognition and enforcement of judgments (other than arbitral awards) and accordingly the foregoing also applies to judgments obtained in United States courts.

Ukraine is a party to the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "**New York Convention**"). Consequently, a foreign arbitral award obtained in a state which is party to the New York Convention should be recognised and enforced by a Ukrainian court (under the terms of the New York Convention), subject to compliance with applicable procedural requirements.

The Notes, the Trust Deeds, the Agency Agreements (as defined below), the Guarantees and the Subscription Agreement are governed by English law. Disputes arising under the Notes, the Trust Deeds, the Agency Agreements, the Guarantees and the Subscription Agreement are subject to settlement by, among others, arbitration

in accordance with the London Court of International Arbitration ("**LCIA**") Rules subject to a right in favour of the Trustee, the Agents or the Joint Lead Managers, as applicable, to refer any dispute to a court of law in England or such other court of competent jurisdiction (if any). Since the United Kingdom and the Netherlands are a party to the New York Convention, the arbitral awards obtained in the United Kingdom may be enforced in Ukraine and/or The Netherlands under provisions of the New York Convention and subject to compliance with applicable procedural requirements.

PRESENTATION OF CERTAIN INFORMATION

Certain Defined Terms

In this Offering Memorandum:

"Amended 2021 Notes" means the Existing 2021 Notes constituted by an amended and restated trust deed dated the Issue Date.

"Avdiivka Coke" means Private Joint Stock Company "Avdeevskiy Coke-Processing Works" (Ukraine), otherwise known as Private Joint Stock Company "Avdiivka Coke Plant" and PrJSC "Avdiivka Coke".

"Azovstal" means Private Joint Stock Company "Azovstal Iron & Steel Works" (Ukraine), otherwise known as Azovstal Iron and Steel Works and PrJSC "Azovstal Iron & Steel Works".

"Belgorodmetалlosnab" means Closed Joint-Stock Company "Belgorodmetалlosnab" (Russian Federation), otherwise known as Locked Joint Stock Company "Belgorodmetалlosnab".

"Central GOK" means Private Joint Stock Company "Central Mining-Dressing Integrated Works" (Ukraine), otherwise known as Centralny GOK Private Joint Stock Company, Private Joint Stock Company "Central Iron Ore Enrichment Works", and PrJSC "Central GOK".

"Donetsk Coke" means Private Joint Stock Company "Donetsk Coke Plant" (Ukraine), otherwise known as PrJSC "Doncoke" and Donetskkoks.

"Existing 2021 Notes" means the U.S.\$1,197,232,103 fixed rate senior secured notes due 2021 issued by the Issuer on 22 March 2017.

"Existing PXF Facility" means the syndicated pre-export finance facility provided under a pre-export finance facility agreement between, among others, the Issuer and the PXF Agent, made pursuant to an amendment and restatement agreement dated 9 February 2017. See *"Description of Indebtedness—The PXF Facility Agreement"*.

"Ferriera Valsider" means Ferriera Valsider S.p.A. (Italy).

"Group" or **"Metinvest"** means Metinvest B.V. together with its subsidiaries taken as a whole.

"Guarantors" means Avdiivka Coke, Azovstal, Central GOK, Ilyich Steel, Ingulets GOK and Northern GOK.

"Ingulets GOK" means Private Joint Stock Company Ingulets'kyi Ore Mining and Processing Enterprise (Ukraine), otherwise known as Private Joint Stock Company "Ingulets Iron Ore Enrichment Works" and PrJSC "Ingulets GOK".

"Ilyich Steel" means Private Joint Stock Company "Ilyich Iron and Steel Works of Mariupol" (Ukraine), otherwise known as Private Joint Stock Company "Ilyich Iron and Works of Mariupol", PrJSC "Ilyich Iron and Steel Works of Mariupol", and MMK Ilycha.

"Inkor Chemicals" means Limited Liability Company "Scientific & Manufacturing Association Inkor & Co" (Ukraine), otherwise known as Inkor & Co Chemical Company.

"Issuer" means Metinvest B.V.

"Khartsyzsk Pipe" means Private Joint Stock Company Khartsyzsk Tube Works (Ukraine), otherwise known as Private Joint Stock Company "Khartsyzsk Pipe Plant" and PrJSC "Khartsyzsk Pipe".

"Kindrativka Refractory Plant" means Public Joint Stock Company "Kindrativka Refractory Plant" (Ukraine), otherwise known as "Kindrativka Refractory Plant", PJSC.

"Komsomolske Flux" means Private Joint Stock Company "Komsomolske Flux Plant" (Ukraine), otherwise known as PrJSC "Komsomolske Flux".

"Krasnodon Coal" means Private Joint Stock Company Krasnodonvugillya (Ukraine), otherwise known as Private Joint Stock Company "Krasnodon Coal Company" and PrJSC "Krasnodon Coal Company".

"Makiivka Steel" means Private Joint Stock Company "Makiivka Iron and Steel Works" (Ukraine), otherwise known as Makiivka Iron and Steel Works and PrJSC "Makiivka Steel".

"Mariupol Machining and Repair" means Limited Liability Company "Metinvest Mariupol Machining and Repair Plant".

"Metalen" means Ukraine-Switzerland Joint Venture Limited Liability Company Metalen.

"Metinvest Distribution" means Limited Liability Company "Metinvest Distributsiya" (Belarus), otherwise known as Metinvest Distribution.

"Metinvest Eurasia" means Limited Liability Company "Metinvest" Eurasia (Russian Federation).

"Metinvest Holding LLC" means Limited Liability Company "Metinvest Holding" (Ukraine).

"Metinvest International" means Metinvest International S.A. (Switzerland).

"Metinvest-Resource" means Limited Liability Company "Metinvest-Resource" (Ukraine).

"Metinvest Promservice" means Limited Liability Company "Metinvest Promservice".

"Metinvest-Shipping" means Limited Liability Company "Metinvest-Shipping" (Ukraine), otherwise known as "Metinvest-Shipping LLC".

"Metinvest-SMC" means Limited Liability Company "Metinvest-SMC" (Ukraine).

"Metinvest Trametal" means Metinvest Trametal S.P.A. (Italy).

"Metinvest Ukraine" means Limited Liability Company "Metinvest Ukraine" (Ukraine).

"Northern GOK" means Private Joint Stock Company Severniy GOK (Ukraine), otherwise known as Private Joint Stock Company "Northern Iron Ore Enrichment Works", PrJSC "Northern GOK" and Joint Stock Company "Sev GOK".

"Notes Documents" means the Trust Deeds, the Agency Agreements and the Surety Agreements.

"PPE" has the meaning set out in the Conditions.

"Promet Steel" means Joint Stock Company "Promet Steel" (Bulgaria), otherwise known as Promet Steel of Metinvest.

"PXF Agent" means Deutsche Bank AG, Amsterdam Branch as agent under the PXF Facility Agreement.

"PXF Facility Agreement" means the PXF facility agreement amended and restated pursuant to an amendment and restatement agreement dated on or around 19 March 2018 and effective as of the Issue Date, between, among others, the Issuer, Deutsche Bank AG, Amsterdam Branch, ING Bank N.V., Natixis and Unicredit S.p.A. as the coordinating mandated lead arrangers and the PXF Agent, as amended, varied or supplemented from time to time. See *"Description of Indebtedness—The PXF Facility Agreement"*.

"SCM" means Private Joint Stock Company "System Capital Management" (Ukraine).

"SCM Cyprus" means SCM (System Capital Management) Limited (Cyprus).

"SCM Group" means SCM, SCM Cyprus, SCM Holdings and their consolidated subsidiaries at the relevant time.

"SCM Holdings" means SCM Holdings Limited (Cyprus).

"Seized Assets" means Yenakiieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke.

"SMART Group" means the group of companies controlled directly or indirectly by Mr. Vadym Novynskyi as of the date hereof.

"Southern GOK" means Public Joint Stock Company "Yuzhnyi GOK" (Ukraine), otherwise known as PJSC "Yuzhnyi GOK".

"Spartan UK" means Spartan UK Limited (United Kingdom).

"Total Production Assets" has the meaning set out in the Conditions.

"United Coal" means United Coal Company LLC (Virginia, United States).

"Yenakiieve Coke" means Private Joint Stock Company Enakievskiy Koksohimprom (Ukraine), otherwise known as Yenakiieve Coke Plant and Private Joint Stock Company "Yenakiieve Coke and Chemical Works".

"Yenakiieve Iron and Steel Works" or **"Yenakiieve I&SW"** means Private Joint Stock Company Enakievo Metallurgical Works (Ukraine), otherwise known as Private Joint Stock Company "Yenakiieve Iron and Steel Works" and PrJSC "Yenakiieve Steel".

"Yenakiieve Steel" means Yenakiieve Iron and Steel Works, Makiivka Steel and Metalen, taken together.

"Zaporizhia Coke" means Private Joint Stock Company "Zaporizhia Coke Plant" (Ukraine), otherwise known as PrJSC "Zaporizhcoke" and Zaporizhkoks.

"Zaporizhia Refractories" means Private Joint Stock Company "Zaporiozhvognetryv" (Ukraine).

"Zaporizhstal" means Public Joint Stock Company "Integrated Iron and Steel Works Zaporizhstal", otherwise known as PJSC "Zaporizhstal" and Zaporizhstal Iron and Steel Works.

All references to **"U.S."** and **"United States"** are to the United States of America, all references to the **"UK"** and **"United Kingdom"** are to the United Kingdom of Great Britain and Northern Ireland and all references to the **"EU"** are to the European Union and its member states as of the date of this Offering Memorandum. All references to the **"CIS"** are to the following countries that formerly comprised part of the Union of Soviet Socialist Republics

and that are now members of the Commonwealth of Independent States: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Financial Information

The financial information set forth herein has, unless otherwise indicated, been derived from:

- (i) the Issuer's (and its consolidated subsidiaries') audited abbreviated consolidated balance sheet and abbreviated consolidated income statement, abbreviated statement of comprehensive income, abbreviated statement of cash flows and abbreviated statement of changes in equity as at and for the year ended 31 December 2015 (the "**2015 Financial Statements**");
- (ii) the Issuer's (and its consolidated subsidiaries') audited consolidated summary balance sheet and consolidated summary income statement, consolidated summary statement of comprehensive income, consolidated summary statement of cash flows and consolidated summary statement of changes in equity as at and for the year ended 31 December 2016 (the "**2016 Financial Statements**"); and
- (iii) the Issuer's (and its consolidated subsidiaries') audited consolidated summary balance sheet and consolidated summary income statement, consolidated summary statement of comprehensive income, consolidated summary statement of cash flows and consolidated summary statement of changes in equity as at and for the year ended 31 December 2017 (the "**2017 Financial Statements**").

The 2015 Financial Statements, the 2016 Financial Statements and the 2017 Financial Statements (together, the "**Financial Statements**") presented in this Offering Memorandum have been prepared in accordance with IFRS as adopted by the European Union and contain information on consolidated subsidiaries of the Group, including all of the Guarantors.

The Financial Statements have been prepared by the Issuer. The Financial Statements were audited by independent auditors, PricewaterhouseCoopers Accountants N.V., located at Thomas R. Malthusstraat 5, 1066 JR Amsterdam, P.O. Box 90357, The Netherlands. The partners of PricewaterhouseCoopers Accountants N.V. who signed the auditors' reports are members of The Netherlands Institute of Chartered Accountants (Nederlandse Beroepsorganisatie van Accountants). In their respective audit reports, PricewaterhouseCoopers Accountants N.V. have expressed an unqualified opinion on the Financial Statements. The audit reports on the Financial Statements for the year ended 31 December 2016 contain an emphasis of matter relating to economic and political uncertainties in Ukraine. The audit reports on the Financial Statements for the year ended 31 December 2015 contain an emphasis of matter relating to there being a material uncertainty with respect to going concern and an emphasis of matter relating to economic and political uncertainties in Ukraine.

This document includes Adjusted EBITDA, a non-IFRS measure calculated as profit before income tax, before finance income and costs, depreciation and amortisation, impairment and devaluation of property, plant and equipment, and other intangible assets, foreign exchange gains and losses, the share of result of associates and other expenses that management believes are non-core, plus the share of EBITDA of joint ventures. Management uses Adjusted EBITDA, among other things, to assess Metinvest's operating performance and make decisions about allocating resources. Adjusted EBITDA is a supplemental measure of Metinvest's performance and is not in accordance with IFRS and may not be comparable to similarly titled measures of other companies. This document also refers to Adjusted EBITDA margin, a non-IFRS measure calculated as Adjusted EBITDA divided by revenue. Adjusted EBITDA should not be considered as an alternative to operating profit, net profit or any other performance measures derived in accordance with IFRS or as an alternative to cash flows from operating activities as a measure of Metinvest's liquidity. For a reconciliation of Adjusted EBITDA to profit before income tax see "*Selected Consolidated Financial Information*".

Market, Economic and Industry Data

Market, economic and industry data used throughout this Offering Memorandum has been derived from various industry and other independent sources. The accuracy and completeness of such information is not guaranteed.

Information contained in this Offering Memorandum relating to the industries in which Metinvest operates in Ukraine and to its competitors (which may include estimates and approximations) was derived from publicly available sources, including official data published by certain government and international agencies, industry publications and press releases, including the State Statistics Service of Ukraine ("**SSSU**"), the National Bank of Ukraine (the "**NBU**"), the World Steel Association (the "**WSA**"), Metal Expert, Energo Business, Bloomberg, Ukrainian Industry Expertise, BP Statistical Review of World Energy, June 2016 ("**BP Energy Review**") and the United States Geological Survey Mineral Summaries 2014 ("**USGS**"). The Issuer and each Guarantor jointly and severally confirm that such information (included in "*Overview of Metinvest*", "*Risk Factors*", "*Management's Discussion and Analysis of Financial Condition and Results of Operations*", "*Industry*" and "*Business Description*") has been accurately reproduced from its sources and, as far as the Issuer and each Guarantor is aware and is able to ascertain from information published by that third party, no facts have been omitted that would render the reproduced information inaccurate or misleading. However, the Issuer and each Guarantor have jointly and severally relied on the accuracy of this information without carrying out an independent verification thereof.

Certain information in this Offering Memorandum in relation to Ukraine has been extracted from documents and other publications released by, and is presented on the authority of, various officials and other public and private sources, including participants in the capital markets and financial sector of Ukraine. There is not necessarily any uniformity of views among such sources as to the information provided therein. Accordingly, each of the Issuer and the Guarantors jointly and severally accepts responsibility for accurately reproducing such extracts as they appear in this Offering Memorandum, but accepts no further or other responsibility in respect of such information.

Operating Data

All data relating to Metinvest's production and operations, such as volumes of production, production capacity and certain sales information presented by sector, geographical region and product, cited in "*Business Description*" and elsewhere in this Offering Memorandum, were derived from management accounts and information, which were not reviewed or audited by PricewaterhouseCoopers Accountants N.V., the independent auditors of Metinvest.

Currency

In this Offering Memorandum, all references to "**Hryvnia**" and "**UAH**" are to the lawful currency for the time being of Ukraine, all references to "**dollars**", "**U.S. dollars**" and "**U.S.\$**" are to the lawful currency for the time being of the United States of America and all references to "**Euro**" or "**€**" are to the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty establishing the European Community, as amended.

Translations of amounts from Hryvnia to dollars are solely for the convenience of the reader and are made at exchange rates based on those established by the NBU and effective as at the dates or for the periods of the respective financial information presented elsewhere in this Offering Memorandum in respect of both balance sheet and income statement items. No representation is made that the Hryvnia or dollar amounts referred to herein could have been converted into dollars or Hryvnia, as the case may be, at any particular exchange rate or at all. See "*Exchange Rates*".

Rounding

Individual figures (including percentages) appearing in this Offering Memorandum have been rounded according to standard business practice. Figures rounded in this manner may not necessarily add up to the totals contained in

a given table. However, actual values, and not the figures rounded according to standard business practice, were used in calculating the percentages indicated in the text. Therefore, in certain cases, the percentage figures appearing in the text may differ from the percentages that would be obtained based on values which have been rounded.

Iron Ore Reserves and Coal Reserves

All data relating to Metinvest's iron ore reserves and resources in Ukraine and coal reserves and resources located in the United States presented in "*Business Description—Reserves*" are calculated by reference to estimates provided by SRK and Cardno in their respective Reserves Reports, which were prepared in accordance with terms and definitions given in the 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "**JORC Code**") as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("**JORC**") and the United States Securities and Exchange Commission (the "**SEC**") Industry Guide 7—Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations ("**Industry Guide 7**") reporting standards, respectively. For additional information on JORC and SEC reporting standards, see Appendix II.

Iron ore reserves and resources in Ukraine and coal reserves and resources located in the United States are quoted as at 1 January 2010 and 1 July 2015, respectively. The Reserves Reports prepared by SRK and Cardno were not prepared for the purposes of the Offering Memorandum and have not been included herein. Where indicated, these figures should be read together with production data for the period since 1 January 2010 and 1 July 2015, as the case may be, to illustrate estimated reserves and resources as at 31 December 2017. Investors should also consider the impact changes in prices for iron ore and coal since the date of the relevant Reserves Report will have on reported reserves. Prospective investors are cautioned, however, that such estimates do not constitute a reserves and resources report prepared in accordance with JORC standards or SEC standards, respectively.

EXCHANGE RATES

The following tables set forth, for the periods indicated, the average and period-end official rates set by the NBU, in each case for the purchase of Hryvnia, expressed in Hryvnia per U.S. dollar.

Year Ended 31 December	High	Low	Average⁽¹⁾	Period End
			<i>(Hryvnia per U.S. dollar)</i>	
2012.....	7.99	7.98	7.99	7.99
2013.....	7.99	7.99	7.99	7.99
2014.....	15.85	7.99	11.87	15.77
2015.....	30.01	15.75	21.81	24.00
2016.....	27.25	23.27	25.59	27.19
2017.....	28.07	25.44	26.60	28.07

Notes:

(1) Calculated based on the exchange rates for each banking day of the period and the number of banking days in the period.

2018	High	Low	Average⁽¹⁾	Period End
			<i>(Hryvnia per U.S. dollar)</i>	
January	28.88	27.89	28.43	28.01
February	27.88	26.65	27.1	26.94
March	26.81	25.92	26.34	26.54
April (through 18 April 2018)	26.33	25.93	26.11	26.08

Notes:

(1) Calculated based on the exchange rates for each banking day of the period and the number of banking days in the period.

Metinvest's reporting currency is U.S. dollars. Certain financial data that has not been derived from the Financial Statements has been translated from Hryvnia into U.S. dollars at the rate of UAH28.07 to U.S.\$1.00 on 31 December 2017, UAH27.19 to U.S.\$1.00 on 31 December 2016 and UAH24.00 to U.S.\$1.00 on 31 December 2015, based on the official rate reported by the NBU on those dates (after rounding adjustments), for the reader's convenience. No representation is made that the Hryvnia or dollar amounts referred to herein could have been converted into dollars or Hryvnia, as the case may be, at any particular exchange rate or at all. The NBU's Hryvnia/dollar exchange rate as reported on 18 April 2018 (after rounding adjustments) was UAH26.08 to U.S.\$1.00.

OVERVIEW OF METINVEST

Metinvest is the largest vertically integrated mining and steel business in Ukraine, operating assets in each stage of the production chain from iron ore mining and processing, coking coal mining and coke production, through to semi-finished and finished steel production, pipe rolling and coil production as well as the production of other value-added products. In the year ended 31 December 2017, Metinvest produced 27.5 million tonnes of iron ore concentrate, 7.6 million tonnes of crude steel and 2.6 million tonnes of coking coal compared to the year ended 31 December 2016, where it produced 29.6 million tonnes of iron ore concentrate, 8.3 million tonnes of crude steel and 3.0 million tonnes of coking coal.

For the year ended 31 December 2017, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$8,931 million and U.S.\$2,044 million, respectively. By comparison, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$6,223 million and U.S.\$1,153 million, respectively, for the year ended 31 December 2016. For the year ended 31 December 2015, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$6,832 million and U.S.\$525 million, respectively.

Based on 2017 production, Metinvest was one of the world's fifteen largest iron ore producers (excluding Chinese and Indian companies), based on management estimates and published operating results of the largest iron ore producing companies, and the largest producer of iron ore in Ukraine, according to Metal Expert. In addition, according to the World Steel Association, Metinvest was the 37th largest crude steel producer in the world in 2016. As at 31 December 2017, Metinvest ranked as the largest producer of crude steel in Ukraine and one of the largest crude steel producers in the CIS, according to Metal Expert.

For the year ended 31 December 2017, the metallurgical segment accounted for 37 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 63 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures). For the year ended 31 December 2016, the metallurgical segment accounted for 57 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 43 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures). For the year ended 31 December 2015, the metallurgical segment accounted for 15 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 85 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures).

- **Metallurgical segment.** In the year ended 31 December 2017, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$7,411 million and U.S.\$808 million, respectively, compared to U.S.\$5,027 million and U.S.\$737 million, respectively, in the year ended 31 December 2016. In the year ended 31 December 2015, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$5,407 million and U.S.\$486 million, respectively. The metallurgical segment's principal products include: finished steel products, such as flat and long steel products and pipes; semi-finished steel products, such as slabs and billets; pig iron; and coke. In the years ended 31 December 2017, 2016 and 2015, finished steel products comprised approximately 71 per cent., 78 per cent. and 74 per cent., respectively, of Metinvest's total steel sales volumes. Metinvest has nine industrial assets in the metallurgical segment:
 - Ilyich Steel, the fourth-largest Ukrainian integrated steel producer, according to Metal Expert;

- Azovstal, the third largest Ukrainian steel producer, according to Metal Expert;
 - Ferriera Valsider, a producer of plates and coils located in Italy;
 - Promet Steel, a producer of shapes and bars located in Bulgaria;
 - Metinvest Trameal and Spartan UK, producers of plates located in Italy and in the United Kingdom, respectively;
 - Avdiivka Coke and Zaporizhia Coke, producers of coke and chemicals located in Ukraine; and
 - Inkor Chemicals, a producer of refined naphthalene and phenol and cresol products located in Ukraine.
- **Mining segment.** In the year ended 31 December 2017, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,520 million and U.S.\$1,380 million, respectively. In the year ended 31 December 2016, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,196 million and U.S.\$548 million, respectively. In the year ended 31 December 2015, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,425 million and U.S.\$88 million, respectively. Metinvest's key products in this segment are merchant iron ore concentrate and pellets and coking coal concentrate. Metinvest has four industrial assets in the mining segment, including three major iron ore enrichment works located in the Kryvyi Rih region of Ukraine:
 - Northern GOK and Ingulets GOK, the second and the third largest iron ore mining companies in Ukraine by production volume, according to Metal Expert;
 - Central GOK, the sixth largest iron ore mining company in Ukraine by production volume, according to Metal Expert; and
 - United Coal, a producer of coking coal based in the United States.

Metinvest's trading and logistical assets serve both segments. Metinvest sells steel, iron ore, coke and coal products to non-CIS international markets in Europe, the Middle East and North Africa and Southeast Asia through Metinvest International; to the Ukrainian market through Metinvest Ukraine and Metinvest-SMC; and to CIS markets (primarily the Russian Federation and Belarus) through Metinvest Ukraine, Metinvest Eurasia and Metinvest Distribution. In addition, Metinvest-Shipping, a company based in Mariupol, provides transportation and forwarding services for Metinvest's cargoes by railway and for their transshipment via sea ports, while Belgorodmetalloznab provides warehouse and transshipment services for Metinvest in the Russian Federation.

Seized Assets in eastern Ukraine

In February 2017, the self-proclaimed authorities on the temporarily non-controlled territory in Ukraine announced their intention to seize businesses located on the temporarily non-controlled territory and to require them to comply with local fiscal, regulatory and other requirements, which contradict Ukrainian legislation. On 15 March 2017, management determined that it had lost control over the operations of entities located on the temporarily non-controlled territory, including Yenakiieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke (collectively, the "**Seized Assets**"). Since then, Metinvest stopped economic activity in this territory, including mining of raw materials and production of finished steel products as well as supplies of raw materials and finished steel products from and into the conflict area. Most employees of the Seized Assets have been dismissed while a small number have been relocated to other Metinvest operations.

In the year ended 31 December 2016, the Seized Assets generated revenue of U.S.\$702 million and gross profit of U.S.\$41 million. From 1 January to 15 March 2017, when they were seized, the Seized Assets generated revenue of U.S.\$137 million and gross profit of U.S.\$15 million. As of 15 March 2017, the Seized Assets' aggregate consolidated tangible assets located on the temporarily non-controlled territory amounted to U.S.\$515 million (5 per cent. of Metinvest's total consolidated assets). Due to the loss of control over the assets of the Seized Assets located on the temporarily non-controlled territory, management performed a revaluation of property, plant and equipment and determined that the value of these assets is zero. Also, other assets (inventories and certain intangible assets) of the Seized Assets were fully impaired. This resulted in the recognition of property, plant and equipment impairment amounting to U.S.\$433 million and impairment of inventory and replaceable equipment amounting to U.S.\$82 million. Metinvest's cost of sales also increased as it had to obtain coking coal from other sources, which may have been on less favourable terms than what they could obtain from the Seized Assets. Metinvest's ability to yield the desired product mix was affected due to the loss of long products produced by the Seized Assets. In the short term, management does not believe the Group is able to regain control of the Seized Assets. However, Metinvest is still the legal owner of the Seized Assets. The Seized Assets have been designated as Unrestricted Subsidiaries under the Conditions as of the Issue Date and, as such, will not be subject to restrictions under the Conditions; see *"Risk Factors—Risks Relating to the Notes and the Guarantees—The Seized Assets are not subject to restrictive covenants in the Notes"*.

If management adopts the position that control over the Seized Assets was lost as at 15 March 2017, the net assets of the Seized Assets in the amount of U.S.\$13 million (before the impairment disclosed in note 7 of the 2017 Financial Statements) would be deconsolidated and the fair value of accounts payable due to the Seized Assets and accounts receivable due from the Seized Assets would be recognised. Additionally, a reclassification of U.S.\$601 million of accumulated net negative currency translation reserve ("**CTR**") from "other comprehensive income" to "profit/(loss)", as described in note 4 of the 2017 Financial Statements, would be required. If the Seized Assets are disposed of or abandoned in the future, the full amount of CTR as of that date would need to be reclassified from "other comprehensive income" to "profit/(loss)". However, for purposes of the Conditions, this reclassification of U.S.\$601 million would not reduce Consolidated Net Income (as defined in the Conditions).

The Seized Assets collectively have certain outstanding trade debts owed to suppliers. To maintain these supplier relationships, Metinvest intends to discharge these trade debts on behalf of the Seized Assets, which will result in receivables owing to it by the Seized Assets. The Seized Assets also owe certain receivables to Metinvest and Metinvest owes certain payables to the Seized Assets, which Metinvest intends to net off, resulting in a net receivable owing to Metinvest. In addition, Krasnodon Coal owes certain amounts to Metinvest Holding LLC under a bond which is currently in default. Metinvest may write off all or part of these existing and future receivables and other obligations owed by the Seized Assets. These existing and future receivables and other obligations owed by the Seized Assets to Metinvest and their write off are permitted under the Conditions.

The above events have also affected other subsidiaries, whose operations are physically located on the controlled territory in Ukraine. As such, Metinvest charged impairment provision on tangible assets located on the temporarily non-controlled territory, but belonging to the subsidiaries whose operations are physically located on the controlled territory, as a result of the inability to access such assets. This resulted in recognition of an additional property, plant and equipment impairment of U.S.\$19 million and impairment of inventory and replaceable equipment of U.S.\$10 million. Metinvest continues to conduct its operations through these affected subsidiaries.

For further information, please see note 4 and note 7 of the 2017 Financial Statements.

Competitive Strengths

- **Vertically integrated business.** Vertical integration is a key element of Metinvest's strategy to secure access to raw materials for steel production (including coal to meet its energy needs) and to reduce overall unit production costs. Through vertical integration, Metinvest utilises significant internal sources of raw materials to reduce its exposure to fluctuating raw material prices. As at 31 December 2017, Metinvest

had approximately 1,254 million tonnes of proven and probable iron ore reserves (based on management estimates) and approximately 126 million tonnes of proven and probable coal reserves at United Coal (based on management estimates). As at 31 December 2017, Metinvest was 282 per cent. self-sufficient in iron ore and 34 per cent. self-sufficient in coking coal, calculated as actual coal concentrate production divided by actual consumption of coal concentrate, including coal consumption for PCI, to produce coke required for production of hot metal in the metallurgical segment. In March 2017, Metinvest lost control of Krasnodon Coal, one of its key coking coal assets, which resulted in a deterioration of its coking coal self-sufficiency. Nevertheless, Metinvest has been actively diversifying its coking coal shipments' geographical regions, including supplies of premium quality products from Australia and Canada, in addition to strengthening its cooperation with Ukrainian producers. Moreover, the majority of coal produced from United Coal was redirected to Metinvest's production in order to meet the Group's raw materials needs. (See "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*" and "*Risk Factors—Risks Relating to Metinvest—Metinvest is dependent on third party suppliers for a portion of its raw materials, and the externally purchased raw materials Metinvest uses to produce steel, such as coking and PCI coal, are subject to price fluctuations that could increase Metinvest's costs of production*".) Metinvest sells excess iron ore and coke products (not needed in its own production) externally, diversifying its revenue base. Metinvest believes that its ability to source raw materials internally or from affiliates provides it with greater stability of operations, better quality control and improved flexibility in planning its steel production. In addition, management believes that vertical integration enables Metinvest to achieve economies of scale and reduce per unit costs.

- **Strong market position and increasing capacity.** Based on 2017 production, Metinvest was one of the world's fifteen largest iron ore producers (excluding Chinese and Indian companies), based on management estimates and published operating results of the largest iron ore-producing companies. In addition, according to the World Steel Association, in 2016, Metinvest was the 37th largest crude steel producer in the world. Metinvest is the largest producer of iron ore and crude steel in Ukraine, according to Metal Expert. Metinvest produced 44.5 per cent. of the aggregate volume of iron ore concentrate (total concentrate, including concentrate used for further reprocessing into pellets) in Ukraine in the year ended 31 December 2017, according to Metal Expert. In the year ended 31 December 2017, Metinvest's share in Ukraine's metallurgical coke production was 54.0 per cent., according to UkrKoks. Similarly, in the year ended 31 December 2017, Metinvest's market share was 35.8 per cent. of the total volume of Ukraine's crude steel, according to Ukrmetallurgprom and based on management estimates. Management believes that Metinvest's strong market position, combined with strong historical cash flow generation, will enable it to capitalise on the expected mid- to long-term growth of the export and Ukrainian markets for its products. As a result of active mergers and acquisitions and after the acquisition of Ilyich Steel, Metinvest's annual production capacity has reached 9.6 million tonnes in crude steel, 8.0 million tonnes in hot rolled flat products and 2.6 million tonnes in hot rolled long products (excluding the assets in the temporarily non-controlled territory of Ukraine but including the assets in Italy, Bulgaria and the United Kingdom).
- **Low cost producer.** Management believes that Ukraine is one of the lowest-cost regions for steel production in the world, enabling Metinvest to benefit from lower production costs compared to some of its competitors elsewhere in the world. In particular, Metinvest benefits from:
 - **Secure access to raw materials.** As at 31 December 2017, Metinvest was more than fully self-sufficient in iron ore for its steel producing assets, based on production capacity. Currently, Metinvest is cooperating with the state-owned Ukrainian railway operator, Ukrzaliznytsia, to eliminate bottlenecks at some of the major railway routes to Mariupol, including Kamysh Zarya–Volnovakha, enabling Metinvest to use more efficiently the production potential of its

steelmaking assets located in Mariupol. See also "*Risk Factors—Risks Relating to Metinvest—Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so*".

- ***Low transportation and logistics costs with prime location of assets.*** Metinvest's production facilities benefit from access to relatively low-cost sea and rail transport. Azovstal and Ilyich Steel are located in the port city of Mariupol on the Sea of Azov. Azovstal operates its own port facilities. Because of increased shortage of rolling stock in Ukraine, Metinvest plans to minimise risks related to logistical operations. In particular, Metinvest has extended its cooperation agreement with Lemtrans, a major private Ukrainian railway operator and a related party to Metinvest, until the end of 2020. According to the terms of the agreement, Lemtrans will cover approximately 50 per cent. of Metinvest's demand in open-top cars by providing its own rolling stock. Metinvest's favourable geographic location also allows for the relatively inexpensive shipment of its products to Ukrainian, European, the CIS, Middle Eastern and North African markets. Since March 2017, Metinvest has broken off its logistics links with the assets which are located in the conflict area. See also "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*" and "*Risk Factors—Risks Relating to Metinvest—Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so*".
- ***Low labour costs.*** Ukraine currently has relatively low labour costs, including lower pension obligations (which are paid by employers in the form of regular payroll-related contributions to the state pension fund), particularly when expressed in U.S.\$ and Euro as compared to some other steel producing countries and regions such as the United States, Western Europe, Japan and South Korea. In addition, Metinvest is continuously working to optimise its headcount.
- ***Capital expenditures to maintain cost competitiveness.*** Metinvest is investing in modern technology in order to reduce production costs and maintain its cost competitiveness. Metinvest currently employs pulverised coal injection (PCI) technology in the blast furnace shop of Azovstal and also began building a new continuous casting machine (CCM-4) at Ilyich Steel. Metinvest plans to modernise a sinter plant at Ilyich Steel and a number of blast furnaces at Ilyich Steel and Azovstal. These projects aim to increase operating efficiency and cut production costs in addition to reducing emissions harmful to the environment. Metinvest continues to invest in upgrading its equipment and employing new technologies in the mining segment in order to improve the Group's operational efficiency and financial performance. Among others, Metinvest invested in a crushing and conveying system at Northern GOK and Ingulets GOK, in addition to the major overhaul of the pelletising machine, Lurgi 552A, at Northern GOK. Moreover, in October 2017, Central GOK finished the reconstruction of its pelletising plant, which permits the production of pellets with homogenous size and of higher endurance, enabling Metinvest to charge higher price premiums.
- ***Growing geographical diversification.*** Management believes that Metinvest is uniquely geographically positioned to benefit from access to the mature markets of Western Europe and North America, following its acquisitions in those regions in the last eight years. Management also believes this places Metinvest in a strong position to access the growing markets of Eastern Europe, the Middle East and North Africa. Metinvest also aims to enter a new sub-segment, DRI grade pellets. The first commercial production is expected to commence in 2019-2020 and would expand and diversify Metinvest's geographical sales by increasing shipments to the Middle East and Africa, and North America.

- **Access to Ukrainian and export markets with the potential for high growth in the long term and broad product range.** Management believes that Metinvest has a leading market position in a broad range of products and expects reasonable long-term growth in export and Ukrainian markets, including sales of iron ore for the global and Ukrainian steel-producing sectors. Ukraine's manufacturing, agriculture and construction sectors are well-positioned for growth in the next decade on the background of increasing fixed asset investments. Management also believes that Metinvest's diversified steel product range reduces Metinvest's exposure to fluctuations in demand for any particular steel product and consequently reduces its reliance on the performance of any particular steel-consuming industry.
- **Diversified end customer base.** Metinvest exports a substantial portion of its steel products to more than 1,000 customers in over 75 countries, principally in Europe, the CIS, the Middle East and Africa, North America and South East Asia. Sales of steel products outside Ukraine accounted for 75 per cent. of Metinvest's total metallurgical segment sales in the year ended 31 December 2017. Metinvest's customers operate in a number of industries, including steelmaking and rolling, pipe-making, construction, shipbuilding, engineering, energy and automobile production. Management believes that Metinvest's diversified customer base contributes to the stability of its revenue base and margins, provides it with additional growth opportunities (in particular, in the developing markets of the Middle East, South East Asia, the CIS and China) and reduces Metinvest's reliance on the economy of any single market or performance of any particular industry.
- **Experienced management team.** Metinvest's senior management team combines extensive industry and market experience with financial and management expertise, and includes individuals who have been involved in Metinvest's business for an average of between five and ten years. At the operational level, Metinvest has developed, and continues to refine, an improved management structure that is focused on enhancing accountability and decision-making processes. Equipped with international experience and advanced business qualifications, the management team's ability to improve the performance of the Issuer's assets is evidenced by Metinvest's increased operating efficiency implemented through various cost reduction measures despite the highly volatile current operating environment (see "*Management—Metinvest's Management Team*").
- **Strong corporate governance.** Metinvest recognises the importance of strong corporate governance and aims to develop its corporate structure in accordance with international best practices. The Issuer has a supervisory board (the "**Supervisory Board**"), which advises the Management Board and is responsible for approving a number of significant decisions related to the Group's operations, including Metinvest's long-term business strategy and annual business plans. The Supervisory Board currently consists of ten members, of whom seven are appointed by the joint meeting of System Capital Management Limited and Clarendale Limited, and three by companies of the SMART Group. In line with best practices in corporate governance, the Supervisory Board has several committees including the Strategy and Investments Committee, including the Technological Sub-committee, Audit and Finance Committee, Health, Safety and Environmental Committee and the Appointments and Compensations Committee.

Strategy

In 2017, the Group updated its corporate and technological strategy. Despite the changes in Metinvest's operations associated with the Seized Assets, Metinvest remains committed to its strategic goals.

- **Sustaining a competitive advantage in steelmaking by increasing operational efficiency and vertical integration.** Metinvest intends to seek competitive advantage and to enhance its profitability and security of supply by increasing vertical integration through the following means.
 - ***Increasing operational efficiency and achieving best practices in steelmaking through focused investments in advanced technologies.*** Metinvest plans to maximise the efficiency of its

operating facilities and use of resources through the use of advanced know-how and operating efficiency projects to increase production volumes, develop new products, optimise the structure of product portfolio, improve quality, reduce emissions and costs, and enhance safety:

- ***Investing in new, state-of-the-art steelmaking technologies.*** Metinvest invests in new, state-of-the-art steelmaking technologies. In 2016, the implementation of a pulverised coal injection ("PCI") project was started at Azovstal. Currently, PCI units have been launched at blast furnaces No. 4 (November 2016) and No. 2 (September 2017). It is also expected that a PCI unit will start to operate at blast furnace No. 3 in the third quarter of 2018. The implementation of PCI technology will allow Azovstal to considerably reduce the consumption of natural gas and coke by replacing them with cheaper PCI coal. Metinvest also plans to build new air blocks at Azovstal and Ilyich Steel, and intends to implement various environmental projects, including the modernisation of a sinter plant at Ilyich Steel and the major overhaul of several blast furnaces at Azovstal and Ilyich Steel, aiming to reduce harmful emissions.
- ***Further modernisation of the existing asset base.*** Metinvest intends to invest in existing assets to optimise production processes, to increase the diversity of its product mix and to improve its cost competitiveness. By the end of 2018, Metinvest plans to complete the construction of a casting continuous machine (CCM-4) at Ilyich Steel. The launch of CCM-4 will enable Metinvest to modernise its method of casting steel ingots, to reduce the production costs of semi-finished products by reducing metal losses and energy consumption, in addition to increasing the production of crude steel and finished steel products. As part of its modernisation programme, Metinvest intends to upgrade its hot strip mill and cold rolling shop at Ilyich Steel, as well as its rail mill at Azovstal. These projects will allow Metinvest to improve the quality of and expand its finished steel product portfolio. For example, Metinvest's hot-rolled coils production weight has increased due to the completed modernisation of Metinvest's mill coiler, which is the first stage of the hot strip mill upgrade at Ilyich Steel. Part of Metinvest's corporate and technological strategy is the construction of crusher and conveyor systems at Northern GOK and Ingulets GOK, and of floatation a system at Northern GOK, and the upgrade of beneficiation and pelletising facilities at Central GOK, investments which will allow the production of high-premium DRI grade pellets. In 2017, Northern GOK also began a major overhaul of the pelletising machine Lurgi 552A.
- ***Continue improving Metinvest's self-sufficiency in raw materials.*** Metinvest seeks to increase and diversify its captive base for high-quality coking coal, which is an important factor in strengthening its vertical integration. Metinvest also seeks to pursue efficient supply strategies for other key raw materials including high-quality coking coal, PCI coal, ferroalloys and scrap. Due to the loss of control over Krasnodon Coal and the increased quality requirements for coking coal and coke, Metinvest diversified the sources for its coking coal purchases. More specifically, Metinvest started to import coking coal from Canada and Australia, in addition to its traditional coking coal import sources such as Russia and the United States. Metinvest also plans to optimise the structure of its coking coal purchases as it increases intercompany coal purchases from United Coal and its purchases by rail from suppliers in its nearest markets, including Ukraine.
- ***Increase production capacity by growing organically and by pursuing selective acquisition opportunities.*** Metinvest seeks, in the long term, to increase its production capacity by growing organically and by pursuing selective acquisition opportunities. Metinvest intends to enhance its cost competitiveness by maximising the utilisation of its existing capacity, by expanding the capacity of its steel and coking coal production facilities and optimising production of iron ore

concentrate. In the long term, Metinvest expects to continue its structured approach to acquisitions to facilitate its strategy of vertical integration and improve its steel product mix, including through reducing its share of semi-finished product offerings. In its core business areas, Metinvest may consider acquisition opportunities to gain access to additional sources of raw materials or to production facilities with higher-margin products.

- ***Establish and sustain a continuous improvement culture.*** Metinvest is committed to establishing a culture of continuous improvement. In 2015-2017, it continued to implement its Continuous Improvement Programme ("CIP") based on Lean principles. The aim of the CIP is to train and incentivise employees to identify and eliminate inefficiencies. The targeted improvements focus on repair and maintenance optimisation, productivity, cost reduction, quality improvement and working capital optimisation. In 2016, the operational improvements yielded variable costs savings of U.S.\$187 million in the metallurgical segment and were immaterial in the mining segment. In 2017, the operational improvements yielded variable costs savings of U.S.\$8 million in the metallurgical segment and U.S.\$92 million in the mining segment, respectively.
- ***Increase personnel productivity.*** Metinvest seeks to increase its operating efficiency by managing headcount, outsourcing non-core operations (such as repair and maintenance and other support functions) and streamlining administrative structures.
- **Strengthening its position in key strategic markets. Metinvest intends to strengthen its position in key strategic markets by focusing on finished products and differentiating finished products for particular requirements.** This is expected to result in broader product lines, increased sales in markets with strong demand for finished products, and enhanced long-term customer relationships and service. Metinvest has faced numerous anti-dumping investigations from several countries during the last three years. Although most of these investigations did not have a substantial impact on Metinvest's financial condition, anti-dumping measures imposed by the European Union on hot rolled flat steel products originating from certain countries, including Ukraine, has effectively barred almost 700 thousand tonnes of imported hot-rolled coils from Ukraine. Consequently, Metinvest had to diversify part of its volume sales to other markets, including the Middle East, Africa and Far East markets. To mitigate the effects of these anti-dumping measures, Metinvest increased its strategic investments that focus on downstream products, including cold-rolled, galvanised coils and hollow sections.
- ***Increasing its focus on finished products.*** Metinvest aims to increase its production and sales of high value added, or premium, products to penetrate premium markets. In 2017, management finalised updating the Group's corporate and technological strategy. Metinvest will focus on its flat products in the medium term, mostly hot-rolled, cold-rolled and coated coils. In 2017, Metinvest continued its strategic investments in CCM-4 at Ilyich Steel, completed the installation of a new down-coiler and hot-strip mill to increase coil weight and initiated a major revamp to improve the quality and the product mix of hot-rolled coils. Metinvest's high value added steel products accounted for 42 per cent. of its total steel products external sales in 2017. In the iron ore business, Metinvest's goal is to minimise shipments of iron ore concentrate to China and increase production of higher-margin pellets, focusing on European customers. In 2017, Metinvest achieved substantial progress in the production of 70.5 per cent. Fe content concentrate and is planning to produce experimental DRI-grade pellets in 2018. In 2017, Metinvest approved an investment project to upgrade two pelletising machines at Northern GOK in order to achieve the pellets specification stipulated by Atlantic Basin Premium (Platts). In 2017, 65 per cent. Fe pellets constituted 54 per cent. of the total pellets external sales, an increase of 16 per cent. compared to 2016.

- ***Improving product portfolio mix.*** In 2016, Metinvest initiated a long-term partnership with the local coater Modul-Ukraine. Under the partnership's terms, Metinvest provides reliable supply of cold-rolled coils to increase its partner's production of galvanised and colour-coated coils. In 2017, Metinvest initiated a long-term cooperation programme to increase the production of galvanised coils with Unisteel, LLC (Ukraine), which operates a galvanising line with production capacity of up to 100 thousand tonnes per year. In January 2018, Metinvest entered into a sales and purchase agreement for the acquisition Unisteel LLC, the completion of which is currently subject to the fulfilment of several conditions precedent. Both projects aim to increase the sales of higher value added products in the Ukrainian market. Under its new product strategy, Metinvest will continue to pursue opportunities in the segments of hollow sections (construction tubes) cold-rolled and coated products to improve profitability and increase sales in the Ukrainian market. In 2017, Metinvest began cooperating with Dneprovskiy Iron & Steel Works and it was agreed that a part of the plant's steel products will be sold through Metinvest's distribution facilities. This partnership will allow Metinvest to partially mitigate the negative effects of losing control over Yenakiieve Steel, given the similarity of the product portfolios of Dneprovskiy Iron & Steel Works and Yenakiieve Steel.
- ***Increasing sales of steel products in the Ukrainian and regional markets.*** Metinvest is well-positioned to capitalise on the expected growth in demand for finished products in the Ukrainian and other regional markets in the long term. Due to the military conflict in the certain parts of the Donetsk and Luhansk regions of Ukraine, Ukrainian steel demand collapsed in 2014-2015, reaching its lowest levels since Ukraine's independence from the Soviet Union. In 2016, the situation stabilised, and the industrial production and construction sectors have slightly improved. The apparent consumption of steel products in Ukraine increased by 23.0 per cent. in 2016 and 6.1 per cent. in 2017, according to Metal Expert. As the largest supplier of steel products in Ukraine, Metinvest is well-positioned to increase its sales to the Ukrainian market as the Ukrainian industrial production and construction sectors improve. In 2015, Metinvest established representative sales offices in Poland and Spain. These offices will focus on strengthening Metinvest's cooperation with its local steel product customers in a more responsive and efficient manner. As part of the reorganisation, Metinvest-SMC became the main seller of steel products.
- ***Building long-term customer relationships and delivering high-quality customer service worldwide.*** Metinvest seeks to become the preferred supplier of steel products for its key customers by building strong relationships through long-term framework contracts, as well as targeting key industries and markets, integrating its products with end-users, providing customer technical support and strengthening the Metinvest brand by continuing to build a reputation for quality and reliability. Specifically, Metinvest was a co-founder of The Ukrainian Steel Construction Association ("**UkrSCA**") in 2013. The creation of UkrSCA is intended to contribute to the development of the Ukrainian steel market. Metinvest, as a member of the Ukrainian Steel Construction Centre ("**USCC**"), is actively involved in the expansion of the steel construction market and assisting steelwork fabricators in exporting their products to nearby markets. In addition, USCC has introduced European building codes for structural steelwork which are compliant with EU construction standards. Furthermore, Metinvest commissioned a new shot blasting and priming facility at Metinvest Tramel, an Italian re-rolling operation of the Group specialising in the production of hot-rolled plates. The line was put into serial production following the completion of performance tests at the end of March 2016. This helped improve Metinvest's value proposition to its customers in the shipbuilding segment and improve sales of higher value added products. In 2017, Metinvest approved its new sales and distribution strategy for the European market with a focus on end-user customers and aims to develop additional services through steel service centres (either wholly-owned or under partnership

agreements). In 2017, Metinvest launched a customer relationship management ("CRM") initiative, aimed at streamlining sales, production and delivery processes, improving its value proposition, enhancing communications and inviting more feedback from its customers with the ultimate goal to improve overall customer experience.

- **Achieving business excellence through the systematic use of outstanding practices in managing the Group and achieving results.** Metinvest seeks to manage its operations more efficiently by transforming its operating model, creating a unified corporate culture of employee commitment and efficient business processes and maintaining transparency of operations and corporate responsibility.
 - ***Developing a new operating model.*** Metinvest believes that leveraging the advantages of integration is the key to market leadership. Metinvest aims to manage every link in the value chain: from mining and processing iron ore and coal to making and selling semi-finished and finished steel products. Metinvest established a new Operations Directorate based on its Mining and Metallurgical Segments on 1 September 2016. The core objective of the transformation is to ensure close cooperation between the Group's mining and metallurgical production assets and centralise the management of all production processes. This organisational structure also prioritises client relationships by merging Metinvest's segmental sales units into a single sales function, whose head will report directly to the General Director. Metinvest has also centralised its other functions, such as procurement and logistics, into a supply chain function within the managing company. Metinvest implemented a centralised Sales and Operational Planning function, which is intended to provide Metinvest with a more efficient and transparent planning process, and help it to identify and implement cost-effective solutions.
 - ***Creating a unified corporate culture and maximising employees' commitment.*** While operating in multiple locations, Metinvest seeks to create a unified corporate culture. Metinvest launched the Corporate University, a unified training system for Metinvest's personnel, and the Leadership Academy, a specialised development programme for high-potential managers. Both are tailored to Metinvest's strategy of seeking to unify its corporate culture. Metinvest is also developing its talent management system. For example, at Azovstal, selected key managers were seconded to leading producers in South Korea and Germany. Metinvest continues to implement a series of human resources programmes to train production workers in the use of new technologies and development of their leadership skills, which is expected to improve the skills of line managers, and improve the transparency of personnel performance evaluations and the remuneration policy.
 - ***Creating unified and efficient business processes.*** Metinvest is standardising and automating its business processes through enhancements to its data processing ("SAP") and enterprise resource planning system ("ERP"). Having installed a SAP framework and completed the concept design for pilot implementation, Metinvest is implementing a SAP system at certain of its plants (Ingulets GOK, Central GOK and Ilyich Steel). SAP's installation at the Azovstal plant is planned for 2018.
 - ***Maintaining transparency of operations and corporate responsibility.*** Metinvest intends to continue to retain and build an experienced and motivated professional management team and maintain the transparency and efficiency of its management system through high corporate governance standards and setting and retaining key performance indicators. Metinvest also publishes social responsibility reports within the framework of its global reporting initiative, which provides details of how Metinvest fulfils its responsibilities as a corporate citizen by engaging in a variety of activities that contribute to the creation of a better society.

OVERVIEW OF THE OFFERING

Reference to the "Conditions" in this overview are to the Terms and Conditions of the 2023 Notes and/or the Terms and Conditions of the 2026 Notes, as applicable. Terms which are defined in the Conditions have the same meaning when used in this overview with respect to the applicable series of Notes.

Notes	U.S.\$944,515,000 7.750 per cent. Senior Notes due 2023 (the " 2023 Notes ") U.S.\$647,661,000 8.500 per cent. Senior Notes due 2026 (the " 2026 Notes ") together, the " Notes ".
Issuer	Metinvest B.V.
Guarantors	Avdiivka Coke, Azovstal, Central GOK, Ilyich Steel, Ingulets GOK and Northern GOK and any Additional Guarantors. See " <i>Listing and General Information—Information Relating to the Guarantors</i> ".
Joint Global Coordinators, Joint Bookrunners and Joint Lead Managers	Deutsche Bank AG, London Branch and ING Bank N.V., London Branch.
Joint Bookrunners and Joint Lead Managers	Natixis and UniCredit Bank AG.
Maturity Date	23 April 2023 in relation to the 2023 Notes (the " 2023 Notes Maturity Date ") 23 April 2026 in relation to the 2026 Notes (the " 2026 Notes Maturity Date ")
Trustee	Madison Pacific Trust Limited.
Registrar	The Bank of New York Mellon SA/NV, Luxembourg Branch.
Principal Paying Agent and Transfer Agent	The Bank of New York Mellon, London Branch.
U.S. Paying Agent and Transfer Agent	The Bank of New York Mellon, New York Branch.
Irish Listing Agent	Arthur Cox Listing Services Limited.
Use of Proceeds	The net proceeds from the issue of the Notes will be applied by Metinvest to pay (i) the total Tender Offer and Consent Solicitation consideration (principal tendered, premium, consent fees and accrued interest), (ii) to the extent applicable, any Excess Note Proceeds payment and, at Metinvest's option, the upfront prepayment, in each case under the PXF Facility Agreement and as defined and described in " <i>Description of Indebtedness—The PXF</i> "

	<p><i>Facility Agreement—Prepayments</i>", together with the fees payable to the PXF lenders in connection with the amendment and restatement of the Existing PXF Facility and (iii) transaction costs and expenses.</p>
Risk Factors	<p>An investment in the Notes involves a high degree of risk. See "<i>Risk Factors</i>".</p>
Issue Price	<p>The 2023 Notes will be issued at an issue price of 99.014 per cent. of the principal amount of the 2023 Notes.</p> <p>The 2026 Notes will be issued at an issue price of 98.583 per cent. of the principal amount of the 2026 Notes.</p>
Interest	<p>The 2023 Notes will bear interest from and including the Issue Date at a rate of 7.750 per cent. per annum payable semi-annually in arrear on 23 February and 23 August in each year, commencing on 23 August 2018 (there will be a first Interest Period of 120 days from and including the Issue Date to but excluding 23 August 2018 and a final Interest Period of 60 days from and including 23 February 2023 to but excluding the 2023 Notes Maturity Date).</p> <p>The 2026 Notes will bear interest from and including the Issue Date at a rate of 8.500 per cent. per annum payable semi-annually in arrear on 23 April and 23 October in each year, commencing on 23 October 2018.</p>
Guarantees	<p>The Guarantors have, pursuant to the granting of a Guarantee under the relevant Surety Agreement, jointly and severally, unconditionally and irrevocably, guaranteed, the due and punctual payment of all amounts becoming due and payable by the Issuer under the Trust Deeds, the Notes and the Agency Agreements. Each suretyship shall not constitute a guarantee obligation (in Ukrainian: <i>garantiya</i>) as that term is interpreted under Ukrainian law.</p> <p>The Issuer will, in accordance with Condition 3.2 (<i>Addition of Guarantors</i>) and Condition 4.15 (<i>Additional Guarantors and Limitations on Guarantees</i>) of the relevant Conditions and upon occurrence of the conditions set forth therein, cause certain other person or persons (the "Additional Guarantors") to execute and deliver to the Trustee one or several Surety Agreements pursuant to which such persons will, jointly and severally, unconditionally and irrevocably guarantee (the "Additional Guarantees") the due and punctual payment of all amounts becoming due and payable by the Issuer under the Trust Deeds, the Notes and the Agency Agreements.</p> <p>Payment of amounts due under the Guarantees will require compliance with certain Ukrainian currency control regulations. See "<i>Risk Factors—Risks Relating to the Notes and the Guarantees—The claims of Noteholders under the Guarantees may</i></p>

be limited under Ukrainian laws in the event that one or more of the Guarantors is declared bankrupt" and "Risk Factors—Risks Relating to the Notes and the Guarantees—Ukrainian currency control regulations may impact the Guarantors' ability to make cross-border payments".

Redemption at the Option of the Issuer

At any time prior to the relevant Maturity Date for the relevant series of the Notes (other than where Condition 6.2.2 (*Optional Redemption at Par*) of the relevant Conditions applies), the Issuer may, at its option, on giving not more than 60 nor less than 30 days' notice to the Noteholders and to the Trustee, redeem the Notes of such series in whole or in part, at a redemption price equal to 100 per cent. of the principal amount of the Notes redeemed, plus the Applicable Premium as of, and accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of redemption, as further described in Condition 6.2.1 (*Redemption at Make-Whole*) of the relevant Conditions.

At any time on or after the date falling three months prior to the relevant Maturity Date for the relevant series of the Notes, the Issuer may, on giving not more than 60 nor less than 30 days' notice to the Noteholders and to the Trustee, redeem the Notes of such series in whole or in part, at the principal amount thereof, plus accrued and unpaid interest and Additional Amounts, if any, on the Notes so redeemed to (but excluding) the date of redemption, as further described in Condition 6.2.2 (*Optional Redemption at Par*) of the relevant Conditions.

At any time prior to the date falling three months prior to the relevant Maturity Date for the relevant series of the Notes, the Issuer may on any one or more occasions, upon not less than 30 nor more than 60 days' notice, redeem up to 35 per cent. of the originally issued aggregate principal amount of the relevant series of Notes using the net proceeds from certain equity offerings at the redemption price set forth in the relevant Conditions plus accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of redemption, if at least 65 per cent. of the originally issued aggregate principal amount of the Notes remain outstanding, as further described in Condition 6.2.3 (*Optional redemption from Equity Offering proceeds*) of the relevant Conditions.

Redemption upon Change of Control

Upon the occurrence of certain change of control events, each Noteholder shall have the right to require that the Issuer repurchase such Noteholder's Notes at a purchase price in cash equal to 101 per cent. of the outstanding principal amount thereof on the date of purchase plus accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of purchase, as further described in Condition 6.3 (*Redemption at the Option of the Noteholders Upon a Change of Control*) of the relevant Conditions.

Ranking of the Notes and the Guarantees

The Notes will constitute direct, unsecured, unsubordinated and

unconditional obligations of the Issuer and shall, at all times, rank *pari passu* and without any preference among themselves and among the Amended 2021 Notes, the 2023 Notes and the 2026 Notes. Each Guarantee constitutes or will constitute a senior, unsubordinated and unsecured obligation of the relevant Guarantor.

The Notes and the Guarantees are:

- (a) senior unsecured obligations of the Issuer and of the Guarantors, ranking *pari passu* in right of payment among each series of the Notes and the Amended 2021 Notes and with any other existing or future unsecured and unsubordinated Indebtedness of the Issuer or the Guarantors;
- (b) senior in right of payment to all existing and future subordinated Indebtedness and any other subordinated liabilities of the Issuer and/or the Guarantors;
- (c) effectively subordinated in right of payment to any existing and future Indebtedness of the Issuer and of the Guarantors that is secured by liens, to the extent of the value of the assets securing such Indebtedness; and
- (d) in the case of the Notes, structurally subordinated to any existing and future obligations of the Issuer's Restricted Subsidiaries that are not Guarantors. See Condition 3.3 (*Status of Notes and Guarantee*).

The Guarantees will be subject to legal limitations under relevant local law. See "*Risk Factors—Risks Relating to the Notes and the Guarantees—The claims of Noteholders under the Guarantees may be limited under Ukrainian laws in the event that one or more of the Guarantors is declared bankrupt*". A Guarantee of any Guarantor will be automatically and unconditionally released under certain circumstances; see Condition 4.15 (*Additional Guarantors and Limitations on Guarantees*).

Taxation

All payments of the principal of, premium on, if any, and interest on the Notes or under the Guarantees shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or within The Netherlands or Ukraine or any political or governmental subdivision or authority thereof or therein having power to tax ("Taxes"), unless such withholding or deduction is required by law. In that event, the Issuer (or, as the case may be, the Guarantors), subject to customary exceptions, shall pay such additional amounts as will result in receipt by the Noteholders of such amounts as would have been received by them had no such withholding or deduction been required ("Additional Amounts"). See Condition 8 (*Taxation*).

Covenants

The Conditions of the Notes, among other things, will restrict the ability of the Issuer and its restricted subsidiaries to:

- incur or guarantee additional debt and issue certain preferred stock;
- make certain restricted payments, including dividends or other distributions;
- prepay or redeem subordinated debt before its maturity;
- engage in certain transactions with affiliates;
- create or permit certain liens to exist;
- sell, lease or transfer certain assets;
- create certain restrictions on the ability of restricted subsidiaries of the Issuer to pay dividends, make loans or transfer assets to the Issuer or another restricted subsidiary; and
- merge or consolidate the Issuer or any Guarantor with other entities or transfer all or substantially all of the Issuer's or a Guarantor's assets.

Each of the covenants is subject to significant exceptions and qualifications. See Condition 4 (*Covenants*).

The Seized Assets (Yenakiieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke) have been designated as Unrestricted Subsidiaries under the Conditions as of the Issue Date. Unrestricted Subsidiaries are not subject to the restrictive covenants in the Conditions; see the Conditions of the Notes and "*Risk Factors—Risks Relating to the Notes and the Guarantees—The Seized Assets are not subject to restrictive covenants in the Notes*".

Events of Default

The Conditions of the Notes permit the acceleration of the Notes following the occurrence of the following events of default:

- (a) non-payment of principal or interest on the Notes;
- (b) breach of other obligations under the Notes or the Notes Documents;
- (c) cross-payment default and cross-acceleration to certain debt;
- (d) occurrence of certain enforcement proceedings;

- (e) expropriation;
- (f) failure to pay certain final judgments;
- (g) certain insolvency events;
- (h) winding up or dissolution or cessation of business;
- (i) nationalisation;
- (j) failure to obtain certain authorisation and consents;
- (k) illegality;
- (l) Guarantees ceasing to be in effect or certain actions or omissions which undermine the Guarantees; and
- (m) analogous events.

The events of default carve out Avdiivka Coke to the extent it becomes subject to expropriation, nationalisation, permanent cessation of business or winding up (due to expropriation or nationalisation) or temporary cessation of business due to armed hostilities. See "*Risk Factors—Risks Relating to the Notes and the Guarantees—The seizure, expropriation or nationalisation of the Group's assets or resultant permanent cessation of business or winding up would not constitute an event of default under the Notes in certain circumstances*". Furthermore, the events of default do not apply to the Seized Assets.

See Condition 10 (*Events of Default*).

Form and Denomination

The Notes will be issued in registered form in the denomination of U.S.\$200,000 each and integral multiples of U.S.\$1,000 in excess thereof. The Regulation S Notes and the Rule 144A Notes in relation to each series of Notes will each be represented by a Regulation S Global Note Certificate and one or more Rule 144A Global Note Certificates, respectively. The Regulation S Global Note Certificates and the Rule 144A Global Note Certificates will be exchangeable for Definitive Certificates in the limited circumstances specified in the Regulation S Global Note Certificates and the Rule 144A Global Note Certificates.

Initial Delivery of Notes

On or before the Issue Date, the Rule 144A Global Note Certificates will be deposited with a custodian for DTC and the Regulation S Global Note Certificates will be deposited with a common depositary for Euroclear and Clearstream, Luxembourg. The Rule 144A Notes will be registered in the name of a nominee of DTC and the Regulation S Notes will be registered in the name of a common nominee for Euroclear and Clearstream, Luxembourg.

Listing and admission to trading

Application has been made for this Offering Memorandum to be approved by Euronext Dublin as listing particulars. Application has also been made to Euronext Dublin for each series of the Notes to be admitted to the Official List and to trading on the Global Exchange Market.

Selling Restrictions

The Notes may be sold only in compliance with applicable laws and regulations. See "*Subscription and Sale*".

MiFID II professionals/ECPs-only/No PRIIPs KID – Manufacturer target market (MIFID II product governance) is eligible counterparties and professional clients only (all distribution channels). No PRIIPs key information document ("**KID**") has been prepared as the Notes are not available to retail investors in the EEA.

Transfer Restrictions

The Notes have not been, and will not be, registered under the Securities Act, and may not be offered or sold within the United States, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act.

Governing Law

The Notes, the Surety Agreements, the Agency Agreements and the Trust Deeds will be governed by English law.

Financial Information

For a presentation of Metinvest's financial information, see "*Selected Consolidated Financial Information*".

Security Codes

	<u>ISIN</u>	<u>CUSIP</u>	<u>Common Code</u>
2023 Notes			
Rule 144A 2023 Notes.....	US591555AD93	591555 AD9	-
Regulation S 2023 Notes	XS1806400534	-	180640053
2026 Notes			
Rule 144A 2026 Notes.....	US591555AE76	591555 AE7	-
Regulation S 2026 Notes	XS1806400708	-	180640070

RISK FACTORS

Prospective investors should carefully consider the risks set forth below and the other information contained or incorporated by reference in this Offering Memorandum prior to making any investment decision with respect to the Notes. Each of the risks highlighted below could have a material adverse effect on the business, operations, financial condition or prospects of the Issuer, the Guarantors or Metinvest, which, in turn, could have a material adverse effect on the amount of principal, premium and interest which investors will receive in respect of the Notes. In addition, each of the risks highlighted below could, individually or in the aggregate, adversely affect the trading prices of the Issuer's securities, including the Notes or the rights of investors under the Notes and, as a result, investors could lose some or all of their investment.

Prospective investors should note that the risks described below are not the only risks the Issuer, the Guarantors and Metinvest face. The Issuer has described only those risks relating to its operations of which it is aware and that it considers to be material. There may be additional risks that the Issuer currently considers not to be material or of which it is not currently aware and any of these risks could have the effects set forth above.

Risks Relating to Metinvest

Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition

Ukraine, where the Group's main production assets are located, experienced significant civil disturbances, political instability and territorial losses in 2013-2014, and currently suffers from the ongoing conflict in certain parts of its eastern Donetsk and Luhansk regions (see "*—Risks Relating to Ukraine—The conflict in certain parts of the Donetsk and Luhansk regions in eastern Ukraine has had, and may continue to have, negative humanitarian, economic and political consequences for Ukraine*" and "*—Risks Relating to Ukraine—Ukraine has experienced, and may continue to experience, significant economic instability*").

In February 2017, the self-proclaimed authorities on the temporarily non-controlled territory in Ukraine announced their intention to seize businesses located on the temporarily non-controlled territory and to require them to comply with local fiscal, regulatory and other requirements, which contradict Ukrainian legislation. On 15 March 2017, management determined that it had lost control over the operations of entities located on the temporarily non-controlled territory, including Yenakieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke (collectively, the "**Seized Assets**"). Since then, Metinvest stopped economic activity in this territory, including mining of raw materials and production of finished steel products as well as supplies of raw materials and finished steel products from and into the conflict area. Most employees of the Seized Assets have been dismissed while a small number have been relocated to other Metinvest operations.

In the year ended 31 December 2016, the Seized Assets generated revenue of U.S.\$702 million and gross profit of U.S.\$41 million. From 1 January to 15 March 2017, when they were seized, the Seized Assets generated revenue of U.S.\$137 million and gross profit of U.S.\$15 million. As of 15 March 2017, the Seized Assets' aggregate consolidated tangible assets located on the temporarily non-controlled territory amounted to U.S.\$515 million (5 per cent. of Metinvest's total consolidated assets). Due to the loss of control over the assets of the Seized Assets located on the temporarily non-controlled territory, management performed a revaluation of property, plant and equipment and determined that the value of these assets is zero. Also, other assets (inventories and certain intangible assets) of the Seized Assets were fully impaired. This resulted in the recognition of property, plant and equipment impairment amounting to U.S.\$433 million and impairment of inventory and replaceable equipment amounting to U.S.\$82 million. Metinvest's cost of sales also increased as it had to obtain coking coal from other sources, which may have been on less favourable terms than what they could obtain from the Seized Assets. Metinvest's ability to yield the desired product mix was affected due to the loss of long products produced by the Seized Assets. In the short term, management does not believe the Group is able to regain control of the Seized

Assets. However, Metinvest is still the legal owner of the Seized Assets. The Seized Assets have been designated as Unrestricted Subsidiaries under the Conditions as of the Issue Date and, as such, will not be subject to restrictions under the Conditions.; see *"Risk Factors—Risks Relating to the Notes and the Guarantees—The Seized Assets are not subject to restrictive covenants in the Notes"*.

If management adopts the position that control over the Seized Assets was lost as at 15 March 2017, the net assets of the Seized Assets in the amount of U.S.\$13 million (before the impairment disclosed in note 7 of the 2017 Financial Statements) would be deconsolidated and the fair value of accounts payable due to the Seized Assets and accounts receivable due from the Seized Assets would be recognised. Additionally, a reclassification of U.S.\$601 million of accumulated net negative currency translation reserve ("**CTR**") from "other comprehensive income" to "profit/(loss)", as described in note 4 of the 2017 Financial Statements, would be required. If the Seized Assets are disposed of or abandoned in the future, the full amount of CTR as of that date would need to be reclassified from "other comprehensive income" to "profit/(loss)". However, for purposes of the Conditions, this reclassification of U.S.\$601 million would not reduce Consolidated Net Income (as defined in the Conditions).

The Seized Assets collectively have certain outstanding trade debts owed to suppliers. To maintain these supplier relationships, Metinvest intends to discharge these trade debts on behalf of the Seized Assets, which will result in receivables owing to it by the Seized Assets. The Seized Assets also owe certain receivables to Metinvest and Metinvest owes certain payables to the Seized Assets, which Metinvest intends to net off, resulting in a net receivable owing to Metinvest. In addition, Krasnodon Coal owes certain amounts to Metinvest Holding LLC under a bond which is currently in default. Metinvest may write off all or part of these existing and future receivables and other obligations owed by the Seized Assets. These existing and future receivables and other obligations owed by the Seized Assets to Metinvest and their write off are permitted under the Conditions.

The above events have also affected other subsidiaries, whose operations are physically located on the controlled territory in Ukraine. As such, Metinvest charged impairment provision on tangible assets located on the temporarily non-controlled territory, but belonging to the subsidiaries whose operations are physically located on the controlled territory, as a result of the inability to access such assets. This resulted in recognition of an additional property, plant and equipment impairment of U.S.\$19 million and impairment of inventory and replaceable equipment of U.S.\$10 million. Metinvest continues to conduct its operations through these affected subsidiaries. For further information, please see note 4 and note 7 of the 2017 Financial Statements.

Some of the Group's metallurgical assets have also been affected by the conflict, in particular:

- Avdiivka Coke, which produced approximately 47 per cent., 54 per cent. and 55 per cent. of the Group's total blast furnace (dry) coke in 2015, 2016 and 2017, respectively, experienced minor property damage to its non-core assets and disruptions in its electricity supply in mid-August 2014 as a result of damage to transmission lines caused by artillery fire. In 2015, with the resumption of hostilities, the facilities (including plant and equipment, buildings and road and rail transport infrastructure) were again damaged by artillery fire. In addition, four high-voltage lines supplying the plant were damaged, and supplies of raw materials and rolling stock were repeatedly interrupted by fighting. At the end of 2015, seven coke batteries of the plant were in operation, one was mothballed and one remains under repair. As a result, total production of blast furnace coke decreased by 381 thousand tonnes year-on-year to 1,938 thousand tonnes in 2015. In July 2016, shelling hit Avdiivka Coke facility on several occasions, interrupting the electricity supply. In early 2017, military action renewed in and around the territories of eastern Ukraine not controlled by the Ukrainian government and two electricity lines to Avdiivka Coke were bombed, which forced the plant to scale back coke production for a three-month period and postponed the launch of the coke oven battery no. 8 from January 2017 to May 2017. Restoring electricity at the Avdiivka Coke facility had been a key challenge to fully restoring production at the facility, as coke oven batteries must be kept warm constantly for production, and electricity was only restored in May 2017, when a new high-voltage electricity line to the plant was installed on territory controlled by the Ukrainian government and Avdiivka Coke resumed operations utilising eight coke oven batteries. As a result of resumed operations

in 2017, the production of blast furnace coke at Avdiivka Coke was 2.6 million tonnes in 2017, compared to 2.3 million tonnes in 2016.

- The supply of raw materials to Azovstal and Ilyich Steel, which together represented approximately 77 per cent., 77 per cent. and 97 per cent. of the Group's total crude steel production in 2015, 2016 and 2017, respectively, was also disrupted at the end of July 2014 when railway lines were partially destroyed due to military action in the Donetsk region. Further, the area of conflict expanded in August-September 2014 towards the south-eastern part of the Donetsk region, up to approximately 20 kilometres east of the city of Mariupol, where Azovstal and Ilyich Steel are located. Ilyich Steel also suffered minor property damage to its sinter plant from artillery fire, although this has not had a material effect on production. In late December 2014, the railway bridge which connected these plants with the Mariupol port was destroyed and, in January 2015, the supply of industrial water to Azovstal was temporarily interrupted when the electricity supply to the pumping stations was damaged by shelling. Supplies of iron ore, coking coal and coal were constrained during the period from January to March 2015. In addition, natural gas supplies to the steel plants in Mariupol were interrupted on 12-14 June 2015 after artillery shelling damaged a key gas pipeline. As a result, in 2015, production of crude steel declined by 239 thousand tonnes year-on-year to 3,206 thousand tonnes at Azovstal and by 899 thousand tonnes year-on-year to 2,645 thousand tonnes at Ilyich Steel. In 2017, production of crude steel increased by 560 thousand tonnes year-on-year to 4,265 thousand tonnes at Azovstal and by 360 thousand tonnes year-on-year to 3,096 thousand tonnes at Ilyich Steel.

There can be no assurance that the conflict will not continue indefinitely, which would further damage the Group's operations and create further disruptions to the Group's infrastructure and negatively impact the Group's business, results of operations and financial condition. See further "*—Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so*".

Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so

The Group currently relies substantially on the rail freight network operated by Ukrzaliznytsya, the Ukrainian state-owned railway company, for transportation of its raw materials and finished products. As noted above, Ukraine's transportation infrastructure has been damaged as a result of military action and sabotage, which has affected and may further affect the Group's production. See "*—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

Since July 2014, Ukrzaliznytsya has restricted the transportation of cargo through a number of railway stations in the Donetsk region due to damage to the railway network caused by military action in the area. As a result of this, Metinvest-SMC, Metinvest Holding LLC and Avdiivka Coke were unable to deliver steel, iron ore and coal products under some of their trade contracts with Metinvest International and certain of their Ukrainian and Russian customers. The Ukrainian Chamber of Commerce has officially certified to these companies that a force majeure event has occurred in relation to their respective contractual obligations. The Ukrainian Chamber of Commerce's certification serves as a basis for the release of Metinvest-SMC, Metinvest Holding LLC and Avdiivka Coke from liability under the relevant trade contracts while the force majeure circumstances persist. During 2015 and 2016, the railway infrastructure in eastern Ukraine sustained damage caused by shelling and sabotage in the course of the ongoing military action in the region, resulting in disruptions in the supply of raw materials to a number of Metinvest's facilities. As a result, Metinvest's operational capacity at Avdiivka Coke, Azovstal and Ilyich Steel was reduced. Until November 2016, production of Metinvest's steel plants in Mariupol, Azovstal and Ilyich Steel was restricted due to limited supply of raw materials due to inadequate railway transportation capacity. Consequently, Metinvest had to transport part of its raw materials to its steel plants in Mariupol by sea. On 9 November 2016, Metinvest and Ukrzaliznytsya completed the Kamysh-Zarya to

Volnovakha railway line, which increased railway transportation capacity to Mariupol from 12-13 cargo trains per day to 16 cargo trains per day. Reconstruction works in mid-2017 and an expansion of Ukrzaliznytsya's locomotives fleet on the Kamysh-Zarya to Volnovakha railway line in the fourth quarter of 2017 increased capacity to 20 cargo trains per day in early 2018. However, this capacity is still lower than the 22 cargo trains per day capacity required to achieve the Group's typical production targets and to supply all materials, if relying exclusively on this railway. Railway tariffs for freight also increase periodically, resulting in corresponding increases in transportation costs. During 2016 and 2017, the Ukrainian state railway increased tariff indexations twice, increasing Metinvest's transportation costs. Should the military actions persist or escalate, or the conflict zone expands to cover the railway routes used for such deliveries, the Group may experience further difficulties delivering steel, iron ore, coke and coal products between its plants and to its customers. An escalation in the conflict could also result in the closure of the border between Ukraine and the Russian Federation, or trade routes passing through the Russian Federation, which would hinder the transportation of raw materials and finished products between the two countries as well as potentially to other countries.

In addition to the rail network, the Group depends on other infrastructure that are also subject to damage due to military actions. Ukraine's physical infrastructure, which is in poor condition and largely dates back to the Soviet times, has been further materially adversely affected by the recent military action in eastern Ukraine, which resulted in, among other things, malfunctioning of electricity transmission lines. See "*Risks Relating to Ukraine—Ukraine's physical infrastructure is in poor condition, which may lead to disruptions in Metinvest's business or an increase in its costs*".

Furthermore, the Group's coke plants in Avdiivka Coke depend on water supply from the Severskiy Donets – Donbas Canal, and any interruption to the supply of water may affect coke and blast-furnace production, which in turn could have a material adverse effect on the Group's entire steel production chain. Since August 2017, Metinvest's ability to transport its products out of Mariupol via the Sea of Azov has been restricted by the construction of a bridge across the Kerch-Yenikalsky Strait, as only vessels with certain dimensions (air draft up to 33 metres) and draught can pass under the bridge to sail into the Sea of Azov. These restrictions forced Metinvest to redirect cargo flows from the port of Mariupol to ports of the Odesa region, increasing logistics costs. Metinvest also made a number of adjustments to its shipping process in order to continue to ship from the port of Mariupol. These adjustments did not affect pig iron shipments, because pig iron is shipped in bigger vessels and therefore was already being shipped from the Odesa port. The adjustments to shipping vessels affected approximately 80 per cent. of the Group's shipments via the Sea of Azov (except for pig iron), eliminating most of the negative effect caused by restrictions on vessel size; however, there is no assurance that additional restrictions will not be imposed in the future.

The actions of the self-proclaimed authorities of the so-called Donetsk People's Republic ("DPR") and Luhansk People's Republic ("LPR") are unpredictable, and in 2017 the Group faced and may in the future face asset seizures, expropriation, illegal fiscal claims or other claims or actions negatively affecting its assets and operations

Certain parts of the Donetsk and Luhansk regions in eastern Ukraine were seized by militia in 2014, who proclaimed them to be, respectively, the "Donetsk People's Republic" and the "Luhansk People's Republic". Those territories are not under Ukraine's control. The self-proclaimed authorities of DPR and LPR seized ("nationalised") certain state- and privately-owned businesses and assets in those territories and have made the businesses operating there subject to various fiscal, regulatory and other requirements which contravene Ukrainian legislation. Following an ultimatum in February 2017 from the unrecognised authorities to re-register certain assets, the Group lost control of the Seized Assets; see "*Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*". There can be no assurance that additional seizures will not occur again in the future. This may further adversely affect the Group's business, results of operations and financial condition.

The Group's assets may be subject to seizure or expropriation by the Ukrainian authorities

The Ukrainian authorities could seize or expropriate the Group's assets without appropriate compensation, limit compensatory payments or deny the Group due process to defend itself against state measures. Pursuant to Ukrainian law, the authorities can exercise these eminent domain powers with respect to the Group's assets in the event such action is deemed by the relevant authorities to be required in order to protect public interests, in response to an emergency situation or in the event a Group member grossly violates applicable law. Any compensation that is paid may be lower than the price for which the expropriated assets could have been sold in the open market, or litigation may arise as to the fair market value of the assets, which could delay the payment of any compensation, or no compensation may be paid for the seized assets, each of which could have a material adverse effect on the Group's business, results of operations and financial condition.

Restrictions on coal supplies from the Russian Federation to Ukrainian metallurgical companies may adversely affect the Group's steel production business

In connection with its steel production business, the Group purchases from third party suppliers certain raw materials, primarily coking and PCI coal. In 2016 and 2017, the Group purchased approximately 38 per cent. and 33 per cent., respectively, of its coal requirements from suppliers in the Russian Federation.

Since November 2015, there have been reports of restrictions on the shipment of coal from the Russian Federation to Ukrainian metallurgical companies, including members of the Group, and, although there has been no public announcement of an actual embargo by the Russian authorities, members of the Group frequently encounter delays in obtaining the necessary clearances from the Russian customs authority in respect of coal shipments from the Russian Federation. See "*—The Russian Federation may introduce an import embargo on the Group's steel and other products*".

If the Russian Federation continues to restrict the shipment of coking coal to Ukrainian metallurgical companies, members of the Group will need to secure coking coal supplies from different producers to maintain the current scale of steel production. If members of the Group are unable to secure alternative coking coal supplies or such supplies are substantially delayed or cost substantially more, the Group's business, results of operations and financial condition may be materially adversely affected.

The Russian Federation may introduce an import embargo on the Group's steel and other products

On 27 June 2014, the President of Ukraine signed the economic part of the Ukraine-European Union Association Agreement, effective from 1 January 2016 (the "**Association Agreement**"). The Association Agreement was ratified by the Ukrainian Parliament and the European Parliament on 16 September 2014. On 13 August 2015, the government of the Russian Federation adopted decree No. 842, which prohibits the import of agricultural products, raw materials and foodstuffs originating from Ukraine as a response to the implementation by Ukraine of the economic part of the Association Agreement. These prohibitions on Ukraine came into force in the Russian Federation with effect from 1 January 2016.

Currently, the Eurasian Economic Union consisting of Armenia, Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation (the "**Eurasian Economic Union**") does not maintain any import restrictions on the Group's products other than anti-dumping duties on Azovstal angles and Ilyich Steel small diameter welded round pipes. However, there can be no assurance that in the future the Russian Federation will not introduce an import embargo on the Group's steel or other products, as it has done in relation to Ukrainian agricultural produce, which might adversely affect the Group's business, results of operations and financial condition. See also "*—Restrictions on coal supplies from the Russian Federation to Ukrainian metallurgical companies may adversely affect the Group's steel production business*".

The Group's financial performance is dependent on the global price of and demand for steel products

The Group's business is cyclical because the major industries in which the majority of its steel customers operate, including the construction, automotive, engineering and railway industries, are themselves cyclical and sensitive to changes in general economic conditions. The demand for steel products is thus generally correlated with macroeconomic fluctuations in the economies in which steel producers sell products, which are in turn affected by global economic conditions. Since 2011, prices for billets on the basis of FOB Black Sea exports have been falling, averaging U.S.\$561 per tonne in 2012, U.S.\$510 per tonne in 2013, U.S.\$480 per tonne in 2014 and U.S.\$327 per tonne in 2015, respectively. The construction sector crisis in China, reaching its peak in 2014-2015, along with an increased overcapacity in the Chinese steel sector, forced Chinese steel makers to increase steel exports, which depressed global steel prices due to oversupply. In 2016, steel prices rose rapidly because of economic stimulus measures introduced by the Chinese government, which led to increased domestic infrastructure spending and robust steel demand, and due to raw material price increases (namely coking coal and iron ore), protectionist measures adopted worldwide and the restructuring of the Chinese steel industry aiming at increasing efficiency by cutting excess capacity. The improvement in Chinese steel industry resulted from increased construction and manufacturing activity, and increased global steel prices, leading to higher profit margins for Chinese steel producers in 2017. These factors resulted in price increases in all regions. As such, average prices of billets for 2016, on the basis of FOB Black Sea exports, amounted to U.S.\$328 per tonne. In 2017, prices continued to increase: billet prices reached U.S.\$389 per tonne in the first quarter of 2017, U.S.\$391 per tonne in the second quarter of 2017, U.S.\$477 per tonne in the third quarter of 2017 and U.S.\$487 per tonne in the fourth quarter of 2017. However, there can be no assurance that steel prices will not decrease in the future, which could negatively affect Metinvest's business and results of operations. See also "*Industry—Steel Industry—Global Overview*".

The Group's financial performance is dependent on global market prices of iron ore

The Group sells iron ore to third parties. Cyclical and other changes in world market prices for this commodity could affect the results of the Group's mining activities. Changes in these prices result from factors that are beyond the Group's control, such as fluctuations in global supply and demand (particularly because of the prevailing level of worldwide demand for steel products) and transportation costs. Prices of these commodities have varied significantly in the past and could vary significantly in the future and are positively correlated with demand from steel producers. See also "*Industry*", "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting Metinvest's Results of Operations—World market prices of iron ore*" and "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting Metinvest's Results of Operations—Demand and price for steel in the markets in which Metinvest operates*".

According to Bloomberg, the benchmark price of 62 per cent. Fe iron ore fines CFR China increased marginally to U.S.\$137 per dry tonne in 2013 compared to U.S.\$131 in 2012, after which prices fell to U.S.\$97 and U.S.\$55 per dry tonne in 2014 and 2015, respectively. In the middle of December 2015 prices fell to a multi-year low of U.S.\$38.5 per dry tonne. According to Bloomberg, in the first quarter of 2016, the price increased for the first time quarter-on-quarter since the fourth quarter of 2013 to a quarterly average of U.S.\$49 per dry tonne compared to U.S.\$46 per dry tonne in the fourth quarter of 2015. Prices reached U.S.\$72 per dry tonne in the fourth quarter of 2016 whereas the average price per dry tonne amounted to U.S.\$59 in 2016. In 2017, prices increased on average by 21.4 per cent. year-on-year and reached U.S.\$72 per dry tonne. The increases in 2016 and 2017 were mainly caused by the economic stimulus measures adopted by the Chinese government and steel production growth, strong global demand for higher-grade products due to efforts to improve steel production efficiency. Other factors that led to higher prices were the imposition of stricter environmental controls, the closure of induction furnaces in China which resulted in a greater utilisation of furnaces that use iron ore products as their key raw material, and also due to increased prices for steel products and several delays in additional capacity launches. The significantly higher profitability of global steel producers (including those located in China) during the years 2016 and 2017, caused by production cuts in the Chinese steel industry and the rise in protectionist measures globally resulted in increased demand for high-grade ore products, aiming to improve blast furnace productivity and maximise steel output. Stricter environmental controls also contributed to higher demand for iron ore with higher Fe content

compared to other, lower grade ore products. High and volatile hard coking coal prices also contributed to the higher use of high-grade ore to reduce coking coal consumption. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting Metinvest's Results of Operations—World market prices of iron ore*" for a discussion of the effects of these declines in iron ore prices on Metinvest's operating and financial performance during the relevant periods.

In addition, any significant increase in global supplies or decrease in global demand for iron ore could reduce the prices for the Group's products, and any such resulting decline in the prices of the commodities the Group sells to third parties may materially adversely affect the Group's business, results of operations and financial condition.

Metinvest is dependent on third party suppliers for a portion of its raw materials, and the externally purchased raw materials Metinvest uses to produce steel, such as coking and PCI coal, are subject to price fluctuations that could increase Metinvest's costs of production

Metinvest sources a significant portion of the raw materials it requires for the production of steel, including all of its coke, iron ore concentrate and pellets requirements, from its iron ore and coke facilities. However, it relies on third parties for the remainder of its raw materials, including 76 per cent. of its coking coal requirements by volume in the year ended 31 December 2017, 100 per cent. of its PCI coal and other coal requirements, 10 per cent. of its coke requirements and all of the ferroalloys and refractory materials used in the production of steel in the same period. The percentage of Metinvest's coking coal requirements supplied by third parties has increased, from 62 per cent. in 2010 to 76 per cent. in the year ended 31 December 2017, primarily due to the loss of control over operations of Krasnodon Coal, Metinvest's Ukrainian coking coal producer, since 15 March 2017. Despite Metinvest's efforts to diversify coking coal suppliers, including establishing relationships with premium quality suppliers in Australia, the US and Canada, as well as re-building and strengthening cooperation with Ukrainian producers, there can be no assurance that these efforts will be successful or will decrease Metinvest's reliance on third party suppliers for its raw materials. See also "*—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*". Any continuing or escalating military action in eastern Ukraine, public protests, unrest or political instability could lead to further disruptions to Metinvest's supplies of raw materials, and thereby further increase its dependence on third party suppliers.

The availability of raw materials from third party suppliers may be negatively affected by a number of factors largely beyond Metinvest's control, including interruptions in production by suppliers, the allocation of raw materials by suppliers to other customers, the introduction of import quotas for such raw materials by the government, price fluctuations and transport costs. Metinvest may not always be able to adjust its prices to recover the costs of increases in the prices of raw materials from third party suppliers, which may materially adversely affect Metinvest's business, results of operations and financial condition.

Also, Metinvest purchases certain raw materials for steel production, including coking and PCI coal, ferrous scrap metal and ferroalloys, from third parties. Prices for these materials have fluctuated significantly in the past. Prices are affected by cyclical, seasonal and other market factors, including periodic shortages, freight costs, speculation by brokers and export markets, and protective actions by the government. While Metinvest's coal, coke and iron ore businesses produce a significant part of the raw materials required by its steel production business, for some of its raw materials Metinvest remains subject to longer-term price fluctuations and shortages which are beyond its control.

Historically, prices for coking coal, ferroalloys, scrap metal and other important raw materials have historically increased as a result of global changes in supply of, and demand for, these materials. Prices for most of the raw materials that Metinvest uses increased regularly until late 2008 following price increases for steel, reflecting increased global demand for these products from steel producers. Increases in raw materials costs may outpace increases in the average selling prices for steel products and Metinvest's ability to appropriately react through normal price changes.

If prices for raw materials the Group uses to produce steel increase further in the future, Metinvest may be exposed to reductions in its profit margins resulting from delays in the reduction of raw material prices, which may materially adversely affect its business, results of operations and financial condition.

Metinvest may not be able to refinance its indebtedness

The 2015 Financial Statements and the 2016 Financial Statements note in an 'emphasis of matter' that Metinvest has been negatively affected, and may continue to be affected for the foreseeable future, by the continuing political and economic uncertainties in Ukraine. The 2015 Financial Statements also contain an additional 'emphasis of matter' to the effect that there is a material uncertainty with respect to going concern.

In addition, the ongoing civil disturbances, political instability and military action in certain parts of eastern Ukraine have resulted in decreased demand from the international investor base for investment in Ukraine, hampering the ability of Ukrainian companies and banks to obtain funding from the international capital and loan markets. See further "*Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*". Any continuing or escalating military action in eastern Ukraine could further hamper the ability of Ukrainian companies and banks to obtain such funding, and there can be no assurance that demand for investment in Ukrainian companies and banks will return to their previous levels after the geopolitical situation in Ukraine has stabilised.

The terms and conditions on which future funding or refinancing may be made available may not be acceptable or funding or refinancing may not be available at all, and in the most severe cases, they may materially adversely affect Metinvest's business, results of operations and financial condition.

Metinvest's uncommitted trade finance facilities may be cancelled at any time and on very short notice

The Group uses trade lines, including trade finance facilities, to finance purchases of inventory and receivables. The Group uses trade lines with weighted average interest rates of 3.5 per cent. per annum, and the maturity of its trade lines generally has terms of less than one year. The majority of these trade lines are drawn by Metinvest International, the main trading company of the Group. The Group's trade lines are typically secured by pledges of inventories and/or the assignment of export proceeds as well as other assets, depending on lender requirements. Many of these facilities are short term, uncommitted, can be cancelled by the relevant banks on very short notice and do not permit redrawings. If these facilities are cancelled on short notice and Metinvest is unable to obtain replacement facilities with similar financing terms or in a timely manner, this could materially adversely affect Metinvest's financial condition.

The Group's mining and metallurgical business depends on obtaining special permits issued by the Ukrainian government and other regulatory authorities, and such permits may be withheld, revoked or not renewed

Metinvest's special permits must be renewed before their expiration date. The expiration dates for Metinvest's special permits range from 2019 to 2037, for its mining and metallurgical segments. See "*Business Description—Licences and permits*". An extension may be refused on a number of grounds, including: in case of subsoil permits, failure to comply with the conditions of the special permit or agreement between the permit owner and the State Geology and Subsoil Service of Ukraine; any restriction of subsoil use by an authorised body; a failure to supply the necessary documents or the submission of false data; if the State Geology and Subsoil Service of Ukraine receives information from law enforcement and financial monitoring authorities that the applicant is engaged in the financing of terrorism; or if the Ministry of Ecology and Natural Sources refuses to approve the extension of the permit. For example, United Coal is subject to various permits in respect of underground coal mines, surface coal mines and preparation plants located in Virginia and West Virginia. United Coal's operations depend on the continuing validity of licences, the issuance of new licences and compliance with the terms of such licences, which may involve uncertainties and additional costs to Metinvest. Any or all of these factors may affect Metinvest's ability to obtain, maintain or renew necessary licences. If Metinvest is unable to obtain, maintain or renew the

necessary licences and special permits or is only able to obtain or renew them with newly introduced material restrictions, it may be unable to benefit fully from its reserves and implement its long-term expansion plans, which may materially adversely affect Metinvest's business, results of operations and financial condition.

Fluctuations in currencies may adversely affect the Group's financial condition and results of operations

The functional currency of the majority of the members of the Group located in Ukraine is the Hryvnia. The functional currencies of the Issuer and its non-Ukrainian subsidiaries are the U.S. dollar, the pound sterling, Euro, the Russian ruble and the Bulgarian lev. The Hryvnia remained relatively stable against the U.S. dollar from the fourth quarter of 2009 to the end of 2013. In 2014, the Hryvnia depreciated from UAH7.99 to U.S.\$1.00 at the start of the year to UAH15.77 to U.S.\$1.00 at the end of the year. In 2015, the Hryvnia continued to depreciate against the U.S. dollar, reaching a historical peak of UAH30.01 to U.S.\$1.00 on 26 February 2015, but later stabilising, bringing the yearly average to UAH21.81 to U.S.\$1.00. In 2016, the Hryvnia depreciated further against the U.S. dollar to the average for the period of UAH25.59 to U.S.\$1.00. In 2017, the Hryvnia depreciated further against the U.S. dollar to the average for the period of UAH26.60 to U.S.\$1.00. On consolidation, income statements and cash flows of the Group's subsidiaries for which the U.S. dollar is not the functional currency are translated into U.S. dollars, the presentation currency for the Group, using monthly average exchange rates during the year. Assets and liabilities are translated into U.S. dollars at the official exchange rate as of the relevant respective balance sheet dates. The exchange rate between the Hryvnia and the U.S. dollar has historically fluctuated, and the translation effect of such fluctuations could have a material adverse effect on the Group's consolidated results of operations.

In particular, as the Group's operations in Ukraine use the Hryvnia as the functional currency, the Group's operating margins are generally adversely affected by an appreciation of the Hryvnia against the U.S. dollar because this will generally cause costs (which are primarily denominated in Hryvnia) to increase relative to revenues (which are primarily denominated in U.S. dollars and, to a lesser extent, in Euro). On the other hand, despite its positive impact on the Group's costs in the short term, a significant depreciation of Hryvnia may negatively affect the Group in the longer term in a number of ways, including by increasing inflation and having a negative effect on the Ukrainian economy. See "*—The Ukrainian currency is subject to volatility and depreciation which could have a material adverse effect on the Group's business.*" Depreciation of Hryvnia also causes the value of the Group's Ukrainian assets to decrease upon translation, which can negatively affect the Group's net income or total comprehensive income for the relevant period.

Trade restrictions may adversely affect the Group's exports of its steel and its business

All of the Group's principal steel-producing subsidiaries (except for the re-rollers Ferriera Valsider, Metinvest Tramel, Spartan UK and Promet Steel) are located in Ukraine. As a major Ukrainian steel producer, which obtained approximately 79 per cent., 81 per cent. and 75 per cent. of its revenue from sales of metallurgical products in the years ended 31 December 2015, 2016 and 2017, respectively, outside Ukraine, the Group is subject to protective tariffs, duties and quotas imposed by certain countries into which the Group exports its steel products, which could reduce its competitiveness in, and limit its access to, certain markets. Although WTO members are expected to abolish all quantitative restrictions on trade flows with Ukraine, as quantitative restrictions are prohibited under the WTO rules, WTO members may still impose measures such as anti-dumping measures, safeguard measures and countervailing duties within the parameters established by the WTO rules. Reportedly, several steel-importing countries, including the European Union, the Eurasian Economic Union, the United States, Canada, Indonesia, Brazil, Thailand and Mexico, currently have anti-dumping measures in place with respect to certain steel imports from Ukraine. In October 2017, the European Commission imposed anti-dumping measures on hot-rolled flat steel products produced in four countries, including Ukraine. Imports from Ukraine are subject to a duty of €60.5 per tonne until October 2022. In October 2017, the Eurasian Economic Union imposed an anti-dumping measure in the form of an anti-dumping duty on hot-rolled steel angles originating in Ukraine, and imported into the customs territory of the Eurasian Economic Union. The anti-dumping measure amounts to 38.89 per cent. of the price. In mid-December 2015, the Russian Federation signed a decree suspending its CIS Free Trade Agreement with respect to Ukraine from 1 January 2016, as a result of which all rolled steel flat and

long products manufactured by the Group (except for plates of certain thickness, widths, steel grades and regular pipes) are subject to import customs duty in Russia. In March 2018, the U.S. imposed a 25 per cent. import tariff on steel products imported from third countries. Although certain countries can be exempted from these tariffs, Ukrainian steel products have not been exempted as of the date of this Offering Memorandum and there is no assurance that they will be exempted at all. In the year ended 31 December 2017, Metinvest's revenue from steel exports to the U.S., amounted to approximately U.S.\$62 million. Although the tariff may not have a material adverse effect on Metinvest's business due to Metinvest's limited steel exports to the U.S. it could redirect steel exports to other markets, which may lead to further anti-dumping measures being implemented in those markets. These further anti-dumping or other protectionist measures could adversely impact Metinvest's exposure to these markets. Moreover, the redirection of steel exports to other markets may lead to over-supply, thereby decreasing steel prices, which could reduce Metinvest's margins. Existing and future trade restrictions could decrease Metinvest's profit margins and increase export costs, which could materially adversely affect Metinvest's business, results of operations and financial condition. See also "*The Russian Federation may introduce an import embargo on the Group's steel and other products*" and "*Industry—Steel Industry—Metinvest's Markets for Steel Products—Trade Restrictions*".

The Group does not carry insurance coverage of all operational risks and may become subject to higher insurance premiums

The Group's operations may be affected by a number of risks, including strikes, riots, civil disorders, terrorist acts and military-related events, in particular, as a result of the on-going military conflict and acts of sabotage in parts of Ukraine, for which full insurance cover is either not available or not available on commercially reasonable terms. For example, the Group does not carry sabotage, military action or terrorist insurance cover. In addition, the severity and frequency of various events, such as accidents and other mishaps, business interruptions or potential damage to its facilities, property and equipment caused by human error, pollution, labour disputes and natural catastrophes, may result in losses or expose the Group to liabilities in excess of its insurance coverage. There can be no assurance that its insurance coverage will be sufficient to cover losses arising from any, or all, such events, or that it will be able to renew existing insurance cover on commercially reasonable terms, if at all. In addition, the Group's insurance policies are subject to commercially negotiated deductibles, exclusions and limitations, and the Group will only receive insurance proceeds in respect of a claim made to the extent of the terms and conditions agreed with the insurers. Therefore, insurance may not cover all losses incurred by the Group and no assurance is given that the Group will not suffer losses beyond the limits of, or outside the cover provided by, its insurance policies. Should an incident occur in relation to which the Group has no insurance coverage or inadequate insurance coverage, the Group could lose the capital invested in, and anticipated future revenue relating to, any property that is damaged or destroyed and, in certain cases, the Group may remain liable for financial obligations related to the impacted property. Similarly, in the event that any assessments are made against the Group in excess of any related insurance coverage that it may maintain, its assets could be subject to attachment, confiscation or restraint under various judicial procedures. Any of these occurrences could have a material adverse effect on the Group's business, results of operations and financial condition.

The Group may incur liabilities in connection with its pension plans

The Group has pension plans under which it is required to provide agreed benefits to current and former employees. As at 31 December 2017, the value of the Group's unfunded defined benefit obligations was U.S.\$369 million and the Group made payments in respect of its defined benefit obligations of U.S.\$27 million in 2017 and U.S.\$38 million in 2016. The Group may not be able to meet its obligations under unfunded benefit obligations. Furthermore, the Group's net liabilities under the defined benefit plans may be significantly affected by changes in the discount rate, the social security rate, the rate of increase in salaries and pension contributions, changes in demographic variables or other events and circumstances. Changes to local legislation and regulation relating to defined benefit plan funding requirements may result in significant deviations in the timing and size of the expected cash contributions under such plans. Although the Cabinet of Ministers of Ukraine recently issued a decree regulating pension entitlements, which is expected to reduce the Group's benefit obligations, there can be no

assurance that the Group will not incur additional liabilities relating to its pension plans, and these additional liabilities could have a material adverse effect on the Group's business, results of operations and financial condition.

Metinvest's success depends on its ability to compete effectively in the steel industry

The steel industry is characterised by intense competition. Metinvest competes with a number of other large steel companies in Ukraine, Russia and other countries, including China, which is developing a significant export market for steel products. Metinvest's principal competitors in steel production include foreign and domestic competitors, including ArcelorMittal S.A. ("**ArcelorMittal**"), which controls PJSC "ArcelorMittal Kriviy Rih" in Ukraine, and OJSC Magnitogorsk Iron & Steel Works ("**MMK**"), OJSC Novolipetsk Steel Mill ("**NLMK**"), OJSC Severstal ("**Severstal**"), JSC HC Metalloinvest ("**Metalloinvest**"), OJSC Mechel ("**Mechel**") and Evraz plc and its subsidiaries ("**Evraz**"). Metinvest's steel business competes primarily on the basis of price, quality and the ability to meet customers' product specifications and delivery schedules.

Metinvest expects that its competitors will continue to improve their production while also reducing costs. A number of Metinvest's competitors are undertaking modernisation and expansion plans, which may make them more efficient or allow them to develop new products. In addition, while Metinvest has relatively low operating costs compared with steel producers in more developed countries, it has higher operating costs than the world's lowest cost producers. Metinvest also faces price-based competition from steel producers in other emerging market countries, including Russia in particular. Competition from foreign steel producers, or foreign direct investment in Metinvest's domestic competitors, may also result in losses of market share for Metinvest. Increased competition from Ukrainian or international steel producers could result in more competitive pricing. In the future, steel producers may also increasingly compete with producers of substitute materials, such as plastics and ceramics, particularly in certain consumer industries, such as the automotive, construction and packaging industries. The highly competitive nature of the steel industry combined with excess production capacity for some steel products has exerted, and may in the future continue to exert, downward pressure on prices of certain of Metinvest's steel products.

In addition, Metinvest's competitive position may be affected by further consolidation in the steel industry. Competition has been previously affected by the mergers and acquisitions involving, among others, the global market leader ArcelorMittal, ThyssenKrupp Stahl and JFE. These and many other large international steel companies have greater financial resources and more extensive global operations than Metinvest, as well as more technologically advanced steel production facilities (in particular, more basic oxygen furnaces and fewer of the less efficient open-hearth furnaces). ArcelorMittal and some other large competitors may, in the future, use their substantial resources to enter into purchase agreements with Metinvest's customers, which may result in a loss of market share for Metinvest. While the rapid rise in Chinese steel production since 2004 has generally reduced the level of consolidation in the steel industry on a global basis, greater consolidation in the Chinese market is a stated aim of the Chinese government. In particular, in December 2016, Baosteel Group and Wuhan Iron and Steel Group consolidated their assets and established Baowu Steel Group which became the largest steel producer in China and the second largest in the world with total steelmaking capacity of 75.5 million tonnes per year at the end of 2016. The Chinese government plans to further accelerate the consolidation process in the national steel industry. The Russian steel industry has also experienced increased consolidation, including the formation of the Evraz Holding Group. Major Russian steel producers have expanded their operations in Ukraine by acquiring interests in Ukrainian steel companies. Metinvest cannot guarantee that its market share will not decrease if competitors further modernise and improve their plants and machinery, which may materially adversely affect Metinvest's business, results of operations and financial condition.

Metinvest may not be successful in executing its business strategy

Metinvest's business strategy includes improving product quality, focusing on its clients' needs, developing a range of products in priority segments, enhancing operational safety and reducing environmental footprint, and increasing

efficiency by further reducing costs. However, Metinvest may be unable to successfully execute its strategy. For example, Metinvest's shift to producing a greater proportion of quality products may not be implemented in a timely manner and its competitors may introduce products of equal or higher quality more swiftly than Metinvest, obtaining a significant competitive advantage. Furthermore, the demand for certain high quality products may be limited, therefore Metinvest may need to establish partnerships with existing producers to access these markets. Any such partnerships may not yield the expected gains. Any failure of Metinvest to execute its strategy may materially adversely affect Metinvest's business, results of operations and financial condition.

Estimates of Metinvest's mining reserves and resources are subject to assumptions and uncertainties and estimates of its resources are speculative

Metinvest's iron ore reserves and resources data contained in this Offering Memorandum, unless otherwise stated, are taken from analyses prepared in accordance with the methods described in "*Business Description—Reserves*", by reference to estimates provided by SRK in its Reserves Report dated 31 March 2010, prepared in accordance with the JORC Code. Iron ore reserves and resources are quoted as at 1 January 2010. Where indicated, these figures should be read together with production data for the period since 1 January 2010 to illustrate estimated reserves and resources as at 31 December 2017. However, such estimates do not constitute a reserves and resources report prepared in accordance with JORC standards. Furthermore, changes in pricing for iron ore and coal since the date of the relevant Reserves Report will have an impact on reported reserves. With respect to Metinvest's iron ore reserves and resources information contained in this Offering Memorandum, Metinvest has not, and does not intend to, engage independent experts to prepare a reserves report in accordance with SEC standards in respect of any of its iron ore deposits. If such an independent report were to be prepared, it could potentially estimate Metinvest's reserves and resources to be materially lower and more adverse than it currently estimates. If the information on which Metinvest's resources and reserves estimates rely is incorrect, or if, due to the inherent uncertainty regarding resources and reserves, these estimates are found to be materially different to the current estimates, Metinvest may experience delays and/or increased operating costs, and the economic viability of its projects may be adversely affected.

Information relating to Metinvest's coal deposits located in the United States has been prepared by reference to estimates provided by Cardno in its Reserves Report dated 15 March 2016, prepared under SEC standards. The estimates of Metinvest's iron ore and coal reserves and resources were based on interpretations of geological data obtained from sampling techniques and projected rates of production. Sampling techniques and projections are inherently uncertain and variances in reserves and resources estimates under different methodologies may be difficult to determine and evaluate.

No assurance can be given that the indicated amount of mining reserves will be recovered, or will be recovered at the prices assumed. Estimates are based on limited sampling and, consequently, are uncertain because the samples may not be representative of the entire mineral resource. Until a better understanding of the mineral resource is obtained, the resource and reserve estimates may change significantly, either positively or negatively.

For these reasons, estimates and classifications of reserves and resources prepared by different engineers or by the same engineers at different times may vary substantially. Actual commodity tonnage recovered from identified reserves and resources and revenue and expenditures with respect to Metinvest's reserves and resources may vary materially from estimates. Accordingly, these reserve and resource estimates may not accurately reflect Metinvest's actual reserves and resources. Any inaccuracy in the estimates related to Metinvest's reserves and resources could result in lower than expected revenue, higher than expected costs, decreased profitability, decreased sale price on disposal and asset impairment.

Metinvest's mining and steel manufacturing operations are subject to a number of operational risks and hazards, including the significant risk of disruption or damage to persons and property

Metinvest's mining and steel manufacturing operations, like those of other mining and metal companies, are subject to a number of risks and hazards, including industrial accidents, the unavailability of equipment (whether due to equipment failure, the need for unscheduled maintenance or otherwise), unusual or unexpected geological conditions, environmental hazards, labour disputes, changes in the regulatory environment, extreme weather conditions (especially in winter) and other natural phenomena. In January 2015, a fire occurred on the conveying line of crushing workshop No. 2 of Northern GOK, damaging the route used for transporting ore. See "*Business Description—Insurance—Loss record*".

Metinvest currently has nine underground coal mines and six surface coal mining operations in the United States. Additional hazards associated with underground mining include underground fires and explosions, including those caused by: flammable gas; cave-ins or ground falls; discharges of gases and toxic chemicals; flooding; sinkhole formation and ground subsidence; and other accidents and conditions resulting from drilling, blasting and removing and processing material from an underground mine. Hazards associated with open-pit mining include accidents involving the operation of open-pit mining and rock transportation equipment and the preparation and ignition of large scale open-pit blasting operations, collapses of the open-pit wall, flooding of the open-pit, production disruptions due to weather and hazards associated with the disposal of mineralised waste water, such as groundwater and waterway contamination.

In 2015, 2016 and 2017, respectively, Metinvest experienced 97, 99 and 76 accidents, which are defined as lost time injuries that prevent the employee from working for at least one day, and four, nine and two work-related fatalities, respectively, at its Ukrainian facilities. See also "*Business Description—Health and Safety*".

The occurrence of any of these events could result in material mine or plant shutdowns or periods of reduced production, and potential litigation from the relevant employees. Although Metinvest has business interruption insurance in place, including "inter-dependency" coverage for its key companies, an interruption in production capability may require Metinvest to make large capital expenditures to remedy the situation. Such occurrences could also result in material damage to, or the destruction of, mineral properties or production facilities, human exposure to pollution, personal injury or death, environmental and natural resource damage, delays in mining, delays in shipment, reduced sales, increased costs, the need to incur significant capital expenditures to remedy the situation, other monetary losses and possible legal liability which may materially adversely affect Metinvest's business, results of operations and financial condition.

Metinvest's operations are subject to environmental laws and regulations that may be difficult and costly to comply with, and future changes in or unanticipated breaches of, such laws and regulations could require Metinvest to incur increased costs

Metinvest operates in an industry that is hazardous to the environment and its operations and properties are subject to environmental, health and safety and other laws and regulations. For instance, mining operations generate large amounts of pollutants and waste, some of which are hazardous to the environment, such as benzopyrene, oxides of sulphur and nitrogen, ammonium sulphates, nitrites and sludges (including sludges containing chrome, copper, nickel and zinc). In addition, mining operations involve the storage of overburden and tailings and the use of hazardous materials such as explosives. The discharge, storage and disposal of hazardous waste are subject to a number of laws and regulations relating to environmental protection in the jurisdictions in which Metinvest operates.

The environmental, health and safety and other laws and regulations to which Metinvest's mining operations are subject may also require clean-ups of contamination and reclamation, such as requirements for cleaning up highly hazardous waste oil. In addition, pollution risks and related clean-up costs are often impossible to assess unless

environmental audits have been performed and the extent of liability under environmental laws is clearly determinable.

A significant part of Metinvest's operations are located in Ukraine. Under the current environmental protection system, Metinvest must determine, in respect of each pollutant, the amount of emissions that it makes into the atmosphere or discharges into the water, and the amount of waste that it produces. Based on the amounts of pollutants that it emits and discharges, Metinvest is required to pay on a quarterly basis an environmental tax calculated separately for each pollutant. Any increase in the rate of the ecology tax and/or the amounts of pollutants generated by Metinvest's Ukrainian operations (whether or not as a result of an expansion of its operations or an increase in its production) may increase Metinvest's operating expenses and/or require it to make additional capital expenditures for equipment to reduce emissions. Metinvest has not generally been indemnified against environmental liabilities or any required land reclamation expenses of its acquired businesses that may arise from activities that occurred prior to the acquisition of such businesses.

Environmental legislation in Ukraine is currently weaker and less stringently enforced than in the EU or the United States. However, Ukraine's integration into the world economy and increasing relations with the EU may lead Ukraine to accelerate the process of adopting more comprehensive legislation that reflects more stringent European environmental standards. In particular, it is expected that the Ukrainian environmental legislation will become more stringent in the next few years as the relevant Ukrainian legislation is approximated to EU regulatory norms as part of the implementation of the Association Agreement and the Deep and Comprehensive Free Trade Agreement ("DCFTA") between Ukraine and the EU. See also "*Risks Relating to Ukraine—A failure to develop relations with the EU might have negative effects on the Ukrainian economy and Metinvest's business*". Based on the applicable regulatory requirements, certain Metinvest companies, including Ingulets GOK (located in Ukraine) and United Coal (located in the United States), have created general reserves which may be used to cover environmental liabilities and compliance costs, although these reserves may not be sufficient.

Future changes in environmental laws or in the enforcement of such laws may require Metinvest to make significant capital expenditures to modify production processes, install pollution control equipment, perform site clean-ups, curtail or cease certain operations, pay fees, fines or make other payments for discharges or other breaches of environmental standards or otherwise alter aspects of Metinvest's operations, which may materially adversely affect Metinvest's business, results of operations and financial condition.

In the event of an environmental investigation, if a production facility is found to have violated environmental standards, the relevant regulatory authorities may request a court to issue an order halting certain processes at that facility. Suspension of production at one or more of Metinvest's facilities due to the imposition of such order may materially adversely affect its business, results of operations and financial condition. See "*Business Description—Environmental Matters*".

Metinvest's compliance with health and safety laws may require increased capital expenditures, and non-compliance may subject Metinvest to significant penalties

A violation of health and safety laws relating to a mine or plant, or failure to comply with the instructions of the relevant health and safety authorities, could lead to, among other things; the temporary shut down of all or part of the mine or plant; the loss of the right to mine or operate a plant; or the imposition of costly compliance procedures and investing in capital projects. It is expected that the health and safety requirements applicable to Metinvest's Ukrainian facilities will become more stringent in the next few years as the relevant Ukrainian legislation is approximated to EU regulatory norms as part of the implementation of the Association Agreement and DCFTA. See also "*Risks Relating to Ukraine—A failure to develop relations with the EU might have negative effects on the Ukrainian economy and Metinvest's business*". If a court, upon a petition from the competent health and safety authorities, orders Metinvest to shut down all or part of a mine or plant, or if the health and safety authorities require Metinvest to implement costly compliance measures, whether pursuant to existing or new health and safety laws and regulations, or the more stringent enforcement of existing laws and regulations, such measures could

materially adversely affect Metinvest's business, results of operations and financial condition. In addition, Metinvest's stated objective of enhancing health and safety compliance at its facilities in line with international best practice may entail significant costs, which may materially adversely affect Metinvest's business, results of operations and financial condition. See "*Business Description—Health and Safety*".

Metinvest's operations are associated with greenhouse gas emissions which are implicated in the development of climate change. Ongoing policy and regulatory efforts to combat climate change may entail additional costs for Metinvest

On-going international negotiations and national policy frameworks which seek to reduce greenhouse gas emissions may have an impact on Metinvest's results of operations. Ukraine is a signatory to the United Nations Framework Convention on Climate Change, otherwise known as the "Kyoto Protocol", and a new international climate change treaty that was agreed in Paris during the United Nations Framework Convention on Climate Change in 2015, which became effective in November 2016, and under which signatory members are required to reduce greenhouse gas emissions beginning in 2020. Currently, the Ministry of Ecology and Natural Resources of Ukraine, in a partnership with the European Bank for Reconstruction and Development, is implementing a project which aims at providing support to the government of Ukraine in development and implementation of low-carbon policies and measures, among other issues provided by the Paris Agreement to the United Nations Framework Convention on Climate Change. Its objectives are to assist in the development and implementation of system for monitoring, reporting and verification of greenhouse gas emissions and providing analytical support for the introduction of emissions trading for greenhouse gases in Ukraine under the Association Agreement between Ukraine and the EU. These policy measures seek to reduce the emission of greenhouse gases and may therefore result in increases in Metinvest's cost of operations. Metinvest also has operations outside of Ukraine, and is therefore also potentially exposed to the cost implications of other countries' policies to regulate the effect of greenhouse gases. Furthermore, to the extent that policies designed to combat the effect of climate change promote the use of renewable energy sources over other non-renewable sources, this may have an impact on third party demand for Metinvest's coal. These factors may have a material adverse effect on Metinvest's business, results of operations and financial condition.

Metinvest may receive contaminated scrap metal

To supplement its use of iron ore and concentrate, Metinvest includes scrap metal in the charge it processes into steel. Some of the scrap metal which Metinvest sources from external suppliers may be contaminated due to the Chernobyl disaster in Ukraine in 1986. Although management has adopted risk assessment procedures to prevent contaminated scrap metal shipments passing into Metinvest's plants, any use of contaminated scrap metal could result in losses and liabilities, including with respect to medical claims and work stoppages, which may materially adversely affect Metinvest's business, results of operations and financial condition.

Metinvest benefits from limitations on the export of scrap metal that may be eliminated in the future

The price that Metinvest pays for scrap metal in Ukraine is generally favourable. Favourable scrap metal prices are due in part to high duties on the export of Ukrainian scrap metal and generally high costs of transporting scrap metal over long distances. In the event that Ukrainian export restrictions on scrap were to be removed, the prices that Metinvest pays for scrap metal could increase, which may materially adversely affect Metinvest's business, results of operations and financial condition.

Title to Metinvest's mineral properties or production facilities, or to any privatised company acquired by Metinvest, may be challenged

Some of the properties and facilities that Metinvest has acquired may be subject to prior claims or unregistered agreements, and title may be affected by defects undetected at the time of acquisition. There can be no assurance that Metinvest's title to these properties will not be challenged. In addition, competitors may from time to time also

seek to deny Metinvest's rights to develop certain natural resource deposits by challenging its compliance with tender rules and procedures or compliance with the terms of relevant licences or permits.

Most of Metinvest's steelmaking and mining assets in Ukraine consist of companies that have been privatised, and Metinvest may seek to acquire additional companies that have been privatised. Privatisations in some former Soviet republics (including Ukraine) have been subject to political controversy and legal challenge or reversal, including the re-privatisation (by way of re-nationalisation and resale by tender) of OJSC Kryvorizhstal (now PJSC "ArcelorMittal Kryvyi Rih"), Ukraine's largest steel mill, in 2005.

Privatisation legislation in Ukraine is vague, internally inconsistent and in conflict with other elements of Ukrainian legislation. As a result, most, if not all, privatisations are arguably deficient and vulnerable to challenge, including through selective action by governmental authorities. While Metinvest believes that it has complied with applicable legislation and regulations with respect to the acquisitions of its assets, if any of Metinvest's acquisitions are successfully challenged as having been improperly conducted and Metinvest is unable successfully to defend itself, Metinvest may lose its ownership interests, which may materially adversely affect Metinvest's business, results of operations and financial condition.

Metinvest's competitive position and future prospects are heavily dependent on its senior management team's experience and expertise

Metinvest's ability to maintain its competitive position and to implement its business strategy and to carry out its day-to-day activities is dependent to a significant extent on the services of its senior management team. However, there can be no assurance that these individuals will continue to make their services available to Metinvest in the future. The loss of the services of members of Metinvest's senior management team or an inability to attract and retain additional or replacement senior management personnel could have a material adverse effect on Metinvest's business, results of operations and financial condition. Moreover, competition, particularly in Ukraine, for personnel with relevant expertise is intense due to the relatively small number of available qualified individuals, and therefore Metinvest's ability to retain its existing senior management personnel and attract additional suitably qualified senior management personnel may be limited. As a result of these factors, the departure of key members of Metinvest's senior management team could materially adversely affect Metinvest's business, results of operations and financial condition.

If Metinvest is unable to obtain or maintain quality certifications for its facilities, it may lose existing customers or fail to attract new customers

In order to expand its sales of higher quality steel products, Metinvest will need to maintain existing and may need to obtain additional quality certifications. Consumers of high quality steel, particularly those in the EU and the United States, often require that their suppliers have these certifications before commencing new supplier trials. In addition, Metinvest may need to undertake further measures in order to maintain the competitiveness of its products.

Most of Metinvest's operating facilities are certified as complying with, among others, ISO 9001, ISO 14001 and OHSAS 18001 standards and most of its major products are certified by leading international classification societies, including Lloyd's Register, Germanischer Lloyd, Det Norske Veritas, TÜV NORD CERT GmbH and others. These certifications are widely recognised. Metinvest's certified products include slabs, billets, plates and shapes and bars. If Metinvest's certifications are cancelled or approvals withdrawn, its ability to continue to serve its targeted markets or to retain customers may be impaired.

Metinvest's subsidiaries in Ukraine are in many cases among the largest employers in their respective regions, which may subject Metinvest to social and political pressures

Metinvest's subsidiaries are in many instances among the largest employers in the regions and cities where they operate. While under Ukrainian legislation Metinvest does not have any specific social obligations or responsibilities in relation to these regions or to the trade unions to which most of Metinvest's employees belong, Metinvest's ability to reduce its workforce, decrease wages or otherwise reduce benefits may nevertheless be subject to local political and social considerations.

In addition, the majority of Metinvest's employees in Ukraine belong to the Federation of Trade Unions of Ukraine and are generally employed under labour agreements entered into for an indefinite period of time. While Metinvest's management believes that its current relations with the trade unions are satisfactory, no assurance can be given that work stoppages will not occur. Work stoppages could reduce production and negatively affect Metinvest's profitability. Any inability to make scheduled or unanticipated reductions in its workforce, or any long-lasting work stoppages caused by strikes or labour disputes could materially adversely affect Metinvest's business, results of operations and financial condition.

Metinvest is dependent on highly qualified personnel and may also be adversely affected by wage increases

Metinvest currently employs personnel with industry experience. Competition in Ukraine for such personnel is intense due to the small number of qualified individuals with suitable practical experience in the mining and steelmaking industry. In addition, wages in Ukraine, though rising, remain low compared to most neighbouring countries and it may be difficult to attract and retain experienced and skilled personnel. Metinvest faces competitive pressure to increase wages to attract personnel that would seek employment outside of Ukraine, mostly to neighbouring countries such as Poland, which offer substantially higher wages than Ukraine. Moreover, Metinvest may be required to raise wages in the future due to the Ukrainian government's employment policy. Continued high demand for skilled labour both within Ukraine and in neighbouring countries, as well as continuing increases in labour costs could make it difficult for Metinvest to attract or retain qualified employees at a commercially reasonable cost or at all, which could have a material adverse effect on Metinvest's business, results of operations, financial condition and prospects.

Metinvest's operating subsidiaries have minority shareholders

Metinvest owns less than 100.0 per cent. of the shares in some of its production subsidiaries based in Ukraine, with the remaining equity being held by a large number of individual minority shareholders. In particular, as of the date of this Offering Memorandum, minority shareholders hold between 5.28 per cent. and 0.23 per cent. in the share capitals of the Guarantors. Under the Law of Ukraine on Joint Stock Companies any proposal by a shareholder or shareholders who in aggregate own 5.0 per cent. or more of the company's voting shares must be included in the agenda of the company's general shareholders' meeting. The governing authorities of Metinvest's operating subsidiaries, including their shareholders' meetings, supervisory councils and management boards, have in the past made and continue to make strategic and operational decisions and approve various business transactions which may be challenged by minority shareholders under Ukrainian law. Currently Metinvest is in the process of squeezing out minority shareholders in some of its subsidiaries, including Azovstal, Ilyich Steel, Ingulets GOK, Central GOK and Northern GOK, and such attempts could be challenged by the minority shareholders. In such instances, Metinvest may have to incur high costs to achieve its squeeze-out efforts or engage in protracted disputes against these minority shareholders. There can be no assurance that such squeeze-out efforts will be completed in a timely manner or at all.

The Issuer and the Group are exposed to risks in connection with interest rate changes and associated hedging and interest rate fluctuations could adversely affect the Group's results of operations

The Issuer and the Group are exposed to risks associated with changes in variable interest rates, as certain of their credit facilities bear interest at a floating rate, such as the PXF Facilities Agreement. Therefore, an increase or decrease in interest rates would affect their current interest expenses and their future refinancing costs. The realisation of any of these risks could have a material adverse effect on the business, financial condition and results of operations of the Issuer and the Group, which could in turn adversely affect the Issuer's ability to fulfil its obligations under the Notes or cause the market price of the Notes to decline.

Some transactions of Metinvest's Ukrainian subsidiaries, including most of the Guarantors, may be subject to specific corporate approval requirements, hence, the approval process may be subject to delay or may be more difficult

Transactions of Metinvest's Ukrainian subsidiaries which are joint stock companies, including all of the Guarantors (Avdiivka Coke, Ilyich Steel, Ingulets GOK, Northern GOK, Central GOK and Azovstal), are subject to specific corporate approval requirements applicable to "transactions with interested parties" and "material transactions".

An **"interested party transaction"** is a transaction in which an interested party:

- is the company's counterparty or is a member of the executive body of the company's counterparty;
- is a representative or intermediary of a party (except for the representation of a company by its officers);
- is remunerated by the company (or its officers) or another party to the transaction in return for undertaking the transaction; and/or
- acquires any property as a result of such transaction.

An **"interested party"** is any of the following:

- an officer of the company (being a member of the management board, supervisory board, audit committee or any other company's body), or a person affiliated with any such officer;
- a shareholder who alone or together with its affiliated parties holds 25 per cent. or more of the company's voting shares, and shareholder's affiliated persons (except for the cases when such shareholder holds either directly or indirectly 100 per cent. of the company's voting shares);
- a legal entity in which any of the above-mentioned persons serves as an officer; or
- other persons defined in the company's charter.

An "interested party transaction" is subject to (i) the verification of its commercial terms that should be on an arm's-length basis ("**customary market terms**") as certified by an independent licensed auditor or valuator retained by the supervisory board or executive body of a public joint stock company or (if such verification is provided under the charter) a private joint stock company and (ii) a prior approval (or, failing such approval, a post-execution ratification) by the company's supervisory board or general shareholders' meeting, in each case with mandatory abstention of the member or shareholder that is an interested party. The charter of a private joint stock company may establish that a shareholder, which is an interested party, may vote at the general shareholders' meeting. All charters of the Ukrainian Guarantors entitle shareholders which are interested parties to vote at the general shareholders' meeting and neither of them provides for the verification of the commercial terms of interested party transactions.

The company's charter may establish additional grounds for a transaction to be regarded as an "interested party transaction" and, accordingly, to require the above specified approval.

An interested party transaction must be approved by the company's general shareholders' meeting if:

- the supervisory board has not been established;
- all members of the supervisory board are interested parties; or
- the market value of the property or services which are the subject of the transaction exceeds 10 per cent. of the value of the company's assets based on the company's most recent annual financial statements.

If the supervisory board either rejected the transaction or failed to issue any decision with respect to the transaction within 30 days from receipt of all necessary information, such transaction may be approved by the company's general shareholders' meeting.

A transaction is defined as a **"material transaction"** if the market value of the property or services which are the subject of such transaction equals or exceeds 10 per cent. of the value of the company's assets based on the company's most recent annual financial statements. Such transaction generally requires an approval of the supervisory board of the company (if the transaction's value does not exceed 25 per cent. of the company's assets) or the general meeting of shareholders (if the transaction's value exceeds 25 per cent. of the company's assets).

There is no assurance that the relevant Ukrainian subsidiary may obtain the requisite approval in time or at all, which may constrain Metinvest's ability to enter into business transactions in a timely manner or at all and therefore adversely affect Metinvest's business, results of operations, financial condition and prospects.

Changes in accounting standards could negatively affect Metinvest's financial results

Metinvest's financial statements have been prepared and presented in accordance with IFRS. Any future changes in these accounting standards, including in the reporting of Metinvest's income and impairment losses, may have a significant impact on Metinvest's reported results and financial condition. Similarly, new accounting standards or pronouncements that may become applicable to Metinvest from time to time, or changes in the interpretation of existing standards and pronouncements, could have a significant effect on Metinvest's reported results for the affected periods. Any new standards may also introduce a degree of volatility to Metinvest's assets and liabilities due to the requirements to reassess certain key estimates and judgments at each reporting date, and could adversely affect Metinvest's results of operations.

Risks Relating to Taxation

The tax authorities could challenge some of Metinvest's transactions on the basis of the "substance over form" principle

Despite Ukrainian tax authorities and courts historically taking the position that, for tax purposes, the form of a transaction prevailed over its substance, recent developments show a greater attention being paid to the substance over the form of transactions for tax purposes. Even though the relevant practice is under development and inconsistent, there is a risk that Ukrainian tax authorities may claim that certain agreements lack business purpose or are used for tax-evasion, and that their tax treatment should be different or that they are completely disregarded from a tax perspective. This approach allows the tax authorities to challenge tax benefits obtained by parties to the relevant transaction and it appears it is being widely applied. Therefore, although management believes that Metinvest can demonstrate that all its transactions were concluded for proper business reasons and that they are in compliance with all applicable tax rules, there is a risk that the Ukrainian tax authorities might challenge some of Metinvest's transactions. Should the Ukrainian tax authorities attempt to or successfully challenge Metinvest's tax

benefits recognised under these transactions, and impose penalties or fines, such an outcome could have a material adverse effect on Metinvest's business, financial condition and results of operations.

Ukrainian tax authorities could challenge accounting records and financial statements of Metinvest in the course of tax audits

As a part of the tax reform approved on 28 December 2014 and effective as of 1 January 2015, the rules concerning the computation of corporate income tax ("CIT") liabilities were significantly amended. Under these new rules, corporate income tax must be charged on accounting profits subject to a limited number of corrections (referred to as tax differences). As a result, tax authorities were granted a right to review accounting records of taxpayers and their correctness, which also covers the review of the accounts of those taxpayers that prepare financial statements under IFRS. Based on statements of the Ministry of Finance of Ukraine and the tax authorities, this authority is not likely to be removed or revoked. However, given that local tax inspectors are typically not sufficiently qualified or experienced to review IFRS-based financial statements and UAS-based accounting (local accounting standards), this could result in unjustified corrections to the tax statements of Metinvest's Ukrainian businesses and in the assessment of additional taxes or material penalties and fines, which could have a material adverse effect on Metinvest's business, financial condition and results of operations.

Metinvest's intragroup transactions and other related party transactions are/may be subject to Ukrainian transfer pricing regulations

Ukrainian transfer pricing rules apply to a wide range of cross-border transactions. Transfer pricing rules also cover certain domestic transactions that took place within the period from 1 September 2013 to 1 January 2015. These rules typically regulate pricing for goods and services sold or purchased to or from related parties and, in certain cases, unrelated parties. Transfer pricing rules provided in the Tax Code of Ukraine (the "**Tax Code**") entered into force on 1 September 2013 and require that liabilities for tax on certain transactions are calculated on an arm's-length basis.

The Tax Code includes a list of transactions that are subject to transfer pricing regulation, including, but not limited to, cross-border transactions with related non-resident entities, cross-border transactions for the sale of goods and services via non-resident agents, and cross-border transactions with non-resident entities incorporated in the so-called "low-tax" jurisdiction or in certain corporate forms, if certain monetary thresholds are met (the "**Controlled Transactions**"). Accordingly, it imposes various reporting obligations, and a failure to observe these reporting obligations may result in sanctions imposed by the tax authorities. Based on such reporting, as well as their own monitoring and tax audits, the Ukrainian tax authorities can make transfer pricing adjustments and impose additional tax liabilities in respect of Controlled Transactions if the transaction is not at arm's length.

The Group's historical and current trading relationships, including sales between businesses in each of its segments, could fall within the scope of the transfer pricing rules. In particular, if the Group's foreign counterparties that do not have a permanent establishment in Ukraine are located in a designated "low-tax" jurisdiction or incorporated in certain corporate forms, the Ukrainian tax authorities may apply the transfer pricing rules to transactions between those members of the Group that are tax-resident in Ukraine and their foreign counterparties, regardless of whether they are related parties.

On 1 January 2017, Ukraine joined the Inclusive Framework for implementation of the OECD Base Erosion and Profit Shifting Action Plan ("**OECD BEPS**"). Ukraine has undertaken to implement four "minimum standard" actions of OECD BEPS. In light of this, tax authorities will likely look more closely at transfer pricing, economic substance of legal structures employed by taxpayers and various anti-abuse rules applicable to cross-border transactions. Since Metinvest operates in different jurisdictions, some of which currently are implementing or are about to implement the OECD BEPS, the OECD BEPS might have significant impact on Group entities. A large number of Metinvest's transactions with foreign counterparties or Group companies may be subject to increased scrutiny by tax authorities in those jurisdictions.

Although the management believes that Metinvest is in compliance with transfer pricing regulations, and that it has paid all applicable taxes, it is not always possible to determine an appropriate market price for all such transactions, and the Ukrainian tax authorities' view as to what constitutes a market price may differ from Metinvest's opinion on the same transaction. In particular, there can be no assurance that the transfer pricing method and the underlying data used by the tax authorities to determine the arm's-length basis would always correspond to the method and data used by Metinvest. Accordingly, any discrepancies between such tax assessments could lead to transfer pricing adjustments by the Ukrainian tax authorities, which may also lead to the imposition of fines and penalties besides requiring the payment of additional amounts to cover underpaid tax liabilities. Further, there is no assurance that Metinvest's non-Ukrainian companies will be successful in an offsetting adjustment, a failure that could increase Metinvest's overall tax burden for a particular transaction and result in a double taxation of its trading profits. The imposition of any such fines, penalties and/or additional payment obligations, or any dispute between the tax authorities and Metinvest in relation thereto, could have a material adverse effect on Metinvest's business, results of operations, financial condition and prospects.

Metinvest operates in many jurisdictions with highly complex and variable tax regimes, and changes in tax rules and the outcome of tax assessments and audits and limitations on the ability to deduct interest expenses could have a material effect on Metinvest's financial results

Metinvest conducts business around the world and is therefore subject to highly complex and often divergent tax laws and regulations, resulting in very challenging structuring and operational issues. International tax laws and regulations are extremely complex and subject to varying interpretations. Metinvest often relies on generally available interpretations of tax laws and regulations in the jurisdictions in which it operates. These uncertainties may have a significant impact on Metinvest's local tax results.

For example, from 2014 to 2017, the Italian tax authorities claimed that Metinvest Trametal was not fully compliant with corporate income tax laws for the financial years 2009, 2010, 2011 and 2012. The Italian tax authorities issued and delivered to Metinvest Trametal tax audit notices indicating the amounts payable of approximately U.S.\$33.6 million, U.S.\$21.1 million, U.S.\$23 million and U.S.\$24 million, respectively. These amounts refer to the interest deductible in the future, if sufficient revenue will be generated. Metinvest Trametal filed an appeal on 26 February 2018 against the tax claims for the fiscal year 2012, and has successfully challenged the tax claims for the fiscal years 2009, 2010 and 2011 in the Provincial Tax Commission. However, the Italian tax authorities appealed to the Regional Tax Commission. The appeal proceedings will take place starting from March 2018 and it is expected that the judgments will be issued in 2018 and 2019. Any or all of these tax issues and their resulting consequences could have an adverse effect on Metinvest's business, results of operation, financial condition and prospects.

The interpretation and application of Ukrainian tax laws and regulations are not fully developed and are subject to frequent change and interpretation, which may increase the risk of operating and investing in Ukraine

The tax legislation in Ukraine and its implementing regulations are not always clearly drafted and are thus subject to inconsistent interpretation by the tax authorities and other government bodies, providing many opportunities for inappropriate and corrupt practices by officials. Accordingly, Ukrainian tax legislation is subject to frequent changes and amendments, which may result in unforeseen complexities for Metinvest. Although the implementation of the Tax Code was viewed by the government as a significant step in the implementation of the tax reform aimed at modernising and simplifying the Ukrainian tax system, it attracted wide public criticism and opposition from entrepreneurs throughout Ukraine. Apart from the Tax Code, the system of taxation is frequently varied by interpretations issued by the tax authorities, which creates significant uncertainty in the future as to the implementation or interpretation of the new legislation and tax rules, an uncertainty that is exacerbated by the complicated process of tax inspections and the contradictory tax rules. Moreover, despite the government's general commitment to economic reform, several new tax measures have been implemented recently, such as a military duty of 1.5 per cent. to be withheld by employers on their employees' salary and a real estate tax on commercial

real estate, all of which, and in addition to the different interpretations of existing tax rules, further exacerbate the risk of non-compliance with any applicable tax rule by Metinvest.

In August 2016, Ukrainian tax authorities claimed that Ingulets GOK is not fully compliant with the laws with respect to corporate income tax and VAT and issued and delivered to Ingulets GOK tax decisions indicating aggregate amount of approximately UAH 1.5 billion (approximately U.S.\$56.9 million) payables and approximately UAH3.5 billion (approximately U.S.\$132.8 million) of improperly calculated losses. Ingulets GOK successfully challenged these tax claims in court of the first instance, and the court decision has already entered into force. However, there can be no assurance that the tax authorities will not appeal the decision in the future.

In June 2017, Ukrainian tax authorities claimed that Northern GOK was not fully compliant with the laws with respect to corporate income tax, VAT, withholding tax and rent payments for use of radio-frequency resources, special water use, use of subsurface resources etc., and issued and delivered to Northern GOK tax assessments indicating an aggregate amount of approximately UAH1.4 billion (approximately U.S.\$53.1 million) in payables. Northern GOK successfully challenged these tax claims in the court of first instance, but the tax authorities are currently appealing the court decision.

In September 2017, Ukrainian tax authorities claimed that Azovstal is not fully in compliance with the law with respect to corporate income tax, excise tax and VAT, and issued and delivered to Azovstal tax decisions indicating an aggregate amount of approximately UAH216 million (approximately U.S.\$8.2 million) in payables and approximately UAH614 million (approximately U.S.\$23.3 million) of improperly calculated losses. Azovstal is currently challenging these tax claims in the court of first instance.

In December 2017, Ukrainian tax authorities claimed that Central GOK is not fully compliant with the laws with respect to corporate income tax, VAT, real estate tax and rent payments for use of subsurface resources and issued and delivered to Central GOK tax assessments indicating aggregate amount payable of approximately UAH1.2 billion (approximately U.S.\$45.5 million). In addition, in February 2018, Ukrainian tax authorities claimed that Metinvest-Resource was not fully compliant with the laws with respect to corporate income tax and issued and delivered to Metinvest-Resource tax assessments indicating an aggregate amount payable of approximately UAH871 million (approximately U.S.\$33.1 million) and approximately UAH10 million (approximately U.S.\$0.38 million) of improperly calculated losses. Both Central GOK and Metinvest-Resource are currently appealing the respective report and tax assessment before the relevant tax authorities; if these appeals are rejected, both companies plan to challenge the relevant tax claims before the competent court. There can be, however, no assurance that either Central GOK or Metinvest-Resource will be successful in these appeals, or that further tax liabilities will not arise in connection with these proceedings.

Besides administrative fines and penalties, criminal sanctions might be imposed against Metinvest's general directors, chief accountant or other senior managers, if certain tax rules are violated and the relevant monetary thresholds are met. Any criminal prosecution or imposition of such penalties against Metinvest's management or directors might damage its reputation and also prevent its management team from operating efficiently and distract it from the core of its corporate responsibilities. This risk is further exacerbated because tax liabilities in essence remain open for re-assessment by tax authorities even when the statutory limitation period for review has passed. Uncertainties and differing opinions regarding the legal interpretation and application of tax laws and regulations, as well as changes in the tax laws, could adversely affect Metinvest's financial condition and results of operations.

The Issuer may become tax-resident in a jurisdiction other than The Netherlands

The Issuer is incorporated in The Netherlands and is currently considered by management to be Netherlands-resident for tax purposes. Generally, in order to maintain its Dutch tax residence, management and control of a company must take place in The Netherlands. If management and control of the Issuer were to be conducted in a jurisdiction other than The Netherlands, the existing tax residence of the Issuer could be jeopardised. Consequently, the Issuer must meet all applicable requirements for Dutch tax residence under Dutch

tax legislation. If management and control of the Issuer takes place in another jurisdiction, or strategic or significant operational decisions or other management activities take place in that jurisdiction, the Issuer may be subject to tax in that other jurisdiction. Whether this is the case will depend upon the tax laws of that other jurisdiction and, in certain cases, the impact of any tax residence "tie-breaker" provision in any double tax treaty between The Netherlands and that jurisdiction. Taxation of the Issuer in a jurisdiction other than The Netherlands could materially adversely affect the Issuer's financial condition and results of operations.

Metinvest may be exposed to taxation in Ukraine if activities of non-Ukrainian companies of Metinvest are treated as creating a permanent establishment for Ukrainian tax purposes

The Tax Code contains the concept of a permanent establishment in Ukraine as a means for taxing foreign legal entities which carry out regular ordinary or primarily ordinary entrepreneurial activities in Ukraine beyond those of a preparatory and auxiliary character. Even though Ukraine's double tax treaties with other countries contain a similar concept, most relevant treaties provide for a narrower definition of "permanent establishment" than the Tax Code, increasing the risk of a company being subject to Ukrainian tax laws.

Accordingly, the practical application in Ukraine of the concept of a permanent establishment under Ukrainian law and double tax treaties is not well developed and, as a result, foreign companies with limited operations in Ukraine are at risk of being treated as having a permanent establishment in Ukraine and hence being liable to Ukrainian taxation. Accordingly, no assurance can be given that Metinvest's activities will not be treated by the Ukrainian authorities as creating such a permanent establishment, subjecting it to Ukrainian tax laws, and be taxed at the applicable 18 per cent. CIT rate. Moreover, this risk is further exacerbated because applicable rules determining the part of a foreign entity's income that is attributable to its Ukrainian operations are not well developed, making it more likely that the tax authorities might seek to assess Ukrainian tax on the entire income of such company, if it were treated as having a permanent establishment in Ukraine. Should Metinvest or any of its non-Ukrainian subsidiaries be deemed as having its permanent establishment in Ukraine, such an outcome could have a material adverse effect on Metinvest's business, financial condition and results of operations.

Metinvest's working capital may be decreased by a delay or non-repayment of VAT by the Ukrainian tax authorities

As an exporter in Ukraine that does not charge VAT on sales that can be offset against the purchase of goods and services, Metinvest relies on the timely repayment of VAT by the government. Given that export sales are generally not subject to VAT tax, Metinvest's Ukrainian businesses are entitled to a VAT refund for purchase expenses related to export sales. Despite the improvements in the VAT refund procedure and the implementation of an electronic VAT administration system since 2015, there is still a risk that VAT owed to Metinvest will not be paid promptly, which will lead to decreases in working capital. There is also a risk that the government's financial position will preclude the timely repayment of VAT, leading to a financial loss depending on the terms of repayment imposed and, as Metinvest reports its financial results and position in U.S. dollars, the prevailing exchange rate when actual repayments are made. In addition, any errors or malfunctions in the operation of the electronic VAT administration system could result in excessive transfers of funds from Metinvest's bank accounts to accounts that are held for VAT payments by Ukrainian companies and/or an inability to reclaim any excess from the VAT accounts, which could have a material adverse effect on Metinvest's working capital, business, financial condition and results of operations.

Metinvest may be required to discontinue certain deferred tax assets upon introduction of the dividend distribution based corporate income tax

Following years of debate around corporate taxation, the Ukrainian cabinet and parliament are considering replacing the existing corporate income tax with a dividend distribution based tax (the so called "exit capital tax" or "capital withdrawal tax"). The Ukrainian ministry of finance has drafted the tax reform bill and its submission is pending before the Ukrainian parliament. The bill provides that corporate profits are taxable only when distributed,

either in the form of dividends or in other forms of taxable capital withdrawals. Accordingly, businesses will be allowed to defer income tax liabilities until the distribution of profits as dividends. Although this regime could be beneficial to corporations and limit their tax liabilities, it would not allow the deduction of deferred tax assets (such as tax losses incurred in preceding taxable periods) against tax liabilities arising out of the distribution of dividends, and Ukrainian companies would have to discontinue all corporate income tax related recognised tax assets and deferred tax benefits. Metinvest had various deferred tax assets and liabilities in the year ended 31 December 2017. Should such tax reform be implemented, Metinvest will be required to discontinue the recognition of such tax assets and liabilities. Despite any positive offsetting effects arising from this tax reform, there can be no assurance that Metinvest will not incur additional tax liabilities due to capital withdrawals to service or repay its debt, expand its operations in jurisdictions other than Ukraine, or for other corporate purposes. Such additional tax liabilities could have a material adverse effect on Metinvest's business, results of operations, financial condition and prospects.

Risks Relating to Ukraine

As noted above, Ukraine is currently experiencing significant civil disturbances and political instability, with ongoing military action in some parts of the Donetsk and Luhansk regions. See further "—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition".

The conflict in certain parts of the Donetsk and Luhansk regions in eastern Ukraine has had, and may continue to have, negative humanitarian, economic and political consequences for Ukraine

As a result of the on-going conflict in certain parts of the Donetsk and Luhansk regions in eastern Ukraine, an important economic region of Ukraine has been significantly disrupted, along with the industrial and social infrastructure therein. Armed groups seized government buildings, military and other state assets, and prevented the exercise of lawful government authority in these regions (in Ukrainian, *oblasts*). The breakdown of law and order in the affected regions has prompted the Ukrainian authorities to launch anti-terrorist operations against the armed groups.

As reported in the United Nations Human Rights Office of the High Commission's report, "*Accountability for killings in Ukraine from January 2014 to May 2016*" published on 14 July 2016, beginning in 2014 there are areas of the Donetsk and Luhansk regions of Ukraine under the control of illegal armed formations largely backed by the Russian Federation where aggression against the legitimate Ukrainian authorities takes place "fuelled by the inflow of foreign fighters and weapons from the Russian Federation". Beyond the enormous humanitarian consequences, the conflict in certain parts of the Donetsk and Luhansk regions has resulted in the loss of a significant proportion of the country's productive capacity and a substantial fall in Ukraine's gross domestic product. These negative effects of these events, along with the associated loss of tax revenue to the Ukrainian government and the necessity of increased military and social welfare expenditure, have had, and continue to have, a significant detrimental effect on the Ukrainian economy and financial position. This could in turn adversely affect Metinvest's business, results of operations and financial condition.

The conflict in certain parts of the Donetsk and Luhansk regions has resulted in a large number of casualties and injuries of civilians, as well as the displacement or destitution of a significant proportion of those living in affected areas. Large numbers of people have fled the occupied territory and sought refuge in other areas of the country. Considerable allocation of funds from the state budget have been, and will continue to be, required in order to feed, house and relocate internally displaced persons ("IDPs"). In addition, the need to accommodate IDPs in satisfactory conditions pending return to their former homes or relocation to new homes, as well as the burden imposed on communities by the presence of large numbers of such IDPs, has led to and may in the future lead to social unrest, placing further strains on local and state authorities and consequently local and state budgets. A failure to effectively relocate and reintegrate IDPs into society, or a continued or increased flow of IDPs from the

uncontrolled territories, could have a material adverse effect on Ukraine's economic growth and political stability and, as a consequence, Metinvest's ability to perform its obligations under the Notes.

The government's efforts to re-establish control over certain parts of the Donetsk and Luhansk regions have resulted in a significant increase in Ukraine's defence expenditure. If the situation escalates, such expenditure will continue to strain the government's finances and negatively affect Ukraine's economy. Further, the conflict in certain parts of the Donetsk and Luhansk regions has led to a significant loss of production in an important industrial area of Ukraine, with industrial output declining significantly in certain areas of the Donetsk and Luhansk regions since 2014. On 15 March 2017, Ukraine imposed additional economic measures in certain parts of the Donetsk and Luhansk regions. These measures include freezing rail and road cargo links between certain parts of the Donetsk and Luhansk regions and the rest of Ukraine, and were imposed as a response to the seizure of certain key steel and coal businesses, including Metinvest's companies, in the Donbas region by Russia-backed illegal armed formations. The additional economic measures affecting these areas continue to have a negative impact on Ukraine's economic growth and industrial production, in particular in relation to the steel, nickel and general metallurgical production sectors, which, in turn, have had and may continue to have a negative impact on Metinvest's business.

The events in these areas have also contributed to a decline in Ukrainian GDP, principally through (i) disruption of business in the affected areas, (ii) deterioration of trade and other economic and political relations with Russia, (iii) reduction of foreign direct investment, and (iv) disruption of the government's privatisation programme. Along with the associated loss of tax revenue to the government and the necessity of increased military and social welfare expenditure, the effect of the conflict in certain parts of the Donetsk and Luhansk regions has had, and continues to have, a significant detrimental effect on the Ukrainian economy and financial position as a whole, and on Metinvest's business in particular.

Despite numerous failed ceasefires brokered with international assistance, supported by the presence of international observers, Russia-backed illegal armed formations continue to hamper the efforts of the government to restore peace and stability to certain parts of the Donetsk and Luhansk regions. The risk of a further intensification of aggression against Ukraine in this area remains high and the full implementation of the terms of the existing ceasefire arrangements remains challenging.

There can be no assurance that any further attempts at a ceasefire will lead to a long-term solution to the conflict in certain parts of the Donetsk and Luhansk regions and may well only result in a "frozen conflict" in this area, with no peace treaty or other political framework resolved to the satisfaction of Ukraine. If the conflict or a "frozen conflict" in certain parts of the Donetsk and Luhansk regions was to continue, it would have a long-term adverse military and economic effect on Ukraine, as well as unpredictable political consequences. In particular, this situation would likely continue to negatively affect levels of economic activity and foreign direct investment in Ukraine and place downward pressure on the Hryvnia. Any or all of these factors could have a material adverse effect on Ukraine's economic growth and political stability, which could in turn have a material adverse effect on Metinvest's business, results of operations and financial condition.

The illegal occupation and attempted annexation of Crimea and the City of Sevastopol has adversely affected and is likely to continue to adversely affect Ukraine's economic and political stability

In 2014, following the Euro-Maidan Revolution, strategic military and governmental locations across Crimea and in the City of Sevastopol, including the Crimean parliament, were occupied by unmarked Russian armed forces. Subsequently, an illegal referendum was held in Crimea and the City of Sevastopol in violation of Ukrainian law and norms of international law and on the basis thereof the purported Russian annexation of Crimea and the City of Sevastopol was announced soon after (referred to herein as the **"illegal occupation of Crimea"**).

The Ukrainian Parliament has declared the illegal referendum in Crimea and the City of Sevastopol unconstitutional and its legitimacy and results have generally not been recognised internationally. Every member

state of the European Union, the United States and Canada have declared it as illegitimate and 13 members of the UN Security Council voted in favour of a resolution declaring it invalid, although the resolution was vetoed by the Russian Federation. On 27 March 2014, the UN General Assembly passed a resolution declaring the referendum invalid and affirming Ukraine's territorial integrity. On 10 April 2014, the Parliamentary Assembly Council of Europe also adopted a resolution condemning the violation of the territorial integrity and sovereignty of Ukraine in Crimea by the armed forces of the Russian Federation on 20 February 2014 and considering the military occupation of the Ukrainian territory and the threat of the use of military force, the recognition of the results of the illegal referendum and subsequent attempted annexation of Crimea into the Russian Federation as being in violation of international law.

Ukraine considers Crimea and the City of Sevastopol to be territories of Ukraine which are illegally occupied by the Russian Federation.

The illegal occupation of Crimea has adversely affected and may continue to adversely affect Ukraine's economic growth and political stability, including through its impact on the following:

- Ukraine's domestic trading market, due to lower trade volumes because of the loss of trade with Crimea and the City of Sevastopol;
- Ukraine's finances, because of the significant anticipated costs due to the reconstruction and reclamation of stolen property, and the ongoing losses of tax revenue from the region;
- Ukraine's economy, which has temporarily lost the benefit of a large number of valuable private- and state-owned assets and property (including Sevastopol Naval Base and local oil and gas assets) in the region;
- Ukraine's GDP, through the disruption caused in the region's industry and the resulting loss of goods and services produced;
- Ukraine's domestic gas supply, as Ukraine has temporarily lost access to its gas production assets located in Crimea and gas stored there, as well as to its gas reserves located in Crimea and in certain parts of the Black Sea; and
- Ukraine's relations with Russia, as the illegal occupation of Crimea has been a source of tension between Russia and Ukraine since the crisis began, resulting in decreased trading volume between the two countries and other adverse financial and economic consequences.

At the date of this Offering Memorandum, the illegal occupation of Crimea continues to place strain on the general resources of Ukraine as well as materially and adversely affect Ukraine's economy and political stability, which creates an adverse effect on Metinvest's business.

Ukraine's economy is vulnerable to fluctuations in the global economy

Ukraine's economy is vulnerable to market downturns and economic slowdowns elsewhere in the world. Because Ukraine is a major producer and exporter of metal and agricultural products, the Ukrainian economy is especially vulnerable to world commodity prices and the imposition of import tariffs by the United States, the EU and Russia or other major export markets. In particular, a deterioration in global economic and financial conditions as well as a decrease in domestic demand resulting from civil disturbances and political uncertainty in Ukraine has affected industrial output, which declined by 13 per cent. in 2015, increased by 2.8 per cent. in 2016, and increased by 0.4 per cent. in 2017, according to SSSU. Any negative developments in the global economy may have negative effects on the economy of Ukraine, which in turn may have a material adverse effect on Metinvest's business, results of operations and financial condition.

Further, during times of financial crisis, companies operating in emerging markets can face particularly severe liquidity constraints as foreign funding sources are withdrawn. Prior to the global financial crisis, relatively easy access to liquidity, both from within Ukraine and internationally, was a significant factor facilitating growth in Ukraine's GDP. If the global macroeconomic situation fails to improve or if conditions in Ukraine do not improve, this could lead to prolonged unavailability of external funding or could impact commodity prices and global trade flows. Ukraine's overall economic and financial position in the short and medium term could also be negatively affected, which could, in turn, have a material adverse effect on Metinvest's business, results of operations and financial condition.

Investments in emerging market countries such as Ukraine carry risks not typically associated with risks in more mature markets

A significant part of Metinvest's operations is located in Ukraine. Investments in emerging markets such as Ukraine are subject to greater risk than investments in more mature markets, including in some cases significant political, social, economic and legal risks. Although some progress has been made since independence in 1991 to reform Ukraine's economy and its political and judicial systems, to some extent Ukraine still lacks the necessary legal infrastructure and regulatory framework that are essential to support market institutions, the effective transition to a market economy and broad-based social and economic reforms. As a consequence, there are risks associated with investments in emerging markets and, specifically, Ukraine, that are not typically associated with investing in more mature markets. The availability of credit to entities operating within emerging markets is significantly influenced by levels of investor confidence in such markets as a whole. Consequently, any factors that impact market confidence (for example, a decrease in credit ratings or state or central bank intervention in one market) could affect the price or availability of funding for entities within such markets. Investors should also note that emerging economies such as Ukraine are subject to rapid change and that the information set out in this Offering Memorandum may become outdated relatively quickly. Accordingly, investors should exercise particular care in evaluating the risks involved and must decide for themselves whether, in light of those risks, their investment is appropriate. Generally, investments in emerging markets such as Ukraine are only suitable for sophisticated investors who fully appreciate the significance of the risks involved and investors are urged to consult with their own legal and financial advisers before making an investment in the Notes.

Ukraine's government may be unable to sustain political consensus, which may result in political instability

Historically, a lack of political consensus in the *Verkhovna Rada* (the Parliament of Ukraine) has made it difficult for the government to secure the necessary support to implement policies intended to foster liberalisation, privatisation and financial stability. There can be no assurance that the current government will sustain political consensus in the form of support of a parliamentary majority coalition required to continue the reform process in Ukraine. Any failure of the government to attract such support may lead to political instability.

This lack of support and any subsequent political instability may also impact the government's ability to enact legislation to meet the necessary criteria for receiving financial support from organisations, such as the IMF, on a constant basis, in particular the IMF requirements for further financing under the 2015 Extended Fund Facility ("EFF"). If such criteria are not met, this could result in a further suspension of international financial assistance to Ukraine. Such a suspension would materially adversely affect the financial position of the government and make it difficult or impossible for Ukraine to meet its international financial obligations. Such circumstances will have a severe negative effect on the economy and, as a result, on the business of Metinvest, its results of operations and its financial condition.

A number of additional factors could adversely affect the political stability in Ukraine, including:

- lack of agreement within political factions and between individual deputies;

- disputes between factions within the parliamentary majority coalition and opposition factions on major policy issues, including Ukraine's foreign, social, fiscal and energy policies, constitutional changes required to implement the Minsk Arrangements, and the issue of the timing and implementation of closer political and economic ties with the EU;
- instability within the parliamentary majority coalition, including the risk of further factions or individual deputies leaving the coalition;
- conduct of the anti-terrorist operation in certain parts of the Donetsk and Luhansk regions; and
- court actions taken by opposition politicians against decrees and other actions of the President and government.

Ukraine's political instability may have further negative effects on the Ukrainian economy and, as a result, a material adverse effect on Metinvest's business, results of operations and financial condition. Such instability could also cause trading in the Notes to be volatile or adversely affect the trading price of the Notes. See also "*Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

Ukraine has experienced, and may continue to experience, significant economic instability

From 2000 until the first half of 2008, Ukraine experienced rapid growth in its GDP, with higher tax collections and increased stability of the Hryvnia providing some degree of economic soundness. This growth was driven mainly by a rapid increase in foreign demand for Ukrainian products, rising commodity prices on external markets and the availability of foreign financing. While positively affecting the pace of Ukrainian economic growth in those years, these factors made the Ukrainian economy overly vulnerable to adverse external shocks. Thus, the Ukrainian economy was one of the most heavily affected by the global financial and economic crisis that began in 2008, which manifested itself through extreme volatility in debt and equity markets, reductions in foreign investment and sharp decreases in GDP around the world. In 2008, due largely to the global financial crisis, Ukrainian economic growth declined, and in 2009, the economy contracted by 14.8 per cent., according to SSSU. The situation globally in certain cases stabilised since, and Ukraine's economy started to recover, with GDP growing by approximately 4.1 per cent. and 5.2 per cent., respectively, in the years 2010 and 2011, according to SSSU. However, GDP growth slowed to 0.2 per cent. in 2012 and remained at the same level in 2013 as in 2012. GDP decreased by 6.6 per cent. and 9.8 per cent. in 2014 and 2015, respectively, and increased by 2.4 per cent. and 2.5 per cent. in 2016 and 2017, respectively, as compared to the same periods of the previous year, according to the SSSU. A deterioration in the global economic situation may lead to a decline in the Ukrainian economy, and, as a result, may have a material adverse effect on Metinvest's business, results of operations and financial condition.

The Ukrainian economy has been characterised by the following features, which may have a significant adverse effect on the investment climate in Ukraine and, in turn, may be a significant detriment to Metinvest's operations:

- high interest rates;
- high levels of budget deficit;
- a relatively weak banking system providing limited liquidity to Ukrainian enterprises;
- the continued operation of loss-making enterprises due to the lack of effective bankruptcy proceedings;
- tax evasion;
- a large black and grey market economy;

- high inflation;
- significant capital flight;
- high unemployment and underemployment; and
- the impoverishment of a large portion of the Ukrainian population.

In addition, the recent significant civil disturbances and political instability in Ukraine and the ongoing military action in some parts of the Donetsk and Luhansk regions of Ukraine have materially and adversely affected and may continue to affect Ukraine's economy. According to the SSSU, Ukraine's real GDP decreased by 9.8 per cent. in 2015, mostly due to a fall in the value of investments and a worsening of the trade balance. The worsening of the trade balance is mainly attributable to the economic pressure that Russia exerted on Ukraine while the government was negotiating the signing of an Association Agreement with the EU. In 2016 and 2017, GDP increased by 2.4 per cent. and 2.5 per cent, respectively, as compared to the same periods of the previous year, according to the SSSU. For the year ended 31 December 2017, exports of Ukrainian goods to Russia increased by 9.6 per cent. compared to the corresponding period in 2016. On 14 August 2014, the Ukrainian Parliament adopted the Law of Ukraine "On Sanctions", which provides for special economic and other restrictive measures (sanctions) against foreign states, foreign legal entities and individuals and other persons involved in activities threatening the national security, sovereignty and territorial integrity of Ukraine or the rights and freedoms of its citizens. In accordance with this law, on 16 September 2015, the President of Ukraine issued a decree introducing sanctions and other restrictions with respect to 105 legal entities and 388 individuals for a period of one year. These sanctions and restrictions were further prolonged and expanded to cover additional legal entities and individuals on 29 March 2016, on 27 May 2016, on 17 October 2016 and on 15 May 2017, respectively. In addition to continuing to update its list of sanctioned entities and individuals, which include, among others, Russian businesses and individuals closely related to the Kremlin, the Ukrainian government has introduced a number of other restrictions against the Russian Federation. Currently, the list of sanctioned entities includes 468 legal entities and 1,228 individuals. These sanctions and restrictions, Russia's counter-measures, and any further restrictive measures which may be introduced by the Russian government against Ukraine, Ukrainian businesses and/or individuals, could contribute to a decline in trade with Russia, which could have a material adverse effect on Metinvest's business, results of operations and financial condition. See also "*—Ukraine's economy is vulnerable to fluctuations in the global economy*".

Although the Ukrainian government has generally been committed to economic reform in recent years, the actual implementation of reforms has been impeded by a lack of political consensus, controversies over privatisation (including the privatisation of land in the agricultural sector and the privatisation of large industrial enterprises), restructuring of the energy sector, and the removal of exemptions and privileges for certain state-owned enterprises or for certain industry sectors.

Failure to achieve the political consensus necessary to support and implement such reforms and any resulting instability could adversely affect the country's macroeconomic indices and economic growth. Furthermore, future political instability in the executive or legislative branches could hamper efforts to implement necessary reforms. There can be no assurance that the political initiatives necessary to achieve these or any other reforms described elsewhere in this Offering Memorandum will continue, will not be reversed or will achieve their intended aims. Rejection or reversal of reform policies favouring privatisation, industrial restructuring and administrative reform may have a negative effect on the Ukrainian economy, which could in turn have a material adverse effect on Metinvest's business, results of operations and financial condition.

Restricted access to international capital markets may adversely affect the Ukrainian economy

Ukraine's internal debt market remains illiquid and under-developed as compared with markets in most Western countries. In the aftermath of the emerging market crisis in the autumn of 1998, and until the second half of 2002,

loans from multinational organisations such as the EBRD, the World Bank, the EU and the IMF comprised Ukraine's only significant sources of external financing. From 2003 until 2008, the international capital markets were Ukraine's main source of external financing but they ceased to be available from mid-2008 until September 2010 due to the global economic and financial crisis. As a result, Ukraine sought financing from the International Monetary Fund (the "**IMF**"), which provided stand-by arrangements in 2008 and 2010. On 30 April 2014, the IMF agreed a staff-level agreement with the Ukrainian leadership on opening a two-year stand-by agreement (the "**2014 SBA**") worth U.S.\$17 billion. The EU and Japan declared they would issue aid of €1.6 billion and U.S.\$1.5 billion, respectively, after Ukraine signed the agreement with the IMF. On 27 March 2014, the United States Congress approved a financial aid package to Ukraine. The bill provides U.S.\$1 billion in loan guarantees to Ukraine, and U.S.\$150 million in financial aid to Kyiv. On 7 May 2014, Ukraine received the first tranche of U.S.\$3.2 billion under the arrangement with the IMF. On 26 May 2014, the government signed loan agreements worth a total of U.S.\$1.5 billion with the International Bank for Reconstruction and Development. On 29 August 2014, the Executive Board of the IMF approved the 2014 SBA second tranche worth SDR914.67 million (U.S.\$1.39 billion). On 11 March 2015, the Executive Board of the IMF approved a four-year extended arrangement under the EFF worth about U.S.\$17.5 billion, under the IMF's exceptional access policy. The Board also took note of Ukraine's decision to cancel the 2014 SBA. On 13 March and 4 August 2015, Ukraine received the first two tranches from the IMF worth U.S.\$5 billion and U.S.\$1.7 billion, respectively, under the new extended programme. On 14 September 2016, the Board of the IMF completed the second review of the EFF and approved the disbursement of the third tranche, in an amount of SDR716.11 million (U.S.\$1 billion), under the programme. The funds were again used to bolster Ukraine's foreign exchange reserves. On 4 March 2017, the IMF and the Ukrainian authorities reached an agreement on the updated Memorandum of Economic and Financial Policies, which paved the way for consideration of the third review of the arrangement under the 2015 EFF. On 3 April 2017, the IMF Executive Board approved the third review of the EFF and facilitated the disbursement of the fourth tranche to Ukraine in the amount of U.S.\$1 billion.

In January and April 2014, Moody's Investors Service Ltd. ("**Moody's**") downgraded Ukraine's sovereign rating from Caa1 to Caa2 and then further to Caa3 with a negative outlook. On 11 July 2014, Standard & Poor's Financial Services LLC ("**S&P**") revised its outlook on Ukraine from negative to stable. At the same time, S&P affirmed 'CCC/C' long- and short-term foreign currency sovereign credit ratings and 'B-/B' long- and short-term local currency sovereign credit ratings on Ukraine. The long-term Ukraine national scale rating at 'uaBB+' was also confirmed. Fitch Ratings Inc. ("**Fitch**"), on 22 August 2014, downgraded Ukraine's long-term local currency Issuer Default Rating ("**IDR**") to 'CCC' from 'B-' and affirmed its long-term foreign currency IDR at 'CCC'. The issue ratings on Ukraine's senior unsecured local currency bonds were downgraded to 'CCC' from 'B-' while the senior unsecured foreign currency bonds were affirmed at 'CCC'. While Ukraine was able to successfully complete a Eurobond issue in September 2017 for the amount of U.S.\$3 billion and has received four tranches from the IMF under the EFF Programme, if Ukraine's access to international debt markets were to become limited, the government would have to rely to a significant extent on official or multilateral borrowings to finance part of the budget deficit, fund its payment obligations under domestic and international borrowings and maintain foreign exchange reserves. On 10 June 2016, S&P Global Ratings affirmed its 'B-/B' long- and short-term local and foreign currency sovereign credit ratings on Ukraine. On 25 August 2017, Moody's further upgraded Ukraine's long-term foreign currency credit rating to Caa2, citing continuing structural reforms and improvement of government debt dynamics and strengthening of external position of Ukraine. Notwithstanding the recent improvement of Ukraine's sovereign credit ratings, there is no assurance that this trend will continue in the future.

The future stability of the Ukrainian economy continues to be largely dependent upon economic reforms and the effectiveness of economic, financial and monetary measures as well as cooperation with international financial institutions to avoid the possible default.

Further external borrowings from multilateral organisations such as the IMF, the EBRD, the World Bank or the EU may be contingent upon Ukraine's satisfaction of certain requirements including:

- implementing strategic, institutional and structural reforms;

- managing the budget deficit in order to restore confidence in fiscal sector sustainability;
- reducing tax and budgetary arrears and indebtedness for electricity and gas; and
- improving the sovereign debt credit ratings.

If Ukraine is unable to meet these requirements, multilateral organisations may withhold or suspend their funding. A failure by official creditors and of multilateral organisations such as the EBRD, the World Bank or the EU to grant adequate financing combined with any inability to access the international capital markets and syndicated loan markets may put pressure on Ukraine's budget and foreign exchange reserves and have a material adverse effect on the Ukrainian economy and, as a result, on Metinvest's business, results of operations and financial condition.

As at 1 February 2018, Ukraine's international reserves amounted to U.S.\$18.4 billion in foreign exchange reserves. At the same time, Ukraine faced significant external repayments in the following years, in particular, sizeable long-term external repayments, including by government, central bank, deposit-taking corporations and other sectors (according to the NBU, as at the third quarter of 2017 gross external debt amounted to U.S.\$117.3 billion, including U.S.\$38.96 billion of long-term debt owed by the government, U.S.\$7.56 billion of long-term debt owed by the central bank, U.S.\$4.39 billion of long-term debt owed by the deposit-taking corporations and U.S.\$40 billion of long-term debt owed by other sectors).

In December 2013, Russia subscribed for U.S.\$3 billion Ukrainian sovereign bonds due December 2015. Though Ukraine denies the validity and enforceability of such bonds, there is a risk that Ukraine may be required to repay such debt (and any other debts that may be subject to a cross-default provision) at short notice, which could have a material adverse effect on the Ukrainian economy as a whole and, as a result, on Metinvest's business, results of operations and financial condition. The Law Debenture Trust Corporation p.l.c. acting as trustee under the above sovereign bonds filed a claim in February 2016 against Ukraine in relation to the repayment of this debt. On 27 May 2016, Ukraine filed its objections to this claim. The first instance summary judgment decision handed down on 29 March 2017 was in favour of the trustee in the amount of U.S.\$3 billion in addition to the outstanding coupon and applicable interest. The decision has been appealed by Ukraine and a hearing took place in January 2018. Pending the outcome of the appeal a stay of enforcement of the summary judgment has been granted by the High Court. If Ukraine loses its appeal (whether to the Court of Appeal or possibly a further appeal to the Supreme Court) and obtains no further stay, the summary judgment will become executable. Unless Ukraine makes a voluntary payment of the sums due, there is a risk that Ukraine's state assets not under immunity would become subject to enforcement action.

Although the financing obtained through sale of the Eurobonds in September 2017 and the four tranches received by Ukraine from the IMF under the EFF have reduced Ukraine's refinancing risk, Ukraine's ability to refinance its debt could come under pressure once again if (i) relations between Russia and Ukraine deteriorate or (ii) access to the international markets remains restricted in the medium term and/or no additional external financing is secured.

Any further unfavourable changes in Ukraine's relationship with Russia may adversely affect the Ukrainian economy and thus Metinvest's business

Ukraine's economy has historically relied heavily on its trade flows with Russia (and, to a lesser extent, the other countries of the former Soviet Union, largely because Ukraine imports a large proportion of its energy requirements, especially from Russia (or from countries that transport energy-related exports through Russia)). In addition, a large share of Ukraine's services receipts comprises transit charges for oil, gas and ammonia from Russia. For year ended 31 December 2017, approximately 9.1 per cent. of all Ukrainian exports of goods were made to Russia, as compared to 9.9 per cent., 12.7 per cent. and 18.2 per cent. in 2016, 2015 and 2014, respectively, according to the SSSU.

Relations between Ukraine and Russia are strained due to:

- the annexation of the Crimean peninsula by the Russian Federation;
- the military action in certain districts of the Donetsk and Luhansk regions in eastern Ukraine;
- ongoing disagreements over the prices and methods of payment for gas delivered by the Russian gas monopolist Gazprom to, or for transportation through, Ukraine;
- issues relating to the delineation of the Russia-Ukraine maritime border; and
- Russian bans on imports of food products from Ukraine and anti-dumping investigations conducted by Russian authorities in relation to certain Ukrainian goods.

When Mr Yanukovich declared his intention to sign the Association Agreement with the EU in 2013, pressure was placed on Russia-Ukraine bilateral relations, which included the threat of restrictive trade measures by Russia. As a result, the Association Agreement was not signed and exports of Ukrainian goods to Russia decreased by 14.6 per cent. in 2013 as compared to 2012. In December 2013, the presidents of Russia and Ukraine agreed on a package of economic support for Ukraine to be provided by Russia in the amount of U.S.\$15 billion. See "*The illegal occupation and attempted annexation of Crimea and the City of Sevastopol has adversely affected and is likely to continue to adversely affect Ukraine's economic and political stability*". On 24 December 2013, Russia made its first payment of U.S.\$3 billion for Ukraine's newly issued sovereign Eurobonds. However, following an escalation of civil disturbances in Ukraine, the second issue of Eurobonds planned for 18 February 2014 was cancelled. Following the signing of political provisions of the Association Agreement on 21 March 2014, the economic part of the treaty was signed on 27 June 2014. On 16 September 2014, both the Ukrainian and the European Parliaments voted to ratify the Association Agreement. On 1 September 2017, the Association Agreement entered into force. See "*A failure to develop relations with the EU might have negative effects on the Ukrainian economy and Metinvest's business*".

Ukraine's economy may be adversely affected by ongoing disputes with Russia over supply and transit of gas. Any uncertainty in energy supply may have an adverse effect on Metinvest's business

Russia has in the past threatened to cut off the supply of oil and gas to Ukraine in order to apply pressure on Ukraine to settle outstanding gas debts and maintain low transit fees for Russian oil and gas through Ukrainian pipelines to European consumers. In the first quarter of 2014, the price of gas purchased from Gazprom by Naftogaz was U.S.\$268.5 per 1,000 cubic metres. Following the conflict between Ukraine and Russia over the Crimean peninsula, Gazprom decided not to continue to implement the agreed discount on gas prices for Ukraine. Gazprom set the price of gas at U.S.\$385.50 per 1,000 cubic metres from 1 April 2014. On 2 April 2014, the Russian government unilaterally annulled an agreement signed in 2010 on the temporary stationing of the Russian Black Sea Fleet in the territory of Ukraine, thus cancelling the discount for gas export duties. On 2 April 2014, the price of Russian gas for Ukraine amounted to more than U.S.\$490 per 1,000 cubic metres. Ukraine started to import gas from Poland and Hungary in April and May 2014. On 28 April 2014, the gas transport operators of Ukraine and Slovakia (Ukrtransgaz and Eustream) signed a memorandum on reverse gas supplies, and on 2 September 2014, Slovakia commenced its gas supplies to Ukraine. On 26 September 2014, a Hungarian gas network operator suspended supplies to Ukraine due to the Russian-Ukrainian conflict. On 16 June 2014, Gazprom suspended gas supplies to Ukraine and introduced an advance payment system. Naftogaz submitted a claim to the Arbitration Institute of the Stockholm Chamber of Commerce for the establishment of a fair price for gas supplied to Ukraine by Gazprom, while Gazprom filed a claim for U.S.\$4.5 billion concerning non-payment for gas by Naftogaz.

On 9 October 2015, Naftogaz and Gazprom signed a supplement to the agreement regarding the terms of the supply of gas from 1 October 2015 to 31 March 2016 and Naftogaz negotiated the cancellation of the "take-or-pay"

clause for this period. On 31 May 2017, the arbitral tribunal of the SCC issued an interim award decided on the case of Naftogaz against Gazprom relating to the Supply Contract.

The tribunal dismissed the claims of Gazprom, which were based on the "take-or-pay" clause. The tribunal also decided that:

- the clauses of the Supply Contract concerning the supply amounts and the "take-or-pay" provision were invalid starting from 19 January 2009 and until the date of the final decision on the case and must be amended starting from the date of the final judgment taking into account the real demand from Naftogaz;
- the price formula provided in the Supply Contract must be reviewed starting from 27 April 2014 so as to bring the price to the market rate;
- Naftogaz must have the sums of overpay compensated in cases of a factual payments price excess over the price as provided by the revised formula of the Supply Contract; and
- the clause of the Supply Contract on the prohibition to Naftogaz to sell gas purchased under the Supply Contract outside Ukraine is invalid starting from 19 January 2009.

On 22 December 2017, the arbitral tribunal of the SCC issued the final award on the case of Naftogaz against Gazprom relating to the Supply Contract. The tribunal:

- restated the price formula of the Supply Contract and fully linked the price for gas to German hub rates, starting from 27 April 2014;
- reduced the price of gas received from Gazprom in the second quarter of 2014 by 27 per cent. from U.S.\$485 per 1,000 cubic metres to U.S.\$352 per 1,000 cubic metres;
- reduced the annual contract volume obligations of Naftogaz from 52 billion cubic metres to 5 billion cubic metres in 2018 and 2019;
- rejected Gazprom's take-or-pay claims to Naftogaz amounting to U.S.\$56 billion for 2009-2017;
- ruled that Naftogaz is not responsible for gas supplies to the uncontrolled territories in the Donetsk and Luhansk regions;
- lifted the ban on Russian gas re-export; and
- obliged Naftogaz to pay U.S.\$2,029,823,867.21 in favour of Gazprom for the volume of gas received but not paid for by Naftogaz in certain months of 2013 and 2014.

On 28 February 2018, the arbitral tribunal of the SCC issued the final award on the case of Naftogaz against Gazprom relating to the Gas Transit Contract. The tribunal:

- found that Gazprom had defaulted on its contractual obligations and awarded damages in the amount of U.S.\$4.63 billion to Naftogaz; and
- confirmed that Gazprom's obligations under the Gas Transit Contract are effective until the end of 2019.

As a result of the two arbitral awards issued by the arbitral tribunal of the SCC, Gazprom must pay Naftogaz approximately U.S.\$2.56 billion.

On 1 March 2018, Gazprom decided to terminate its gas supplies to Ukraine and returned the advance payment, despite Naftogaz's claims that such action violates Gazprom's contractual obligations. On 2 March 2018, Gazprom announced its intention to initiate the termination of the Supply Contract and Gas Transit Contract with Naftogaz. Gazprom also announced that it will appeal both arbitral awards of the arbitral tribunal of the SCC. It remains unclear whether Naftogaz and Gazprom will be able to settle their dispute without further arbitral proceedings. In addition, should Naftogaz and Gazprom not settle their dispute, such outcome could lead to a risk that gas supplies to Ukraine by Gazprom will be terminated, and Ukrainian producers and consumers might be unable to source it from elsewhere.

In addition, in May 2011, it was reported that Russia plans to divert approximately 20 billion cubic metres of gas per annum from Ukraine's gas transit system to the Nord Stream pipeline bypassing Ukraine. The Nord Stream pipeline commenced commercial operations in November 2011. Moreover, in October 2016, Russia and Turkey signed an agreement for the construction of the TurkStream. For the year ended 31 December 2017, transit of natural gas through Ukraine amounted to 93.5 billion cubic metres – an increase of 13.7 per cent. compared to the year 2016. Ukraine is seeking to minimise any potential adverse effect of Nord Stream to Naftogaz and the Ukrainian economy in general, including through assurances on transport volumes. Such efforts may not be successful and any decreases in the volumes of gas transportation (due to the operation of Nord Stream, or the launch of TurkStream and other pipelines bypassing Ukraine), further increases in the prices of natural gas supplied to Ukraine by Russia or other developments could adversely affect Naftogaz's future results of operations, reducing the revenue that the state budget receives from Naftogaz or increasing Naftogaz's need for support.

These and any further changes in Ukraine's relations with Russia, in particular any changes adversely affecting supplies of energy resources from Russia to Ukraine or Ukraine's revenues derived from transit charges for Russian oil and gas, may have negative effects on certain sectors of the Ukrainian economy, which could in turn have a material adverse effect on Metinvest's business, results of operations and financial condition.

A failure to develop relations with the EU might have negative effects on the Ukrainian economy and Metinvest's business

Ukraine aims to achieve a closer relationship with the EU, which has recognised it as a market economy since December 2005. The EU accounted for 34.1 per cent. and 37.1 per cent. of all Ukrainian exports in 2015 and 2016, respectively, according to the SSSU, making it the largest external trade partner of Ukraine. In 2017, the EU accounted for 40.5 per cent. of all Ukrainian exports, according to the SSSU.

Following extensive negotiations on the free trade area between Ukraine and the EU from 2008, the parties achieved progress in the harmonisation of, among other things, trade in goods (including in relation to instruments of trade protection, tariffs, technical barriers in trade, sanitary and customs issues), intellectual property, rules relating to the origin of goods, sustainable development and trade, trade in services, and public procurement.

In 2013, former President Yanukovich and his government announced their decision to suspend preparations for the signing of the Association Agreement, but in February 2014, Ukraine's new government headed by acting Prime Minister Arseniy Yatseniuk resumed negotiations and both the political and economic parts of the Association Agreement, including the DCFTA, had been signed by June 2014. In September 2014, both the Ukrainian and the European Parliaments voted to ratify the Association Agreement and Ukraine began the process of implementation which entails, among other things, the incremental approximation of Ukrainian legislation to EU regulatory norms in areas including transport, energy, environment, and health and safety. The DCFTA is intended to substantially integrate the EU and Ukraine markets by dismantling import duties and banning other trade restrictions, albeit with specific limitations and transitional periods in "sensitive" areas, such as trade in agricultural products. It will also partially integrate public procurement markets. On 1 January 2016, Title IV of the Association Agreement establishing a DCFTA with Ukraine entered into force and on 1 September 2017, the Association Agreement entered into force.

Should Ukraine fail to develop its relations with the EU, or should such developments be protracted or regressed, this may have a negative effect on the Ukrainian economy, which could in turn have a material adverse effect on Metinvest's business, results of operations and financial condition, and impose risks associated with Metinvest's further development and growth plans.

The Ukrainian banking system is vulnerable to stress due to fragmentation, undercapitalisation and a potential increase in non-performing loans, all of which could have a material adverse effect on the Ukrainian economy

The global financial crisis starting in 2007 led to the collapse or bailout of some Ukrainian banks and to significant liquidity constraints for others. The floating of the Hryvnia since February 2014 has put additional strains on the Ukrainian banking system, as the high dollarisation of the Ukrainian financial system and its customers has not only exposed Ukrainian banks to additional foreign exchange risks but has also contributed to a worsening of asset quality. Ukrainian banks have also been negatively impacted by the Ukrainian population's loss of confidence in the Hryvnia since it was floated in 2014 and there have been subsequent increases in the purchase of U.S. dollars by Ukrainian citizens in order to avoid complete exposure to the fluctuation of Hryvnia rates. According to the NBU, the proportion of loans represented by doubtful and bad loans was 28.0 per cent., 30.5 per cent. and 56.0 per cent. as at 31 December 2015 and 2016, and December 2017, respectively. As a result, the Ukrainian banking system as a whole is undercapitalised and suffers from high levels of non-performing loans.

Other factors which have had exacerbated the weak performance of the Ukrainian banking sector since 2014 include:

- significant outflows of deposits;
- the impact on the banking sector of the loss of income and branches in Crimea following the illegal occupation and annexation of that territory; and
- the effect on the sector's revenues and business of the ongoing conflict in certain parts of the Donetsk and Luhansk regions.

Further, Ukrainian banks have relied extensively on liquidity facilities and other support from the NBU and have been shielded from the full impact of the floating exchange rate through currency control restrictions and other technical regulations of the financial sector imposed by the NBU.

Since 2014, the NBU has taken steps to promote the consolidation and strengthening of the Ukrainian banking sector, and to this end has required and/or facilitated the temporary administration, liquidation and/or restructuring of a number of Ukrainian banks. Several major banks operating in Ukraine, such as VAB Bank, Nadra Bank, Delta Bank and others, were first subject to temporary administration and then declared insolvent and liquidated during the years 2014-2017. PrivatBank, the largest bank in Ukraine by value of assets, was nationalised in 2016, following its insolvency. Subsequent to the nationalisation of PrivatBank, the Ministry of Finance of Ukraine has recapitalised the bank through the injection in aggregate of over UAH155.3 billion of fresh capital. There can be no assurance that further capital injections will not be required in order to ensure the continued commercial viability of Ukrainian banks. Should additional capital contributions be required from the government, it will further deplete Ukraine's fiscal resources and potentially lead to a widening of the public deficit. A further increase in the share of non-performing loans in banks' loan portfolios, or a failure to decrease this share, could place additional strain on the Ukrainian banking system, and may lead to further banks being declared insolvent and being liquidated or nationalised by the government.

The fragile condition of the Ukrainian banking system has been the main factor in restricting the availability of domestic credit. Domestic banks are in many cases unwilling or unable to lend to domestic businesses in need of renewed or increased funding and a continued shortage of credit will have a negative effect on Ukraine's GDP

growth. Furthermore, increased domestic borrowing by the government is likely to reduce the availability of domestic credit for Ukrainian businesses, exacerbating the negative impact on GDP levels.

Several European banks have terminated their activities in Ukraine in recent years, including Commerzbank, Austria's Erste Group Bank, Sweden's Swedbank, the Bank of Cyprus, the Greek Eurobank Group and the UniCredit Group. This is largely due to the perceived high risk of doing business in Ukraine, high credit risk, a high ratio of non-performing loans and exchange rate risk. The share of Russian banks in the Ukrainian market is also decreasing largely due to the political situation between the two countries. Moreover, VTB and Vneshekonombank, two major Russian state-owned banks, are reportedly planning to sell their subsidiary banks in Ukraine. Similarly, Sberbank of Russia, another Russian state-owned bank, is reportedly already in the process of selling its Ukrainian subsidiary. See also "*Any further unfavourable changes in Ukraine's relationship with Russia may adversely affect the Ukrainian economy and thus Metinvest's business*".

The continuation or worsening of the financial crisis, further insolvencies of Ukrainian banks, increased liquidity constraints, growth in the non-performing loans, the need for the government to inject more capital into the banking system and the failure to adopt and implement a system of banking regulation that achieves an increased degree of soundness and stability in the nation's banks could affect the Ukrainian economy and could have a material adverse effect on Metinvest's business, results of operations and financial condition.

The Ukrainian currency is subject to volatility and depreciation

As a result of the high dollarisation of the Ukrainian economy and the reliance of Ukrainian borrowers on external markets, Ukraine has become increasingly exposed to the risk of the hryvnia exchange rate fluctuations. As at 31 December 2013, immediately prior to the Euro-Maidan Revolution, the NBU official U.S.\$/UAH exchange rate was pegged at UAH7.9930 per 1 U.S.\$\$. In February 2014, the NBU allowed the exchange rate to float. The NBU official U.S.\$/UAH exchange rate was UAH24.00, UAH27.19, UAH28.06 and UAH26.08 to U.S.\$1 as at 31 December 2015, 31 December 2016, 31 December 2017 and 18 April 2018, respectively.

In March 2015, the NBU increased its discount rate from 19.5 per cent. to 30.0 per cent. in an attempt to stabilise the currency. Even though the discount rate decreased to 12.5 per cent. per year in May 2017, it amounted to 17 per cent. in March 2018, higher than historical standards, an outcome that could lead to lower domestic liquidity and higher borrowing costs. The NBU has also adopted inflation targeting, but overall its ability to stabilise the currency is dependent on many factors (including political stability and a resolution of the occupation of Crimea and the conflict in certain parts of the Donetsk and Luhansk regions) which cannot be predicted with any degree of certainty.

While a flexible exchange rate regime is expected in the medium term to have beneficial economic effects, these positive effects may not be realised and the interim support provided to banks to mitigate the effects of exchange rate depreciation may not have the desired effect. In addition, any further depreciation of the hryvnia may adversely affect the government's ability to service its external debt. It is possible that strained relations with Russia arising from the occupation of Crimea and the conflict in certain parts of the Donetsk and Luhansk regions may put pressure on the hryvnia exchange rate to the extent that the population loses confidence in the local currency and seeks to acquire foreign currencies as a hedge against political and economic risk. Any failure to maintain a relatively stable exchange rate may have a material adverse effect on the Ukrainian economy in general.

Due to a change in policy, the NBU has limited its intervention through the sale of international reserves. The NBU also adopted measures to limit foreign currency transactions in the shadow economy. A significant worsening of external conditions, in particular in the Euro-zone, could lead to increased Hryvnia volatility. In November 2012, the NBU ordered Ukrainian companies with foreign currency income to mandatorily exchange 50 per cent. of their foreign currency proceeds for the equivalent amount in the local currency. Following various fluctuations ranging from 100 per cent. to 50 per cent., since April 2017, and as of the date of this Offering Memorandum, the mandatory exchange requirement stands at 50 per cent. Although the NBU eased certain currency control

restrictions in 2016 and, in 2017, it may use further currency control measures in the future preventing Metinvest from adequately facing relevant currency risks and depleting its foreign exchange reserves. Despite NBU's measures to implement inflation-targeting policies and ease currency controls, any further currency fluctuations may negatively affect the Ukrainian economy in general, which could in turn have a material adverse effect on Metinvest's business, results of operations and financial condition, and impose risks associated with Metinvest's further development and growth plans.

A failure to carry out constitutional reforms might have negative effects on the Ukrainian economy and the Group's business

On 5 September 2014, in Minsk, former Ukrainian president Leonid Kuchma, together with representatives of Russia and the OSCE, signed a ceasefire agreement (the "**Minsk Protocol**") and, on 19 September 2014, Leonid Kuchma signed the Minsk Memorandum (together, the "**Minsk Arrangements**"). On 12 February 2015, the subsequent steps arranged for enforcement of the Minsk Arrangements were agreed in Minsk by OSCE, Ukrainian and Russian representatives, as well as representatives of the self-proclaimed DPR and LPR. The Minsk Arrangements envisaged constitutional reform, with the adoption of amendments to the Constitution of Ukraine. On 16 July 2015, the Ukrainian Parliament voted in favour of sending a draft law on amendments to the Constitution of Ukraine on the decentralisation of power (the "**Draft Law**") to the Constitutional Court of Ukraine (the "**CCU**"). Upon the CCU's holding that the Draft Law complies with the Constitution, on 31 August 2015, the Ukrainian Parliament gave its preliminary approval of the Draft Law. As of the date of this Offering Memorandum, the adoption of the Draft Law by the Ukrainian Parliament was pending. The Draft Law envisages granting local communities powers to collect taxes and allocate budgets themselves. The *oblast* (region) and *raion* (district) state administrations will be dissolved and prefects representing the state at a local level would be appointed. Powers of the dissolved regional and district state administrations would be transferred to the level of village, town, and city authorities. The Draft Law also provides that prefects will oversee compliance by the local self-governing authorities with the Constitution of Ukraine and the laws of Ukraine. Along with local government reform, the Draft Law restates certain provisions of the Constitution of Ukraine on administrative and territorial structures. In particular, the Draft Law contains a requirement according to which the terms and procedures for the creation, liquidation, changes in boundaries of and the naming and re-naming of administrative units must be regulated by law. Additionally, the proposed amendments provide for a specific procedure for the implementation of local self-government in several districts of the Donetsk and Luhansk regions, which will be regulated by a separate law. A failure to carry out the constitutional reforms envisaged by the Minsk Arrangements may exacerbate or prolong the on-going conflict in the Donetsk and Luhansk regions, which could have a negative impact on the Ukrainian economy and the Group's business.

Ukraine's developing legal system creates risks and uncertainties for investors in Ukraine and for participants in the Ukrainian economy

Since independence in 1991, as Ukraine has been transforming from a planned to a market-based economy, the Ukrainian legal system has also been developing to support this transformation. Ukraine's legal system is, however, in transition and is, therefore, subject to greater risks and uncertainties than a more mature legal system. In particular, risks associated with the Ukrainian legal system include, but are not limited to:

- inconsistencies between the Constitution of Ukraine and various laws, presidential decrees, governmental, ministerial and local orders, decisions, resolutions and other acts;
- provisions in laws and regulations that are ambiguously worded or lack specificity and thereby raise difficulties when implemented or interpreted;
- different and sometimes controversial practices of interpreting and applying laws within Ukraine;

- the relative inexperience of judges and courts in interpreting Ukrainian legislation, specifically in dealings with business and corporate law;
- corruption within the judiciary; and
- a high degree of discretion on the part of governmental authorities, which could result in arbitrary actions.

Furthermore, several fundamental Ukrainian laws either have only recently become effective or are still pending hearing or adoption by the Ukrainian Parliament. The recent origin of much of Ukrainian legislation, the lack of consensus regarding the scope, content and pace of economic and political reform and the rapid evolution of the Ukrainian legal system in ways that may not always coincide with economic development, place the enforceability and underlying constitutionality of certain laws in doubt. This results in ambiguities, inconsistencies and anomalies within Ukraine's legal and regulatory framework. In addition, Ukrainian laws often contemplate implementing regulations, but these regulations have either not yet been promulgated, leaving substantial gaps in the regulatory infrastructure, or have been promulgated with substantial deviation from the principal rules and conditions contemplated by the underlying laws, which results in a lack of clarity and an increasing number of conflicts with regulatory authorities. There are uncertainties relating to Ukraine's judicial system, which may make legal recourse and enforcement against Metinvest difficult or impossible. See also "*The judiciary's lack of independence and overall experience, difficulty in enforcing court decisions and governmental discretion in enforcing claims could prevent Metinvest or investors from obtaining effective redress in court proceedings*". These and other factors that have an impact on Ukraine's legal system make an investment in the Notes subject to greater risks and uncertainties than an investment in a country with a more mature legal system.

In addition, Ukrainian corporate laws and regulations contain ambiguities, imprecision and inconsistencies which can make it difficult to comply with them. As a result, Metinvest's transactions might not be in compliance with all corporate requirements, procedures or formalities. Such non-compliance may result in fines, warnings from governmental authorities, orders to remedy the violations, inability to increase share capital of a joint stock company, mandatory winding up proceedings or requests to unwind a transaction. Although Metinvest does not expect that any party would seek to review or modify any of these transactions or challenge any such irregularities, there can be no assurance that this will not occur. Any successful challenge of Metinvest's transactions could have a material adverse effect on Metinvest's business, results of operations and financial condition.

Moreover, Ukrainian legislation governing the operation of businesses with assets in the Donetsk and Luhansk regions which have been seized by militia and are not under Ukrainian control is poorly drafted and inconsistent and often fails to timely address the regulatory issues arising in respect of logistics, transportation, supplies, trade and other business and commercial dealings in these territories. As a result, the Group may experience difficulties in ensuring legal compliance in respect of its assets and operations in these territories (including, without limitation, in respect of permits and environmental and health and safety regulations), and there can be no guarantee that the Group will not be subject to challenges or claims by the Ukrainian regulatory authorities as a result.

Official economic data and third party information in this Offering Memorandum may not be reliable

Official statistics and other data published by Ukrainian state authorities and other third party information may not be as complete or reliable as those of more developed countries. Official economic and other data and third party information may also be produced on different bases than those used in more developed countries, and may not fully conform to international standards. Furthermore, standards of accuracy of statistical data may vary from agency to agency and from period to period due to the application of different methodologies. The existence of a sizeable unofficial or shadow economy may also affect the accuracy and reliability of statistical information. In addition, Ukraine has experienced variable rates of inflation, including periods of hyperinflation. Unless indicated otherwise, the macroeconomic data presented in this Offering Memorandum has not been restated to reflect such inflation and, as a result, period to period comparisons may not be meaningful. Specifically, investors should be

aware that certain statistical information and other data contained in this document have been extracted from official governmental sources in Ukraine and were not prepared or independently verified in connection with preparation of this Offering Memorandum. Metinvest accepts responsibility only for the correct extraction and reproduction of such information. These factors may negatively impact the predictability of Ukraine's economy and could have a material adverse effect on Metinvest's business, results of operations and financial condition.

Ukraine's physical infrastructure is in poor condition, which may lead to disruptions in Metinvest's business or an increase in its costs

Ukraine's physical infrastructure, including its power generation, transmission and communication systems and building stock, largely dates back to Soviet times and has not been adequately funded and maintained over the past decade. Road conditions throughout Ukraine are relatively poor in comparison with more developed countries. In addition, the recent military action in the Donetsk and Luhansk regions of Ukraine has had an adverse effect on infrastructure in the region, in particular, on the railway infrastructure and electricity transmission lines. See also "*Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*". The government has been implementing plans to develop the nation's rail, electricity and telephone systems, which may result in increased charges and tariffs while failing to generate the anticipated capital investment needed to repair, maintain and improve these systems. The deterioration of Ukraine's physical infrastructure has an adverse effect on the national economy, disrupts the transportation of goods and supplies, adds costs to doing business in Ukraine and can interrupt business operations. Any further deterioration in Ukraine's physical infrastructure could have a material adverse effect on Metinvest's business, results of operations and financial condition.

Ukraine may not be able to maintain access to foreign trade and investment

Cumulative foreign direct investment remains low for a country of Ukraine's size. As a result of a significant shortage of internal financial resources, Ukraine has sought to attract foreign investment as an important contributor to economic growth and structural reform. However, the pace and amount of foreign direct investment in Ukraine has been adversely affected by overly complex and inconsistent legislation and non-transparent procedures, including in the areas of privatisation, government intervention and taxation, and by perceived corruption. Cumulative foreign direct investment amounted to U.S.\$40.7 billion, U.S.\$36.2 billion, U.S.\$37.5 billion and U.S.\$39.1 as of 1 January 2015, 1 January 2016, 1 January 2017 and 31 December 2017, respectively, according to the SSSU. Investments made in Ukraine to date have primarily been in the following sectors: industry, financial services, real estate, engineering, trade and repair of cars and household goods. The current political crisis has had a negative impact on trade relations with Russia, resulting in a decrease of approximately 51.7 per cent. and 25.6 per cent. in the volume of exports of Ukrainian goods to Russia in 2015 and 2016, respectively, as compared to the corresponding period in the previous year. For the year ended 31 December 2017, the volume of exports of Ukrainian goods to Russia increased by 9.6 per cent. comparing to the same period in 2016. See also "*Any further unfavourable changes in Ukraine's relationship with Russia may adversely affect the Ukrainian economy and thus Metinvest's business*".

Any increase in the perceived risks associated with investing in Ukraine and tightening of the foreign investment regulations could dampen foreign direct investment in Ukraine and adversely affect the Ukrainian economy. No assurance can be given that Ukraine will remain attractive to foreign trade and investment. For example, between 2005 and 2010 the government took steps to challenge, reverse or cancel a number of privatisations. Privatisation remains relatively low and, in current market conditions with depressed local asset prices, is unlikely to be substantially increased, and any future attempts to re-nationalise previously privatised enterprises could adversely affect the climate for foreign direct investment and have an adverse effect on the economy of Ukraine which, in turn, may have a material adverse effect on Metinvest's business, results of operations and financial condition.

Corruption and money laundering may have an adverse effect on the Ukrainian economy

Independent analysts, including the Financial Action Task Force on Money Laundering and Transparency International, an anti-corruption body based in the UK, have identified corruption and money laundering as problems in Ukraine. In accordance with Ukrainian anti-money laundering legislation which came into force in February 2015, the NBU and other state authorities, as well as various entities performing financial transactions, are required to closely monitor certain financial transactions for evidence of money laundering. The new set of anti-corruption laws was adopted in October 2014. In order to enforce the above laws, the National Anti-Corruption Bureau of Ukraine ("**Anti-Corruption Bureau**") and the National Agency on Corruption Prevention ("**Agency on Corruption Prevention**") were established. The Anti-Corruption Bureau commenced activities on 16 April 2015. On the same day, the Director of the Anti-Corruption Bureau was appointed by the President of Ukraine. On 15 August 2016, the Agency on Corruption Prevention officially commenced its activity. Although this legislation and institutional system are expected to facilitate anti-corruption efforts in Ukraine, there can be no assurance that the laws will be effectively applied and implemented by the relevant supervising authorities. Any future allegations of corruption in Ukraine or evidence of money laundering could have a negative effect on the ability of Ukraine to attract foreign investment and thus have a negative effect on the Ukrainian economy, which could in turn have a material adverse effect on Metinvest's business, results of operations and financial condition.

The judiciary's lack of independence and overall experience, difficulty in enforcing court decisions and governmental discretion in enforcing claims could prevent Metinvest or investors from obtaining effective redress in court proceedings

The independence of the judicial system and its immunity from economic and political influences in Ukraine remain questionable. The system of constitutional jurisdiction is too complicated to ensure the smooth and effective removal of discrepancies between the Constitution of Ukraine on the one hand, and various laws of Ukraine on the other hand.

The court system is understaffed and underfunded. Because Ukraine is a civil law jurisdiction, judicial decisions generally (except certain resolutions of the Supreme Court) have no precedential effect on subsequent decisions, and courts are generally not bound by earlier decisions taken under the same or similar circumstances, which can result in the inconsistent application of Ukrainian legislation to resolve the same or similar disputes. Not all Ukrainian legislation is readily available to the public or organised in a manner that facilitates understanding. In September 2016, a new law on the judicial system became effective. Further, on 15 December 2017, a law restating three Procedure Codes came into full effect. Although the said laws are intended to streamline and simplify the court system, it may take some time for them to be duly implemented. During the transition period, claimants may experience difficulties in protecting their rights, and the process of judicial review may become slower.

Enforcement of court orders and judgments can, in practice, be very difficult in Ukraine. The State Enforcement Service, a body independent of the Ukrainian courts, is responsible for the enforcement of court orders and judgments in Ukraine. Enforcement procedures are often very time consuming and may fail for a variety of reasons, including the defendant lacking sufficient funds, the complexity of auction procedures for the sale of the defendant's property or the defendant undergoing bankruptcy proceedings. In addition, the State Enforcement Service has limited authority to enforce court orders and judgments quickly and efficiently. Ukrainian enforcement agencies are bound by the method of enforcement envisaged by the relevant court order or judgment and may not independently change such method even if it proves to be inefficient or unrealisable. Furthermore, notwithstanding the successful execution of a court order or a judgment, a higher court may reverse the court order or judgment and require that the relevant funds or property be restored to the defendant. In practice, the procedures employed by the State Enforcement Service do not always comply with the applicable legal requirements, resulting in delays to or failures in enforcement of court orders and judgments.

On 5 January 2017, the concept of private enforcement officers (private bailiffs) became effective. Private enforcement officers will be allowed to enforce certain types of court decisions, however, it may take some time before enforcement proceedings by private enforcement officer are fully operational and effective.

These uncertainties also extend to other rights, including investor rights. In Ukraine, there is no established history of investor rights or responsibility to investors and, in certain cases, the courts may not enforce these rights. In addition, court claims are often used in the furtherance of political aims. Metinvest may be subject to such claims and may not be able to receive a fair trial. Finally, court orders are not always enforced or followed by law enforcement institutions.

All of these factors make judicial decisions in Ukraine difficult to predict and effective redress uncertain. The uncertainties of the Ukrainian judicial system could have a negative effect on the Ukrainian economy and on Metinvest's business, results of operations and financial condition.

Ukraine's competition legislation is complex, often uncertain and its application may be inconsistent

Metinvest has been growing its business and international presence through the establishment of subsidiaries and acquisition of interests in companies and of other assets within and outside of Ukraine. Certain of these transactions were subject to prior approvals of the Anti-monopoly Committee of Ukraine (the "AMC") under the applicable competition legislation. Metinvest believes that it has complied with the requirements of Ukrainian competition legislation in all material respects, and Metinvest has not received any notice or order from the AMC which would indicate otherwise. However, Ukrainian competition legislation is complex, sometimes uncertain or contradictory, and lacks sufficient detail and precision. Such complexities of Ukrainian competition legislation make it difficult to achieve absolute compliance.

Applicable competition legislation restricts companies and individuals from performing concentration (in Ukrainian, *konsentratsiia*), including, among others, directly or indirectly acquiring control over other companies, mergers of several independent companies into a new company, absorption of one company by another, establishment of companies without the prior approval of the AMC where financial thresholds stipulated by the effective competition laws are met. Although the management of Metinvest believes that Metinvest is generally in compliance with the requirement for obtaining the AMC approvals for such transactions and Metinvest intends to comply with such requirement in the future, the failure to obtain required approvals could cause Metinvest (and all entities related to it through relations of control) to be subject to fines in the amount of up to 5.0 per cent. of Metinvest's consolidated revenue in the year immediately preceding the year of imposition of the fine, for each failure to obtain such approvals, which may be material. If an acquisition led to a particular market becoming monopolistic or competition being significantly restricted on such market or part thereof, the AMC may seek the invalidation of such transactions by the Ukrainian courts, which in turn may lead to the compulsory divestment of the relevant companies. In practice, however, the AMC has never imposed this type of penalty.

The submission of an inaccurate or incomplete filing to the AMC could also result in fines and even the relevant approval could be annulled. The filing by Metinvest of an inaccurate and incomplete submission to the AMC in the past could result in the imposition of fines in an amount of up to 1.0 per cent. of Metinvest's consolidated revenue in the year immediately preceding the imposition of the fine. There can be no assurance regarding the future actions of the Ukrainian state authorities, and the laws and regulations in respect of such matters are vague in certain parts and subject to varying interpretations.

Penalties imposed by the AMC on Metinvest could have a material adverse effect on Metinvest's business, results of operations, financial condition and prospects.

Disclosure and reporting requirements and fiduciary duties remain less developed than those of more developed countries

Disclosure, reporting requirements and anti-fraud legislation in Ukraine have only recently been adapted to the requirements of the market economy and remain untested. Most Ukrainian companies do not have corporate governance procedures that are in line with Western standards. The concept of fiduciary duties of management of board members to their companies or shareholders is not as developed in Ukraine as it is in the United States or Western Europe, and currently applies only to members of the governing bodies of joint stock companies and, in particular, banks. While Metinvest considers that it has adequate corporate governance and internal reporting procedures in place, violations of disclosure and reporting requirements or breaches of fiduciary duties by the company's Ukrainian subsidiaries or their management could significantly affect the receipt of material information or result in inappropriate management decisions, which in turn may have a material adverse effect on Metinvest's business, results of operations and financial condition.

Risks Relating to the Notes and the Guarantees

The Group's future leverage and debt service obligations could adversely affect its business and prevent the Issuer from fulfilling its obligations with respect to the Notes and the Guarantors with respect to the Guarantees

The Group cannot guarantee that it will be able to generate enough cash flow from operations to service its debt obligations, including under the Notes. After the issuance of the Notes, the Group may become more leveraged than its current level.

The degree to which the Group will be leveraged following the issuance of the Notes could have important consequences to the Noteholders, including, but not limited to:

- making it more difficult for the Group to satisfy its obligations with respect to the Notes and its other debt and liabilities;
- making the Group vulnerable to, and reducing its flexibility to respond to, general adverse economic and industry conditions;
- requiring the Group to dedicate a substantial portion of its cash flow from operations to the payment of principal of, and interest on, indebtedness, thereby reducing the availability of such cash flow to fund working capital, capital expenditures or other general corporate purposes;
- limiting the Group's flexibility in planning for, or reacting to, changes in its business and the competitive environment and industry in which it operates;
- placing the Group at a competitive disadvantage as compared to its competitors that are not as highly leveraged; and
- limiting the Group's ability to borrow additional funds or raise equity capital in the future and increasing the cost of any such additional financings.

Any of these or other consequences or events could have a material adverse effect on the Group's ability to satisfy its debt obligations, including the Notes. The Group's ability to make payments on and refinance its indebtedness and to fund working capital, capital expenditures and other expenses will depend on its future operating performance and ability to generate cash from operations. Its ability to generate cash from operations is subject, in large part, to general economic, competitive, legislative and regulatory factors and other factors that are beyond its control. The Group may not be able to generate sufficient cash flow from operations nor obtain enough capital to service its debt or fund planned capital expenditures.

The Group will require a significant amount of cash to service its debt and sustain its operations. The Group's ability to generate or raise sufficient cash depends on many factors beyond its control

The Group's ability to make principal or interest payments when due on its indebtedness, including the PXF Facility Agreement, the Amended 2021 Notes and its obligations under the Notes, and to fund its ongoing operations, will depend on its future performance and ability to generate cash, which is subject to general economic, financial, competitive, legislative, legal, regulatory and other factors, as well as other factors discussed in these "Risk Factors", many of which are beyond its control.

If the Group is unable to generate sufficient cash flows from operations and other capital resources to pay its debt obligations or meet other liquidity needs, it may be required to refinance or restructure its indebtedness. If the Group is unable to refinance or restructure all or a portion of its indebtedness or obtain such refinancing or restructuring on terms acceptable to it, the Group may be forced to, among others:

- reduce or delay its business activities, planned acquisitions and capital expenditures;
- sell assets;
- raise additional debt or equity financing; or
- restructure or refinance all or a portion of its debt, including the Notes, on or before maturity or on favourable terms for Metinvest.

If any of the above occurs, the holders of debt of the Group may be able to accelerate such debt and, to the extent such debt is secured, foreclose on its assets. The type, timing and terms of any future financing, restructuring, asset sales or other capital raising transactions will depend on the Group's cash needs and the prevailing conditions in the financial markets. There can be no assurance that the Group will be able to accomplish any of these measures in a timely manner or on commercially reasonable terms, if at all. In such an event, the Group may not have sufficient cash or sources of cash to repay all of its debt. In addition, the terms of the PXF Facility Agreement and the terms of the Notes and the Amended 2021 Notes may limit the Group's ability to pursue any of these measures.

The Issuer is a holding company and is completely dependent on cash flow from its operating subsidiaries to service its indebtedness, including the Notes

The Issuer is a holding company and its primary assets consist of its shares in its subsidiaries and cash in its bank accounts. The Issuer has no revenue-generating operations of its own, and therefore the Issuer's cash flow and ability to service its indebtedness, including the Notes, will depend primarily on the operating performance and financial condition of its operating subsidiaries and the receipt by the Issuer of funds from such subsidiaries in the form of interest payments, dividends or otherwise. Because the debt service of the Notes is completely dependent upon the cash flows of the Issuer's operating subsidiaries, the Issuer may be unable to make required interest and principal payments on the Notes.

The operating performance and financial condition of the Issuer's operating subsidiaries and the ability of such subsidiaries to provide funds to the Issuer by way of interest payments, dividends or otherwise will in turn depend, to some extent, on general economics, financial, competitive, market and other factors, many of which are beyond the Issuer's control. The Issuer's operating subsidiaries may not generate income and cash flow sufficient to enable the Issuer to meet the payment obligations on the Notes. Presently, the NBU has restricted cross-border payments of dividends by Ukrainian companies. Foreign investors are allowed to repatriate dividends for the years until 2017 (inclusive) only up to U.S.\$7 million per calendar month. This restriction affects dividends that will be accrued for the year 2018, and will remain effective until the Ukrainian banking and financial systems become stable and the NBU adopts a separate regulation.

Furthermore, there can be no assurance that the currency control regulations currently in place will not be extended or expanded in a manner that would further prevent the Issuer's subsidiaries from providing funds to the Issuer. See "*—Ukrainian currency control regulations may impact the Guarantors' ability to make cross-border payments*".

The terms of other agreements to which the Issuer and its subsidiaries may be or may become subject may restrict the ability of its subsidiaries to provide funds to the Issuer. In addition, the Issuer and its subsidiaries may incur other debt in the future that may contain financial or other covenants more restrictive than those contained in the Trust Deeds and the Guarantees.

The inability of members of the Group to transfer cash to the Issuer may mean that, even though the Group, in aggregate, may have sufficient resources to meet its obligations, it may not be permitted to make the necessary transfers in order to make payments to the Issuer. Finally, the subsidiaries of the Issuer that do not guarantee the Notes have no obligation to make payments with respect to any of the Notes.

The Group is subject to restrictive debt covenants that may limit its ability to finance future operations and capital needs and to pursue business opportunities and activities

The Notes will restrict, among other things, the Group's ability to:

- incur or guarantee additional debt and issue certain preferred stock;
- make certain restricted payments, including dividends or other distributions;
- prepay or redeem subordinated debt before its maturity;
- engage in certain transactions with affiliates;
- create or permit certain liens to exist;
- sell, lease or transfer certain assets;
- create certain restrictions on the ability of subsidiaries of the Issuer to pay dividends, make loans or transfer assets to the Issuer or another subsidiary; and
- merge or consolidate the Issuer or any Guarantor with other entities or transfer all or substantially all of the Issuer's or a Guarantor's assets.

All of these limitations will be subject to certain exceptions and qualifications. See Condition 4 (*Covenants*). Despite these exceptions and qualifications, the covenants to which the Group is subject could limit its ability to finance future operations and capital needs and its ability to pursue business opportunities and activities that may be in its interest. The PXF Facility Agreement and the Amended 2021 Notes will contain similar and additional covenant restrictions, including certain financial covenants.

In addition, the Group's ability to comply with these covenants and restrictions may be affected by events beyond its control. These include prevailing economic, financial and industry conditions. If the Group breaches its obligation to make timely payments under the Notes, this could also result in a cross-default to the Amended 2021 Notes and the PXF Facility Agreement, and the holders of the Amended 2021 Notes and the PXF lenders could elect to declare their respective debt, together with accrued and unpaid interest and other fees, if any, immediately due and payable and proceed against any collateral securing that debt. If the debt under the PXF Facility Agreement, the Amended 2021 Notes, the Notes or the Guarantees or any other material financing arrangement that the Group enters into were to be accelerated, the Group's assets may be insufficient to repay in full the Notes and its other debt. Borrowings under other debt instruments that contain cross-acceleration or cross-default

provisions also may be accelerated or become payable on demand. In these circumstances, the Group's assets may not be sufficient to repay in full that indebtedness and its other indebtedness then outstanding, including the Notes. See Condition 10 (*Events of Default*) and "*Description of Indebtedness—The PXF Facility Agreement—Events of Default*".

Despite its current leverage or any potentially higher future leverage, the Group may incur more debt, which could adversely affect the Group's business and prevent the Issuer and the Guarantors from fulfilling their obligations with respect to the Notes and the Guarantees

The terms of the Conditions will permit the Group to incur substantial additional debt, including in respect of borrowings under the PXF Facility Agreement. The PXF Facility will also be secured by certain assets (see "*Description of Indebtedness—The PXF Facility Agreement*") and therefore lenders thereunder will have a priority claim over the holders of the Notes with respect to enforcement proceeds from those assets. In addition, the Conditions allow debt in the amount of up to 20 per cent. of Metinvest's total assets, and an unlimited amount of trade finance facilities debt and certain other debt, to be incurred by non-guarantor subsidiaries that would be structurally senior to the Notes and that would also be allowed to be secured on assets, giving such debt a priority claim over enforcement proceeds from those assets ahead of the Notes.

The Notes will be structurally subordinated to the liabilities and preference shares (if any) of the Issuer's non-guarantor subsidiaries

Generally, claims of creditors of the Issuer's non-guarantor subsidiaries, including trade creditors, and claims of preference shareholders (if any) of such non-guarantor subsidiaries will have priority with respect to the assets and earnings of such non-guarantor subsidiaries over the claims of creditors of its parent entity, including claims by the Noteholders under the Guarantees. In the event of any foreclosure, dissolution, winding up, liquidation, reorganisation, administration or other bankruptcy or insolvency proceeding of any of the Issuer's non-guarantor subsidiaries, holders of such non-guarantor subsidiaries' indebtedness, including holders of third party debt which such non-guarantor subsidiaries have guaranteed, and trade creditors of such non-guarantor subsidiaries will generally be entitled to payment of their claims from the assets of those non-guarantor subsidiaries before any assets are made available for distribution to those non-guarantor subsidiaries' parent entity. As such, the Notes and the Guarantee will each be structurally subordinated to the creditors (including trade creditors) and preference shareholders (if any) of the non-guarantor subsidiaries. See also "*The Issuer is a holding company and is completely dependent on cash flow from its operating subsidiaries to service its indebtedness, including the Notes*".

Claims of the secured creditors of the Issuer and the Guarantors will have priority with respect to their collateral over the claims of unsecured creditors, such as the Noteholders, to the extent of the value of the assets securing such indebtedness

The Notes will not be secured by any of the Issuer's or Guarantors' assets. The Notes permit certain indebtedness to be secured, including debt under the PXF Facility Agreement, and the amounts of such indebtedness could be substantial. As a result, claims of the secured creditors of the Issuer and the Guarantors will have priority with respect to the assets securing their indebtedness over the claims of the Noteholders. As such, the Notes and Guarantees will be effectively subordinated to any secured indebtedness and other secured obligations of the Issuer or the relevant Guarantor to the extent of the value of the assets securing such indebtedness or other obligations. In the event of any foreclosure, dissolution, winding up, liquidation, reorganisation, administration or other bankruptcy or insolvency proceeding of the Issuer or any Guarantor that has secured obligations, holders of secured indebtedness will have priority claims to the assets of the Issuer or such Guarantor that constitute their collateral. Subject to the limitations referred to under the caption "*Enforceability of Judgments*", the Noteholders will participate ratably with all holders of the unsecured indebtedness of the Issuer, or in the case of a Guarantor, the relevant Guarantor, and potentially with all of their other general creditors, based upon the respective amounts owed to each holder or creditor, in the remaining assets of the Issuer or the relevant Guarantor. If any of the secured indebtedness of the Issuer or the relevant Guarantor becomes due or the creditors thereunder proceed

against the operating assets that secure such indebtedness, any assets remaining after repayment of that secured indebtedness may not be sufficient to repay all amounts owing in respect of the Notes or the relevant Guarantee. As a result, the Noteholders may receive less, ratably, than holders of secured indebtedness of the Issuer or the relevant Guarantor.

The claims of Noteholders under the Guarantees may be limited under Ukrainian laws in the event that one or more of the Guarantors are declared bankrupt

Ukrainian bankruptcy law may prohibit the Guarantors from making payments pursuant to the Surety Agreements or any inter-company loan agreement(s) under which a part of the proceeds may be distributed to the Ukrainian subsidiaries of the Issuer, including the Guarantors. Ukrainian bankruptcy law differs from the bankruptcy laws of the United Kingdom and the United States and is subject to varying interpretations. Currently, there is insufficient precedent to be able to predict how claims of the Noteholders would be resolved in the event of the bankruptcy of one or more of the Guarantors. In the event of the bankruptcy of a Guarantor, the Noteholders' claims under the Surety Agreements would be treated as claims of unsecured creditors, and would be effectively subordinated to, among others, the following obligations:

- obligations secured on such Guarantor's assets;
- severance pay, employment-related obligations and payment of wages to that Guarantor's employees;
- expenditures associated with the conduct of the bankruptcy proceedings and work of the liquidation commission;
- claims arising under insurance agreements;
- obligations arising as a result of causing harm to life or health of individuals, as well as mandatory pension and social security contributions;
- obligations in respect of payment of taxes and other mandatory charges (including claims of the respective governmental authorities managing the state reserve fund); and
- expenditures associated with the prevention of environmental damage, property damage and harm to the health of citizens.

In the event of the bankruptcy of one or more of the Guarantors, Ukrainian bankruptcy law may materially adversely affect their ability to make payments to the Noteholders. In particular, a receiver appointed to conduct financial rehabilitation proceedings in respect of a Guarantor has the power to renounce the relevant Surety Agreement provided it has not been performed in full or in part, within three months of commencement of the financial rehabilitation proceedings on the following grounds: (i) if the receiver considers that the Guarantor would incur losses as a result of performance of the relevant Surety Agreement; (ii) the term of the relevant Surety Agreement is longer than one year; and (iii) if the receiver considers that such performance would hamper the restoration of the Guarantor's solvency. However, if a recipient of a Guarantor exercises such power in respect of the relevant Surety Agreement, the Noteholders would be in a position to claim damages arising in connection with any renunciation of the relevant Surety Agreement in the course of the insolvency proceedings. Also, to the extent the insolvency proceedings were commenced against a Guarantor within one year since the date of the relevant Guarantee or any amendment thereof, the Guarantee or any amendment thereof may be challenged or revoked in the course of the insolvency in respect of the Guarantor if the court concludes, in particular, that: (a) the Guarantee was entered by the Guarantor without any relevant consideration provided by the beneficiary of the Guarantee; (b) the Guarantee led to the Guarantor's insolvency or to its inability, in full or in part, to discharge its payment obligations towards other creditors; or (c) the Guarantor made a payment under the Guarantee on a day when the total claims of its creditors exceeded the value of its assets. If the relevant Surety Agreement is successfully

challenged or revoked in the course of the insolvency proceedings of the Guarantor, the Noteholders will have to return to the liquidation estate of such Guarantor assets received from the Guarantor or, if impossible, reimburse their value to the Guarantor. However, in such case the Noteholders will be entitled to request payment of their claim to the Guarantor as creditors of the first priority ranking.

Furthermore, Ukrainian bankruptcy laws provide for special bankruptcy proceedings for companies deemed as "business entities with social or other value, or special status" or considered "hazardous enterprises", a definition that includes coal production and enrichment companies, iron ore enrichment plants, iron and steel manufacturers. The relevant municipal and/or state authorities are allowed to intervene in the relevant proceedings, which could lead to delays in the overall bankruptcy process and higher costs. Similarly, such special proceedings allow certain claims to rank above the claims of other creditors, such as the Noteholders. Based on the above regulation, Metinvest believes that each of the Guarantors falls under the definition of a "hazardous enterprise" under Ukrainian bankruptcy legislation and, therefore, the Noteholders' claims under the Surety Agreements may be effectively subordinated to expenditures associated with the prevention of environmental damage, property damage and harm to the health of citizens.

The validity of the Surety Agreements could be challenged

Each of the Surety Agreements creates a suretyship (in Ukrainian, *poruka*) for the purposes of Ukrainian law. From the standpoint of Ukrainian law, a suretyship is an ancillary undertaking in relation to the underlying obligations of the Notes and the Trust Deeds and, therefore, if those obligations are invalid, the suretyship under the Surety Agreements will also be invalid under Ukrainian law. Furthermore, if the underlying obligations are amended so as to increase the scope of responsibility of the provider of the suretyship or are assigned, the prior consent of the provider of the suretyship must be obtained to ensure the continued validity of the suretyship under the Surety Agreements. For the avoidance of doubt, the obligations of the providers of suretyships under the Surety Agreements shall not constitute a guarantee obligation (in Ukrainian, *garantiya*) as that term is interpreted under Ukrainian law.

Under the Law of Ukraine "On Financial Services and the State Regulation of the Markets of Financial Services" dated 12 July 2001, suretyships are considered "financial services", which may only be rendered by a duly licensed bank or other financial institution or, as an exception, by a non-financial institution when expressly permitted by a law of Ukraine or the National Commission of Ukraine on the Regulation of the Markets of Financial Services (the "**Financial Services Commission**"). Although the Financial Services Commission's regulations permit non-financial institutions to issue suretyships, such permission is subject to compliance by the provider of a suretyship with anti-money laundering requirements and procedures. Ukrainian companies often conclude suretyship agreements, and neither the Financial Services Commission nor Ukrainian courts have as yet recognised such practice as invalid. As a result, to the extent that the provider of a suretyship is deemed to fail to comply with such requirements and procedures, it may be regarded as lacking capacity to enter into and/or to perform under the Surety Agreement. Although the Group is unaware of any established practice of the Ukrainian courts whereby suretyship agreements such as the Surety Agreements would be declared invalid specifically due to the provider of the suretyship failing to comply with any requirements or procedures of anti-money laundering legislation, the Group cannot foreclose this possibility.

Ukrainian currency control regulations may impact the Guarantors' ability to make cross-border payments

The NBU is empowered to establish policies for and to regulate currency operations in Ukraine and has the power to establish restrictions on currency operations and repatriation. Ukrainian currency controls and practice are subject to change, with the NBU exercising considerable autonomy in interpretation and practice.

Although no licence from the NBU or other Ukrainian state authority was required for any Guarantor to enter into the Surety Agreements, or for the Guarantee to be valid and legally binding, each Guarantor would need to obtain an individual licence (a "**Cross-Border Payment Licence**") from the NBU in order to make cross-border payments

pursuant to the Guarantee. However, the NBU does not issue Cross-Border Payment Licences in advance or for contingent payments when the amount and date of a cross-border payment are not known.

As a contingency measure aimed at the stabilisation of the Ukrainian currency market, the NBU prohibited the carrying out of payments by Ukrainian residents pursuant to Cross-Border Payment Licences in an amount exceeding U.S.\$50,000 per month. There can be no assurance that this prohibition will not be in effect at the time a Guarantor is required to make a payment under the Guarantee. If the requisite Cross-Border Payment Licence is not granted for any reason, the Guarantees would still remain valid and enforceable, thus it is possible that a Guarantor would be permitted to make cross-border payments thereunder pursuant to an appropriate order of a Ukrainian court (enforcing a foreign arbitral award or adopted as a result of review of the merits of the dispute) which expressly requires that the Guarantor make such cross-border payment. However, there is no court practice to confirm this position.

The ability of the Guarantors to make cross-border payments under the Surety Agreements may be further impeded by Ukrainian currency control regulations restricting a Ukraine-resident entity's ability to purchase or use borrowed foreign currency in order to make payments under a suretyship issued with respect to obligations of a foreign debtor, such as the Issuer. It is uncertain whether a Guarantor may purchase foreign currency funds on the basis of a Cross-Border Payment Licence obtained by it for the purpose of making a payment under its Guarantee. Accordingly, unless such regulations are amended accordingly by the date of the payment, each Guarantor would need to use its otherwise available foreign currency funds (such as proceeds from foreign trade operations). However, the amount of owned foreign currency funds available to a Guarantor for making such payments may be limited due to the requirement for the compulsory sale of a portion of foreign currency proceeds of Ukrainian exporters in the amount of 50 per cent. of foreign currency proceeds received from abroad, which is in effect until 13 June 2018 and which may be further extended by the NBU in its discretion.

The proportion of Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures) and Metinvest's Total Production Assets accounted for by the Guarantors could decrease in the future and could become less than the proportion accounted for on the Issue Date

The PPE and combined adjusted EBITDA of the Guarantors accounted for approximately 86.4 per cent. and 93.1 per cent. of Metinvest's Total Production Assets and Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures) (both as defined in the Conditions), respectively, as of and for the year ended 31 December 2017. There is a requirement under the Conditions that the Guarantors maintain a certain level of aggregate percentage contributions to Metinvest's Total Production Assets and Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures) such that other subsidiaries must become Guarantors under the Notes if such aggregate percentage contributions fall below 65 per cent. and 70 per cent. of Metinvest's Total Production Assets and Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures), respectively, tested annually. Therefore, if the PPE and combined adjusted EBITDA of the Guarantors decrease from current levels but remain at or higher than 65 per cent. and 70 per cent., respectively, the Conditions do not require additional Guarantors. However, such decrease in the PPE and combined adjusted EBITDA of the Guarantors could still have a material adverse effect on the Group or the Noteholders' ability to recover value in respect of their debt claims against the Issuer and the Guarantors.

In addition, if the PPE and combined adjusted EBITDA of the non-guarantor subsidiaries increase, including through the transfer of assets or sales from the Guarantors, the acquisition of additional assets by the non-guarantor subsidiaries or the acquisition of new non-guarantor subsidiaries, the PPE and combined adjusted EBITDA of the Guarantors may decrease as a percentage of Metinvest's Total Production Assets and Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures). However, so long as the PPE and the combined adjusted EBITDA of the Guarantors remain at or higher than 65 per cent. and 70 per cent. of Metinvest's Total Production Assets and Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures), respectively, tested annually, the Conditions do not require additional Guarantors. Furthermore, if the Guarantors' aggregate percentage contributions fall below 65 per cent. and 70 per cent. of Metinvest's Total Production Assets and Metinvest's

Adjusted EBITDA (excluding share in EBITDA of joint ventures) and consequently other subsidiaries become additional Guarantors, the Conditions allow the Guarantees of such additional Guarantors to be released if, after such release, the PPE and combined adjusted EBITDA of the remaining Guarantors is at least 70 per cent. and 75 per cent. of Metinvest's Total Production Assets and Metinvest's Adjusted EBITDA (excluding share in EBITDA of joint ventures), respectively.

The Noteholders will be structurally subordinated to creditors of non-guarantor subsidiaries and those creditors will have greater access to such non-guarantor subsidiaries' combined adjusted EBITDA and the PPE to service the obligations owed to them. See also "*—The Notes will be structurally subordinated to the liabilities and preference shares (if any) of the Issuer's non-guarantor subsidiaries*".

Any Guarantee may be released or discharged without consent of the Noteholders

The Conditions provide that in certain circumstances any Guarantee may be released without any consent of the Noteholders; see Condition 4.15.7. For example, if Avdiivka Coke becomes subject to seizure, expropriation or nationalisation, or resultant permanent cessation of business or winding up, or temporary cessation of business due to armed hostilities, the Guarantee of Avdiivka Coke may be released without consent of the Noteholders. After any such release, the Noteholders will no longer benefit from the relevant Guarantee.

The seizure, expropriation or nationalisation of certain of the Group's assets or resultant permanent cessation of business or winding up or the temporary cessation of business due to armed hostilities of certain Group entities would not constitute an event of default under the Notes in certain circumstances

There is a risk of a temporary cessation of business of certain Group entities due to armed hostilities or that certain of the Group's assets could be seized, expropriated or nationalised by the Ukrainian authorities and/or militia, as this happened with respect to the Seized Assets, which could also result in the cessation of business and/or winding up of certain Group entities. See "*—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*". The occurrence of any of these events with respect to Avdiivka Coke and the Seized Assets would not trigger an event of default under the Notes. In addition, to the extent Avdiivka Coke or any of the Seized Assets is or has been subject to any of these events, such entity will be carved out of the other events of default under the Notes. See Condition 10.2 (*Events of Default*). Consequently, the Group could lose a part of its assets or a part of its business could cease or be wound up without triggering an event of default under the Notes. See "*—Risks Relating to Metinvest—The actions of the self-proclaimed authorities of the so-called Donetsk People's Republic ("DPR") and Luhansk People's Republic ("LPR") are unpredictable, and in 2017 the Group has faced and may in the future face asset seizures, expropriation, illegal fiscal claims or other claims or actions negatively affecting its assets and operations*" and "*—Risks Relating to Metinvest—The Group's assets may be subject to seizure or expropriation by the Ukrainian authorities*".

The gross-up obligation under the Conditions and the Surety Agreements may not be enforceable

Payments by any of the Guarantors under the Conditions and the Surety Agreements to a non-resident legal entity may be subject to withholding tax at the rate of 15 per cent., except when such payments are not effectively connected with a permanent establishment of the non-resident entity situated in Ukraine. See "*Taxation—Ukraine—Payments under the Surety Agreements*". In the event of the imposition of such tax, the Conditions and the Surety Agreements oblige the Guarantors to pay additional amounts such that the recipient receives the amount due to it had no such withholding been required. Ukrainian law generally prohibits payment of tax for another person and contractual provisions requiring such payment and, in particular, gross-up provisions. In May 2012, the State Tax Service of Ukraine issued a letter expressing the position that clauses in agreements between Ukrainian residents and their foreign counterparties providing for the payment of an amount compensating a foreign counterparty for the withholding of tax in Ukraine contradict certain provisions of Ukrainian legislation that prohibit a Ukrainian resident from assuming a foreign counterparty's tax payment obligation. Therefore, there is a

risk that such restriction would also apply to gross-up obligations of the Guarantors under the Conditions and the Surety Agreements. As a result, the gross-up provisions in the Conditions and the Surety Agreements could be found null and void and, therefore, unenforceable against the Guarantors.

Payments under the Surety Agreements may be subject to withholding tax and an investor may not be able to obtain relief under a double tax treaty

In general, payments under the Surety Agreements (including payments in respect of interest, default interest, indemnities etc.) by the Guarantors to a non-resident payee (such as the Trustee or any Noteholder) are subject to Ukrainian withholding tax at the rate of 15 per cent., subject to any reduction or full exemption pursuant to the terms of an applicable double tax treaty. Based on a fair interpretation of applicable Ukrainian tax legislation, such Ukrainian withholding tax should not apply to the payments under the Surety Agreements in respect of, and equal to, the nominal amount of the Notes.

Ukraine does not have an effective tax treaty with Hong Kong, which is a jurisdiction of the Trustee's tax residency. Therefore, payments in respect of interest on the Notes (or other amounts due in respect of the Notes) made by the Guarantors to the Trustee under the Surety Agreements would be subject to Ukrainian withholding tax.

The Noteholders may benefit from the reduced rate of, or exemption from, Ukrainian withholding tax if there is an effective double tax treaty between their residence jurisdiction and Ukraine and all conditions for application of such treaty relief are met. In particular, in order to benefit from the provision of such double tax treaty, a Noteholder must (i) qualify as the beneficial owner of the relevant payment and (ii) provide the Guarantors with a tax residency certificate issued by the competent authorities of the state of its residency before the relevant payment is made by the Guarantors under the Surety Agreements. If the relevant Noteholder fails to qualify as the beneficial owner of the relevant payment or to provide the Guarantors with the applicable residency certificate, any benefits of the double tax treaty will not be available and the relevant payment to such Noteholder may be subject to withholding tax in Ukraine. See also "*Taxation—Ukraine—Payments under the Surety Agreements*".

The Issuer may not be able to finance a redemption at the option of the Noteholders upon a change of control

Upon the occurrence of certain events (including an enforced sale of the Issuer's shares in connection with the SCM Cyprus dispute) described in "*Shareholders and Related Party Transactions*") constituting a change of control as set out in the Conditions, the Issuer would be required to offer to repurchase all outstanding Notes at a purchase price in cash equal to 101 per cent. of the principal amount thereof on the date of purchase plus accrued and unpaid interest to, but excluding, the date of purchase, if any. If a change of control were to occur, the Group cannot be assured that it would have sufficient funds available at such time, or that it would have sufficient funds to provide to the Issuer to pay the purchase price of the outstanding Notes or that the restrictions in the PXF Facility Agreement, the Notes or the Group's other existing contractual obligations would allow the Group to make such required repurchases. A change of control may result in an obligation to mandatorily prepay the PXF Facility Agreement and certain other indebtedness. The repurchase of the Notes pursuant to such an offer could cause a default under such other indebtedness, even if the change of control itself does not. The ability of the Issuer to receive cash from its subsidiaries to allow them to pay cash to the Noteholders following the occurrence of a change of control, may be limited by the Issuer's and the Group's then existing financial resources as well as currency control regulations; see "*—Ukrainian currency control regulations may impact the Guarantors' ability to make cross-border payments*". Sufficient funds may not be available when necessary to make any required repurchases. If an event constituting a change of control occurs at a time when the Group is prohibited under its other financing arrangements from providing funds to the Issuer for the purpose of repurchasing the Notes, the Group may seek the consent from the lenders under such other financing arrangements to the purchase of the Notes or may attempt to refinance the borrowings that contain such prohibition. If such a consent to repay such borrowings is not obtained, the Issuer will remain prohibited from repurchasing any Notes. In addition, the Group expects that it would require third party financing to make an offer to repurchase the Notes, upon a change of control. The Group cannot be assured that it would be able to obtain such financing. Any failure by the Issuer to

offer to purchase the Notes would constitute a default under the PXF Facility Agreement and the Notes, which would, in turn, constitute a default under certain other indebtedness.

The change of control provision contained in the Notes may not necessarily afford the holders of Notes protection in the event of certain important corporate events, including a reorganisation, restructuring, merger or other similar transaction involving the Group that may adversely affect the holders of Notes, because such corporate events may not involve a shift in voting power or beneficial ownership or, even if they do, may not constitute a "Change of Control" as defined in the Notes. Except as described in the Conditions, the Notes will not contain provisions that would require the Issuer to offer to repurchase or redeem the Notes in the event of a reorganisation, restructuring, merger, recapitalisation or similar transaction.

The Seized Assets are not subject to restrictive covenants in the Notes

Due to the loss of control of these entities in the conflict area in March 2017, the Seized Assets have been designated as Unrestricted Subsidiaries under the Conditions as of the Issue Date, and therefore are not subject to the restrictive covenants or events of default in the Conditions for the benefit of Noteholders. In particular, while other subsidiaries and assets directly and indirectly held by Metinvest are subject to a restrictive covenant limiting dividends and other restricted payments, all of the assets of these Unrestricted Subsidiaries may be distributed to the shareholders of Metinvest. See Condition 4.16.

In addition, Metinvest's Adjusted EBITDA, Total Assets, Consolidated Net Income, Net Debt, Consolidated Net Leverage Ratio and Total Production Assets for purposes of the Conditions are defined by reference to such numbers as they are reported by the Group with respect to the Issuer and all of its consolidated subsidiaries, and, as such, the results of Unrestricted Subsidiaries, including the Seized Assets, will be included in the calculations of the relevant thresholds and ratios for purposes of the negative covenants in the Conditions. In particular, and among other effects:

- any Indebtedness incurred by the Seized Assets or any other Unrestricted Subsidiary will be included in, and increase, the Consolidated Net Leverage Ratio;
- any contribution to Adjusted EBITDA and Consolidated Net Income of Metinvest by the Seized Assets or any other Unrestricted Subsidiary, whether positive or negative, will correspondingly affect the Consolidated Net Leverage Ratio and the ability of the Issuer and its Restricted Subsidiaries to incur debt and make Restricted Payments;
- any assets of the Seized Assets or any other Unrestricted Subsidiary will be included in, and increase, the Total Assets of Metinvest, and the ability of the Issuer and its Restricted Subsidiaries to make Investments as well as the amount of Indebtedness that may be incurred by non-Guarantor Restricted Subsidiaries or on a secured basis; and
- any property, plant and equipment of the Seized Assets or any other Unrestricted Subsidiary will be included in, and increase, the Total Production Assets of Metinvest, and the ability of Issuer and its Restricted Subsidiaries to sell assets.

While the property, plant and equipment and other assets (inventory and replaceable equipment) of the Seized Assets were fully impaired, and such subsidiaries currently negatively impact the Group's Adjusted EBITDA and Net Income, there can be no assurance that this will remain the case either with respect to the Seized Assets or other Unrestricted Subsidiaries that may be designated by the Group in the future.

The insolvency laws of The Netherlands and Ukraine may not be as favourable as the U.S. bankruptcy laws and may preclude the Noteholders from recovering payments due on the Notes

The Netherlands

The Issuer is incorporated under the laws of The Netherlands and has its statutory seat (*statutaire zetel*) in The Netherlands. Consequently, in the event of a bankruptcy or insolvency event with respect to the Issuer, primary proceedings would likely be initiated in The Netherlands.

Dutch insolvency laws differ significantly from insolvency proceedings in the U.S. and other jurisdictions, and may make it more difficult for holders of Notes to recover the amount they would normally expect to recover in a liquidation or bankruptcy proceeding in the U.S. or another jurisdiction.

There are two primary insolvency regimes under Dutch law applicable to legal entities. The first, suspension of payments (*surseance van betaling*), is intended to facilitate the reorganisation of a debtor's debts and enable the debtor to continue as a going concern; the second, bankruptcy (*faillissement*), is designed to liquidate and distribute the assets of a debtor to its creditors.

Upon request by the debtor, the court will grant a provisional suspension. A definitive suspension will generally be granted in a creditors' meeting called for that purpose, unless a qualified minority (more than one-quarter in amount of claims held by creditors present or represented at the creditors' meeting or one-third in number of creditors present or represented at such creditors' meeting) of the unsecured non-preferential creditors withholds its consent or if there is no prospect that the debtor will in the future be able to pay its debts as they fall due (in which case the debtor will generally be declared bankrupt). During a suspension of payments, unsecured and non-preferential creditors will be precluded from attempting to recover their claims from the assets of the debtor. A suspension of payments is subject to exceptions, the most important of which excludes secured creditors and preferential creditors (such as tax and social security authorities and employees) from the application of the suspension. This implies that during suspension of payments proceedings secured creditors may proceed against the assets that secure their claims to satisfy their claims, and preferential creditors are also not barred from seeking to recover their claims. However, the court may order a "cooling down period" (*afkoelingsperiode*) for a maximum period of four months, during which enforcement actions by secured or preferential creditors are barred. In a suspension of payments, a composition (*akkoord*) may be offered by the debtor to its creditors. Such a composition will be binding on all unsecured and non-preferential creditors, irrespective of whether they voted in favour or against it or whether they were represented at the creditors' meeting called for the purpose of voting on the composition plan, if (i) it is approved by more than 50 per cent. in number of the general unsecured and non-preferential creditors present or represented at the creditors' meeting, representing at least 50 per cent. in amount of the general unsecured and non-preferential claims admitted for voting purposes and (ii) it is subsequently ratified (*gehomologeerd*) by the court. Consequently, Dutch insolvency laws could reduce the recovery of the Noteholders (for example as a result of a composition).

Under Dutch law, a debtor can be declared bankrupt when it is no longer able to pay its debts when due. The bankruptcy can be requested by a creditor of a claim that is due and payable but left unpaid when there is at least one other creditor. The debtor can also request the application of bankruptcy proceedings itself. Under Dutch bankruptcy proceedings, the assets of a debtor are generally liquidated and the proceeds distributed to the debtor's creditors in accordance with the respective rank and priority of their claims. The general principle of Dutch bankruptcy law is the so-called *paritas creditorum* (principle of equal treatment) which means that all creditors have an equal right to payment and that the proceeds of bankruptcy proceedings shall be distributed in proportion to the size of their claims. However, certain creditors (such as secured creditors and tax and social security authorities) may have special rights that take priority over the rights of other creditors. Consequently, Dutch insolvency laws could reduce potential recovery in Dutch bankruptcy proceedings. The claim of a creditor may be limited depending on the date the claim becomes due and payable in accordance with its terms. Generally, claims of the Noteholders that were not due and payable by their terms on the date of a bankruptcy of the Issuer will be

accelerated and become due and payable as of that date. Each of these claims will have to be submitted to the trustee in bankruptcy (*curator*) to be verified. "**Verification**", under Dutch law, means that the trustee verifies the existence and the value of the claim and whether and to what extent it may be admitted in the bankruptcy proceedings. The claim of a creditor may be limited depending on the date the claim becomes due and payable in accordance with its terms. Each claim will have to be submitted to the trustee in bankruptcy of the Issuer for verification. Creditors that wish to dispute the valuation of their claims by the relevant trustee in bankruptcy will need to commence a court proceeding. These verification procedures could result in the Noteholders receiving a right to recover less than the principal amount of their Notes. In addition, in a Dutch bankruptcy in practice usually no or little funds remain available for the payment of unsecured and non-preferential creditors. Finally, bankruptcy proceedings may also end by a composition much like a composition in suspension of payment proceedings. This may also reduce the recovery of the Noteholders.

Ukraine

There are two primary insolvency regimes under Ukrainian law. The first, pre-trial rehabilitation of the debtor, is intended to facilitate the reorganisation of a debtor's debts and enable the debtor to continue as a going concern. The second, judicial bankruptcy proceedings, provides for court-supervised financial rehabilitation proceedings in respect of the debtor or its liquidation, depending on the decision of the creditors' committee.

A debtor or a creditor is entitled to initiate the debtor's pre-trial rehabilitation procedure.

A pre-trial rehabilitation may be commenced if the following conditions are satisfied:

- the written consent of the debtor's owner (or the debtor's supervising authority) has been obtained;
- the written consent of creditors whose aggregate claims exceed 50 per cent. of the debtor's debts according to the debtor's financial statements has been obtained; and
- the approval of the financial rehabilitation plan by all secured creditors and the general creditors' meeting has been obtained.

The general creditors' meeting is called upon written notice of the debtor sent to the creditors. The debtor or a representative of the creditors must file with the court at the location of the debtor an application for approval of the debtor's financial rehabilitation plan within five calendar days from the date of its approval by the creditors. Upon approval of the debtor's financial rehabilitation plan by the court, the court shall impose a moratorium prohibiting satisfaction of creditors' claims during the procedure of the debtor's pre-trial rehabilitation other than pursuant to the terms of the financial rehabilitation plan, which cannot last longer than 12 months. During the pre-trial rehabilitation of the debtor, the debtor's bankruptcy cannot be commenced in court.

A bankruptcy petition may be presented to a Ukrainian commercial court at the place of location of the debtor by any creditor (other than a fully secured creditor), the debtor itself, tax and certain other state agencies acting as creditors. A creditor (an individual or a business entity) that holds an uncontested claim against the debtor may initiate bankruptcy proceedings against the debtor if the amount of the claim is not less than 300 minimum monthly salaries and the claim remains unsatisfied by the debtor for at least three months following receipt by a creditor of a court judgment that entered into force and commencement of the enforcement proceedings against the debtor. As of the date of this Offering Memorandum, the minimum monthly salary in Ukraine is UAH3,723.

Once bankruptcy proceedings have been triggered, any creditor (except a fully secured creditor) may, within 30 days of the formal publication on the official website of the High Commercial Court of Ukraine of the commencement of the bankruptcy proceedings against the debtor, submit a participation petition substantiating its claims against the debtor. Creditors whose claims matured prior to commencement of the bankruptcy proceedings

and were submitted after the expiration of the 30-day period do not have a right to participate or vote in the creditors' committee and their claims will be satisfied in the sixth order of priority.

A creditor whose claims are fully secured by collateral is deemed to be a secured creditor and may not initiate bankruptcy proceedings. If a secured creditor considers that its claims are not fully secured, or if the collateral is lost or is missing, the secured creditor can initiate the bankruptcy proceedings or participate as a creditor with respect to the unsecured part of its claims or all its claims.

The judicial bankruptcy proceedings in Ukraine may include the following stages:

- administration of assets;
- voluntary arrangement;
- financial rehabilitation; and
- liquidation proceedings.

In the course of the administration of assets, the Ukrainian commercial court shall appoint an insolvency manager (asset administrator), who will supervise and approve the disposal of the debtor's assets. The court shall impose a moratorium on the discharge of the claims of the debtor's creditors that arose prior to the date of the commencement of the bankruptcy proceedings. In the course of administration of assets, the asset administrator shall identify the creditors; prepare the register of the creditors and the amounts claimed from the debtor for further approval by the court; and organise the general meeting of the debtor's creditors, which in turn shall appoint the creditors' committee (the "**committee**"). Once elected, the committee is entitled to initiate the financial rehabilitation or the liquidation proceedings of the debtor; to agree to the terms and conditions of the financial rehabilitation plan and apply to the court for its approval; to request the court to appoint an insolvency manager (asset administrator, financial rehabilitation manager and liquidator), or to apply for their replacement; to agree on the terms and conditions of the voluntary arrangement and to apply to the court for its approval; and to decide on other practical issues of the bankruptcy proceedings. The creditors participating in the general meeting of creditors or in meetings of the committee are allocated a number of votes determined pro rata based on their respective claims, and they adopt their decisions by a majority. Administration of assets proceedings may last 115 calendar days and may be further extended by the court for two months upon a request of the insolvency manager, the committee or the debtor.

Financial rehabilitation may be introduced by the court as the next stage of the bankruptcy proceedings for a period of six months, and may be extended for another 12 months upon a request of the committee or the financial rehabilitation manager. After ruling on the introduction of financial rehabilitation, the court shall appoint a financial rehabilitation manager, who shall replace debtor's management. The financial rehabilitation manager must submit financial rehabilitation plan approved by the committee to the court for approval within three months after its appointment. The financial rehabilitation plan may include the corporate restructuring of the debtor, sale of its assets, recovery of the receivables, debt restructuring, restructuring of assets, write-off of indebtedness and other means of renewing the debtor's solvency. The financial rehabilitation plan may also provide for the "*replacement of assets*", a procedure according to which a part of the debtor's assets and obligations can be transferred to a newly established entity created by the debtor. The shares of such newly created entity can be entered into the debtor's books and further sold through auction. If the financial rehabilitation manager fails to provide the financial rehabilitation plan to the court for approval within six months from the day of commencement of the financial rehabilitation, the court may recognise the debtor as bankrupt and commence the liquidation proceedings (i.e., the final stage of the bankruptcy proceedings).

The liquidation proceedings may also be instituted by the court upon request of the committee, immediately after the administration of assets stage, omitting the financial rehabilitation, or after the financial rehabilitation if the

debtor fails to restore its solvency in accordance with its financial rehabilitation plan. Upon the commencement of liquidation proceedings, the court shall appoint a liquidator, who shall replace the debtor's management. In the course of liquidation proceedings, the liquidator must determine the liquidation value of the debtor's liquidation estate, sell the debtor's assets and pay off the debt to the creditors in the order of priority established by the law. Upon completion of the liquidation proceedings, the liquidator shall prepare a report, as well as a liquidation balance sheet of the debtor, and provide them to the court for consideration and approval. Based on the results of the liquidation proceedings, the court may approve the report and the liquidation balance sheet of the debtor, dissolve the debtor and terminate the bankruptcy proceedings. The term of liquidation proceedings cannot exceed 12 months from the day of commencement.

At any stage of the bankruptcy proceedings, the creditors and the debtor may enter into a voluntary arrangement with a view to restructuring and/or writing-off of the debt. However, first priority debt cannot be written off or restructured, and debt arising from mandatory pension and social security contributions cannot be written off by a voluntary arrangement. The voluntary arrangement is subject to approval by the committee, all secured creditors and the court and shall become effective from the day the court approves it. Upon approval of the voluntary arrangement, the court shall terminate the bankruptcy proceedings.

The insolvency and other laws of The Netherlands and Ukraine may not be as favourable to the interests of the Noteholders in their capacity as creditors as the laws of the United States or other jurisdictions with which such holders may be familiar.

Foreign judgments may not be enforceable against the Issuer

The Notes, the Surety Agreements and the Trust Deeds are governed by English law. Disputes arising under the Notes, the Surety Agreements and the Trust Deeds are subject to settlement by arbitration in accordance with the LCIA Arbitration Rules subject to a right in favour of the Trustee and the Noteholders to refer any dispute to a court of law in England or such other court of competent jurisdiction (if any). Since both The Netherlands and the United Kingdom are parties to the New York Convention, arbitral awards obtained in the United Kingdom in a dispute with respect to which the parties have validly agreed shall be settled by arbitration and duly obtained on the basis of the submission to arbitration by such parties may be enforced by the courts of The Netherlands pursuant and subject to the terms of the New York Convention and subject to compliance with applicable Dutch procedural requirements and the Dutch Code of Civil Procedure (*Wetboek van Burgerlijke Rechtsvordering*).

The Issuer is a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid* or B.V.) incorporated under the laws of The Netherlands. It may be difficult for investors to enforce against the Issuer judgments obtained in courts outside The Netherlands. Where there is no treaty on the recognition and enforcement of judgments between a country and The Netherlands, as is the case for Ukraine and the United States (other than for arbitral awards), a judgment rendered by a court of such country (a "**Foreign Court**") will not be enforced by a Dutch court. In order to obtain a judgment that is enforceable in The Netherlands, the claim must be re-litigated before a competent Dutch court. However, if a party in whose favour a final judgment is rendered by a Foreign Court brings a new suit in a competent Dutch court, such party may submit to such Dutch court the final judgment that has been rendered by the Foreign Court. If the Dutch court finds that the jurisdiction of the Foreign Court has been based on grounds which are internationally acceptable and that proper legal procedures have been observed, the Dutch court will, in principle, uphold such final judgment and regard it as conclusive evidence, without substantive re-examination or re-litigation on the merits of the subject matter thereof, unless such judgment contravenes public order in The Netherlands. See "*Enforceability of Judgments*".

Foreign judgments may not be enforceable against the Guarantors

Courts in Ukraine may refuse to recognise and/or enforce any judgment obtained in a court established in a country other than Ukraine unless such enforcement is envisaged by an international treaty to which Ukraine is a party and only in accordance with the terms of such treaty. There is no such treaty in effect between Ukraine and the United

Kingdom or the United States. Accordingly, the Noteholders and other parties to the relevant transaction documents may not be able to enforce their rights thereunder.

In the absence of such treaty, the courts of Ukraine may only recognise or enforce a Foreign Court judgment on the basis of the principle of reciprocity. Unless proven otherwise, reciprocity is deemed to exist in relations between Ukraine and the country where the judgment was rendered. Ukrainian law does not provide for any clear rules on the application of the principle of reciprocity and there is no official interpretation or established court practice in this respect. Accordingly, there could be no assurance that the Ukrainian courts will recognise or enforce a judgment rendered by the United States or the United Kingdom courts on the basis of the principle of reciprocity. Furthermore, the courts of Ukraine might refuse to recognise or enforce a Foreign Court judgment on the basis of the principle of reciprocity on the grounds provided in the applicable Ukrainian legislation.

The Notes, the Surety Agreements and the Trust Deeds are governed by English law. Disputes arising under the Notes, the Trust Deeds and the Surety Agreements are subject to settlement by arbitration in accordance with the LCIA Arbitration Rules subject to a right in favour of the Trustee, the Agents and the Noteholders to refer any dispute to a court of law in England or such other court of competent jurisdiction (if any). Since both Ukraine and the United Kingdom are parties to the New York Convention, the arbitral awards obtained in the United Kingdom may be enforced in Ukraine under provisions of the New York Convention and subject to compliance with applicable Ukrainian procedural requirements. See "*Enforceability of Judgments*".

The Conditions provide flexibility for value to leave the Group through the making of charitable and sponsorship payments, including to affiliated entities

The Group has in the past made, and expects to continue to make, charitable and sponsorship payments. In 2016 and 2017, the Group's aggregate sponsorship and other charitable payments were U.S.\$6 million and U.S.\$10 million, respectively, all of which was paid to non-related parties. The making of sponsorship and charitable payments will result in value leaving the Group which would otherwise be available to the Group to service its obligations under the Notes and meet its other obligations.

Any sale, purchase or exchange of Notes may become subject to the Financial Transaction Tax ("FTT")

On 14 February 2013, the European Commission published a proposal (the "**Commission's Proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "**participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's proposal has very broad scope and could, if introduced, apply to certain dealings in the Notes (including secondary market transactions) in certain circumstances. Under the Commission's proposal, the FTT could apply in certain circumstances to persons both within and outside the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective Noteholders are advised to seek their own professional advice in relation to the FTT.

The Notes may not have an active trading market, which may have an adverse impact on the value of the Notes

An active trading market for the Notes may not develop. The Notes have not been registered under the Securities Act or any U.S. state securities laws and, unless so registered, may not be offered or sold except in a transaction exempt from, or not subject to, the registration requirements of the Securities Act and applicable state securities laws. The Notes are expected to be listed on the Official List and admitted to trading on the Global Exchange Market of Euronext Dublin. However, there can be no assurance that a liquid market will develop for the Notes, that the Noteholders will be able to sell their Notes, or that such holders will be able to sell their Notes for a price that reflects their value. In addition, liquidity may be limited if the Issuer makes large allocations to a limited number of investors. It is the Noteholders' obligation to ensure that their offers and sales or resales of the Notes within the United States and other countries comply with applicable securities laws. See "*Transfer Restrictions*".

The trading prices of emerging market debt are subject to substantial volatility

Historically, the markets for emerging market debt have been subject to disruptions that have caused substantial volatility in the prices of securities similar to the Notes. There can be no assurance that the market for the Notes will not be subject to similar disruptions. The price volatility may be in response to actual or anticipated variations in Metinvest's operating results and those of its competitors, adverse business developments, changes to the regulatory environment in which it operates, changes in financial estimates by securities analysts and the actual or expected sale of a large number of Notes, as well as other factors, including Metinvest's credit rating and the political stability of Ukraine. In addition, in recent years the global financial markets have experienced significant price and volume fluctuations which, if repeated in the future, could adversely affect the market price of the Notes without regard to Metinvest's operating results, financial condition or prospects or its credit rating.

The Financial Statements have been prepared on a consolidated basis and may be of limited use in assessing the financial position of the Guarantors

The Issuer has requested, and Euronext Dublin has granted, a derogation under Rule 3.3(3)(c) of the Global Exchange Market Listing and Admission to Trading Rules from the requirement for guarantors to include their individual financial statements in this Offering Memorandum. The accounts of the Guarantors have been included in the consolidated Financial Statements of the Issuer, and have not been presented separately herein. However, the Financial Statements include the consolidated accounts of both the Guarantors and the non-guarantor subsidiaries. The non-guarantor subsidiaries represent 52.1 per cent. of the Issuer's consolidated net assets as at and for the year ended 31 December 2017, the Financial Statements may be of limited use in assessing the financial position of the Guarantors. See also "*Unaudited Supplemental Information on the Guarantors*".

The Noteholders may not be able to recover in civil proceedings for U.S. securities law violations

The Issuers and the Guarantors and most of their respective subsidiaries are organised outside the United States, and the Group's business is conducted primarily outside the United States. The directors, managers and/or executive officers of the Issuer and the Guarantors are non-residents of the United States. In addition, as all or a substantial portion of the assets of the Issuers and the Guarantors and their respective subsidiaries and those of their directors and executive officers are located outside of the United States, the Noteholders may be unable to enforce judgments obtained in the U.S. courts against them. Moreover, actions of the Issuer and the Guarantors may not be subject to the provisions of the federal securities laws of the United States. The United States is not currently bound by a treaty providing for reciprocal recognition and enforcement of judgments, other than arbitral awards rendered in civil and commercial matters with The Netherlands or Ukraine. There is, therefore, doubt as to the enforceability in The Netherlands or Ukraine of U.S. securities laws in an action to enforce a U.S. judgment in such jurisdictions. In addition, the enforcement in The Netherlands or Ukraine of any judgment obtained in a U.S. court, whether or not predicated solely upon U.S. federal securities laws, will be subject to certain conditions. There is also doubt that a court in The Netherlands or Ukraine would have the requisite power or authority to grant remedies

sought in an original action brought in such jurisdictions on the basis of U.S. securities laws violations. For further information see "*Enforceability of Judgments*".

The interests of the Group's controlling shareholders may be inconsistent with the interests of holders of Notes

The interests of the Group's principal shareholders, in certain circumstances, may conflict with the interests of holders of Notes. The Group's principal shareholders have, directly or indirectly, the power, among other things, to affect the Group's legal and capital structure and day-to-day operations, as well as the ability to elect and change its management and to approve any other changes to its operations. For example, the Group's principal shareholders could cause the Group to incur additional indebtedness, to sell certain material assets or make dividend distributions, in each case, so long as the Notes, the Amended 2021 Notes and the PXF Facility Agreement so permit. The interests of the Group's principal shareholders could conflict with the interests of holders of Notes, particularly if the Group encounters financial difficulties or is unable to pay its debts when due. The Group's principal shareholders could also have an interest in pursuing acquisitions, divestitures, financings, dividend distributions or other transactions that, in their judgement, could enhance their equity investments although such transactions might involve risks to the holders of Notes. In addition, the Group's principal shareholders may currently or in the future own businesses that directly compete with business of the Group.

As the Global Note Certificates are held by or on behalf of Euroclear, Clearstream, Luxembourg and DTC, investors will have to rely on their procedures for transfer, payment and communication with the Issuer and/or the Guarantors

The Notes will be represented by the Global Note Certificates except in certain limited circumstances described therein. The Regulation S Global Note Certificates will be deposited with the Common Depositary for Euroclear and Clearstream, Luxembourg. The Rule 144A Global Note Certificates will be registered in the name of a nominee of, and deposited with a custodian for, DTC. Except in certain limited circumstances described in the Global Note Certificates, investors will not be entitled to receive definitive Notes. Euroclear, Clearstream, Luxembourg and DTC will maintain records of the beneficial interests in the Global Note Certificates. While the relevant Notes are represented by the Global Note Certificates, investors will be able to trade their beneficial interests only through Euroclear, Clearstream, Luxembourg and/or DTC, as applicable.

The Issuer and the Guarantors will discharge their payment obligations under the Notes by making payments through DTC or to the Common Depositary for Euroclear and Clearstream, Luxembourg for distribution to their accountholders. A holder of a beneficial interest in the Global Note Certificates must rely on the procedures of DTC, Euroclear and Clearstream, Luxembourg to receive payments under the Notes. The Issuer and the Guarantors have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Note Certificates.

Holders of beneficial interests in the Global Note Certificates will not have a direct right to vote in respect of the Notes. Instead, such holders will be permitted to act only to the extent that they are enabled by DTC, Euroclear and Clearstream, Luxembourg to appoint appropriate proxies. We cannot guarantee that procedures implemented for the granting of such proxies will be sufficient to enable noteholders to vote on any requested actions or to take any other action on a timely basis.

Notes may not be a suitable investment for all investors

Each potential investor in any Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained or incorporated by reference in this Offering Memorandum;

- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact such investment will have on its overall investment portfolio;
- have sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes;
- understand thoroughly the terms of the Notes; and
- be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

A potential investor should not invest in the Notes, which are complex financial instruments, unless it has the expertise (either alone or with the help of a financial adviser) to evaluate how the Notes will perform under changing conditions, the resulting effects on the value of such Notes and the impact this investment will have on the potential investor's overall investment portfolio.

Investors may face foreign exchange risks by investing in the Notes.

The Notes are denominated and payable in dollars. If investors measure investment returns by reference to another currency, an investment in the Notes entails foreign exchange-related risks due to, among other factors, possible significant changes in the value of the dollar relative to such investor's reference currency. Such currency fluctuations could result from economic, political and other factors over which Metinvest has no control.

Depreciation of the dollar against such investor's reference currency could cause a decrease in such investor's effective yield from the Notes below their stated coupon rates and could result in a loss to such investor when the return on the Notes is translated into such investor's reference currency. There may also be tax consequences for such investor as a result of any foreign exchange gains or losses resulting from investment in the Notes.

Credit ratings may not reflect all risks

Metinvest is currently rated "B" by Fitch, "B-" by S&P and "Caa1" by Moody's and the Notes of each series is expected to be rated "B" by Fitch and "B-" by S&P. The foregoing credit ratings do not mean that the Notes are a suitable investment.

The credit ratings assigned to the Notes at any time may not reflect the potential impact of all risks related to structure, market, factors discussed above and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the rating organisation at any time. A credit rating reflects only the views of the assigning rating organisation. Investors must conduct their own assessments of Metinvest and its business, operations, assets and financial position, and are strongly cautioned not to place undue emphasis on any particular rating that has been assigned to Metinvest or the Notes.

Any negative change in Ukraine's or (if applicable) any Metinvest's own credit rating could adversely affect the market price of the Notes

Ukraine's foreign currency long term debt is rated "B-" by S&P, "Caa2" by Moody's and "B-" by Fitch. Any negative change in Ukraine's or (if applicable) Metinvest's credit rating or that of the Notes could materially adversely affect the market price of the Notes. A change in the credit rating of one or more other Ukrainian corporate borrowers or banks could also adversely affect the price of each series of the Notes.

DOCUMENT INCORPORATED BY REFERENCE

The monthly report of the Issuer for January 2018 (the "**January 2018 Monthly Report**") was published on 29 March 2018 and is incorporated in, and forms part of, this Offering Memorandum.

A copy of the January 2018 Monthly Report can be obtained from the specified office of the Principal Paying Agent for the time being in London. In addition, the January 2018 Monthly Report is available at: https://www.metinvestholding.com/upload/metinvest/content/139/Monthly%20Report%20Janury%202018_eng.pdf.

TENDER OFFER, CONSENT SOLICITATION AND PXF SHIFT

On 19 March 2018, the Issuer announced an invitation to holders of its Existing 2021 Notes to:

- (a) tender their Notes for purchase for cash (the "**Tender Offer**"); and
- (b) consent by way of an extraordinary resolution to:
 - (i) substantially amend and restate in their entirety (including as to the interest and optional redemption provisions, covenants and events of default) the terms and conditions of the Existing 2021 Notes in order to align those terms as applicable to the Conditions of the Notes (see "*Description of Indebtedness—Amended 2021 Notes—Terms and conditions of the Amended 2021 Notes*") including the removal of cash sweep provisions;
 - (ii) the alignment of the guarantor group in respect of the Existing 2021 Notes with the guarantors of the Notes and the release of the common security relating to the Existing 2021 Notes;
 - (iii) certain consequential amendments to the trust deed, the surety agreements and the agency agreement relating to the Existing 2021 Notes; and
 - (iv) the issue of the Notes to finance, among other things (as described in "*Use of Proceeds*") the payments to be made to tendering and consenting holders of the Existing 2021 Notes,

as proposed by the Issuer for approval by an extraordinary resolution of the holders of the Existing 2021 Notes by way of electronic consent (the "**Consent Solicitation**").

The purchase of any Existing 2021 Notes by the Issuer pursuant to the Tender Offer and the implementation of the Consent Solicitation are subject to certain conditions, including (but not limited to) the approval of the extraordinary resolution by or on behalf of eligible holders, of not less than 75 per cent. in nominal amount of the Existing 2021 Notes outstanding (the "**Consent Approval**") and the successful completion (in the determination of the Issuer) of the issue of the Notes.

The pricing and issue of the Notes is conditional, among other things, on the Consent Approval.

As part of the amendment and restatement of the PXF Facility Agreement on the Issue Date, each of the PXF lenders will be given the option to subscribe for Notes of the relevant series as specified by the PXF lender up to the business day following the pricing of the Notes in consideration for the transfer to the Company and cancellation of certain of such PXF lender's commitment (the "**PXF Shift**"). The amount of Notes to be subscribed will be equal to (i) the amount of the PXF lenders' commitment to be transferred and cancelled divided by (ii) the issue price of the Notes. The total amount of the commitments subject to the PXF Shift may not exceed U.S.\$300 million. To the extent that the total amount of the commitments requested to be included in the PXF Shift exceeds U.S.\$300 million, such commitments will be scaled on a pro rata basis.

Holders of the Existing 2021 Notes that tender their Existing 2021 Notes in the Tender Offer may also be given priority in the allocation of the Notes for an aggregate nominal amount of the Notes of not more than the aggregate (amortised) nominal amount of Existing 2021 Notes validly tendered by such holders in the Tender Offer and accepted for purchase by the Company.

In relation to the Consent Solicitation, on 4 April 2018 the Issuer announced that, as at the electronic consent deadline of 4.00 p.m. (London time) on 3 April 2018, eligible holders of an aggregate (amortised) principal amount of U.S.\$1,148,545,629 of the Existing 2021 Notes (representing approximately 97 per cent. in (amortised) principal

amount of the outstanding Existing 2021 Notes) had provided an electronic consent approving the extraordinary resolution. The extraordinary resolution has accordingly been duly passed by the Consent Approval.

In relation to the Tender Offer, on 4 April 2018 the Issuer announced that, as at the early tender deadline of 4.00 p.m. (London time) on 3 April 2018, the aggregate (amortised) principal amount of the Existing 2021 Notes validly tendered pursuant to the Tender Offer is U.S.\$1,067,638,534.

The purchase of any Existing 2021 Notes by the Issuer pursuant to the Tender Offer and the implementation of the extraordinary resolution is conditional on satisfaction of certain further conditions, including the successful completion (in the determination of the Issuer) of the issue of the Notes.

USE OF PROCEEDS

The net proceeds from the issue of the Notes will be applied by Metinvest to pay (i) the total Tender Offer and Consent Solicitation consideration (principal tendered, premium, consent fees and accrued interest), (ii) to the extent applicable, any Excess Note Proceeds payment and, at Metinvest's option, the upfront prepayment, in each case under the PXF Facility Agreement and as defined and described in "*Description of Indebtedness—The PXF Facility Agreement—Prepayments*", together with the fees payable to the PXF lenders in connection with the amendment and restatement of the Existing PXF Facility and (iii) transaction costs and expenses.

CAPITALISATION

The following table sets forth the Issuer's consolidated capitalisation as at 31 December 2017 on an actual and on a *pro forma* basis to give effect to the transactions described in "Use of Proceeds". The table below should be read in conjunction with "Selected Consolidated Financial Information", "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the 2017 Financial Statements included elsewhere in this Offering Memorandum.

	As at 31 December 2017					
	(millions of U.S. dollars)					
	IFRS	Commissions and fees capitalised	Interest Accrued	Actual Principal	Adjustments	As Adjusted
Total loans and borrowings	3,010	55	(103)	2,962	185	3,147
Existing PXF Facility / PXF Facility Agreement ⁽¹⁾	1,058	27	(2)	1,084	(339) ⁽²⁾	745
Existing 2021 Notes / Amended 2021 Notes	1,166	28	(7)	1,187	(1,068)	119 ⁽³⁾
Notes offered hereby	—	—	—	—	1,592	1,592
Other debt ⁽⁴⁾	786	—	(94)	691	—	691
Sellers' Notes	7	—	—	7	—	7 ⁽⁵⁾
TOTAL DEBT	3,017	55	(103)	2,969	185	3,154
TOTAL EQUITY	4,308	—	—	4,308	—	4,308
TOTAL CAPITALISATION⁽⁶⁾	7,325	55	(103)	7,277	185	7,462

Notes:

- (1) As at 19 March 2018, the actual principal amount of the Existing PXF Facility is U.S.\$1,083,513,535.71, the commission and fees capitalised is U.S.\$22,631,430.64 and interest accrued is zero.
- (2) The principal amount outstanding under the Existing PXF Facility will reflect (a) a reduction (i) of U.S.\$239,251,000 equal to the principal amount of the PXF lenders' commitments to be transferred and cancelled pursuant to the PXF Shift, (ii) of U.S.\$144,289,776.74 equal to the 20 per cent. principal repayment of the remaining PXF commitments that were not subject to the PXF Shift and (iii) the Excess Notes Proceeds prepayment and (b) an increase of U.S.\$65,000,000 in PXF commitments as a result of new lenders providing new commitments or existing lenders increasing their commitments. The Excess Notes Proceeds prepayment will be paid no later than 7 Business Days after the Issue Date and is estimated as of 18 April 2018 at U.S.\$20,013,581.06 based on estimated transaction fees and expenses. See "Description of Indebtedness".
- (3) Based on the amount of Existing 2021 Notes that have been tendered as of the early tender deadline of 4.00 p.m. (London time) on 3 April 2018 (the "Early Tender Deadline"), the principal (amortised) amount outstanding under the Amended 2021 Notes will be U.S.\$119,485,316. Accordingly, this amount is subject to the amount of Existing 2021 Notes that are tendered following the Early Tender Deadline up to the expiration of the Tender Offer at 4.00 pm (London time) on 19 April 2018.
- (4) Other debt includes certain non-current bank borrowings, non-current non-bank borrowings, non-current trade finance, non-current finance lease, current trade finance, current bonds issued, current bank borrowings, current finance lease and current non-bank borrowings from related parties. See Note 19 of the 2017 Financial Statements.
- (5) The Seller's Notes were fully repaid on 14 February 2018.
- (6) Total capitalisation represents total debt and total equity.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The selected financial information set forth below should be read in conjunction with the section headed "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements included elsewhere in this Offering Memorandum. The Financial Statements have been prepared in accordance with IFRS as adopted by the European Union. The selected income statement and cash flow information set forth below for the years ended 31 December 2015, 2016 and 2017, and selected balance sheet information as at 31 December 2015, 2016 and 2017 have been extracted from the Financial Statements which are included elsewhere in this Offering Memorandum. The selected financial information set forth below is qualified in its entirety by reference to the Financial Statements. See also "Presentation of Certain Information—Financial Information".

	Year Ended 31 December		
	2015	2016	2017
	(millions of U.S. dollars)		
INCOME STATEMENT INFORMATION			
Revenue	6,832	6,223	8,931
Cost of sales	(6,087)	(4,833)	(6,756)
Gross Profit	745	1,390	2,175
Distribution costs	(920)	(660)	(721)
General and administrative expenses	(199)	(183)	(193)
Other (expenses)/income, net	(300)	(222)	39
Operating profit/(loss)	(674)	325	1,300
Results of the loss of control over the assets located on temporarily non-controlled territory			(329)
Finance income	26	26	29
Finance costs	(647)	(397)	(350)
Share of result of associates and joint venture	131	205	191
Profit/(loss) before income tax	(1,164)	159	841
Income tax (expense)/benefit	161	(41)	(224)
Profit/(loss) for the period	(1,003)	118	617
Profit is attributable to:			
Owners of the Company	(988)	106	603
Non-controlling interests	(15)	12	14
Profit/(loss) for the period	(1,003)	118	617

	Year Ended 31 December		
	2015	2016	2017
	(millions of U.S. dollars)		
BALANCE SHEET INFORMATION			
ASSETS			
Total non-current assets	6,805	6,558	6,238
Total current assets	2,377	2,773	3,845
TOTAL ASSETS	9,182	9,331	10,083

EQUITY

Equity attributable to the owners of the Company.....	3,886	3,890	4,185
Non-controlling interest.....	138	138	123
TOTAL EQUITY.....	4,024	4,028	4,308

LIABILITIES

Total non-current liabilities	786	786	3,488
Total current liabilities.....	4,372	4,517	2,287
TOTAL LIABILITIES.....	5,158	5,303	5,775
TOTAL LIABILITIES AND EQUITY	9,182	9,331	10,083

Year Ended 31 December

2015	2016	2017
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*(millions of U.S. dollars)***STATEMENT OF CASH FLOW INFORMATION**

Net cash from operating activities	637	490	595
Net cash used in investing activities	(237)	(331)	(449)
Net cash used in financing activities.....	(321)	(105)	(110)
Effect of exchange rate changes on cash and cash equivalents	(13)	(8)	(3)
Net (decrease)/increase in cash and cash equivalents	66	46	33

Year Ended 31 December

2015	2016	2017
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*(millions of U.S. dollars)***ADJUSTED EBITDA**

Profit/(loss) before income tax	(1,164)	159	841
Reconciling items			
Depreciation and amortisation	615	529	525
(Reversal of impairment)/impairment of property, plant and equipment and intangible assets	364	34	284
Finance income.....	(26)	(26)	(29)
Finance costs.....	647	397	350
Share of result of associates and share of depreciation, amortisation, tax and finance income and costs of joint ventures.....	81	80	134
Goodwill impairment.....	74	-	-
Foreign exchange gains less losses, net	(115)	(18)	(66)
Impairment of associate	-	-	7
Other reconciling items.....	49	(2)	(2)
Adjusted EBITDA (including share in EBITDA of joint ventures)	525	1,153	2,044
Share in EBITDA of joint ventures	212	285	325
Adjusted EBITDA (excluding share in EBITDA of joint ventures)	313	868	1,719

UNAUDITED SUPPLEMENTAL INFORMATION ON THE GUARANTORS

The Issuer's obligations under the Notes will be guaranteed on a joint and several basis by the Guarantors. The following tables set forth the adjusted EBITDA (including the share in EBITDA of joint ventures), adjusted EBITDA (excluding the share in EBITDA of joint ventures), net assets and PPE of the Guarantors and the non-guarantor subsidiaries (in absolute terms and expressed as a percentage of the Adjusted EBITDA (including the share in EBITDA of joint ventures), Adjusted EBITDA (excluding the share in EBITDA of joint ventures) net assets and Total Production Assets of the Issuer) as at and for the years ended 31 December 2016 and 2017 reflecting, in each case, intercompany eliminations. These tables should be read in conjunction with the "Selected Consolidated Financial Information", "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and related notes thereto included elsewhere in this Offering Memorandum.

	As at and for the Year Ended 31 December 2017							
	Issuer		Guarantors		Non-Guarantors		Total	
	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%
Adjusted EBITDA (Including Share In EBITDA Of Joint Ventures)								
Consolidated Adjusted EBITDA ⁽¹⁾	320	15.7%	1,601	78.3%	123	6.0%	2,044	100.0%
Adjusted EBITDA (Excluding Share In EBITDA Of Joint Ventures)								
Consolidated Adjusted EBITDA ⁽¹⁾	(5)	(0.3%)	1,601	93.1%	123	7.1%	1,719	100.0%
Net Assets								
Combined standalone net assets	8,182	55.0%	3,767	25%	2,947	20%	14,895	100.0%
Intercompany eliminations ..	(10,166)	-	281	-	(702)	-	(10,587)	-
Consolidated net assets	(1,984)	(46.1%)	4,048	94.0%	2,245	52.1%	4,308	100.0%
PPE								
Consolidated PPE	87	2.1%	3,569	86.4%	476	11.5%	4,132	100.0%

Notes:

(1) Consolidated Adjusted EBITDA was derived from combined standalone revenue.

	As at and for the Year Ended 31 December 2016							
	Issuer		Guarantors		Non-Guarantors		Total	
	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%
Adjusted EBITDA (Including Share In Ebitda Of Joint Ventures)								
Consolidated Adjusted EBITDA ⁽¹⁾	265	23.0%	1,006	87.3%	(118)	(10.2%)	1,153	100%
Adjusted EBITDA (Excluding Share In EBITDA Of Joint Ventures)								
Consolidated Adjusted EBITDA ⁽¹⁾	(20)	(2.3%)	1,006	115.9%	(118)	(13.6%)	868	100%
Net Assets								
Combined standalone assets	7,222	47.4%	3,919	25.7%	4,091	26.9%	15,232	100%
Intercompany eliminations	(9,316)	—	89	—	(1,977)	—	(11,204)	—
Consolidated net assets	(2,094)	(52.0%)	4,008	99.5%	2,114	52.5%	4,028	100%
PPE								
Consolidated PPE	109	2.3%	3,755	79.5%	860	18.2%	4,724	100%

Note:

(1) Consolidated Adjusted EBITDA was derived from combined standalone revenue.

As at and for the Year Ended 31 December 2017

Guarantor	Adjusted EBITDA (including share in EBITDA of joint ventures)		Adjusted EBITDA (excluding share in EBITDA of joint ventures)		Net Assets		PPE	
	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%
Azovstal	212	10.4%	212	12.3%	1,364	31.7%	1,029	24.9%
Central GOK	184	9.0%	184	10.7%	195	4.5%	203	4.9%
Ilyich Steel	150	7.3%	150	8.7%	1,106	25.7%	1,065	25.8%
Ingulets GOK	382	18.7%	382	22.2%	573	13.3%	490	11.9%
Northern GOK	519	25.4%	519	30.2%	561	13.0%	603	14.6%
Avdiivka Coke	154	7.5%	154	8.9%	249	5.8%	179	4.3%
Total	1,601	78.3%⁽¹⁾	1,601	93.1%⁽¹⁾	4,048	940%	3,569	86.4%

Note:

(1) Consolidated Adjusted EBITDA was derived from combined standalone revenue.

As at and for the Year Ended 31 December 2016

Guarantor	Adjusted EBITDA (including share in EBITDA of joint ventures)		Adjusted EBITDA (excluding share in EBITDA of joint ventures)		Net Assets		PPE	
	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%	(million U.S.\$)	%
Azovstal	179	15.5%	179	20.6%	1,328	33.0%	1,110	23.5%
Central GOK	91	7.9%	91	10.5%	205	5.1%	215	4.5%
Ilyich Steel	161	13.9%	161	18.5%	1,076	26.7%	1,091	23.1%
Ingulets GOK	222	19.3%	222	25.6%	605	15.0%	478	10.1%
Northern GOK	271	23.5%	271	31.2%	604	15.0%	667	14.1%
Avdiivka Coke	82	7.1%	82	9.5%	190	4.7%	194	4.1%
Total	1,006	87.3%	1,006	115.9%	4,008	99.5%	3,755	79.5%

Note:

(1) Consolidated Adjusted EBITDA was derived from combined standalone revenue.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of Metinvest's financial condition and results of operations should be read in conjunction with the Financial Statements, the notes thereto and the other information included elsewhere in this Offering Memorandum. This section contains forward-looking statements that involve risks and uncertainties. The Issuer's actual results may differ materially from those discussed in such forward looking statements due to various factors, including those described under "Risk Factors" and "Forward-Looking Statements".

Overview

Metinvest is the largest vertically integrated mining and steel business in Ukraine, operating assets in each stage of the production chain from iron ore mining and processing, coking coal mining and coke production, through to semi-finished and finished steel production, pipe rolling and coil production as well as the production of other value-added products.

For the year ended 31 December 2017, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$8,931 million and U.S.\$2,044 million, respectively. By comparison, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$6,223 million and U.S.\$1,153 million, respectively, for the year ended 31 December 2016. For the year ended 31 December 2015, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$6,832 million and U.S.\$525 million, respectively.

Metinvest's business is divided for financial reporting purposes into two segments: the metallurgical segment and the mining segment. For the year ended 31 December 2017, the metallurgical segment accounted for 37 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 63 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures). For the year ended 31 December 2016, the metallurgical segment accounted for 57 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 43 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures). For the year ended 31 December 2015, the metallurgical segment accounted for 85 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 15 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures).

- *Metallurgical segment.* In the year ended 31 December 2017, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$7,411 million and U.S.\$808 million, respectively. In the year ended 31 December 2016, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$5,027 million and U.S.\$737 million, respectively. In the year ended 31 December 2015, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$5,407 million and U.S.\$486 million, respectively. The metallurgical segment's principal products include: finished steel products, such as flat and long steel products and pipes; semi-finished steel products, such as slabs and billets; pig iron; and coke. In the years ended 31 December 2017, 2016 and 2015, finished steel products comprised approximately 71 per cent., 78 per cent. and 74 per cent., respectively, of Metinvest's total steel sales volumes.

- Mining segment.* In the year ended 31 December 2017, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,520 million and U.S.\$1,380 million, respectively. In the year ended 31 December 2016, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,196 million and U.S.\$548 million, respectively. In the year ended 31 December 2015, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,425 million and U.S.\$88 million, respectively. Metinvest's key products in this segment are merchant iron ore concentrate and pellets and coking coal concentrate.

Reorganisation and Formation of Metinvest

The Issuer was incorporated under the laws of The Netherlands on 21 May 2001. In October 2004, as part of a comprehensive reorganisation of the SCM Group, the Issuer became the ultimate holding company for Metinvest.

As part of a shareholders' agreement between the SCM Group and SMART Group (as described in more detail in "*Shareholders and Related Party Transactions—Shareholders' Agreement*"), the SCM Group agreed to sell and/or contribute its remaining interests in Metinvest entities and certain other equity investments to the Issuer, in consideration for the acquisition by SMART Group of certain additional rights over the management of Metinvest. Due to the complexity of the transaction, it was executed in several stages between 2007 and 2014 and was finally completed in July 2014. Pursuant to the shareholders' agreement, the SMART Group contributed to the statutory capital of Metinvest 100 per cent. of the shares in Trosilia Holdings Ltd (Cyprus), which indirectly owned 44.78 per cent. of the shares in Southern GOK and directly owned 16.07 per cent. of Northern GOK and 14.14 per cent. of Ingulets GOK. In consideration for the contribution of Trosilia Holdings Limited (Cyprus), SMART Group received a number of additional rights with respect to Metinvest, including the right to veto certain matters within the remit of the Supervisory Board and General Shareholders' Meeting of the Issuer; the right to appoint three of the ten Supervisory Board members of the Issuer (the other seven members of the Supervisory Board being appointed by a joint meeting of the SCM Group and Clarendale Limited); and the right to appoint one of the Issuer's two directors (the other director, who serves as the CEO of the Issuer and the Group, being appointed by a joint meeting of the SCM Group and Clarendale Limited). Furthermore, an additional class B share was issued in July 2014 for the benefit of the SMART Group. As a result, SCM Cyprus' interest in the Issuer is now 71.24 per cent. and the SMART Group companies' interest amounts to 23.76 per cent. See "*Summary of Acquisitions and Disposals*". The remaining 5.00 per cent. interest in the Issuer has been acquired from the previous owners of Ilyich Group for the benefit of the SCM Group and SMART Group. It is the intention of SCM and the SMART Group to dispose of the remaining 5.00 per cent. interest in due course (after receiving respective governmental approvals, if necessary), such that the ultimate interest of the SCM Group in the Issuer shall be 75.00 per cent. minus 1 share; and the ultimate interest of SMART Group in the Issuer shall be 25.00 per cent. plus 1 share.

Until November 2007, 100 per cent. of the Issuer's shares were owned by the SCM Group which is in turn ultimately beneficially owned by Mr Rinat Akhmetov. See also "*Shareholders and Related Party Transactions*" and "*Business Description—History*" for further information on Metinvest's ownership.

Summary of Acquisitions and Disposals

Metinvest has sought to develop a vertically integrated steel and mining business through the purchase of assets that it believes offer significant upside potential, particularly in light of Metinvest's plan to implement improved working practices and operational methods.

The following is a summary of the terms of Metinvest's principal steel and mining acquisitions and disposals in the period under review. The acquired entities were consolidated in Metinvest's financial statements from the date on which Metinvest acquired, directly or indirectly, an interest of more than one half of the voting rights in an entity or otherwise obtained power to govern the financial and operating policies of an entity so as to obtain economic benefits. Acquisitions were accounted for using the purchase method of accounting. The cost of an acquisition is

measured at the fair value of the assets given up, equity instruments issued and liabilities incurred or assumed at the date of exchange. The date of exchange is the acquisition date where a business combination is achieved in a single transaction. Where a business combination is achieved in stages, the previously held interest in the acquired business is included in the cost of business combination at fair value as of the acquisition date, with any resulting gains recognised in the consolidated income statement. Costs directly related to the acquisition of subsidiaries are recognised in the consolidated income statement in the period when the costs are incurred and the services are received.

Acquisitions and disposals in 2015

There were no acquisitions and disposals during the year ended 31 December 2015.

Acquisitions and disposals in 2016

In January 2016, Metinvest transferred its entire interest in the share capital of BKI Cyprus to a third party buyer for U.S.\$6 million.

Acquisitions and disposals in 2017

On 15 March 2017, the Group lost control of the Seized Assets. See "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

Factors Affecting Metinvest's Results of Operations

Impact of the conflict in Ukraine

The situation in Ukraine deteriorated in late 2013 and early 2014 following protests in Kyiv. Since April 2014, parts of the Donetsk and Luhansk regions have experienced significant conflict. Some of Metinvest's assets are located in these regions. Since then, a number of Metinvest's production facilities in Ukraine have experienced serious problems with their production and supply chains, resulting in temporary suspensions of production. Furthermore, railway infrastructure in eastern Ukraine has sustained damage caused by shelling and sabotage in the course of the ongoing military action in the region. In 2015 and 2016, this resulted in disruptions in the supply of raw materials to a number of Metinvest's facilities and consequently reduced operations at Avdiivka Coke, Donetsk Coke, Azovstal, Ilyich Steel, Krasnodon Coal and Komsomolske Flux, as well as resulted in the temporary suspension of operations at Khartsyzsk Pipe, Donetsk Coke and Yenakiieve Steel. On 12 February 2015, as a result of prolonged discussions between the conflicting parties (in collaboration with European and Russian leaders), steps were taken to bring about a ceasefire and stop the conflict. Since then, military activity has diminished, although there continues to be frequent, but relatively small scale military actions in this region.

Until November 2016, production of Metinvest's steel plants in Mariupol was limited by railway transportation capacity for the supply of raw materials. Consequently, Metinvest had to transport part of its raw materials to its steel plants in Mariupol by sea. On 9 November 2016, Ukrzaliznytsia completed the Kamysh-Zarya – Volnovakha railway line, which increased railway transportation capacity to Mariupol from 12-13 cargo trains per day to 16 cargo trains per day. Reconstruction works in mid-2017 and an expansion of Ukrzaliznytsya's locomotives fleet on the Kamysh-Zarya – Volnovakha railway line in the fourth quarter of 2017 increased capacity to 20 cargo trains per day in early 2018. However, this capacity is still lower than the 22 cargo trains per day capacity required to achieve the Group's typical production targets and to supply all materials, if relying exclusively on this railway.

In July 2016, shelling hit Avdiivka Coke facility on several occasions, interrupting the electricity supply. In early 2017, military action renewed in and around the territories of eastern Ukraine not controlled by the Ukrainian government and two electricity lines to Avdiivka Coke were bombed, which forced the plant to scale back coke

production for a three-month period and postponed the launch of the coke oven battery no. 8 from January 2017 to May 2017. Restoring electricity at the Avdiivka Coke facility had been a key challenge to fully restoring production at the facility, as coke oven batteries must be kept warm constantly for production, and electricity was only restored in May 2017, when a new high-voltage electricity line to the plant was installed on territory controlled by the Ukrainian government and Avdiivka Coke resumed operations utilising eight coke oven batteries.

On 15 March 2017, the Group lost control of the Seized Assets.

Starting from August 2017, Metinvest's ability to transport its products out of Mariupol via the Sea of Azov has been restricted by the construction of a bridge across the Kerch-Yenikalsky Strait, as only vessels with certain dimensions (air draft up to 33 metres) and draught can pass under the bridge to sail into the Sea of Azov. These restrictions forced Metinvest to redirect some cargo flows from the port of Mariupol to ports of the Odesa region, increasing logistics costs. Metinvest made a number of adjustments to its shipping process in order to continue to ship from the port of Mariupol. Approximately 80 per cent. of shipments were adjusted, which eliminated most of the negative effect caused by the restrictions on vessel size, except for pig iron shipments, which are shipped in bigger vessels, and therefore have been forced to ship from the Odesa port.

Management believes it is taking appropriate measures to support the sustainability of Metinvest's business in the current circumstances. However, the final resolution and the effects of the political and economic crisis are difficult to predict and they may have further negative implications for both the Ukrainian economy and Metinvest's business. See further *"Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition"*.

Seized Assets in eastern Ukraine

In February 2017, the self-proclaimed authorities on the temporarily non-controlled territory in Ukraine announced their intention to seize businesses located on the temporarily non-controlled territory and to require them to comply with local fiscal, regulatory and other requirements, which contradict Ukrainian legislation. On 15 March 2017, management determined that it had lost control over the operations of entities located on the temporarily non-controlled territory, including Yenakiieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke (collectively, the **"Seized Assets"**). Since then, Metinvest stopped economic activity in this territory, including mining of raw materials and production of finished steel products as well as supplies of raw materials and finished steel products from and into the conflict area. Most employees of the Seized Assets have been dismissed while a small number have been relocated to other Metinvest operations.

In the year ended 31 December 2016, the Seized Assets generated revenue of U.S.\$702 million and gross profit of U.S.\$41 million. From 1 January to 15 March 2017, when they were seized, the Seized Assets generated revenue of U.S.\$137 million and gross profit of U.S.\$15 million. As of 15 March 2017, the Seized Assets' aggregate consolidated tangible assets located on the temporarily non-controlled territory amounted to U.S.\$515 million (5 per cent. of Metinvest's total consolidated assets). Due to the loss of control over the assets of the Seized Assets located on the temporarily non-controlled territory, management performed a revaluation of property, plant and equipment and determined that the value of these assets is zero. Also, other assets (inventories and certain intangible assets) of the Seized Assets were fully impaired. This resulted in the recognition of property, plant and equipment impairment amounting to U.S.\$433 million and impairment of inventory and replaceable equipment amounting to U.S.\$82 million. Metinvest's cost of sales also increased as it had to obtain coking coal from other sources, which may have been on less favourable terms than what they could obtain from the Seized Assets. Metinvest's ability to yield the desired product mix was affected due to the loss of long products produced by the Seized Assets. In the short term, management does not believe the Group is able to regain control of the Seized Assets. However, Metinvest is still the legal owner of the Seized Assets. The Seized Assets have been designated as Unrestricted Subsidiaries under the Conditions as of the Issue Date and, as such, will not be subject to

restrictions under the Conditions; see *"Risk Factors—Risks Relating to the Notes and the Guarantees—The Seized Assets are not subject to restrictive covenants in the Notes"*.

If management adopts the position that control over the Seized Assets was lost as at 15 March 2017, the net assets of the Seized Assets in the amount of U.S.\$13 million (before the impairment disclosed in note 7 of the 2017 Financial Statements) would be deconsolidated and the fair value of accounts payable due to the Seized Assets and accounts receivable due from the Seized Assets would be recognised. Additionally, a reclassification of U.S.\$601 million of accumulated net negative currency translation reserve ("**CTR**") from "other comprehensive income" to "profit/(loss)", as described in note 4 of the 2017 Financial Statements, would be required. If the Seized Assets are disposed of or abandoned in the future, the full amount of CTR as of that date would need to be reclassified from "other comprehensive income" to "profit/(loss)". However, for purposes of the Conditions, this reclassification of U.S.\$601 million would not reduce Consolidated Net Income (as defined in the Conditions).

The Seized Assets collectively have certain outstanding trade debts owed to suppliers. To maintain these supplier relationships, Metinvest intends to discharge these trade debts on behalf of the Seized Assets, which will result in receivables owing to it by the Seized Assets. The Seized Assets also owe certain receivables to Metinvest and Metinvest owes certain payables to the Seized Assets, which Metinvest intends to net off, resulting in a net receivable owing to Metinvest. In addition, Krasnodon Coal owes certain amounts to Metinvest Holding LLC under a bond which is currently in default. Metinvest may write off all or part of these existing and future receivables and other obligations owed by the Seized Assets. These existing and future receivables and other obligations owed by the Seized Assets to Metinvest and their write off are permitted under the Conditions.

The above events have also affected other subsidiaries, whose operations are physically located on the controlled territory in Ukraine. As such, Metinvest charged impairment provision on tangible assets located on the temporarily non-controlled territory, but belonging to the subsidiaries whose operations are physically located on the controlled territory, as a result of the inability to access such assets. This resulted in recognition of an additional property, plant and equipment impairment of U.S.\$19 million and impairment of inventory and replaceable equipment of U.S.\$10 million. Metinvest continues to conduct its operations through these affected subsidiaries.

For further information, please see note 4 and note 7 of the 2017 Financial Statements.

World market prices of iron ore

Iron ore prices are influenced by fluctuations in global supply and demand, as well as by transportation costs. Iron ore prices have varied significantly in the past and could vary significantly in the future and are also positively correlated with demand from steel producers. For example, iron ore prices collapsed in 2009, primarily due to lower commodity demand caused by the global financial crisis. While demand for iron ore in the developed world remained subdued following the decline in 2009, strong growth in demand in developing economies, combined with limited supply, resulted in an increase in world iron ore prices in 2010-2011. From 2011 until early 2016, iron ore prices have tended to fall, mainly due to a growing imbalance between supply and demand caused by substantial increases in seaborne iron ore supplies (mainly from Australia and Brazil). In 2016 and 2017, iron ore prices remained volatile trading mostly in the range of U.S.\$50-70 per dry tonne with short-term spikes above U.S.\$90 per dry tonne and drops to U.S.\$40 per dry tonne.

According to Bloomberg, the benchmark price of 62 per cent. Fe iron ore fines CFR China increased marginally to U.S.\$137 per dry tonne in 2013 compared to U.S.\$131 in 2012, after which prices fell to U.S.\$97 and U.S.\$55 per dry tonne in 2014 and 2015, respectively. In the middle of December 2015 prices fell to a multi-year low of U.S.\$38.5 per dry tonne. According to Bloomberg, in the first quarter of 2016, the price increased for the first time quarter-on-quarter since the fourth quarter of 2013 to a quarterly average of U.S.\$49 per dry tonne compared to U.S.\$46 per dry tonne in the fourth quarter of 2015. Prices reached U.S.\$72 per dry tonne in the fourth quarter of 2016 whereas the average price per dry tonne amounted to U.S.\$59 in 2016. In 2017, prices increased on average by 21.4 per cent. year-on-year and reached U.S.\$72 per dry tonne. The increases in 2016 and 2017 were mainly

caused by the economic stimulus measures adopted by the Chinese government and steel production growth, strong global demand for higher-grade products due to efforts to improve steel production efficiency. Other factors that led to higher prices were the imposition of stricter environmental controls, the closure of induction furnaces in China which resulted in a greater utilisation of furnaces that use iron ore products as their key raw material, and also due to increased prices for steel products and several delays in additional capacity launches. The significantly higher profitability of global steel producers (including those located in China) during the years 2016 and 2017, caused by production cuts in the Chinese steel industry and the rise in protectionist measures globally resulted in increased demand for high-grade ore products, aiming to improve blast furnace productivity and maximise steel output. Stricter environmental controls also contributed to higher demand for iron ore with higher Fe content compared to other lower grade ore products. High and volatile hard coking coal prices also contributed to the higher use of high-grade ore to reduce coking coal consumption.

Until March 2010, worldwide prices for iron ore were set based on a benchmark price which was determined in part based on the outcome of negotiations between the world's largest steel manufacturers and the world's largest iron ore mining companies. Metinvest was not a party to these negotiations. In early 2010, the system of annual contracts and benchmark prices that had existed since the 1960s was replaced with new short-term pricing mechanisms linked to the spot market. Prior to this change, iron ore prices were first agreed between one of the major iron ore producers and a steelmaker during annual negotiations. The agreed price then became a benchmark followed by the rest of the industry for a year. However, the strong growth in the size of the internationally traded iron ore market prompted the development of a large spot market for the product. In March 2010, BHP Billiton negotiated the first settlement with Asian customers on the basis of shorter-term landed price contracts. This practice, which used spot-linked quarterly contracts rather than annual contracts, was soon adopted by Vale and Rio Tinto. The share of spot market sales as against contract-based settlement has been gradually increasing since 2010 and currently accounts for approximately 75-80 per cent. of the global iron ore seaborne sales, according to Metinvest's estimates. For instance, approximately 17 per cent. of Rio Tinto's sales in 2017 were priced with reference to the prior quarter's average index lagged by one month. The remainder was sold either on the current quarter average, the current monthly average or on the spot market. However, various pricing schemes based on the previous dynamics of spot prices (including different time lags) are also being used. It is expected that the global spot market for seaborne iron ore will continue to grow, bringing a gradual shift from contract to spot sales. See also *"Industry—Iron Ore Mining and Processing Industry—Global Overview"*.

Metinvest is more than self-sufficient in iron ore and sells externally excess iron ore volumes. In the years ended 31 December 2015, 2016 and 2017, external sales of the mining segment amounted to U.S.\$1,425 million, U.S.\$1,196 million and U.S.\$1,520 million, respectively. Generally, realised prices for iron ore products follow global benchmarks, although they also depend on qualitative characteristics of iron ore products and regional premiums. Accordingly, higher global iron ore prices result in higher selling prices for Metinvest and higher mining segment revenue, contributing to higher mining segment Adjusted EBITDA. Therefore, the collapse of global iron ore prices in 2015 was the main cause for the decreased external sales in Metinvest's mining division, which declined to U.S.\$1,425 million in the year ended 31 December 2015 compared U.S.\$2,400 million in the year ended 31 December 2014. Correspondingly, the decreased iron ore prices, in addition to impairment of trade and other receivables, and lower sales volumes, impacted mining segment's Adjusted EBITDA which decreased to U.S.\$88 million in the year ended 31 December 2015 compared to U.S.\$1,754 million in the year ended 31 December 2014. Likewise, mining segment profitability increased in the year ended 31 December 2017, mainly due to increased global iron ore prices, which averaged U.S.\$72 per dry tonne for the benchmark price of 62 per cent. Fe iron ore fines CFR China for the year 2017 compared to an average of U.S.\$59 per dry tonne for the year 2016. In 2017, the mining segment's external revenue and Adjusted EBITDA increased by U.S.\$324 million and U.S.\$832 million year-on-year to U.S.\$1,520 million and U.S.\$1,380 million, respectively, compared to U.S.\$1,196 million and U.S.\$548 million compared to the year ended 31 December 2016. This was mainly due to higher global benchmark prices for iron ore, and lower impairment of trade and other receivables compared to 2016. Similarly, the mining segment's Adjusted EBITDA margin (including share in EBITDA of joint ventures)

grew to 40 per cent. in the year ended 31 December 2017 from 24 per cent. in the year ended 31 December 2016 and 3 per cent. in the year ended 31 December 2015.

Metinvest benefits from the vertical integration of its business model. Therefore, lower iron ore prices reduce production costs in the metallurgical segment, which increases the metallurgical segment's profitability and contribution to the Group's consolidated results. Similarly, metallurgical segment's Adjusted EBITDA margin (including share in EBITDA of joint ventures) was 11 per cent. in the year ended 31 December 2017, 14 per cent. in the year ended 31 December 2016 and 9 per cent. in the year ended 31 December 2015.

Demand and price for steel in the markets in which Metinvest operates

The steel industry is affected by a combination of factors, including periods of economic growth or recession, worldwide production capacity and the existence of, and fluctuations in, steel imports and protective trade measures. Steel prices tend to be volatile, responding to supply and demand and fluctuating in response to general and industry-specific economic conditions. Between 2002 and 2008, annual average prices for billets rose by over 350 per cent. on the basis of FOB Black Sea exports, from U.S.\$166 per tonne in 2002 to U.S.\$749 per tonne in 2008, according to Metal Expert, driven to a significant extent by demand from China. Prices then collapsed in 2009, during the global economic recession, falling by 48 per cent. year-on-year to U.S.\$390 per tonne. Average annual prices recovered in 2010 to U.S.\$526 per tonne and in 2011 to U.S.\$635 per tonne, peaking at U.S.\$681 per tonne in August 2011, but this still remained below the average annual price for 2008. Since 2011, prices had been declining, averaging U.S.\$561 per tonne in 2012, U.S.\$510 per tonne in 2013, U.S.\$480 per tonne in 2014 and U.S.\$327 per tonne in 2015. In 2016, steel prices grew rapidly because of economic stimulus measures introduced by the Chinese government, which led to increased domestic infrastructure spending and robust steel demand, and due to raw material price increases (namely coking coal and iron ore), protectionist measures adopted worldwide and the restructuring of the Chinese steel industry aiming at increasing efficiency by cutting excess capacity. These factors resulted in price increases in all regions. As such, prices of billets, on the basis of FOB Black Sea exports, increased from U.S.\$265 per tonne in the fourth quarter of 2015 to U.S.\$367 per tonne in the fourth quarter of 2016, while the average price in 2016 amounted to U.S.\$328 per tonne. In 2017, prices continued to increase: billet prices increased to U.S.\$389 per tonne in the first quarter of 2017, U.S.\$391 per tonne in the second quarter of 2017, U.S.\$477 per tonne in the third quarter of 2017 and U.S.\$487 per tonne in the fourth quarter of 2017. See also "*Industry—Steel Industry—Global Overview*".

The following table shows a breakdown of the prices of Metinvest's main products for the years ended 31 December 2016 and 2017, on a Free Carrier, or FCA, basis:

	Year Ended 31 December	
	2016	2017
	<i>(U.S.\$ per tonne)</i>	
Mining segment products		
Iron ore concentrate	36	58
Pellets	61	90
Metallurgical segment products		
Pig iron	220	318
Slabs	288	420
Billets	272	443
Flat products	396	535
Long products	385	518
Rails	812	814

Sourcing and prices of raw materials

Metinvest's principal raw materials for steel production are coal, coke, iron ore materials (including sintering iron ore, iron ore concentrate, iron ore pellets and sinter), scrap metal, dolomite, dolomite fluxes and ferroalloys and refractory materials. While Metinvest's steel production business sources a significant portion of these raw materials, including most of its coke requirements and all of its iron ore concentrate and pellets requirements, from Metinvest's coke and iron ore businesses, it relies on third parties for the remainder of its raw materials.

In the year ended 31 December 2017, Metinvest purchased from third parties 76 per cent. of its coking coal requirements, 100 per cent. of its PCI coal and other coal requirements, 10 per cent. of its coke requirements and all of the ferroalloys and refractory materials used in the production of steel in the same period. In the year ended 31 December 2016, Metinvest purchased from third parties 80 per cent. of its coking coal requirements, 100 per cent. of its PCI coal and other coal requirements, 28 per cent. of its coke requirements and all of the ferroalloys and refractory materials used in the production of steel in the same period. In the year ended 31 December 2015, Metinvest purchased from third parties 78 per cent. of its coking coal requirements, 100 per cent. of its PCI coal and other coal requirements, 27 per cent. of its coke requirements, and all of the ferroalloys and refractory materials used in the production of steel in the same period.

The percentage of Metinvest's coking coal requirements supplied by third parties has changed, from 78 per cent. in 2015 to 76 per cent. in 2017, primarily due to the Group losing control of the operations of Krasnodon Coal, Metinvest's Ukrainian coking coal producer, since 15 March 2017. To mitigate negative effects from this loss, the Group redirected almost all coal produced by its U.S. coking coal producer, United Coal, to Metinvest's coke production facilities in order to meet the Group's needs in raw materials. Moreover, Metinvest has been actively working to diversify coking coal suppliers, including establishing a relationship with premium quality suppliers in Australia, the US and Canada, as well as re-building and strengthening cooperation with Ukrainian producers.

The percentage of Metinvest's coke requirements supplied by third parties has also changed, from 27 per cent. in 2015 to 10 per cent. in 2017 as Avdiivka Coke, Metinvest's largest coke producer, experienced sporadic disruptions to its operations during 2015, 2016 and the first half of 2017 amid intensive shelling, which caused power supply disruptions. In May 2017, after a new high-voltage electricity line to the plant was installed on territory controlled by the Ukrainian government, Avdiivka Coke resumed operations utilising eight coke oven batteries. See also "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

Prices of all of the abovementioned raw materials are affected by cyclical, seasonal and other market factors, including periodic shortages, freight costs, speculation by brokers and export markets. Therefore, with respect to some of its raw materials, Metinvest remains subject to longer-term price fluctuations and shortages which are beyond its control. In the year ended 31 December 2017, higher purchase prices of raw materials, which followed global benchmarks, accounted for 32 per cent. of year-on-year increase in cost of sales of U.S.\$1,923 million to U.S.\$6,756 million compared to U.S.\$4,833 million in 2016. In 2017, the negative impact from higher purchase prices of raw materials on cost of sales totalled U.S.\$625 million, including U.S.\$495 million due to higher coal prices and U.S.\$48 million from higher coke prices. See "*Risk Factors—Risks Relating to Metinvest—The externally purchased raw materials Metinvest uses to produce steel, such as coking coal, are subject to price fluctuations that could increase Metinvest's costs of production*". In the period under review, Metinvest benefited from a high level of self-sufficiency in iron ore concentrate, pellets and coke, which shielded it from fluctuations in prices for these raw materials and potential resulting decrease in steel production.

Cyclical

Metinvest's business is cyclical because the industries in which the majority of its steel customers operate, including the construction, automotive, oil and gas and engineering industries, are themselves cyclical and sensitive

to changes in general economic conditions. While Metinvest benefited from the business cycle in late 2007 and 2008, steel prices collapsed in 2009, reflecting a significant decrease in demand for steel products as a result of the global economic downturn.

The timing and extent of price recovery and return to prior levels cannot be predicted. For example, although billet prices recovered in 2010 and 2011, they still fell short of the average annual price for 2008, and decreased again in 2012-2015. An eventual recovery in steel prices will probably depend on a broad recovery from the recent global economic downturn and a more favourable supply-demand balance, although the length and nature of business cycles affecting the steel industry have historically been unpredictable. The demand for steel products is thus generally correlated with macroeconomic fluctuations in the economies in which steel producers sell products, which are in turn affected by global economic conditions.

Currency exchange rates

Metinvest's sales outside Ukraine generate foreign currency earnings. As Metinvest exports a significant portion of its production, for which it is paid in U.S. dollars and Euros, it is exposed to (and may benefit from) currency exchange rate fluctuations. Metinvest's finance costs are denominated primarily in foreign currencies, principally in U.S. dollars. However, a substantial portion of Metinvest's operating costs (in particular, wages, salaries, electricity and transportation services within Ukraine) are incurred in Hryvnia. Therefore, depreciation of the Ukrainian Hryvnia against the U.S. dollar has a temporary positive effect on Metinvest's results of operations in the periods in which it occurs, though this effect is mitigated to some extent by the impact of Hryvnia's resulting inflation.

The table below shows the nominal exchange rate and real effective exchange rate for Hryvnia in 2015, 2016 and 2017.

	Year Ended 31 December		
	2015	2016	2017
Average nominal exchange rate (Hryvnia per dollar) ⁽¹⁾	21.81	25.59	26.60
Nominal exchange rate (Hryvnia per dollar) at period end ⁽²⁾	24.00	27.19	28.07
Average nominal exchange rate (Hryvnia per Euro) ⁽¹⁾	24.19	28.31	30.08
Nominal exchange rate (Hryvnia per Euro) at period end ⁽²⁾	26.22	28.42	33.50
Change in real effective exchange rate ⁽³⁾	8.0%	(0.3)%	(2.0)%

Notes:

- (1) Average of the official exchange rates set by the NBU during the relevant period.
- (2) The official exchange rates set by the NBU as at 31 December 2015, 2016 and 2017 as relevant.
- (3) Effective exchange rate is a multilateral exchange rate which is a weighted average of exchange rates of domestic and foreign currencies, with the weight for each foreign country equal to its share in trade. It measures the average price of a home good relative to the average price of goods of trading partners, using the share of trade with each country as the weight for that country.

In 2015, the Hryvnia continued to depreciate against the U.S. dollar, reaching a historical peak of UAH30.01 to U.S.\$1.00 on 26 February 2015, but later stabilising, bringing the yearly average to UAH21.81 to U.S.\$1.00. In 2016, the Hryvnia depreciated further against the U.S. dollar to the average for the period of UAH25.59 to U.S.\$1.00. In 2017, the Hryvnia depreciated further against the U.S. dollar to the average for the period of UAH26.60 to U.S.\$1.00. See also "*Risk Factors—Risks Relating to Metinvest—Fluctuations in currencies may adversely affect the Group's financial condition and results of operations*". This had a short-term positive impact on Metinvest's overall profitability given that a portion of its costs is UAH-based while its sales are largely US dollar denominated.

Macroeconomic trends in Ukraine

Most of Metinvest's operations are based in Ukraine and it generates a significant proportion of its sales in Ukraine. In 2015, 2016 and 2017, Metinvest generated 24 per cent., 26 per cent. and 28 per cent. of its consolidated revenue from sales to customers in Ukraine, respectively. As a result, Ukrainian macroeconomic trends, including the

overall decline or growth in the economy, significantly influence its performance. Since a significant proportion of the Group's production is in Ukraine, inflation in Ukraine impacts the Group's costs. Since 2016, the Ukrainian economy began recovering following a deep recession during the previous years. In 2017, the upturn of the Ukrainian economy continued amid structural economic reforms, favourable export market environment and ongoing increase in consumer spending and the NBU implemented monetary policy targeting inflation. Accordingly, the consumer price index declined to 14.4 per cent. in the year ended 31 December 2017 from 48.7 per cent. in the year ended 31 December 2015.

The table below summarises certain key macroeconomic indicators relating to the Ukrainian economy in 2015, 2016 and 2017.

	Year Ended 31 December		
	2015	2016	2017
GDP growth	(9.8)%	2.4%	2.5%
Consumer price index	48.7%	13.9%	14.4%
Producer price index	36.0%	20.5%	26.4%
Unemployment rate ⁽¹⁾	9.1%	9.3%	9.5%

Source: SSSU, NBU

Notes:

(1) Calculated under the International Labour Organisation's methodology.

The growth of the Ukrainian economy between 2000 and 2008 resulted in greater domestic consumption of steel and also resulted in increases in the costs of raw materials and energy due to greater demand. When the global economic and financial situation began to deteriorate in 2008, the effect on Ukraine's economy was particularly severe, with consumption of steel products (including flat, long and certain semi-finished products, but excluding pipes, according to Metal Expert) decreasing. After the decrease in 2009, consumption of steel products in Ukraine increased in 2010 and 2011, reaching 8.4 million tonnes in 2011. However, starting from 2012 until 2016 consumption of steel products in Ukraine fell. Domestic consumption of steel products declined to 7.6 million tonnes (or by 10 per cent. year-on-year) in 2012, to 6.6 million tonnes (or by 17 per cent. year-on-year) in 2013, to 5.5 million tonnes (or by 18 per cent. year-on-year) in 2014, to 4.0 million tonnes in 2015 (or by 26 per cent. year-on-year), according to Metal Expert. The trend has reversed in 2016, when the apparent consumption of steel products in Ukraine amounted to 4.9 million tonnes, an increase of 23 per cent. as compared to 2015, driven by an increase in Ukrainian construction activity, which increased by 17.4 per cent. year-on-year (according to the SSSU) and the machine building industry expansion, which increased by 2.0 per cent. year-on-year (according to the SSSU), as well as inventory replenishment amid expectations of further growth of steel prices. In 2017, consumption of steel products increased to 5.3 million tonnes (or by 6.5 per cent. year-on-year) amid further growth in key steel-consuming sectors: construction activity increased by 26.3 per cent. year-on-year (according to the SSSU), the machine building industry increased by 7.9 per cent. year-on-year (according to the SSSU) and the hardware production rose by 3.2% year-on-year (according to Metal Expert). However, steel production in Ukraine decreased year-on-year, after steelmaking assets located in the non-controlled territory were seized in the first half of 2017. See *"Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition"*. In addition, Ukrainian employers, including Metinvest, face competitive pressure to increase wages to attract personnel that would seek employment outside of Ukraine, mostly to neighbouring countries such as Poland, which offer substantially higher wages than Ukraine. Such pressure could force Metinvest to increase wages for its personnel to the extent possible, increasing relevant costs and lowering their profits.

Debt restructuring

In March 2017, Metinvest successfully implemented a restructuring (the "**Restructuring**") of three series of guaranteed notes due 2016, 2017 and 2018 (the "**Pre-Restructuring Notes**") and pre-export loan facilities under four syndicated loan facilities (the "**Pre-Restructuring PXF**"). The Restructuring was implemented by way of an English scheme of arrangement, which was sanctioned by the High Court of Justice of England and Wales on 8 February 2017. The Restructuring involved the cancellation and replacement of the Pre-Restructuring Notes for the Existing 2021 Notes and the amendment and restatement of the Pre-Restructuring PXF into the Existing PXF.

The Restructuring was required as a result of the ongoing significant civil disturbances and political instability in Ukraine since the end of 2013, the ongoing military action in the country, and the declining prices of steel products, coal and iron ore in 2014, 2015 and the beginning of 2016 and the continuing price volatility thereafter which negatively impacted the business and financial condition of Metinvest. Furthermore, in 2015-2016 the Ukrainian government failed to pay VAT refunds due to certain members of the Metinvest group in a timely manner. During this period, Metinvest was also unable to raise capital in the international capital and debt markets to refinance its debt due to the political situation in Ukraine.

In order to implement the Restructuring, Metinvest obtained a stable platform for the negotiations with its stakeholders via contractual standstill arrangements with certain of its Pre-Restructuring PXF lenders and, in the case of the holders of the Pre-Restructuring Notes, by implementing two separate English schemes of arrangement effecting, among other matters, a moratorium on the taking of enforcement action.

As of 31 December 2017, U.S.\$56 million of fees and costs paid directly related to restructuring were capitalised in the amount of borrowings.

Implementation of cost reduction

Metinvest's management has historically focused on implementing measures aimed at reducing the cost of producing its steel products and implementing an efficient corporate and management structure and maximising the utilisation of its assets. These measures include, among other things: optimising its production facilities through the closing of open hearth production and the closing of a blooming mill; decreasing consumption coefficients through technological and organisational improvements at its steelmaking and rolling facilities; and increasing use of low-cost materials such as slagging scrap instead of iron ore concentrate. Metinvest's ability to continue to reduce costs will impact, among other things, its profitability and capacity plans.

Impairments of trade receivables

Metinvest estimates the likelihood of the collection of trade and other receivables based on an analysis of individual accounts. IAS 39 requires the estimation of the impairment loss to be computed as the difference between the carrying value of a receivable and the present value of the future cash flows discounted at the receivables effective interest rate.

During the years ended 31 December 2015 and 2016, the Group recognised full impairment of trade receivables from some of its key customers in a total amount of U.S.\$534 million. Factors taken into consideration by management when estimating the future cash flow included an ageing analysis of trade and other receivables, and the financial position and performance of and collection history with the customer. In the current environment, there is significant judgement in estimating whether the impaired trade and other receivables and any related penalty interest will be collected. During 2017, the Group commenced external sales of iron ore, coke and coal products purchased from one of these customers. All the metal products of this customer are purchased by the Group and resold externally. These transactions are performed at an arm's-length basis. These transactions are not linked to the existing impaired debt, thus impairment was not reversed.

Additionally, the estimates used to assess the impairment of trade and other receivables from certain Ukrainian customers are impacted by the uncertainty caused by events in eastern Ukraine.

See also "*—Results of Operations for the Years Ended 31 December 2016 and 2017—Other Operating Income/(Expenses), Net*" and "*—Results of Operations for the Years Ended 31 December 2015 and 2016—Other Operating Income/(Expenses), Net*".

Financial Statements Discussed

Abbreviated consolidated financial statements of the Issuer as at and for the year ended 31 December 2015 and summary consolidated financial statements of the Issuer as at and for the years ended 2016 and 2017 presented in this Offering Memorandum have been prepared in accordance with IFRS as adopted by the European Union. The 2015 Financial Statements, the 2016 Financial Statements and the 2017 Financial Statements have been audited by the Issuer's independent auditors, PricewaterhouseCoopers Accountants N.V. ("**PricewaterhouseCoopers**"). See also "*Selected Consolidated Financial Information*". The audit reports on the 2015 Financial Statements and the 2016 Financial Statements contain an emphasis of matter relating to an uncertainty in the financial statements with respect to the political and economic uncertainties in Ukraine. The audit reports on the Financial Statements for the year ended 31 December 2015 contain an emphasis of matter relating to there being a material uncertainty with respect to going concern and an emphasis of matter relating to economic and political uncertainties in Ukraine.

Components of Principal Income Statement Items

Revenue

Metinvest's revenue is generated from the sales of its steel, iron ore, coal and coke products and resales of products manufactured by related parties as well as certain third parties.

Cost of sales

Metinvest's cost of sales consists primarily of costs of raw materials, costs of energy materials, payroll and related expenses for employees at its production facilities, depreciation and amortisation, impairment of property, plant and equipment, expenses in relation to repairs and maintenance, outsourcing, taxes and other costs.

Distribution costs

Metinvest's distribution costs consist largely of transportation costs, salaries paid to sales and distribution employees, commissions paid by Metinvest's European subsidiaries to third party sales agents and trade offices for their services and cost of materials.

General and administrative expenses

Metinvest's general and administrative expenses consist largely of salaries paid to administrative employees, consultancy fees, auditors, legal and banking services expenses, insurance costs and lease expenses.

Other operating income and expenses

Metinvest's other operating income and expenses consist primarily of sponsorship and other charity expenses, operating foreign exchange gains less losses, maintenance of social infrastructure, gain or loss on disposal of property, plant and equipment, impairments of goodwill and trade and other receivables. Social infrastructure expenses and sponsorship and other charity expenses include such items as maintenance of medical centres and recreational centres.

Finance income

Metinvest's finance income includes finance foreign exchange gains, interest income on bank deposits and loans issued, imputed interest on other financial instruments and other finance income.

Finance costs

Metinvest's finance costs include interest expense on its bank borrowings and debt securities, finance foreign exchange losses, interest cost on retirement benefit obligations and other finance costs.

Results of Operations for the Years Ended 31 December 2016 and 2017

The following table presents Metinvest's income statement data for the years ended 31 December 2016 and 2017 in absolute terms and as a percentage of revenue as well as period to period comparisons for 2016 and 2017.

	Year Ended 31 December					
	2016		2017		2016 v 2017	
	(millions of U.S. dollars, except percentages)					
Revenue.....	6,223	100%	8,931	100%	2,708	44%
Cost of sales	(4,833)	(78)%	(6,756)	(76)%	(1,923)	40%
Gross profit	1,390	22%	2,175	24%	785	56%
Distribution costs	(660)	(11)%	(721)	(8)%	(61)	9%
General and administrative expenses	(183)	(3)%	(193)	(2)%	(10)	5%
Other operating income/(expenses), net	(222)	(4)%	39	0%	261	N/A
Operating profit	325	5%	1,300	15%	975	>100%
Results of the loss of control over the assets located on temporarily non-controlled territory	—	—	(329)	(4)%	(329)	N/A
Finance income	26	0%	29	—	3	12%
Finance costs	(397)	(6)%	(350)	(4)%	47	(12)%
Share of result of associates	205	3%	191	2%	(14)	(7)%
Profit before income tax	159	3%	841	9%	682	>100%
Income tax expense	(41)	(1)%	(224)	(3)%	(183)	>100%
Profit for the year	118	2%	617	7%	499	>100%

Revenue

Metinvest's total revenue increased by U.S.\$2,708 million from U.S.\$6,223 million in the year ended 31 December 2016 to U.S.\$8,931 million in the same period of 2017. External revenue of the metallurgical segment increased by U.S.\$2,384 million year-on-year, while external revenue of the mining segment rose by U.S.\$324 million year-on-year. This was mainly driven by higher steel and iron ore selling prices, which followed global benchmarks. In addition, stronger demand resulted in greater sales of pig iron, slabs, flat products and coke. Moreover, the Group started resales of square billets and long products, which partly compensated lower sales volumes of these products which were manufactured at the Group's seized facilities.

The following table presents Metinvest's total revenue by segment for the years ended 31 December 2016 and 2017, as well as a geographic breakdown of Metinvest's external revenue for these periods (based on the location of the customer) in absolute terms and as a percentage of segment revenue.

	Year Ended 31 December					
	2016		2017		2016 v 2017	
	Amount	Share of total segment revenue	Amount	Share of total segment revenue	Change	% Change
<i>(millions of U.S. dollars, except percentages)</i>						
Revenue by segment						
Metallurgical segment						
Sales – external						
Ukraine	1,129	22%	1,889	25%	760	67%
Europe	1,989	39%	2,605	35%	616	31%
Southeast Asia	76	1%	197	3%	121	>100%
CIS (excl. Ukraine)	591	12%	775	10%	184	31%
Middle East and						
North Africa	948	19%	1,469	20%	521	55%
North America	217	4%	416	6%	199	92%
Other countries.....	77	1%	60	1%	(17)	(22)%
Total for external sales.....	5,027	98%	7,411	99%	2,384	47%
Sales to other segments	77	2%	53	1%	(24)	(31)%
Total for metallurgical segment	5,104	100%	7,464	100%	2,360	46%
Mining segment						
Sales – external						
Ukraine	477	21%	578	17%	101	21%
Europe	278	12%	614	18%	336	>100%
Southeast Asia	337	15%	308	9%	(29)	(9)%
CIS (excl. Ukraine)	–	–	–	–	–	–
Middle East and						
North Africa	1	–	–	–	(1)	(100)%
North America	103	5%	20	1%	(82)	(80)%
Other countries.....	–	–	–	–	–	–
Total for external sales.....	1,196	53%	1,520	44%	325	27%
Sales to other segments	1,071	47%	1,940	56%	869	81%
Total for mining segment.....	2,267	100%	3,460	100%	1,193	53%
Eliminations	(1,148)		(1,993)		(845)	74%
Total revenue.....	6,223		8,931		2,708	44%

External revenue from the metallurgical segment accounted for 83 per cent. of Metinvest's total revenue in the year ended 31 December 2017 as compared to 81 per cent. of total revenue in the same period of 2016. External revenue from the mining segment accounted for 17 per cent. of Metinvest's total revenue in the year ended 31 December 2017, as compared to 19 per cent. of total revenue in the same period of 2016.

Metallurgical segment revenue

The metallurgical segment generates revenue from sales of pig iron, steel and coke products and services. The metallurgical segment's external revenue increased by 47 per cent. year-on-year to U.S.\$7,411 million in the year ended 31 December 2017 compared to U.S.\$5,027 million in the same period in 2016. This was mainly attributable to a rise in resales of pig iron, flat products, square billets and long products of U.S.\$960 million. In addition, external sales of products manufactured at Metinvest's facilities increased: flat products increased by U.S.\$749 million, slabs increased by U.S.\$294 million, coke increased by U.S.\$290 million and pig iron increased by U.S.\$179 million. Meanwhile, external sales of long products and square billets produced at Metinvest's plants decreased by U.S.\$211 million and U.S.\$71 million, respectively due to the loss of Yenakieve I&SW. At the same time, external sales of other products and services, including tubular products, rose by U.S.\$194 million.

The following table shows the average price trends for Metinvest's principal steel products in the years ended 31 December 2016 and 2017.

	Year Ended 31 December	
	2016	2017
	Effective Average External Sale Prices for Metinvest's Steel Products ⁽¹⁾ (U.S. dollars per tonne ⁽²⁾)	
Semi-finished products:		
Pig iron	252	359
Slabs	319	455
Square billets	306	488
Finished products:		
Flat products	431	573
Long products	425	586

Notes:

- (1) Prices include transportation costs and costs of brokerage and other services related to the sales of Metinvest's products. Prices reflect the terms of the sales contracts and were not adjusted for any specific terms of delivery of Metinvest's products.
- (2) Revenue denominated in Hryvnia was converted into U.S. dollars using the averages of the Hryvnia to U.S. dollar exchange rates published by the NBU for 2016 and 2017.

The following table shows the breakdown of Metinvest's metallurgical segment external revenue in the years ended 31 December 2016 and 2017.

	Year Ended 31 December				2016 v 2017	
	2016		2017			
	Amount	Percentage of external segment revenue	Amount	Percentage of external segment revenue	Change	% Change
	(millions of U.S. dollars, except percentages)					
Semi finished products:						
Pig iron	350	7%	606	8%	256	73%
incl. resales.....	37	1%	113	2%	76	>100%
Slabs	227	5%	521	7%	294	>100%
Square billets	98	2%	321	4%	223	>100%
incl. resales.....	—	—	294	4%	294	N/A
Total for semi finished products.....	675	13%	1,448	20%	773	>100%
Finished products:						
Flat products	2,954	59%	4,211	57%	1,257	43%
incl. resales.....	953	19%	1,461	20%	508	53%
Long products	824	16%	694	9%	(129)	(16)%
incl. resales.....	—	—	82	1%	82	N/A
Total for finished products	3,778	75%	4,905	66%	1,128	30%
Coke	171	3%	461	6%	290	>100%
Other products and services(1)	403	8%	597	8%	194	48%
Total	5,027	100%	7,411	100%	2,384	47%

(1) Including U.S. \$5 million and U.S.\$2 million of tubular products in 2016 and 2017 respectively.

In the year ended 31 December 2017, revenue from sales of pig iron increased by 73 per cent. year-on-year to U.S.\$606 million, due to a 43 per cent. rise in the effective average selling price and a 21 per cent. increase in sales volumes. Sales volumes rose by 297 thousand tonnes year-on-year to 1,689 thousand tonnes in the year ended 31 December 2017, driven by strong market demand and greater resales of Zaporizhstal's pig iron. Sales in North America and Europe grew by 313 thousand tonnes and 108 thousand tonnes year-on-year, respectively, given the

favourable margins and increased orders from both existing and new customers. This resulted in a year-on-year decline in sales to the Middle East and North Africa of 135 thousand tonnes.

In the year ended 31 December 2017, revenue from sales of slabs more than doubled year-on-year to U.S.\$521 million, driven by a 43 per cent. increase in the effective average selling price and a 61 per cent. increase in sales volumes. Sales volumes rose by 435 thousand tonnes year-on-year to 1,146 thousand tonnes in the year ended 31 December 2017, due to higher demand and supported by greater production. Sales volumes to Europe increased by 471 thousand tonnes year-on-year due to greater orders from customers in Italy and sales to a new client in Hungary. Meanwhile, volumes to the Middle East and North Africa decreased by 46 thousand tonnes year-on-year due to lower sales to Turkey. The increase in the average selling price followed the benchmark for slabs (FOB Black Sea), which rose by 34 per cent. year-on-year.

In the year ended 31 December 2017, revenue from sales of square billets tripled year-on-year to U.S.\$321 million, as sales volumes doubled and the effective average selling price increased by 60 per cent. Sales volumes rose by 337 thousand tonnes year-on-year to 657 thousand tonnes in the year ended 31 December 2017 as a result of higher resales, which increased by 589 thousand tonnes year-on-year, and which compensated for lower sales volumes of own products following the loss of control over Yenakieve Steel. All available volumes were sold in the Middle East and North Africa and Southeast Asia, with the Middle East and North Africa accounting for 84 per cent. of total sales volumes. Average selling prices followed the dynamics of the square billet FOB Black Sea benchmark, which climbed by 33 per cent. year-on-year.

In the year ended 31 December 2017, revenue from sales of flat products increased by 43 per cent. year-on-year to U.S.\$4,211 million, due to a 33 per cent. increase in the effective average selling price and a 7 per cent. rise in sales volumes. Sales volumes increased by 497 thousand tonnes year-on-year to 7,351 thousand tonnes in the year ended 31 December 2017, while resales of Zaporizhstal's goods rose by 244 thousand tonnes year-on-year to 2,781 thousand tonnes in the year ended 31 December 2017, keeping its share in total sales volumes at 38 per cent. in the year ended 31 December 2017. Sales in Ukraine were up 447 thousand tonnes year-on-year as a local competitor left the market in the first quarter of 2017. Greater sales in Middle East and Africa, which increased by 168 thousand tonnes year-on-year, were driven by strong demand. Other sales volumes were redistributed between regions following market conditions. Average selling prices were in line with the hot-rolled coil FOB Black Sea benchmark, which rose by 31 per cent. year-on-year.

In the year ended 31 December 2017, revenue from sales of long products decreased by 16 per cent. year-on-year to U.S.\$694 million, caused by a 39 per cent. decrease in sales volumes due to lower production levels and the loss of control over Yenakieve Steel, which was partly compensated by higher resales (up 147 thousand tonnes year-on-year). At the same time, the positive year-on-year price trend on all markets for long products was due to stronger billet quotations.

For the years ended 31 December 2016 and 2017, the metallurgical segment's sales to the mining segment amounted to U.S.\$77 million and U.S.\$53 million, respectively.

Revenue from sales to customers in Ukraine increased by 67 per cent. year-on-year to U.S.\$1,889 million in the year ended 31 December 2017 from U.S.\$1,129 million in the year ended 31 December 2016, while sales volumes increased by 23 per cent. year-on-year to 3,043 thousand tonnes in the year ended 31 December 2017 from 2,472 thousand tonnes in the year ended 31 December 2016. This was mainly due to greater sales volumes of flat products and coke, driven by greater demand from the Ukrainian market due to an economic recovery, as well as higher selling prices of steel and coke products, which followed benchmark trends.

Revenue from sales to customers in the CIS (excluding Ukraine) increased by 31 per cent. year-on-year due to higher selling prices and greater sales volumes of flat products. Revenue from sales to customers in Europe increased by 31 per cent. year-on-year mainly due to greater sales volumes of pig iron and slabs, as well as higher selling prices. Revenue from sales to customers in the Middle East and North Africa increased by 55 per cent.

year-on-year due to higher selling prices and greater sales volumes of square billets and flat products. Revenue from sales to customers in Southeast Asia more than doubled year-on-year mainly due to higher selling prices and greater sales volumes of square billets and flat products. Revenue from sales to customers in North America increased by 92 per cent. year-on-year primarily due to higher selling prices and higher sales volumes of pig iron and flat products. Revenue from sales to customers in other regions declined by 22 per cent. year-on-year.

Mining segment revenue

Mining segment revenue includes revenue from sales of iron ore, coal and other products and services. In the year ended 31 December 2017, the mining segment's external revenue increased 27 per cent. year-on-year to U.S.\$1,520 million compared to U.S.\$1,196 million in the year ended 31 December 2016, mainly due to higher iron ore and coal selling prices, which followed global benchmarks. This was partly offset by lower sales volumes amid lower overall production of iron ore products and coking coal concentrate, as well as higher intragroup consumption of coal. As a result, external sales of pellets increased by U.S.\$196 million year-on-year, iron ore concentrate by U.S.\$91 million year-on-year, and other products and services by U.S.\$77 million year-on-year. Meanwhile, sales of coking coal concentrate decreased by U.S.\$40 million year-on-year.

The following table shows average price trends for Metinvest's principal iron ore and coal products in the years ended 31 December 2016 and 2017.

	Year Ended 31 December	
	2016	2017
	Effective Average External Sale Prices for Metinvest's Iron Ore and Coal Products ⁽¹⁾	
	(U.S. dollars per tonne) ⁽²⁾	
Iron ore concentrate.....	47	70
Pellets.....	71	105
Coking coal concentrate.....	79	140

Notes:

- (1) Prices include transportation costs and costs of brokerage and other services related to the sales of Metinvest's products. Prices reflect the terms of the sales contracts and were not adjusted for any specific terms of delivery of Metinvest's products.
- (2) Revenue denominated in Hryvnia was converted into U.S. dollars using the monthly averages of the Hryvnia to U.S. dollar exchange rates published by the NBU for 2016 and 2017.

In the year ended 31 December 2017, the effective average price for iron ore concentrate (calculated as total revenue from sales of iron ore concentrate divided by sales volumes) increased by 50 per cent. year-on-year to U.S.\$70 per tonne from U.S.\$47 per tonne in the same period of 2016. The effective average price for pellets increased by 48 per cent. year-on-year to U.S.\$105 per tonne from U.S.\$71 per tonne in the same period of 2016. The effective average price for coking coal concentrate increased by 77 per cent. year-on-year to U.S.\$140 per tonne from U.S.\$79 per tonne in the same period of 2016.

The following table shows the breakdown of Metinvest's mining segment external revenue in the years ended 31 December 2016 and 2017.

	Year Ended 31 December				2016 v 2017	
	2016	2017	2016	2017		
	Amount	Share of total segment revenue	Amount	Share of total segment revenue	Change	% Change
	(millions of U.S. dollars, except percentages)					
Iron ore products:						
Iron ore concentrate	554	46%	644	42%	90	16%
Pellets	424	36%	620	41%	196	46%

	Year Ended 31 December				2016 v 2017	
	2016		2017			
	Amount	Share of total segment revenue	Amount	Share of total segment revenue	Change	% Change
	(millions of U.S. dollars, except percentages)					
Total for iron ore products.....	978	82%	1,264	83%	286	29%
Coking coal concentrate.....	136	11%	96	6%	(40)	(30)%
Other products and services.....	82	7%	160	11%	78	95%
Total.....	1,196	100%	1,520	100%	324	27%

In the year ended 31 December 2017, revenue from sales of merchant iron ore concentrate increased by 16 per cent. year-on-year to U.S.\$644 million, primarily due to a 50 per cent. increase in the effective average selling price. The latter followed the benchmark for 62 per cent. Fe iron ore fines CFR China, which increased by 21 per cent. year-on-year to an average of U.S.\$72 per tonne in the year 2017, up from U.S.\$59 per tonne a year earlier. Meanwhile, sales volumes decreased by 22 per cent. (or 2,624 thousand tonnes) year-on-year to 9,145 thousand tonnes in the year ended 31 December 2017 as a result of lower production and weaker demand in Ukraine during the year ended 31 December 2017 compared with destocking in the year ended 31 December 2016. As such, sales in Ukraine dropped by 1,898 thousand tonnes year-on-year as shipments to some customers in the eastern region stopped and other key customers temporarily shut down their operations. At the same time, sales to Europe, one of Metinvest's priority markets for iron ore, rose by 1,307 thousand tonnes year-on-year. The remaining available volumes were sold to Southeast Asia, although volumes to that region decreased by 2,033 thousand tonnes year-on-year.

In the year ended 31 December 2017, revenue from sales of pellets increased by 46 per cent. year-on-year to U.S.\$620 million, driven by a 48 per cent. increase in the effective average selling price in line with the benchmark. At the same time, sales volumes decreased by 1 per cent. (or 60 thousand tonnes) year-on-year to 5,903 thousand tonnes in the year ended 31 December 2017. Sales to Europe increased by 1,294 thousand tonnes year-on-year amid stronger demand, which raised the region's share in total sales volumes of pellets to 54 per cent. in the year ended 31 December 2017 from 32 per cent. in the year ended 31 December 2016. Meanwhile, sales to Ukraine dropped by 1,415 thousand tonnes year-on-year amid a cessation of shipments to some customers in the eastern region. This led to higher sales to Southeast Asia (up 76 thousand tonnes year-on-year) which is an opportunistic market for this product.

In the year ended 31 December 2017, revenue from sales of coking coal concentrate declined by 30 per cent. year-on-year to U.S.\$96 million due to a 60 per cent. decrease in sales volumes, which was partly offset by a 77 per cent. increase in the effective average selling price. Volumes fell by 1,032 thousand tonnes year-on-year to 684 thousand tonnes in the year ended 31 December 2017 due to lower production and higher internal consumption, which resulted in lower sales in North America.

For the years ended 31 December 2016 and 2017, the mining segment sales to the metallurgical segment amounted to U.S.\$1,071 million (47 per cent. of mining segment sales) and U.S.\$1,940 million (56 per cent. of mining segment sales), respectively.

Revenue from sales to customers in Ukraine increased by 21 per cent. year-on-year to U.S.\$578 million in the year ended 31 December 2017 from U.S.\$477 million in the year ended 31 December 2016. This was primarily due to higher selling prices in this region.

Revenue from sales to customers in Europe more than doubled year-on-year due to an increase in sales volumes of iron ore concentrate and pellets, as well as higher selling prices of iron ore products. Revenue from sales to customers in Southeast Asia decreased by 9 per cent. year-on-year mainly due to a decrease in sales volumes of

iron ore concentrate. Revenue from sales to customers in North America decreased by 80 per cent. year-on-year due to lower sales of coking coal concentrate.

Operating Expenses

The table below sets out Metinvest's operating expenses by category for the years ended 31 December 2016 and 2017 in absolute terms and as a percentage of total revenue.

	Year Ended 31 December			
	2016		2017	
	Amount	Share of total revenue	Amount	Share of total revenue
	<i>(millions of U.S. dollars, except percentages)</i>			
Cost of sales	(4,833)	(78)%	(6,756)	(76)%
Distribution costs	(660)	(11)%	(721)	(8)%
General and administrative expenses.....	(183)	(3)%	(193)	(2)%
Total operating expenses.....	(5,676)	(92)%	(7,670)	(86)%

In the year ended 31 December 2017, cost of sales rose by 40 per cent. year-on-year to U.S.\$6,756 million, primarily attributable to: (i) increased cost of goods and services for resale of U.S.\$1,146 million, mainly pig iron, steel products and coal; (ii) increased purchase prices of raw materials of U.S.\$625 million, including coal (U.S.\$495 million), coke (U.S.\$48 million), scrap (U.S.\$68 million) and iron ore (U.S.\$14 million); (iii) increased expenses for raw material transportation of U.S.\$162 million, mainly as a result of an increase in railway costs in the U.S. and freight costs related to coal supplies, as well as upward tariff indexation by the Ukrainian state railway operator; and (iv) increased services and other costs amounting to U.S.\$109 million due to higher expenses on subsoil use tax, lease, insurance, blasting and drilling, as well as a net reversal of an inventory write-down in the year ended 31 December 2016 of U.S.\$45 million that was created at the end of 2015 due to sale of respective inventories, increased steel prices and recovery of gross margins. These factors were partly offset by favourable movements in the U.S.\$/UAH exchange rate, which accounted for U.S.\$86 million. As a percentage of consolidated revenue, cost of sales accounted for 76 per cent. in the year ended 31 December 2017 compared to 78 per cent. in the year ended 31 December 2016.

In the year ended 31 December 2017, distribution costs increased by 9 per cent. year-on-year to U.S.\$721 million. Freight costs rose by U.S.\$76 million, as (i) metal product sales volumes to Italy, Middle East, the Red Sea region and the U.S. increased and (ii) higher crude oil prices inflated sea freight tariffs. This was partly offset by lower shipments of iron ore products to Southeast Asia, which decreased by 1,957 thousand tonnes year-on-year, and which also contributed to lower other transportation costs of U.S.\$45 million due to lower expenses on loading, unloading and storage in port amid lower total iron ore shipments. Railway costs increased by U.S.\$33 million mainly due to higher iron ore and steel products distribution through railway, as well as a 15 per cent. increased tariff indexation by the Ukrainian state operator on 30 April 2016 and a further 15 per cent. increase on 1 November 2017, which was partly compensated by the lower sales of coal from United Coal to third parties and the loss of control over operations of Yenakiieve Steel. As a share of consolidated revenue, distribution costs accounted for 8 per cent. in the year ended 31 December 2017 compared to 11 per cent. in the year ended 31 December 2016.

In the year ended 31 December 2017, general and administrative expenses increased by 5 per cent. year-on-year to U.S.\$193 million, mainly due to an increase in labour costs of U.S.\$11 million. In addition, service fees increased by U.S.\$7 million year-on-year due to greater expenses on consulting services related to logistics, security and legal services. As a share of consolidated revenue, general and administrative expenses accounted for 2 per cent. in the year ended 31 December 2017 compared to 3 per cent. in the year ended 31 December 2016.

Other Operating Income/(Expenses), Net

In the year ended 31 December 2017, other operating income amounted to U.S.\$39 million compared with U.S.\$222 million of other operating expenses in the year ended 31 December 2016, primarily due to a decline in impairment of trade and other receivables of U.S.\$220 million. In addition, operating foreign exchange gains arising from revaluation of trade receivables and trade payables increased by U.S.\$48 million year-on-year. As a share of consolidated revenue, other operating income was zero per cent. in the year ended 31 December 2017 compared to 4 per cent. in the year ended 31 December 2016.

Operating Profit and Adjusted EBITDA (including share in EBITDA of joint ventures)

In the year ended 31 December 2017, operating profit totalled U.S.\$1,300 million, compared to U.S.\$325 million in the year ended 31 December 2016. This primarily reflected an increase in total revenue of U.S.\$2,708 million and a reduction in impairment of trade and other receivables of U.S.\$220 million. This was partly offset by an increase in cost of sales of U.S.\$1,923 million, as well as distribution, general and administrative costs of U.S.\$71 million. Operating margin was 15 per cent. in the year ended 31 December 2017 compared to 5 per cent. in the year ended 31 December 2016.

Management assesses the performance of Metinvest's operating segments based on Adjusted EBITDA (including share in EBITDA of joint ventures). See "*Selected Consolidated Financial Information*" for a reconciliation of Adjusted EBITDA (including share in EBITDA of joint ventures) to profit before income tax.

In the year ended 31 December 2017, Adjusted EBITDA (including share in EBITDA of joint ventures) increased by 77 per cent. year-on-year to U.S.\$2,044 million, primarily driven by an increase in the contribution from the mining segment of U.S.\$832 million. In addition, EBITDA of the metallurgical segment rose by U.S.\$72 million year-on-year, while corporate overheads and eliminations increased by U.S.\$12 million year-on-year.

The following table presents Adjusted EBITDA (including share in EBITDA of joint ventures) by segment for the years ended 31 December 2016 and 2017.

	Year Ended 31 December				2016 v 2017	
	2016		2017			
	Amount	Percentage of total segment revenue	Amount	Percentage of total segment revenue	Change	% Change
	<i>(millions of U.S. dollars, except percentages)</i>					
Metallurgical segment.....	737	14%	808	11%	71	10%
<i>incl. Joint Venture</i>	165	-	135	-	(30)	(18)%
Mining segment.....	548	24%	1,380	40%	832	>100%
<i>incl. Joint Venture</i>	120	-	190	-	70	59%
Corporate overheads.....	(76)	-	(79)	-	(3)	4%
Eliminations.....	(56)	-	(65)	-	(9)	16%
Total	1,153	19%⁽¹⁾	2,044	23%⁽¹⁾	891	77%

Notes:

(1) Percentage of Metinvest's total revenue.

In the year ended 31 December 2017, the year-on-year increase in consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) was primarily attributable to higher sales price, which contributed U.S.\$2,403 million. Greater sales volumes contributed U.S.\$305 million to the Adjusted EBITDA increase, in addition to higher contributions from joint ventures, mainly Southern GOK, totalling U.S.\$40 million. In addition, Adjusted EBITDA increased due to the impact of the Hryvnia devaluation equal to U.S.\$94 million, as the U.S.\$/UAH

exchange rate averaged 26.60 in 2017, compared with 25.59 in 2016. Lastly, a decrease in other costs contributed U.S.\$206 million to Adjusted EBITDA.

These factors were partly offset by an increase in cost of goods and services for resale of US\$1,146 million due to both higher prices and volumes. Adjusted EBITDA further decreased due to an increase in costs of raw materials equal to U.S.\$672 million, primarily due to increased market prices of coal, coke and scrap, and to higher consumption of purchased coal and higher costs of ferroalloys and purchased semi-finished products. In addition, Adjusted EBITDA decreased due to increased logistics costs amounting to U.S.\$247 million, caused mainly by an increase in railway costs in the U.S. related to coal supplies, upward tariff indexation by the Ukrainian state railway operator, greater rail shipments, as well as a rise in freight costs. Also, Adjusted EBITDA decreased by U.S.\$92 million due to impairment of seized inventories.

In the year ended 31 December 2017, Metinvest's consolidated Adjusted EBITDA margin (including share in EBITDA of joint ventures) increased by 4 percentage points year-on-year to 23 per cent. The mining segment's EBITDA margin (including share in EBITDA of joint ventures) grew by 16 percentage points year-on-year to 40 per cent., while the EBITDA margin of the metallurgical segment (including share in EBITDA of joint ventures) dropped by 3 percentage points year-on-year to 11 per cent.

Finance income

In the year ended 31 December 2017, finance income increased to U.S.\$29 million from U.S.\$26 million in the year ended 31 December 2016.

Finance costs

In the year ended 31 December 2017, finance costs decreased by 12 per cent. year-on-year to U.S.\$350 million mainly as a result of lower foreign exchange loss from financing activity incurred on intragroup loans and dividends during the reporting period. For details of current borrowings, see also "*Description of Indebtedness*".

Income tax expense

Metinvest is subject to taxation in several tax jurisdictions, depending on the residence of its subsidiaries. In the year ended 31 December 2017, corporate income tax rates were as follows: 18 per cent. in Ukraine (18 per cent. in the year ended 31 December 2016), 10 per cent. in Switzerland (10 per cent. in the year ended 31 December 2016), 10-28 per cent. in the EU (10 to 32 per cent. in the year ended 31 December 2016) and 35 per cent. in the U.S. (35 per cent. in the year ended 31 December 2017).

In the year ended 31 December 2017, the income tax expense increased by U.S.\$183 million year-on-year to U.S.\$224 million due to higher current tax expense, which increased by U.S.\$158 million year-on-year as a result improved profitability. In addition, deferred tax asset decreased by U.S.\$24 million as a significant amount of deferred tax assets arising on tax losses carry forward was recognised on impairment of receivables in the year ended 31 December 2016. Effective tax rate, calculated as total income tax divided by profit before tax (both of which are adjusted by the effects of the loss of seized assets), was 18 per cent. in the year ended 31 December 2017 (26 per cent. in the year ended 31 December 2016).

Results of Operations for the Years Ended 31 December 2015 and 2016

The following table presents Metinvest's income statement data for the years ended 31 December 2015 and 2016 in absolute terms and as a percentage of revenue as well as period to period comparisons for 2015 and 2016.

Year Ended 31 December		
2015	2016	2015 v 2016

	<i>(millions of U.S. dollars, except percentages)</i>					
Revenue	6,832	100%	6,223	100%	(609)	(9)%
Cost of sales	(6,087)	(89)%	(4,833)	(78)%	1,254	(21)%
Gross profit	745	11%	1,390	22%	645	87%
Distribution costs	(920)	(13)%	(660)	(11)%	260	(28)%
General and administrative expenses.....	(199) ⁽¹⁾	(3)%	(183)	(3)%	16	(8)%
Other operating income/(expenses), net	(300)	(4)%	(222)	(4)%	78	(26)%
Operating profit	(674)	(10)%	325	5%	999	N/A
Finance income	26	0%	26	0%	0	0%
Finance costs	(647) ⁽¹⁾	(9)%	(397)	(6)%	250	(39)%
Share of result of associates	131	2%	205	3%	74	56%
Profit before income tax	(1,164)	(17)%	159	3%	1,323	N/A
Income tax expense	161	2%	(41)	(1)%	(202)	<(100)%
Profit for the year	(1,003)	(15)%	118	2%	1,121	N/A

Notes:

- (1) In 2016, the Group changed presentation of legal and consulting expenses related to the debt restructuring. Such expenses were reclassified from general and administrative expenses to finance costs to better reflect the nature of such expenditures. This resulted in a U.S.\$12 million change in the comparative line items for the year ended 31 December 2015.

Revenue

Metinvest's total revenue decreased by U.S.\$609 million from U.S.\$6,832 million in the year ended 31 December 2015 to U.S.\$6,223 million in the same period of 2016. External revenue of the metallurgical segment decreased by U.S.\$380 million year-on-year, while external revenue of the mining segment decreased by U.S.\$229 million year-on-year. This was mainly driven by lower sales prices of steel, iron ore and coal products. Prices slightly recovered but remained highly volatile for the remainder of 2016. In addition, iron ore sales volumes dropped amid lower overall production following underinvestment in capital expenditures during the Group's liquidity constraints between 2014 and the first half of 2016 and higher intragroup consumption as a result of greater crude steel output.

The following table presents Metinvest's total revenue by segment for the years ended 31 December 2015 and 2016, as well as a geographic breakdown of Metinvest's external revenue for these periods (based on the location of the customer) in absolute terms and as a percentage of segment revenue.

	Year Ended 31 December					
	2015		2016		2015 v 2016	
	Amount	Share of total segment revenue	Amount	Share of total segment revenue	Change	% Change
(millions of U.S. dollars, except percentages)						
Revenue by segment						
Metallurgical segment						
Sales – external						
Ukraine	1,151	21%	1,129	22%	(22)	(2)%
Europe.....	2,090	38%	1,989	39%	(101)	(5)%
Southeast Asia.....	116	2%	76	1%	(40)	(35)%
CIS (excl. Ukraine)	602	11%	591	12%	(11)	(2)%
Middle East and						
North Africa	1,266	23%	948	19%	(318)	(25)%
North America	111	2%	217	4%	106	96%
Other countries.....	71	1%	77	1%	6	9%
Total for external sales.....	5,407	98%	5,027	98%	(380)	(7)%
Sales to other segments	109	2%	77	2%	(32)	(29)%
Total for metallurgical segment	5,516	100%	5,104	100%	(412)	(7)%

Mining segment

Sales – external						
Ukraine	468	17%	477	21%	9	2%
Europe.....	165	6%	278	12%	113	69%
Southeast Asia	635	22%	337	15%	(298)	(47)%
CIS (excl. Ukraine)	–	–	–	–	–	–
Middle East and						
North Africa	39	1%	1	–	(38)	(98)%
North America	118	4%	103	5%	(15)	(13)%
Other countries.....	–	0%	–	–	–	–
Total for external sales.....	1,425	50%	1,196	53%	(229)	(16)%
Sales to other segments	1,436	50%	1,071	47%	(365)	(25)%
Total for mining segment.....	2,861	100%	2,267	100%	(594)	(21)%
Eliminations	(1,545)		(1,148)		397	(26)%
Total revenue	6,832		6,223		(609)	(9)%

External revenue from the metallurgical segment accounted for 81 per cent. of Metinvest's total revenue in the year ended 31 December 2016 as compared to 79 per cent. of total revenue in the same period in 2015. External revenue from the mining segment accounted for 19 per cent. of Metinvest's total revenue in the year ended 31 December 2016, as compared to 21 per cent. of total revenue in the same period in 2015.

Metallurgical segment revenue

The metallurgical segment generates revenue from sales of pig iron, steel and coke products and services. The metallurgical segment's external revenue decreased by 7 per cent. year-on-year to U.S.\$5,027 million in the year ended 31 December 2016 compared to U.S.\$5,407 million in the same period in 2015. This was primarily attributable to a decrease in revenue from sales of: semi-finished products of U.S.\$206 million; flat products of U.S.\$130 million; tubular products of U.S.\$58 million; coke of U.S.\$34 million; and other products and services of U.S.\$66 million. External revenue from sales of long products increased by U.S.\$114 million.

The following table shows average price trends for Metinvest's principal steel products in the years ended 31 December 2015 and 2016.

	Year Ended 31 December	
	2015	2016
Effective Average External Sale Prices for Metinvest's Steel Products ⁽¹⁾		
(U.S. dollars per tonne ⁽²⁾)		
Semi-finished products:		
Pig iron	258	252
Slabs	350	319
Square billets	361	306
Finished products:		
Flat products.....	458	431
Long products.....	455	425

Notes:

- (1) Prices include transportation costs and costs of brokerage and other services related to the sales of Metinvest's products. Prices reflect the terms of the sales contracts and were not adjusted for any specific terms of delivery of Metinvest's products.
- (2) Revenue denominated in Hryvnia was converted into U.S. dollars using the averages of the Hryvnia to U.S. dollar exchange rates published by the NBU for 2015 and 2016.

The following table shows the breakdown of Metinvest's metallurgical segment external revenue for the years ended 31 December 2015 and 2016.

	Year Ended 31 December
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	2015		2016		2015 v 2016	
	Amount	Percentage of external segment revenue	Amount	Percentage of external segment revenue	Change	% Change
	<i>(millions of U.S. dollars, except percentages)</i>					
Semi-finished products:						
Pig iron.....	379	7%	350	7%	(29)	(8)%
<i>incl. resales</i>	84	2%	37	1%	(47)	(56)%
Slabs.....	274	5%	227	5%	(47)	(17)%
Square billets	228	4%	98	2%	(130)	(57)%
Total for semi finished products	880	16%	675	14%	(206)	(23)%
Finished products:						
Flat products	3,084	57%	2,954	59%	(130)	(4)%
<i>incl. resales</i>	1,098	20%	953	19%	(145)	(13)%
Long products	710	13%	824	16%	114	16%
Tubular products	63	1%	5	—	(58)	(92)%
Total for finished products	3,857	71%	3,783	75%	(74)	(2)%
Coke	206	4%	171	3%	(34)	(17)%
Other products and services	464	9%	398	8%	(66)	(14)%
Total	5,407	100%	5,027	100%	(380)	(7)%

In the year ended 31 December 2016, revenue from sales of pig iron decreased by 8 per cent. (or U.S.\$29 million) year-on-year to U.S.\$350 million, due to a 3 per cent. decline in the effective average selling price and a 5 per cent. decrease in sales volumes. Sales volumes of pig iron decreased by 75 thousand tonnes year-on-year to 1,392 thousand tonnes in the year ended 31 December 2016 due to a decline in resales of Zaporizhstal's pig iron of 175 thousand tonnes year-on-year to 157 thousand tonnes in the year ended 31 December 2016. This was partly compensated by higher overall production and destocking during 2016. At the same time, sales volumes in Southeast Asia increased by 24 thousand tonnes year-on-year due to shipments to a new client in Bangladesh. Sales volumes to North America rose by 330 thousand tonnes year-on-year, as new long-term contracts with customers in the United States were concluded. To fulfil its obligations under these contracts, Metinvest redirected volumes from other markets: 226 thousand tonnes from the Middle East and North Africa, 98 thousand tonnes from Europe, 32 thousand tonnes from Ukraine and 74 thousand tonnes from other regions.

In the year ended 31 December 2016, revenue from sales of slabs decreased by 17 per cent. (or U.S.\$47 million) year-on-year to U.S.\$227 million, driven by a 9 per cent. decrease in the effective average selling price and a 9 per cent. decrease in sales volumes. Volumes decreased by 71 thousand tonnes year-on-year to 711 thousand tonnes in the year ended 31 December 2016, due to higher flat product output. Sales to Europe declined by 81 thousand tonnes year-on-year, mainly amid lower sales to Italy, Romania and Poland. Sales to the Middle East and North Africa decreased by 41 thousand tonnes year-on-year due to stronger competition in the region, mainly from Brazilian suppliers. Sales to Southeast Asia increased by 36 thousand tonnes year-on-year amid greater demand in South Korea and Indonesia.

In the year ended 31 December 2016, revenue from sales of square billets decreased by 57 per cent. (or U.S.\$130 million) year-on-year to U.S.\$98 million due to a 49 per cent. decrease in sales volumes and a 15 per cent. decrease in the effective average selling price. Sales volumes of square billets decreased by 311 thousand tonnes year-on-year to 320 thousand tonnes in the year ended 31 December 2016, mainly due to an increase in long product output. This resulted in a decline in sales to the Middle East and North Africa of 286 thousand tonnes year-on-year. Meanwhile, the Middle East and North Africa remained the key markets for square billets, accounting for 55 per cent. of total sales volumes of this product, supported by regular sales to key clients.

In the year ended 31 December 2016, revenue from sales of flat products decreased by 4 per cent. (or U.S.\$130 million) year-on-year to U.S.\$2,954 million, due to a 6 per cent. drop in the effective average selling price, which was partly offset by a 2 per cent. increase in sales volumes. Flat product sales volumes rose by 128 thousand tonnes

year-on-year to 6,854 thousand tonnes in the year ended 31 December 2016 amid greater production. Sales volumes in Ukraine increased by 91 thousand tonnes year-on-year as a result of higher sales of galvanised and polymer-coated sheets. Sales to the CIS (excluding Ukraine) rose by 42 thousand tonnes year-on-year due to loyalty programmes for clients and lower sales in 2015, when the market was less attractive than other markets. Volumes to Europe increased by 41 thousand tonnes year-on-year due to greater demand in Netherlands, Czech Republic, Croatia and other countries of Central and Eastern Europe. Sales to other regions rose by 43 thousand tonnes year-on-year due to sales of plates and coils to Mexico and Columbia. Sales to North America increased by 25 thousand tonnes year-on-year. In contrast, volumes to Southeast Asia dropped by 97 thousand tonnes year-on-year amid anti-dumping duties and protective measures imposed by the Indian government and the redirection of volumes to other markets. Volumes to the Middle East and North Africa decreased by 16 thousand tonnes year-on-year. At the same time, resales of Zaporizhstal's flat products dropped by 122 thousand tonnes year-on-year to 2,537 thousand tonnes, reducing their share in total sales volumes to 37 per cent. in the year ended 31 December 2016 (compared to 40 per cent. in the year ended 31 December 2015).

In the year ended 31 December 2016, revenue from sales of long products increased by 16 per cent. (or U.S.\$114 million) year-on-year to U.S.\$824 million. This was caused by a 24 per cent. increase in sales volumes, partially offset by a 6 per cent. decline in the effective average selling price. Volumes increased by 374 thousand tonnes year-on-year to 1,937 thousand tonnes in the year ended 31 December 2016, driven by a recovery in demand and higher overall production. As such, sales to all regions other than the CIS (excluding Ukraine) and the Middle East and North Africa increased. The negative price trend in all markets for long products was due to weaker scrap and billet quotations.

In the year ended 31 December 2016, revenue from sales of tubular products decreased by 92 per cent. (or U.S.\$58 million) year-on-year to U.S.\$5 million, caused mainly by a decline in sales volumes amid a lack of customer orders.

For the years ended 31 December 2015 and 2016, the metallurgical segment's sales to the mining segment amounted to U.S.\$109 million and U.S.\$77 million, respectively.

Revenue from sales to customers in Ukraine decreased by 2 per cent. year-on-year from U.S.\$1,151 million in the year ended 31 December 2015 to U.S.\$1,129 million in the year ended 31 December 2016, while sales volumes increased by 14 per cent. year-on-year from 2,169 thousand tonnes in the year ended 31 December 2015 to 2,476 thousand tonnes in the year ended 31 December 2016. This was mainly due to lower sales volumes of pig iron and lower selling prices of steel and coke products, which followed benchmark trends.

Revenue from sales to customers in the CIS (excluding Ukraine) decreased by 2 per cent. year-on-year due to lower sales of long and tubular products. Revenue from sales to customers in Europe decreased by 5 per cent. year-on-year mainly due to lower sales volumes of pig iron, slabs and square billets, as well as lower selling prices. Revenue from sales to customers in the Middle East and North Africa decreased by 25 per cent. year-on-year due to lower sales of all products. Revenue from sales to customers in Southeast Asia decreased by 35 per cent. year-on-year mainly due to lower sales of flat products. Revenue from sales to customers in North America increased by 96 per cent. year-on-year primarily due to higher sales volumes of pig iron, flat and long products. Revenue from sales to customers in other regions rose by 9 per cent. year-on-year.

Mining segment revenue

Mining segment revenue includes revenue from sales of iron ore, coal and other products and services. The mining segment's external revenue decreased by 16 per cent. year-on-year to U.S.\$1,196 million in the year ended 31 December 2016 compared to U.S.\$1,425 million in the same period of 2015, mainly due to lower sales volumes amid a fall in overall output of iron ore products and coking coal. In addition, average selling prices declined.

The following table shows average price trends for Metinvest's principal iron ore and coal products in the years ended 31 December 2015 and 2016.

	Year Ended 31 December	
	2015	2016
Effective Average External Sale Prices for Metinvest's Iron Ore and Coal Products ⁽¹⁾		
(U.S. dollars per tonne) ⁽²⁾		
Iron ore concentrate.....	49	47
Pellets.....	72	71
Coking coal concentrate	93	79

Notes:

- (1) Prices include transportation costs and costs of brokerage and other services related to the sales of Metinvest's products. Prices reflect the terms of the sales contracts and were not adjusted for any specific terms of delivery of Metinvest's products.
- (2) Revenue denominated in Hryvnia was converted into U.S. dollars using the monthly averages of the Hryvnia to U.S. dollar exchange rates published by the NBU for 2015 and 2016.

In the year ended 31 December 2016, the effective average price for iron ore concentrate (calculated as total revenue from sales of iron ore concentrate divided by sales volumes) decreased by 3 per cent. year-on-year to U.S.\$47 per tonne from U.S.\$49 per tonne in the same period of 2015. The effective average price for pellets decreased by 1 per cent. year-on-year to U.S.\$71 per tonne from U.S.\$72 per tonne in the same period of 2015. The effective average price for coking coal concentrate decreased by 14 per cent. year-on-year to U.S.\$79 per tonne from U.S.\$93 per tonne in the same period of 2015.

The following table shows the breakdown of Metinvest's mining segment external revenue in the years ended 31 December 2015 and 2016.

	Year Ended 31 December					
	2015		2016		2015 v 2016	
	Amount	Share of total segment revenue	Amount	Share of total segment revenue	Change	% Change
	(millions of U.S. dollars, except percentages)					
Iron ore products:						
Iron ore concentrate	639	45%	554	46%	(85)	(13)%
Pellets.....	500	35%	424	36%	(76)	(15)%
Total for iron ore products	1,139	80%	978	82%	(161)	(14)%
Coking coal concentrate.....	179	13%	136	11%	(43)	(24)%
Other products and services	107	8%	82	7%	(25)	(23)%
Total	1,425	100%	1,196	100%	(229)	(16)%

In the year ended 31 December 2016, revenue from sales of iron ore concentrate decreased by 13 per cent. year-on-year to U.S.\$554 million, caused by an 11 per cent. decrease in sales volumes and a 3 per cent. decline in the effective average selling price. Volumes decreased by 1,390 thousand tonnes year-on-year to 11,769 thousand tonnes in the year ended 31 December 2016 due to a decline in overall output, partly compensated by destocking. Sales volumes in Europe increased by 681 thousand tonnes year-on-year amid greater purchases by key clients. To meet this demand, volumes were redirected from Southeast Asia. Sales volumes in Ukraine fell by 149 thousand tonnes year-on-year amid weaker demand from local clients. The effective average selling price decreased by 3 per cent. year-on-year due to greater volumes sold in the first half of 2016 (37 per cent. higher than the second half of 2016) at lower prices than the second half of 2016, when the benchmark for 62 per cent. Fe iron ore CFR China rose by 25 per cent. half-year-on-half-year to an average of U.S.\$64 per tonne.

In the year ended 31 December 2016, revenue from sales of pellets decreased by 15 per cent. year-on-year to U.S.\$424 million, driven mainly by lower sales volumes. Volumes decreased by 962 thousand tonnes year-on-year to 5,963 thousand tonnes in the year ended 31 December 2016 due to lower production together with an increase in stocks. Given the greater demand and market premiums for pellets in Ukraine and Europe, volumes in these regions rose by 1,185 thousand tonnes and 793 thousand tonnes year-on-year, respectively. This reduced the remaining available volume and resulted in lower sales to Southeast Asia (2,456 thousand tonnes year-on-year), the Middle East and North Africa (484 thousand tonnes year-on-year). The effective average selling price dropped by 1 per cent. year-on-year due to the low level of the benchmark for 62 per cent. Fe iron ore CFR China in early 2016, when it hit a multi-year bottom.

In the year ended 31 December 2016, revenue from sales of coking coal concentrate decreased by 24 per cent. year-on-year to U.S.\$136 million, driven by a 14 per cent. decrease in the effective average selling price and an 11 per cent. decrease in sales volumes. Volumes decreased by 216 thousand tonnes year-on-year to 1,716 thousand tonnes in the year ended 31 December 2016 amid lower production, which resulted in lower sales in all markets. The average selling price in Ukraine declined by 9 per cent. year-on-year following a decrease in the share of sales of a more expensive coal in that market. The average selling price for hard coking coal in North America fell by 14 per cent. year-on-year, mainly due to long-term contracts concluded in the beginning of the year at market prices.

For the years ended 31 December 2015 and 2016, mining segment sales to the metallurgical segment amounted to U.S.\$1,436 million (50 per cent. of mining segment sales) and U.S.\$1,070 million (47 per cent. of mining segment sales), respectively.

Revenue from sales to customers in Ukraine increased by 2 per cent. year-on-year from U.S.\$468 million in the year ended 31 December 2015 to U.S.\$477 million in the year ended 31 December 2016. This was primarily due to higher sales volumes of pellets in this region.

Revenue from sales to customers in Europe increased by 69 per cent. year-on-year due to an increase in sales volumes of iron ore concentrate and pellets, as well as higher selling prices of iron ore products. Revenue from sales to customers in Southeast Asia decreased by 47 per cent. year-on-year to U.S.\$337 million in the year ended 31 December 2016 mainly due to a decrease in sales volumes of iron ore concentrate and pellets. Revenue from sales to customers in North America decreased by 13 per cent. year-on-year to U.S.\$103 million in the year ended 31 December 2016 due to lower sales of coking coal concentrate. Revenue from sales to customers in the Middle East and North Africa decreased by 98 per cent. year-on-year to U.S.\$1 million in the year ended 31 December 2016 due to lower sales of pellets.

Operating Expenses

The table below sets out Metinvest's operating expenses by category for the years ended 31 December 2015 and 2016 in absolute terms and as a percentage of total revenue.

	Year Ended 31 December			
	2015		2016	
	Amount	Share of total revenue	Amount	Share of total revenue
	<i>(millions of U.S. dollars, except percentages)</i>			
Cost of sales	(6,087)	(89)%	(4,833)	(78)%
Distribution costs	(920)	(13)%	(660)	(11)%
General and administrative expenses.....	(199) ⁽¹⁾	(3)%	(183) ⁽¹⁾	(3)%
Total operating expenses.....	(7,206)	(105)%	(5,676)	(92)%

Notes:

- (1) In 2016, the Group changed presentation of legal and consulting expenses related to the debt restructuring. Such expenses were reclassified from general and administrative expenses to finance costs to better reflect the nature of such expenditures. This resulted in a change in the comparative line items for the year ended 31 December 2015 amounting to U.S.\$12 million.

Metinvest's cost of sales decreased by 21 per cent. year-on-year from U.S.\$6,087 million in the year ended 31 December 2015 to U.S.\$4,833 million the year ended 31 December 2016. This decline of U.S.\$1,254 million was primarily attributable to: (i) favourable movements in the U.S.\$/UAH exchange rate, which accounted for U.S.\$366 million or 29 per cent. of the total decrease in the cost of sales; (ii) a decrease in the cost of goods and services for resale of U.S.\$369 million (mainly goods from Zaporizhstal); (iii) a decrease in impairment charges accrued during the reporting period of U.S.\$328 million; (iv) lower purchase prices of raw materials (U.S.\$94 million), primarily coal and coke; (v) a decrease in natural gas costs of U.S.\$120 million amid lower prices (U.S.\$76 million) and lower consumption (U.S.\$44 million); and (vi) a decline in services and other costs of U.S.\$94 million, mainly driven by a net reversal of an inventory impairment in 2016 of U.S.\$45 million, created at the end of 2015 due to sales of respective inventories, an increase in steel prices and a recovery in gross margins. Cost of sales were partly offset by greater volumes of raw materials purchased of U.S.\$69 million and higher electricity costs of U.S.\$56 million amid increased electricity tariffs (U.S.\$40 million) and higher consumption of electricity (U.S.\$16 million). Cost of sales as a share of total revenue decreased from 89 per cent. in the year ended 31 December 2015 to 78 per cent. in the year ended 31 December 2016.

Distribution costs decreased by 28 per cent. year-on-year from U.S.\$920 million in the year ended 31 December 2015 to U.S.\$660 million in the year ended 31 December 2016, and decreased as a share of total revenue from 13 per cent. in the year ended 31 December 2015 to 11 per cent. in the year ended 31 December 2016. The decrease in distribution costs was primarily attributable to a decline in sea freight costs due to lower shipment volumes (mainly iron ore products to Southeast Asia), driven by a change in the sales structure and lower sea freight tariffs as a result of decreased crude oil prices. Other transportation costs declined amid lower expenses on loading, unloading and storage in port. These factors were partly offset by an increase in railway costs following an upward indexation in tariffs of 15 per cent. on 30 April 2016 and higher rail shipment volumes.

General and administrative expenses decreased by 8 per cent. year-on-year from U.S.\$199 million in the year ended 31 December 2015 to U.S.\$183 million in the year ended 31 December 2016, driven by favourable movements in the U.S.\$/UAH exchange rate, which mainly impacted wages and salaries, and lower service fees. In addition, in 2016, the Group changed presentation of legal and consulting expenses related to the debt restructuring. These expenses were reclassified from general and administrative expenses to finance costs to better reflect the nature of such expenditures. This resulted in a change in the comparative line items for the year ended 31 December 2015 amounting to U.S.\$12 million.

Other Operating Income/(Expenses), Net

In the year ended 31 December 2016, other operating expenses amounted to U.S.\$222 million (a decrease of 26 per cent. year-on-year), mainly due to an impairment of trade and other receivables recognised totalling U.S.\$227 million. During the year ended 31 December 2016, following further delays in payments from some customers beyond the originally expected dates and certain operational and financial issues experienced by these customers, Metinvest recognised a full impairment of trade receivables from these customers of U.S.\$220 million (compared to a partial impairment of U.S.\$254 million for the year ended 31 December 2015). In addition, operating foreign-exchange gains decreased by 85 per cent. year-on-year to U.S.\$18 million, principally due to a lower gain from the revaluation of trade receivables and trade payables. At the same time, there was no impairment of goodwill in the year ended 31 December 2016, compared with U.S.\$74 million charged in the year ended 31 December 2015. As a share of total revenue, other operating income amounted to 4 per cent. in the year ended 31 December 2016, flat year-on-year.

Operating Profit and Adjusted EBITDA (including share in EBITDA of joint ventures)

In the year ended 31 December 2016, operating profit totalled U.S.\$325 million, compared with an operating loss of U.S.\$674 million in the year ended 31 December 2015. This primarily reflected a reduction in expenses of U.S.\$1,608 million, which was partly offset by a decline in total revenue of U.S.\$609 million. In the year ended 31 December 2016, the operating margin amounted to positive 5 per cent., compared with negative 10 per cent. in the year ended 31 December 2015.

Management assesses the performance of Metinvest's operating segments based on Adjusted EBITDA (including share in EBITDA of joint ventures). See "*Selected Consolidated Financial Information*" for a reconciliation of Adjusted EBITDA (including share in EBITDA of joint ventures) to profit before income tax.

Adjusted EBITDA (including share in EBITDA of joint ventures) significantly increased by 119 per cent. year-on-year from U.S.\$525 million for the year ended 31 December 2015 (amounting to 8 per cent. of Metinvest's total revenue), to U.S.\$1,153 million for the year ended 31 December 2016 (amounting to 19 per cent. of Metinvest's total revenue). The contributions from both segments increased: contribution from the metallurgical segment increased by U.S.\$251 million and contribution from the mining segment increased by U.S.\$460 million. Meanwhile, corporate overheads and eliminations rose by U.S.\$83 million.

The following table presents Adjusted EBITDA (including share in EBITDA of joint ventures) by segment for the years ended 31 December 2015 and 2016.

	Year Ended 31 December						
	2015			2016		2015 v 2016	
	Amount	Percentage of total segment revenue	Amount	Percentage of total segment revenue	Change	% Change	
<i>(millions of U.S. dollars, except percentages)</i>							
Metallurgical segment.....	486	9%	737	14%	251	52%	
<i>incl. Joint Venture</i>	153	-	165	-	12	8%	
Mining segment.....	88	3%	548	24%	460	523%	
<i>incl. Joint Venture</i>	59	-	120	-	61	103%	
Corporate overheads.....	(95)	-	(76)	-	19	(20)%	
Eliminations.....	46	-	(56)	-	(102)	(222)%	
Total	525	8%⁽¹⁾	1,153	19%⁽¹⁾	628	119%	

Notes:

(1) Percentage of Metinvest's total revenue.

In the year ended 31 December 2016, the year-on-year increase in consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) was primarily attributable to cost reductions amid:

- the favourable impact of the Hryvnia devaluation (U.S.\$341 million), as the U.S.\$/UAH exchange rate averaged 25.59 in 2016, compared with 21.81 in 2015;
- a decrease in the cost of goods and services for resale as a result of lower cost of Zaporizhstal's goods, a fall in fixed costs and lower impairment of trade and other receivables;
- lower transportation expenses (U.S.\$281 million) amid lower freight costs and other logistical expenses, partly offset by higher railway expenses;
- lower natural gas costs (U.S.\$120 million), partly offset by higher spending on electricity (U.S.\$56 million) and fuel (U.S.\$12 million); and

- lower raw material market prices, mainly of coal, coke and scrap (U.S.\$94 million), partly offset by greater consumption driven by higher crude steel production (U.S.\$69 million).

In addition, contributions from joint ventures increased by U.S.\$61 million from Southern GOK and U.S.\$12 million from Zaporizhstal.

These factors were partly offset by lower revenue amid a decrease in average selling prices (U.S.\$434 million) and lower sales volumes in the mining segment (U.S.\$175 million).

Metinvest's consolidated Adjusted EBITDA margin (including share in EBITDA of joint ventures) increased by 11 percentage points year-on-year to 19 per cent. in the year ended 31 December 2016. The EBITDA margin of the metallurgical segment (including share in EBITDA of joint ventures) increased by 5 percentage points year-on-year to 14 per cent., while the EBITDA margin of the mining segment (including share in EBITDA of joint ventures) increased by 21 percentage points year-on-year to 24 per cent.

Finance income

Finance income remained unchanged year-on-year at U.S.\$26 million in the year ended 31 December 2016.

Finance costs

Finance costs decreased by 39 per cent. year-on-year from U.S.\$647 million in the year ended 31 December 2015 to U.S.\$397 million in the year ended 31 December 2016 primarily due to lower foreign exchange losses from financing activity incurred on intragroup loans and dividends. For details of current borrowings, see also "*Description of Indebtedness*".

Income tax expense

Metinvest is subject to taxation in several tax jurisdictions, depending on the residence of its subsidiaries. In 2016, corporate income tax rates were 18 per cent. in Ukraine, 10 per cent. in Switzerland, 10-34 per cent. in the EU and 35 per cent. in the U.S.

In the year ended 31 December 2016, the Group's income tax expense amounted to U.S.\$41 million, compared with a benefit of U.S.\$161 million in the year ended 31 December 2015. This was principally driven by a decrease in deferred tax income of U.S.\$148 million, mainly due to lower taxable losses in the year ended 31 December 2016. In addition, current tax increased by U.S.\$54 million, as several entities reported higher profit before income tax during the reporting period.

Pledges

As at 31 December 2017, trade and other receivables totalling U.S.\$250 million were pledged as collateral for borrowings compared to U.S.\$123 million as at 31 December 2016 and U.S.\$99 million as at 31 December 2015.

As at 31 December 2017, inventories totalling U.S.\$35 million were pledged as collateral for borrowings compared to U.S.\$50 million as at 31 December 2016 and U.S.\$69 million as at 31 December 2015.

As at 31 December 2017, cash and cash equivalents totalling U.S.\$16 million were pledged as collateral for borrowings compared to U.S.\$11 million as at 31 December 2016. As at 31 December 2015, no cash and cash equivalents were pledged to third parties.

As at 31 December 2017, U.S.\$543 million of property, plant and equipment were pledged as collateral for loans and borrowings. As at 31 December 2016 and 2015 no buildings, plant and machinery were pledged to third parties as collateral for loans and borrowings.

As at 31 December 2017, deposits totalling U.S.\$9 million were pledged as collateral in connection with an energy guarantee provided to the Group's related party. As at 31 December 2016 and 2015, no deposits were pledged to third parties.

Cash flows

The following is a summary of Metinvest's cash flows for the periods indicated:

	Year Ended 31 December		
	2015	2016	2017
	<i>(millions of U.S. dollars)</i>		
Net cash from operating activities	637	490	595
Net cash generated from/(used in) investing activities	(237)	(331)	(449)
Net cash used in financing activities	(321)	(105)	(110)
Effect of exchange rate changes on cash and cash equivalents.....	(13)	(8)	(3)
Net increase/(decrease) in cash	66	46	33
Cash and cash equivalents at the beginning of the year	114	180	226
Cash and cash equivalents at the end of the year	180	226	259

Net cash from operating activities

In the year ended 31 December 2017, Metinvest's net cash flow from operating activities increased by 22 per cent. year-on-year to U.S.\$595 million, driven by a rise in profit before income tax. It was affected by the outflow of working capital in the amount of U.S.\$850 million, income tax paid in the amount of U.S.\$154 million and interest paid in the amount of U.S.\$135 million.

The negative change in working capital in the year ended 31 December 2017 was attributable to an increase in inventories of U.S.\$358 million, which primarily resulted from two factors. The first was greater costs of production since the beginning of the year amid higher market prices of key raw materials. The second was a rise in inventories of coal (up 301 thousand tonnes year-to-date) to create contingency stock following a fall in self-sufficiency in coking coal, slabs (up 76 thousand tonnes year-to-date) amid a temporary lack of vessels for intragroup deliveries and third-party sales in the third quarter of 2017, flat products (up 177 thousand tonnes year-to-date) amid an increase in production in the fourth quarter of 2017 and pig iron (up 50 thousand tonnes year-to-date) to form a stock to substitute scrap during the winter period. Meanwhile, iron ore inventories decreased year-to-date, as Metinvest managed to reallocate spare volumes following lower internal consumption in the first half of 2017 and lower sales in Ukraine to other markets. The negative change was also attributable to an increase in net receivable position from joint ventures, calculated as a change in accounts receivable minus a change in accounts payable, of U.S.\$345 million, primarily as a result of a substantial growth in volumes and prices of iron ore products and coke sold to Zaporizhstal; and an increase in receivables from third parties of U.S.\$151 million, which resulted mainly from steel and iron ore selling price growth year-to-date.

Income tax paid amounted to U.S.\$154 million in the year ended 31 December 2017 compared with U.S.\$35 million of income tax reimbursed in the year ended 31 December 2016. This was mainly due to improved profitability of iron ore producers in the year ended 31 December 2017, while in the year ended 31 December 2016 the Group received income tax reimbursement for corporate income tax prepaid during 2015. Interest paid amounted to U.S.\$135 million in the year ended 31 December 2017 as Metinvest paid contingent interest via a cash sweep in addition to obligatory interest under the Existing 2021 Notes and the Existing PXF Facility during 2017 amid improved liquidity.

Metinvest generated U.S.\$490 million of cash from operating activities in the year ended 31 December 2016, compared to U.S.\$637 million in the same period of 2015. The principal reason for this decrease was a change in working capital, which had a negative impact on net cash flow in the amount of U.S.\$438 million in the year ended 31 December 2016. This was mainly due to an increase in trade and other receivables of U.S.\$442 million following price growth since the beginning of 2016, as well as higher cash blocked on bank accounts for the opened cash-covered letters of credit for coal purchases and other purposes.

Inventories increased by U.S.\$195 million amid a rise in stocks of steel products and higher costs of production since the beginning of 2016 due to raw materials price growth, which was offset by an increase in trade and other payables of U.S.\$199 million. In comparison, in the year ended 31 December 2015, changes in working capital had a positive impact on the net cash flow in the amount of U.S.\$351 million. The negative impact of working capital was partly compensated by an increase in operating cash flow before working capital changes of U.S.\$501 million year-on-year, driven by a rise in profit before income tax of U.S.\$1,323 million year-on-year, partly offset by non-cash expenses. In addition, income tax and interest paid decreased by U.S.\$74 million and U.S.\$67 million year-on-year, respectively.

Income tax refunded amounted to positive U.S.\$35 million in the year ended 31 December 2016, as U.S.\$71 million of a corporate income tax prepayment was reimbursed to certain Ukrainian subsidiaries of Metinvest B.V. during this period. Moreover, a new tax collection system was introduced in Ukraine on 1 January 2016. Under the new system tax prepayments have been abolished and tax is now paid quarterly based on the taxpayer's actual financial performance. Total interest paid also decreased year-on-year as in the first half of 2016 Metinvest paid only approximately 30 per cent. of accrued interest and capitalised the remaining 70 per cent. due to the Group's constrained liquidity in line with the moratorium schemes under the notes and the standstills under the PXF facilities then outstanding. In the second half of 2016, liquidity improved, allowing Metinvest to repay U.S.\$40 million of previously capitalised interest.

Net cash generated from/(used in) investing activities

In the year ended 31 December 2017, net cash used in investing activities increased by 36 per cent. year-on-year to U.S.\$449 million. Total cash used to purchase property, plant and equipment and intangible assets amounted to U.S.\$465 million, up 30 per cent. year-on-year. No proceeds were received from the sale of subsidiaries and associates compared with U.S.\$6 million received in January 2016 when Metinvest sold its investment in Black Iron (Cyprus) Limited. Proceeds received from the sale of property, plant and equipment and intangible assets amounted to U.S.\$1 million in the year ended 31 December 2017 (U.S.\$3 million in the year ended 31 December 2016). Interest received totalled U.S.\$15 million in the year ended 31 December 2017 (U.S.\$18 million in the year ended 31 December 2016).

In the year ended 31 December 2016, Metinvest used U.S.\$331 million of cash in investment activities, compared to U.S.\$237 million during the same period of 2015. This increase was attributable to increased investments made in the second half of 2016, after a period of underinvestment in capital expenditures amid liquidity constraints experienced from 2014 until the first half of 2016. Total cash used to purchase property, plant and equipment and intangible assets amounted to U.S.\$358 million, an increase of 30 per cent. year-on-year. Proceeds received from the sale of subsidiaries and associates amounted to U.S.\$6 million as the Group sold its entire investment in Black Iron (Cyprus) Limited.

Net cash used in financing activities

In the year ended 31 December 2017, net cash used in financing activities totalled U.S.\$110 million, up 5 per cent. year-on-year. Following the successful completion of the Restructuring, U.S.\$85 million was used to repay the Sellers' Notes and U.S.\$90 million to repay loans and borrowings, while expenditures incurred in relation to the restructuring amounted to U.S.\$57 million (U.S.\$27 million in the year ended 31 December 2016). At the same time, this was partly offset by U.S.\$117 million of net trade finance proceeds received in the year ended 31

December 2017 compared with net repayments of U.S.\$67 million a year earlier, and U.S.\$6 million of proceeds received from loans and borrowings during the year as Metinvest Shipping secured a bank term loan from a Ukrainian bank to partially finance rail wagon purchases, compared with no such proceeds received in the year ended 31 December 2016.

In the year ended 31 December 2016, Metinvest used U.S.\$105 million of cash in financing activities, compared to U.S.\$321 million in the corresponding period of 2015. The decrease was primarily driven by a decrease in repayments of loans and borrowings. The total amount of repayment of loans and borrowings decreased by U.S.\$124 million year-on-year to U.S.\$10 million in the year ended 31 December 2016, due to the deterioration of Metinvest's cash position and in light of its debt restructuring discussions in 2016. In addition, net repayments of trade finance amounted to U.S.\$67 million in the year ended 31 December 2016, compared with U.S.\$179 million in the same period of 2015. Meanwhile, cash used for other financing activities amounted to U.S.\$27 million in the year ended 31 December 2016, compared with U.S.\$12 million in the year ended 31 December 2015. No new proceeds were received in the year ended 31 December 2016, compared with U.S.\$4 million received under the final drawdown under the export credit agencies facility in 2015.

Capital expenditures

Metinvest is implementing a capital expenditure programme aimed at modernising its production facilities to increase the efficiency of these facilities, to increase the share of value-added products in Metinvest's product mix and to maintain the operations of its current facilities.

Historical capital expenditures

The following table summarises Metinvest's capital expenditures by segment for the periods indicated.

	Year Ended 31 December		
	2015	2016	2017
	<i>(millions of U.S. dollars)</i>		
Metallurgical segment.....	137	196	275
Mining segment.....	136	174	258
Corporate overheads.....	12	4	9
Total	285	374	542

As a result of significant civil disturbances and political instability in Ukraine and the ongoing military activity in some parts of the Donetsk and Luhansk regions of Ukraine, the Group's constrained liquidity, as well as the volatility of global steel and iron ore prices, Metinvest was forced to scale back its capital investment programme during the years ended 31 December 2015 and 2016. During this period, Metinvest therefore postponed, slowed or suspended certain planned investments, while its focus shifted to vital maintenance projects, as well as top-priority expansion projects that offer a fast return on capital invested.

In 2017, Metinvest reviewed its Technological Strategy 2030. There are five areas of focus:

- Enhance operational safety and reduce environmental footprint;
- Improve product quality;
- Increase efficiency (further reduce costs);
- Focus on clients' needs; and
- Develop a range of products in priority segments.

Metinvest's total capital expenditures for the year ended 31 December 2017 amounted to U.S.\$542 million (including corporate overheads of U.S.\$9 million), of which U.S.\$275 million was allocated to the metallurgical segment and U.S.\$258 million to the mining segment, compared to total capital expenditures of U.S.\$374 million (including U.S.\$4 million corporate overheads) for the year ended 31 December 2016, of which U.S.\$196 million was allocated to the metallurgical segment and U.S.\$174 million to the mining segment. In the year ended 31 December 2015, Metinvest's total capital expenditures amounted to U.S.\$285 million (including U.S.\$12 million corporate overheads), of which U.S.\$137 million was allocated to the metallurgical segment and U.S.\$136 million to the mining segment.

In the year ended 31 December 2017, Metinvest's maintenance and expansion capital expenditures amounted to U.S.\$450 million and U.S.\$92 million, respectively, compared to U.S.\$282 million and U.S.\$92 million, respectively, for the year ended 31 December 2016. In the year ended 31 December 2015, Metinvest's maintenance and expansion capital expenditures amounted to U.S.\$209 million and U.S.\$76 million, respectively.

The following table represents Metinvest's capital expenditures for the years ended 31 December 2016 and 2017 by key facilities:

	Year Ended 31 December	
	2016	2017
	<i>(U.S. million dollars)</i>	
Ilyich Steel.....	96	141
Ingulets GOK	44	101
Northern GOK.....	55	86
Azovstal.....	48	67
Central GOK.....	43	37
United Coal.....	8	30
Avdiivka Coke	8	9
Other assets.....	68	62
Corporate overheads.....	4	9
Total	374	542

Metallurgical segment

Between 1 January 2015 and 31 December 2017, Metinvest invested a total of U.S.\$883 million in its metallurgical segment's production facilities. These expenditures primarily related to the capital expenditure programme implemented by Metinvest at Ilyich Steel and Azovstal. This included:

- the reconstruction of the sinter plant at Ilyich Steel, which started in 2012 and is expected to be completed in 2020, at a total cost of approximately U.S.\$140 million (U.S.\$32 million of which had been spent by 31 December 2017);
- the major overhaul of the blast furnace No. 4 at Ilyich Steel, which started in the third quarter of 2015 and was completed in the second quarter of 2016, at a total cost of U.S.\$14 million (all of which had been spent by 30 June 2017);
- the reconstruction of the dust-trapping facilities in the basic oxygen furnace No. 2 at Ilyich Steel, which started in the first quarter of 2016 and was completed by the end of 2016, at a total cost of U.S.\$5 million (all of which had been spent by 30 June 2017);
- the construction of continuous casting machine No. 4 at Ilyich Steel, for which active stage of construction started in the third quarter of 2016 and is expected to be completed in the fourth quarter of

2018, at a total cost of approximately U.S.\$150 million (U.S.\$24 million of which had been spent by 31 December 2017);

- the reconstruction of 1700 hot strip mill at Ilyich Steel, for which basic engineering development started in the third quarter of 2017, detailed engineering and documentation are expected to be ready in 2018 and its commissioning is expected in the second quarter of 2019, at a total cost of approximately U.S.\$90 million (less than U.S.\$1 million of which had been spent by 31 December 2017);
- the replacement of a standby turbine air blower No. 3 at Azovstal, which started in 2011; the equipment was launched in the second quarter of 2016, with a total cost of U.S.\$7 million (all of which had been spent by 31 December 2017);
- the construction of a PCI system at Azovstal; the construction of a PCI unit at the blast furnace No. 4 as the first stage of the project started in 2014 and was completed in the fourth quarter of 2016; the construction of PCI facilities at blast furnaces Nos. 2 and 3 was approved as the second stage of the project: construction works at blast furnace No. 2 started in the fourth quarter of 2016 and was completed in the third quarter of 2017; construction at blast furnace No. 3 started in the third quarter of 2017 and is expected to be completed in the third quarter of 2018, at a total cost of U.S.\$23 million (U.S.\$18 million of which had been spent by 31 December 2017);
- the major overhaul of the blast furnace No. 4 at Azovstal, which started in 2013 and was completed in the third quarter of 2015, at a total cost of U.S.\$54 million (all of which had been spent by 30 June 2016);
- the major overhaul of the blast furnace No. 3 at Azovstal, which started in the third quarter of 2017 and is expected to be completed in the third quarter of 2018, at a total cost of approximately U.S.\$75 million (U.S.\$3 million of which had been spent by 31 December 2017); and
- the purchase of 1800 open rail wagons, which started in the fourth quarter of 2017 and is expected to be completed in the second quarter of 2018, at a total cost of approximately U.S.\$70 million (U.S.\$29 million of which had been spent by 31 December 2017).

In addition, these expenditures included capital expenditure on investment projects implemented at Yenakieve Steel and Khartsyzsk Pipe. Metinvest lost control over operations of these assets on 15 March 2017. For more information please see "*—Factors Affecting Metinvest's Results of Operations—Seized Assets in eastern Ukraine*".

Mining segment

Between 1 January 2015 and 31 December 2017, Metinvest invested a total of U.S.\$872 million in its mining segment's production facilities. This included:

- the construction of a crusher and conveyor system at the Pervomaysky quarry of Northern GOK, which started in 2010; the first facility was launched in the third quarter of 2016, while the second facility is expected to be completed in the second quarter of 2019. The total budget is approximately U.S.\$160 million (U.S.\$149 million of which had been spent by 31 December 2017);
- the replacement of gas cleaning units of the Lurgi 552-B pelletising machine at Northern GOK, which started in the second quarter of 2012 and is expected to be completed in the third quarter of 2018. Currently, 4 of 5 filters have been replaced. The total budget is U.S.\$9 million (U.S.\$7 million of which had been spent by 31 December 2017);

- the major overhaul of OK 306 pelletising machine at Northern GOK, which started in the first quarter of 2014 and was completed in the second quarter of 2015. The total budget is U.S.\$10 million (all of which had been spent by the end of 2015); and
- the construction of the Vostochny conveyor line as part of the construction of a crusher and conveyor system at Ingulets GOK, which started in 2013 and is expected to be completed in 2020. The total budget is approximately U.S.\$40 million (U.S.\$12 million of which had been spent by 31 December 2017).

In addition, these expenditures included capital expenditure on investment projects implemented at Krasnodon Coal and Komsomolske Flux. Metinvest lost control over operations of these assets on 15 March 2017. For more information please see "*—Factors Affecting Metinvest's Results of Operations—Seized Assets in eastern Ukraine*".

Budgeted capital expenditures

The PXF Facility Agreement prohibits the Issuer and any of its restricted subsidiaries, during Period 1 (as defined below), from incurring expenditure on the purchase of property, plant and equipment and intangible assets (as shown in the financial statements of the Metinvest group prepared in accordance with the accounting principles) ("**Capital Expenditure**"), except permitted capital expenditure.

Permitted Capital Expenditure includes:

- in respect of the year ending 31 December 2018: U.S.\$751 million; and
- in respect of the year ending 31 December 2019: U.S.\$775 million.

Period 1 is the period from the Issue Date (which is also the effective date under the PXF Facility Agreement) until the first date on which the PXF loan has been repaid by an amount equal to the amount required to reduce existing PXF lenders' commitments (that is those lenders who were lenders under the Existing PXF Facility) to an amount that is 35 per cent. lower than their commitments were as at 1 November 2017 and any new PXF lenders commitments by an amount that is 15 per cent. lower than then commitments were on the Issue Date. After Period 1 the Company is not restricted from making Capital Expenditure.

Metinvest's capital expenditures in 2018 are expected to relate primarily to the following:

Metallurgical segment

- the major overhaul of blast furnace No. 3 at Azovstal to increase hot metal production volumes and decrease product cost by decreasing consumption of coke and coke nuts;
- the major overhaul of blast furnace No. 6 at Azovstal to increase hot metal production volumes and decrease product cost by decreasing consumption of coke and coke nuts;
- the construction of a PCI unit at blast furnace No. 3 at Azovstal to minimise the need for natural gas in the production process and facilitate the more efficient use of coke;
- the construction of continuous casting machine No. 4 at Ilyich Steel to increase slab casting capacity, improve product quality, decrease costs and reduce environmental impact;
- the reconstruction of 1700 hot strip mill at Ilyich Steel to increase hot strip mill capacity, improve the quality of steel surface and reduce the waste during the slab production process;
- the reconstruction of the sinter plant at Ilyich Steel to comply with environmental requirements;

- the reconstruction of existing dust-trapping facilities in the basic oxygen furnace No. 3 at Ilyich Steel to comply with environmental requirements;
- the construction of a air separation unit at Ilyich Steel to increase production of oxygen and nitrogen required for steel production;
- the reconstruction of a cold rolling mill at Ilyich Steel to increase mill capacity and improve product quality; and
- the purchase of open rail wagons at Metinvest Shipping to offset a risk of forced production cutback amid a shortage of open wagons in Ukraine, reduce operational costs related to wagons and obtain synergy through supplying of Metinvest's rolled steel products to a manufacturer of open rail wagons.

Mining segment

- the construction of a crusher and conveyor system at the Pervomaisky quarry of Northern GOK to enable capacity and production volumes to be maintained at current levels and to facilitate a reduction in the costs of iron ore production and transportation;
- the replacement of gas cleaning units at Lurgi 552-A and Lurgi 552-B pelletising machines at Northern GOK to comply with environmental requirements and improve conditions in the workplace;
- the modernisation of OK 306, Lurgi 278-A, Lurgi 552-A and Lurgi 552-B pelletising machines at Northern GOK to improve pellet quality;
- the construction of new dump sites at Ingulets GOK and the Pervomaisky quarry of Northern GOK to ensure business continuity when existing dump sites reach capacity;
- the construction of a new tailing dump at Ingulets GOK to ensure business continuity when the existing tailing dump sites reach capacity;
- the construction of the Vostochny conveyor line as part of the crusher and conveyor system at Ingulets GOK to reduce operational and capital expenditures in iron ore mining and maintain production volumes; and
- the modernisation of equipment for production of concentrate at Central GOK to improve mechanical properties of concentrate, including higher Fe content.

In addition, in 2018 Metinvest plans to continue to implement its maintenance projects, including the upgrade of its open-pit mine machinery (including drilling rigs, excavators, dump trucks and bulldozers) at the mining facilities and other equipment at the metallurgical facilities.

See also "Business Description— *Capital Investment Programme—Metallurgical Segment Investment Programme*", "*Business Description—Iron Ore Business—Iron Ore Business Investment Programme*" and "*Business Description—Coal Business—Coal Business Investment Programme*".

Metinvest's actual capital expenditures may vary significantly from its estimates and depend on a variety of factors, including market conditions, levels of demand for Metinvest's products, the availability of funding, operating cash flow and other factors fully or partially outside Metinvest's control. Accordingly, the actual capital expenditure costs and launch dates may differ from current estimates due to a variety of factors.

Qualitative and Quantitative Disclosure About Market Risks

Financial risk management

The Group's activities expose it to a variety of financial risks, including market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program, focuses on the unpredictability of the financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Financial risk management is carried out jointly by the internal control and risk management department and the central treasury department. These departments identify, evaluate and mitigate financial risks in close co-operation with the Group's operating units.

Market risk

Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the U.S. dollar. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations. Approximately 50 per cent. of Metinvest's sales were denominated in U.S. dollars during the year ended 31 December 2017, with 11 per cent. being denominated in Hryvnia but linked to the U.S. dollar. Approximately 17 per cent. of sales during the same period were denominated in Hryvnia. Approximately 16 per cent. of sales during the same period were denominated in Euro and British pounds, with the remainder of sales being denominated in rubles.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign operations is managed through borrowings denominated in the relevant foreign currencies and different treasury operations such as forwards, swaps and other.

Foreign exchange risk is managed centrally by the Group treasury. The Group treasury has established a policy for managing foreign exchange risk. The Group treasury sets limits on the level of exposure by currency and the maximum amount of exposure. The subsidiaries have not entered into transactions designed to hedge against these foreign currency risks except with the permission of the Group treasury.

At 31 December 2017, if the UAH had strengthened or weakened by 25 per cent. against the U.S. dollar (with all other variables held constant), post-tax profit for the year would have been U.S.\$61 million (compared with U.S.\$172 million in 2016, factoring in a 25 per cent. change) lower or higher, mainly as a result of foreign exchange losses/gains on translation of U.S. dollar-denominated trade receivables and foreign exchange gains/losses on translation of U.S. dollar-denominated borrowings.

Price risk

Metinvest's revenue is exposed to the market risk from price fluctuations related to the sale of its steel and iron ore products. The prices of the steel and iron ore products sold both within Ukraine and abroad are generally determined by market forces. These prices may be influenced by factors such as supply and demand, production costs (including the costs of raw material inputs) and global economic growth. The prices of the products that Metinvest sells to third parties are also affected by supply and demand, as well as global and Ukrainian economic growth. Adverse changes in respect of any of these factors may reduce the revenue that Metinvest receives from the sale of its steel or mined products.

Metinvest's exposure to commodity price risk associated with its purchases is limited as the Group is vertically integrated and is self-sufficient for iron ore and certain portions of coking coal requirements.

No financial instruments are exposed to price risk.

Cash flow and fair value interest rate risk

The Group's income and operating cash flows are dependent on changes in market interest rates.

The Group's interest rate risk arises from long-term and short-term borrowings. Borrowings attracted at variable rates expose the Group to cash flow interest rate risk. Borrowings attracted at fixed rates expose the Group to fair value interest rate risk. The Group's policy is to maintain a balanced borrowings portfolio of fixed and floating rate instruments. As at 31 December 2017, 54 per cent. of the total borrowings were provided to the Group at fixed rates (compared with 56 per cent. as at 31 December 2016). During 2017 and 2016, the Group's borrowings at variable rates were denominated in U.S.\$, EUR and GBP.

Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of issuing new debt, management uses its judgement to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

At 31 December 2017, if interest rates on U.S.\$, EUR and GBP denominated borrowings had been 1 percentage point higher/lower with all other variables held constant, post-tax profit for the year would have been U.S.\$11 million lower/higher (2016: U.S.\$11 million).

Credit risk

Credit risk is managed centrally by the Group management. Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions, as well as from credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. When wholesale customers are independently rated, these ratings are used for credit quality assessment. Otherwise, if there is no independent rating, the Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilisation of credit limits is regularly monitored.

Financial assets, which potentially subject the Group to credit risk, consist principally of cash, loans, trade and other receivables.

Cash is placed with major Ukrainian and reputable international financial institutions, which are considered (at the time of deposit) to have minimal risk of default.

The Group has policies in place to ensure that the provision of loans and sales of products/services are made to customers with an appropriate credit history. The Group's credit risk exposure is monitored and analysed on a case-by-case basis. Credit evaluations are performed for all customers requiring credit over a certain amount. The carrying amount of loans, trade and other receivables, net of provision for impairment, represents the maximum amount exposed to credit risk. Concentration of credit risk mainly relates to the CIS and European countries where the Group's major customers are located.

The maximum exposure to credit risk as at 31 December 2017 was U.S.\$2,310 million (compared with U.S.\$1,424 million in 2016), being the carrying value of long- and short-term loans issued and receivables and cash. In order to reduce credit risk on receivables, the Group uses letters of credit, guarantees and trade insurance. The Group does not hold any collateral as security.

Management believes that credit risk is appropriately reflected in impairment allowances recognised against assets. Management does not expect any significant losses from non-performance by these counterparties.

Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, the Group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

In 2017, the Group completed the restructuring of its debts, and has achieved and currently maintains a healthy liquidity position and the ability to continue operating on a going concern basis.

The Group treasury analyses the ageing of their assets and the maturity of their liabilities and plans their liquidity depending on the expected repayment of various instruments. In case of insufficient or excessive liquidity in individual entities, the Group reallocated resources and funds among the entities of the Group to achieve optimal financing of the business needs of each entity.

The table below presents Metinvest's financial liabilities into relevant maturity groupings based on the remaining period at the consolidated balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Cash flows from borrowings were calculated using spot rates.

At 31 December 2017	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
		<i>(millions of U.S. dollars)</i>		
Bank borrowings.....	25	335	918	-
Trade finance	255	38	-	-
Bonds	38	120	1,555	-
Non-bank borrowings	-	-	636	-
Seller's notes	7	-	-	-
Finance lease	2	10	-	-
Financial trade and other payables.....	1,552	-	-	-
Total	1,879	503	3,109	-

Capital risk management

Metinvest's objectives when managing capital are to safeguard its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, Metinvest monitors capital on the basis of a gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings and Sellers' Notes (including current and non-current parts) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

The Group has yet to determine its optimum gearing ratio. Presently, the majority of debt is due within 2-5 years and the Group is actively pursuing mechanisms to extend the credit terms to match its long-term investment strategy. As at 31 December 2016, all debt was either in default or matures within one year, but the Group successfully restructured its debt in 2017.

	Year Ended 31 December	
	2017	2016
	<i>(millions of U.S. dollars)</i>	
Total borrowings.....	3,010	2,879
Sellers' Notes	7	90
Less: cash and cash equivalents.....	(259)	(226)
Net debt	2,758	2,743
Total equity	4,308	4,028
Total capital	7,066	6,771
Gearing ratio	39%	41%

Critical Accounting Policies

Metinvest makes estimates and assumptions that affect the reported amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. Judgements that have the most significant effect on the amounts recognised in the IFRS consolidated financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next financial year include:

Impairment of property, plant and equipment, goodwill and other intangible assets. The Group assesses whether goodwill is impaired based on the *IAS 36 Impairment of assets* requirements. The most recent detailed calculations for the Metallurgical and mining segments were performed as of 30 November 2016, as disclosed in Note 8 of the 2017 Financial Statements. Management has carried forward these calculations in 2017, having considered that since then:

- (a) the assets and liabilities making up these segments have not changed significantly. As disclosed in Note 7 of the 2017 Financial Statements, the assets of the metallurgical segment located on the temporarily non-controlled territory were fully impaired in 2017; however, as concluded by management, this had no significant impact on the segment's recoverable amount as of 31 December 2017;
- (b) the recoverable amount calculations performed last year resulted in the amounts that exceeded the carrying amounts of both segments by substantial margins; and
- (c) the likelihood that a current recoverable amount determination as of 31 December 2017 would be less than the current carrying amount of the unit is remote, based on management's analysis of events that have occurred and circumstances that have changed, including:
 - the lower discount rates in 2017 compared to 2016 due to a decrease in country risk which offset certain increases in the Group's cost of debt;
 - the increased gross margins in 2017, mostly due to increased steel and iron ore prices, as disclosed in Note 1 of the 2017 Financial Statements, compared to the estimates produced by the 2016 impairment test; and
 - the higher expected gross margins for 2018 and subsequent periods compared to the estimates produced by the 2016 impairment test.

Revaluation of property, plant and equipment. On an annual basis management of the Group carries out an analysis to assess whether carrying amounts of items of property, plant and equipment differ materially from that

which would be determined using fair value at the end of the reporting period. The analysis is based on price indices, developments in technology, movements in exchange rates since the date of the latest revaluation, profitability of underlying businesses and other relevant factors. Where the analysis indicates that the fair values of items of property, plant and equipment differ materially from the carrying amounts, further revaluation is performed involving independent evaluators.

As most of the Group's property, plant and equipment is of a specialised nature, its fair value is determined using depreciated replacement cost or, where it is available, the market value. For some assets the fair values as of the reporting date were obtained using indexation of their carrying amounts for relevant cumulative price indices since the last revaluation date impacting the replacement cost used in measurement of depreciated replacement cost.

The majority of the structures, plant and machinery are specialised in nature and are rarely sold in the open market in Ukraine other than as part of a continuing business. The market for similar property, plant and equipment is not active in Ukraine and does not provide a sufficient number of sales of comparable assets to allow for using a market-based approach for determining fair value. Consequently, the fair value of structures, plant and machinery was primarily determined using depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical, functional or economic depreciation, and obsolescence. The depreciated replacement cost was estimated based on internal sources and analysis of Ukrainian and international markets for similar property, plant and equipment. Various market data was collected from published information, catalogues, statistical data etc., and industry experts and suppliers.

When performing a valuation using these methods, the key estimates and judgements applied by the independent valuers, in discussion with the Group's internal valuation team and technicians, are as follows: choice of information sources for construction costs analysis (actual costs recently incurred by the Group, specialised reference materials and handbooks, estimates for cost of construction of various equipment etc.); determination of similar items for replacement cost of certain equipment, as well as the corresponding adjustments required to take into account differences in technical characteristics and the condition of new and existing equipment; selection of market data when determining market value where it is available, as well as corresponding adjustments required to take into account differences in technical characteristics and the condition of new and existing equipment; determination of applicable cumulative price indices which would most reliably reflect the change in fair value of assets revalued using indexation of carrying amounts; use of directories of per-unit replacement cost for buildings and constructions, assuming that all buildings and constructions of a similar type and nature within the industry have similar replacement costs; and liquidation value for items, which are expected to be realised, less cost to sell.

The fair values obtained using depreciated replacement cost and indexation of carrying amounts are validated using discounted cash flow models, and are adjusted if the values obtained using income approach are lower than those obtained using depreciated replacement cost or indexation of carrying amounts (i.e. there is economic obsolescence). Key inputs into discounted cash flow models are consistent with the assumptions used for goodwill impairment testing, except for discount rates which are specific to each of the Group's subsidiaries and are pre-tax.

Changes in the above estimates and judgements could have a material effect on the fair value of property, plant and equipment, which, however, is impracticable to quantify due to the wide variety of assumptions and assets being valued.

Remaining useful lives of property, plant and equipment. The Group's management determines the estimated useful lives and related depreciation charges for its property, plant and equipment. This estimate is based on the technical characteristics, physical conditions and management's expectations on use of the respective assets and other factors. This affects depreciation charge and revaluation results.

Remaining useful lives for iron ore mining licences and coal reserves are estimated by management based on reserves' studies performed by independent experts. Results of such studies depend, *inter alia*, on the expert's

assessment of geological conditions and the feasibility of extraction of mineral resources, which is dependent on future levels of prices for iron ore and coking coal and the costs of such extraction.

Impairment of trade and other receivables. Management estimates the likelihood of the collection of trade and other receivables based on an analysis of individual accounts. IAS 39 requires an estimate of the impairment loss which is computed as the difference between the carrying value of a receivable and the present value of the future cash flows discounted at the receivables effective interest rate.

During 2015 and 2016 the Group recognised full impairment of trade receivables from some of its key customers in the total amount of U.S.\$534 million. Factors taken into consideration by management when estimating the future cash flow included an ageing analysis of trade and other receivables and the financial position and performance of and collection history with the customer. In the current environment there is significant judgement in estimating whether the impaired trade and other receivables and any related penalty interest will be collected. During 2017 the Group commenced sales of iron ore, coke and coal products for the use by one of these customers. All the metal produce of this customer is purchased by the Group and resold externally. All the transactions are performed at an arm's-length basis. These are not linked to the existing old impaired debt due to the Group thus impairment was not reversed.

Additionally, the estimates used to assess the impairment of trade and other receivables from certain Ukrainian customers are impacted by the uncertainty caused by events in eastern Ukraine.

Related party transactions. In the normal course of business the Group enters into transactions with related parties. Judgement is applied in determining if transactions are priced at market or non-market terms, where there is no active market for such transactions, and also in estimating the timing of settlement of the balances due from related parties, where there is a history of prolongations. Financial instruments are recorded at origination at fair value using the effective interest method. The Group's accounting policy is to record gains and losses on related party transactions, other than business combinations or equity investments, in the income statement. The basis for judgement is pricing of similar types of transactions with unrelated parties and an effective interest rate analysis.

Further, estimation of timing of settlement and recoverability of balances due from related parties requires judgement. The ability of shareholders and parties under their control to repay the amounts due to the Group is dependent to a large extent on cash flows from the Group. Such cash flows in the current circumstances may be limited. Herewith, the Group is in a net payable position with major groups of its related parties. No impairment was recognised in respect of balances due from related parties in the consolidated financial statements for the year ended 31 December 2017.

Deferred income tax asset recognition. The recognised deferred tax asset represents income taxes recoverable through future deductions from taxable profits and is recorded in the consolidated balance sheet. Deferred income tax assets are recorded to the extent that realisation of the related tax benefit is probable. The future taxable profits and the amount of tax benefits that are probable in the future are based on the long-term strategy and plans prepared by management. The strategy is based on management's expectations that are believed to be reasonable under the circumstances. In addition, a number of feasible tax planning opportunities are available to the Group to recover the deferred tax asset recognised.

Further, management exercised significant judgement in their assessment whether a deferred tax asset related to impaired trade receivables from certain key customers can be recognised as at 31 December 2017 and 31 December 2016. Management estimated that it is not probable that the Group's subsidiaries will be able to realise the tax benefit of the respective deductible temporary differences to the full extent. As a result, as of 31 December 2017 and 2016 a deferred tax asset of U.S.\$26 million was recognised while a deferred tax asset of U.S.\$17 million was not recoverable. Recognition of a deferred tax asset is supported by proper tax planning performed by management which conforms to the Ukrainian tax legislation. Changes in the estimates and judgements made could have a material effect on these consolidated financial statements.

Post-employment and other long-term employee benefits obligations. Management assesses post-employment and other long-term employee benefit obligations using the projected unit credit method based on actuarial assumptions which represent management's best estimates of the variables that will determine the ultimate cost of providing post-employment and other employee benefits. Since the plan is administered by the State of Ukraine, the Group may not have full access to information and therefore assumptions regarding: when, or if, an employee takes early retirement, whether the Group would need to fund pensions for ex-employees depending on whether that ex-employee continues working in hazardous conditions, the likelihood of employees transferring from State funded pension employment to Group funded pension employment could all have a significant impact on the Group's pension obligation.

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The major assumptions used in determining the net cost (income) for pensions include the discount rate and future salary and benefits increase rate. Any changes in these assumptions will impact the carrying amount of the Group's pension obligations.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of high-quality government bonds that are denominated in the currency in which the benefits will be paid, and which have terms to maturity approximating the terms of the related pension liability. Other key assumptions for pension obligations are based in part on the current market conditions.

Tax legislation. Ukrainian tax, currency and customs legislation continues to evolve. Conflicting regulations are subject to varying interpretations. Management believes its interpretations are appropriate and sustainable, but no guarantee can be provided against a challenge from the tax authorities.

Functional currency. Judgement was applied in determining the functional currency of Metinvest B.V., which is a holding company for operations of the Group in Ukraine, Italy, the United States of America and other countries. The functional currency of Metinvest B.V. was determined on the basis that: (i) in management's opinion Metinvest B.V. is not an extension of and is not integral to the Ukrainian operations; (ii) the primary economic exposures are to a number of countries; and (iii) Metinvest B.V. retains cash and obtains financing in U.S. Dollars. Management therefore determined the U.S. Dollar as the functional currency of Metinvest B.V. Amount of net payables of Metinvest B.V. totalled U.S.\$628 million and U.S.\$2,111 million as at 31 December 2017 and 2016, respectively, where potential foreign exchange gains/losses could arise should a different functional currency (UAH) be determined.

Loss of control over the assets located on the temporarily non-controlled territory.

The Group lost control over the assets located on the temporarily non-controlled territory. The Group accounted for this event as impairment of related property, plant, and equipment and inventories, and, accordingly, recognised the impairment through Other Comprehensive Income to the extent of existing revaluation reserves and recognised further impairment loss through the profit and loss. Also, the Group has determined that the operations located on the temporarily non-controlled territories over which control was lost do not represent a disposal of foreign operations as defined in IAS 21.

Operations of the entities located on the non-controlled territory is not a major line of business and not a separate geographical segment, therefore management believes that these activities do not represent discontinued operations.

Control over the legal entities whose operations on the temporarily non-controlled territory were lost.

The Group retains a legal ownership over the entities whose physical assets and production activities are located on the temporarily non-controlled territories. Management determined that it retains control over these entities as these entities are registered on the controlled territory of Ukraine and the Group continues to perform transactions in accordance with the Ukrainian legislation. Thus, the Group continues to consolidate the remaining assets (largely trade and other receivables) and liabilities of those entities and accounted for the loss of control of tangible assets as their impairment.

Would the position be adopted that control over the legal entities is lost as at 15 March 2017, the net assets of the entities in the amount of U.S.\$13 million (before the impairment disclosed in Note 7 of the 2017 Financial Statements) would be deconsolidated and the fair value of payables due to the entities and receivables due from the entities would be recognised. Additionally, a reclassification of U.S.\$601 million of accumulated net negative Currency Translation Reserve ("CTR") from Other Comprehensive Income to profit and loss in the Income Statement would have been required. If the legal entities are disposed of or abandoned in the future, the full amount of CTR as of that date would need to be reclassified from Other Comprehensive Income to the profit and loss.

Currency translation reserve related to entities located on the temporarily non-controlled territory.

The lost operations have not been consolidated directly but only together with the remaining operations of each of the legal entities, which continue to exist and be controlled by the Group. Operations and management were structured in such a way that each legal entity in its entirety was considered to be one entity and, therefore, the lost part of an entity does not represent a branch or a business. Thus, the management determined that these operations do not represent a disposal of foreign operations as defined in IAS 21 "The Effects of Changes in Foreign Exchange Rates" and, therefore, no accumulated CTR on those entities is reclassified to profit and loss. Would it be determined that operations lost represent a disposal of foreign operations, the accumulated CTR relating to those operations would need to be reclassified from Other Comprehensive Income to the profit and loss, resulting in negative charge to the Income Statement and no impact on the total Comprehensive Income for the period.

If all the net assets of the entities located on the temporarily non-controlled territory were derecognised, the negative charge of CTR in the income statement would have been U.S.\$601 million, as stated above; the exact amount of the charge would depend on whether only part of or all the assets and liabilities of these entities were derecognised. Thus, this charge would be significantly larger if only assets and (or) some liabilities of these entities were derecognised.

Impairment of property, plant and equipment located on the temporarily non-controlled territory.

Management has determined that the loss of control over the physical assets does not require the derecognition of these assets as the Group still holds the legal title over these assets as their seizure is illegal and might be temporary. Moreover, the Group may still be able to claim some compensation for the assets through international courts.

As such, management of the Group has performed a revaluation of respective property, plant and equipment and determined that the value of these assets is zero, thus recognising U.S.\$205 million as a decrease of the previously recognised revaluation in Other Comprehensive Income and U.S.\$228 million as impairment charge in profit and loss. Should the judgement be made that the assets are derecognised, the whole amount of U.S.\$433 million of decrease of carrying value of property, plant and equipment would need to be charged as impairment in profit and loss. Additionally, the remaining revaluation reserve related to these assets in the amount of U.S.\$330 million (remained upon translation to the presentation currency and raised on difference in exchange rates prevailing at the revaluation date and average rates at which its annual utilisation was translated in subsequent years) would need to be transferred to retained earnings.

INDUSTRY

The following information includes extracts from publicly available information, data and statistics and has been extracted from official sources and other sources which Metinvest believes to be reliable. Metinvest accepts responsibility for accurately reproducing such information, data and statistics, but accepts no further responsibility in respect of such information, data and statistics. Such information, data and statistics may be approximations or use rounded numbers.

Steel Industry

Global Overview

Steel is one of the most important, multi-functional and adaptable materials in use today, and is generally considered to be a backbone of industrial development. Steel is highly versatile, as it is hot and cold formable, weldable, hard, recyclable and resistant to corrosion, water and heat. The industries in which steel is used include construction, oil and gas, transportation (including railways), engineering, automotive and consumer goods, including white goods.

The steel industry is affected by a combination of factors, including periods of economic growth or recession, worldwide production capacity, fluctuations in steel imports and protective trade measures. Steel prices tend to be volatile, responding to supply and demand and fluctuating in response to general and industry-specific economic conditions. Between 2002 and 2008, annual average prices rose by over 350 per cent. Prices for billets on the basis of FOB Black Sea exports amounted to U.S.\$749 per tonne in 2008, according to Metal Expert. Prices then crashed in 2009, during the global economic recession, falling by 48 per cent. year-on-year to U.S.\$390 per tonne. Average annual prices recovered to U.S.\$526 per tonne in 2010 and to U.S.\$635 per tonne in 2011, respectively, still remaining below the average annual prices for 2008. Since 2011, prices have been falling, averaging U.S.\$561 per tonne in 2012, U.S.\$510 per tonne in 2013, U.S.\$480 per tonne in 2014 and U.S.\$327 per tonne in 2015, respectively. The construction sector crisis in China, reaching its peak in 2014-2015, along with an increased overcapacity in the Chinese steel sector, forced steel makers to increase steel exports. In 2016, steel prices rose rapidly because of economic stimulus measures introduced by the Chinese government, which led to increased domestic infrastructure spending and robust steel demand, and due to raw material price increases (namely coking coal and iron ore), protectionist measures adopted worldwide and the restructuring of the Chinese steel industry aiming at increasing efficiency by cutting excess capacity. The improved Chinese steel industry resulted from increased construction and manufacturing activity, and increased global steel prices, leading to higher profit margins for Chinese steel producers in 2017. These factors resulted in price increases in all regions. As such, average prices of billets for 2016, on the basis of FOB Black Sea exports, amounted to U.S.\$328 per tonne. In 2017, prices continued to increase: billet prices reached to U.S.\$389 per tonne in the first quarter of 2017, U.S.\$391 per tonne in the second quarter of 2017, U.S.\$477 per tonne in the third quarter of 2017 and U.S.\$487 per tonne in the fourth quarter of 2017.

Steel production has historically been centred in the EU, Japan and the United States. The steel industry operates predominantly on a regional basis as a result of the high cost of transporting steel. However, despite the limitations associated with transportation costs, as well as the restrictive effects of protective tariffs, duties and quotas, global imports and exports have generally increased in the last decade as production has shifted towards low-cost production regions such as China.

World steel production reached 1,669 million tonnes in 2014, an increase of 1.7 per cent., or 28 million tonnes, compared to production for the year 2013, according to the World Steel Association (the "WSA"). In 2015, world steel production decreased by 3.0 per cent. to 1,620 million year-on-year. In 2016, global steel production decreased by 0.8 per cent. to 1,606 million tonnes year-on-year. According to the preliminary data prepared by the WSA, global steel production increased by 5.3 per cent. in 2017 to 1,691 million tonnes.

Increases in world steel production in 2017 were driven by a growth of steel production across all regions: production in 2017 compared to 2016 increased by 4.1 per cent. in the European Union, 12.5 per cent. in Other Europe (includes Albania, Bosnia-Herzegovina, Macedonia, Montenegro, Norway, Serbia, Switzerland and Turkey), 0.03 per cent. in the CIS, 4.8 per cent. in North America, 8.7 per cent. in South America, 14.4 per cent. in Africa, 10.9 per cent. in the Middle East, 5.4 per cent. in Asia and 2.5 per cent. in Oceania. More specifically, within the CIS (including Ukraine), production decreased by 6.4 per cent. in Ukraine and increased by 1.3 per cent. in Russia. Crude steel production in the CIS (including Ukraine) equalled 102 million tonnes in 2017, accounting for 6 per cent. of the total world crude steel production. China remained the driving force in global steel production. In 2017, the production of crude steel in China increased by 5.7 per cent. and totalled 832 million tonnes, accounting for 49 per cent. of the total world steel production. In 2017, the production of crude steel in India increased by 6.2 per cent. compared to 2016 and reached 101 million tonnes, accounting for 6 per cent. of the total world steel production in 2017.

The following table sets out crude steel production data by country or region for the years 2010 to 2017.

	Crude steel production							
	Year Ended 31 December							
	2010	2011	2012	2013	2014	2015	2016	2017
	<i>(million tonnes)</i>							
China.....	639	702	731	813	822	804	787	832
EU28 ⁽¹⁾	173	178	169	166	169	166	162	169
Japan	110	108	107	111	111	105	105	105
United States	80	86	89	87	88	79	78	82
Russia.....	67	69	70	69	71	71	70	71
India	69	73	77	81	87	89	95	101
South Korea	59	69	69	66	72	70	69	71
Ukraine	33	35	33	33	27	23	24	23
Other Asia ⁽²⁾	42	44	42	44	47	45	48	54
Other Europe ⁽³⁾	34	39	40	39	38	36	38	42
Other	128	135	133	133	136	133	130	142
Total	1,433	1,538	1,560	1,641	1,669	1,620	1,606	1,691

Source: WSA

Notes:

- (1) Includes the current 28 EU Member States (EU28).
- (2) Excludes China, Japan, India and South Korea.
- (3) Includes Albania, Bosnia-Herzegovina, Macedonia, Montenegro, Norway, Serbia, Switzerland and Turkey, and excludes the current 28 EU member states and CIS countries.

According to the WSA, apparent world consumption of finished steel products decreased by 2.5 per cent. in 2015 compared to 2014. Apparent world consumption of finished steel products is estimated to have increased by 1.3 per cent. year-on-year in 2016 whereas it is expected to increase by 2.8 per cent. year-on-year in 2017. The WSA's forecast in relation to apparent consumption of finished steel products by region is set out in the table below.

	Consumption of finished steel products					Growth rates, %			
	Year Ended 31 December					2015	2016	2017 (F)	2018 (F)
	2014	2015	2016	2017 (F)	2018 (F)				
	<i>(million tonnes)</i>								
EU28 ⁽¹⁾	149	154	158	162	164	3.3%	2.8%	2.5%	1.4%
Other Europe ⁽²⁾	37	40	41	40	42	8.6%	1.2%	-1.0%	5.2%
CIS	56	51	49	51	53	-9.2%	-2.7%	3.6%	3.8%
NAFTA	146	134	132	139	140	-8.2%	-1.5%	4.9%	1.2%
Central & South America	49	46	39	40	42	-6.7%	-13.5%	2.5%	4.7%
Africa	37	39	38	37	38	3.4%	-2.7%	-1.6%	3.3%
Middle East	55	54	53	54	56	-1.3%	-1.4%	1.5%	4.8%
Asia & Oceania	1069	1041	1068	1099	1111	-2.6%	2.5%	2.9%	1.1%

of which China ⁽³⁾	763	730	743	766	766	-4.4%	1.8%	3.0%	0.0%
Total	1,598	1,558	1,578	1,622	1,648	-2.5%	1.3%	2.8%	1.6%

Source: WSA

Notes:

- (1) Includes the current 28 EU Member States.
- (2) Includes Albania, Bosnia-Herzegovina, Macedonia, Montenegro, Norway, Serbia, Switzerland and Turkey, and excludes the current 28 EU member states and CIS countries.
- (3) According to official statistics published by the National Bureau of Statistics, with forecasts made by the WSA. Official steel consumption statistics in China are produced by more than one organisation and, due to differences in methodology, figures produced by different organisations may not be comparable with one another or with steel consumption statistics produced by other countries. Data for China is given without production at induction furnaces, which was not included in official statistics.

Despite producing significant quantities of steel, the United States was a net importer of steel, while China, Japan and Russia were net exporters of steel, as was Ukraine in 2016 and is expected to remain so in 2017, according to the WSA. The major traded steel products worldwide include semi-finished products, hot- and cold-rolled sheets and coils, steel tubes and fittings, galvanised sheet, plates, wire rod, rebars, angles and sections.

The strategy and product mix of steel producers generally varies between producers in industrial countries and producers in emerging markets. Historically, commodity steel producers in industrial countries had limited export markets due to the high cost of transporting steel relative to the low value of commodity steel grades. In the second half of the twentieth century, producers in emerging markets began to compete with steel producers in industrial countries as they took advantage of the lower manufacturing costs in their countries to offset high transportation costs. In response, producers in Western Europe and Japan invested heavily in new technology and capacity to produce high value-added steel grades in order to differentiate their product portfolio and protect their margins by reducing their exposure to commodity steel prices. However, these similar and simultaneous investments resulted in production overcapacity and put pricing pressures on value-added segments. The fall in demand for steel as a result of the economic downturn starting in 2008, coupled with ongoing increases in capacity in China and other developing markets, has further increased production overcapacity and pricing pressures.

In 2016, the global steel industry had an excess steelmaking capacity of approximately 774 million tonnes per year, including 378 million tonnes of excess steelmaking capacity in China. At the same time, government authorities globally and particularly in China have taken some steps to reduce excess steel capacity. The Chinese government implemented a plan providing for the reduction of 140 million tonnes of steelmaking capacity in the country between 2016 and 2020, and the actual reduction amounted to 65 million tonnes and 50 million tonnes in 2016 and 2017, respectively. According to OECD, however, around 40 million tonnes of steelmaking capacity are currently under construction and could be put into operation during 2017-2019. An additional 53.6 million tonnes of steelmaking capacity are currently in the planning stages for possible start-up during the same period.

Since the turn of the century, the growth and consolidation of both steel consumers and raw material suppliers has weakened the bargaining power of steel producers and put further pressure on their margins. Steel producers have responded with successive phases of industry consolidation. For example, in 2006, Arcelor and Mittal Steel merged, forming the world's largest steel company, ArcelorMittal, and in April 2007, India's Essar Group purchased the Algoma Steel Corporation and the Tata Group acquired the Corus Group (formed as a result of the 1999 merger between Koninklijke Hoogovens N.V. and British Steel Plc). Since 2008, the steel industry consolidation process has slowed down due to the global economic crisis and, in particular, the freezing of credit markets and the unavailability of financing to support transactions. However, some steel producers still consider acquisitions to be a key part of their strategy in achieving their business objectives. Some further consolidation has occurred in recent years and is expected to continue in the future. For example, consolidation of the steel industry continued in Ukraine in 2010 with Metinvest's acquisition of Ilyich Steel. Meanwhile in Japan, Nippon Steel Corporation and Sumitomo Metal Industries merged in 2012 to form Nippon Steel & Sumitomo Metal Corporation ("NSSMC"). China's steel industry is also undergoing a consolidation phase at the domestic level. In particular, in December 2016, Baosteel Group and Wuhan Iron and Steel Group consolidated their assets and established Baowu

Steel Group which became the largest steel producer in China and the second largest in the world with a total steelmaking capacity of 75.5 million tonnes per year at the end of 2016. The Chinese government plans to further accelerate the consolidation process in the national steel industry. In Europe, ThyssenKrupp and Tata Steel Europe are also negotiating a possible merger of their steel production assets and ArcelorMittal is negotiating the purchase of ILVA group.

Consolidation has enabled steel companies to lower their production costs and has allowed for more stringent supply-side discipline, including through selective capacity closures. Despite the fact that the level of regional consolidation over the past decade has increased, the global steel market remains highly fragmented. According to the WSA, in 2016, the five largest producers, being ArcelorMittal (95.45 million tonnes), Baowu Steel Group (63.81 million tonnes), Hesteel Group (46.18 million tonnes), NSSMC (46.16 million tonnes) and POSCO (41.56 million tonnes), accounted for approximately 18 per cent. of total worldwide steel production, with ArcelorMittal, the largest, accounting for approximately 6 per cent. of worldwide steel production.

Metinvest's Markets for Steel Products

Overview

As a global supplier of steel products, Metinvest operates on various regional markets, although its primary competitors are other CIS steel producers.

According to the preliminary estimates of the WSA, 102.1 million tonnes of crude steel were produced in 2017 in the CIS (including Ukraine), remaining relatively flat year-on-year. Ukraine, the second largest crude steel producer in the CIS, produced 22.7 million tonnes of crude steel in 2017 (a 6.4 per cent. decrease year-on-year). Russia produced 71.3 million tonnes of crude steel in 2017 (a 1.3 per cent. increase year-on-year). Ukraine and Russia were, respectively the third and sixth largest exporters of steel products in 2016, with China and Japan occupying the first and second positions respectively, with South Korea and Germany occupying the fourth and fifth positions. In 2017, Ukraine was the world's twelfth largest steel producer after China, Japan, India, the United States, Russia, South Korea, Germany, Turkey, Brazil, Italy and Taiwan. In 2016, Ukraine was the fourth largest net exporter of steel products after China, Japan and Russia, according to the WSA.

CIS Steel Producers

Metinvest's competitors include the following CIS-based steel producers:

Evraz. Evraz is a vertically-integrated steel, mining and vanadium business with operations in the Russian Federation, Ukraine, the United States, Canada, Czech Republic, Italy, Kazakhstan and South Africa. Evraz produced approximately 14.0 million tonnes of crude steel and 12.7 million tonnes of rolled products in 2017. Evraz's customers are located across the world, although approximately 47 per cent. of its revenues for the six months ended 30 June 2017 were generated from customers in Russia and the CIS.

MMK. The Magnitogorsk Iron and Steel Works ("**MMK**") Group is a vertically-integrated steel producer with operations located primarily in the Russian Federation, engaged in producing a range of steel products predominantly for the pipe, car manufacturing and machine-building industries. MMK produced approximately 12.9 million tonnes of crude steel and sold 11.6 million tonnes of rolled steel products in 2017. MMK sold approximately 78 per cent. and 73 per cent. of its steel products by volume to customers in Russia and the CIS in the third and fourth quarter of 2017, respectively. The key regions for MMK's export sales are the Middle East, Asia and Far East and Europe.

Severstal. Severstal is an international, vertically-integrated metals and mining company that sells steel and mining products to customers across the world. Severstal produced 11.7 million tonnes of crude steel and sold 10.9 million tonnes of steel products in 2017. Severstal is a full production cycle operation that includes iron ore and coal

mining enterprises, steel mills and rolled product plants as well as downstream production and distribution businesses. Crude steel production currently takes place in Russia, which is its core market.

NLMK. Novolipetsk Steel ("**NLMK**") is a vertically-integrated steel producer with operations in Russia, the United States and Europe spanning mining, steelmaking and production of rolled products. In 2017, NLMK produced 16.9 million tonnes of crude steel and sold 16.5 million tonnes of metal products. NLMK sold approximately 36 per cent. of its steel products by volume in Russia, 19 per cent. in Europe and 17 per cent. in North America in 2017.

Metalloinvest. Metalloinvest is a vertically-integrated iron ore mining and steel production business with assets located primarily in Russia. Metalloinvest produced 4.8 million tonnes of crude steel and 2.7 million tonnes of hot metal and shipped 6.5 million tonnes of steel products and pig iron in 2017.

Mechel. Mechel is an integrated steel and mining group focused on the production of steel products, coal and iron ore. Mechel's assets are located in several regions of Russia, as well as in Lithuania and Ukraine. In 2016, Mechel produced approximately 4.3 million tonnes of crude steel and sold 4.3 million tonnes of rolled steel products (comprising long products, flat products, hardware, forgings and stampings). In the first nine months of 2017, it produced approximately 3.2 million tonnes of crude steel and sold 3.3 million tonnes of rolled steel products (comprising long products, flat products, hardware, forgings and stampings). Mechel's customers are located across the world. Mechel operates its own ports and land-based logistics enterprises, which it uses to distribute its products to customers in Russia and the CIS, as well as Europe, Asia and the Middle East.

Ukrainian steel producers. The Ukrainian steel industry is characterised by a high level of competition. According to Metal Expert, published annual reports and interim results, and (with respect to Metinvest) management estimates, the three largest steel producers in Ukraine are: Metinvest, which produced 7.6 million tonnes of crude steel in 2017; ArcelorMittal Kryvyi Rih, located in the Dnipropetrovsk region, which produced 5.8 million tonnes of crude steel in 2017; and the Industrial Union of Donbas, which produced 1.5 million tonnes of crude steel in 2017 at its Ukrainian steel operations, which include Alchevsk Iron & Steel Works (located in the Luhansk region) and Dneprovskiy Iron & Steel Works (located in the Dnipropetrovsk region).

Export Markets

The Ukrainian steel industry is export-oriented. The Middle East and North Africa, Europe and the CIS are the primary export destinations for Ukrainian steel, accounting for approximately 41 per cent., 34 per cent., and 12 per cent. of exports in 2017, respectively, according to Metal Expert. Semi-finished steel products accounted for approximately 42 per cent. of Ukrainian steel exports to all destinations in 2017, followed by flat products (which accounted for approximately 33 per cent. of exports), long products (which accounted for approximately 21 per cent. of exports) and tubular products (which accounted for approximately 4 per cent.), in each case according to Metal Expert. Total Ukrainian exports of semi-finished and finished steel products have fallen by approximately 48 per cent. between 2008 and 2017, according to Metal Expert. In 2017, Ukrainian exports of semi-finished products decreased by 21 per cent. and exports of finished steel products (including pipes) decreased by 15 per cent., respectively, year-on-year. Exports of semi-finished and finished steel products amounted to 15 million tonnes in 2017.

Chinese and South East Asian Markets

China has the world's largest steel industry, both in terms of production and consumption. According to the preliminary data prepared by the WSA, China produced 832 million tonnes of crude steel in 2017, accounting for just under half of worldwide production. It also consumed 766 million tonnes of finished steel products in 2017, accounting for 47 per cent. of worldwide consumption, according to the preliminary data prepared by the WSA. The Asian market as a whole consumed 1,092 million tonnes of finished steel products, according to the WSA.

According to the WSA, the Chinese finished steel market has grown rapidly since 2000. Chinese consumption increased from 124 million tonnes in 2000 to 775 million tonnes in 2013, and then fell to 763 tonnes and 730 tonnes in 2014 and 2015, respectively. It grew again to 743 tonnes and 766 tonnes in 2016 and 2017, respectively. Growth has slowed in China since 2009, when the government pushed through a major stimulus package in order to shield the country from the worst effects of the global recession. Growth exceeded 20 per cent. in 2009, but then slowed to 6.6 per cent. in 2010, 9.1 per cent. in 2011 and 2.9 per cent. in 2012. It accelerated to 11.4 per cent. in 2013 due to some rebound in the property sector, but subsequently decreased to negative 1.5 per cent. year-on-year in 2014 and continued its decrease by negative 4.4 per cent. in 2015. In 2016, the economic measures adopted by the Chinese government which led to increased domestic infrastructure spending, increased steel consumption by 1.8 per cent. in 2016 and 3.0 per cent. in 2017, respectively. The demand for steel in other Asian countries recovered from a 15.8 per cent. fall in 2009 by rising by 17.6 per cent. in 2010, but growth slowed to 5.9 per cent. in 2011 and only partially recovered to 2.9 per cent. in 2012, 2.2 per cent. in 2013, 5.1 per cent. in 2014, 1.8 per cent. in 2015 and 4.4 per cent. in 2016, respectively. In 2017, according to the preliminary data prepared by the WSA, year-on-year growth in demand in other Asian countries was 2.8 per cent. The huge growth rates shown in the 2000s are considered unsustainable as the Chinese economy has been moving from steel-heavy industries to less steel-intensive industries.

European Market

The European steel market has not yet fully recovered from the economic downturn that started in 2008. Production of crude steel in Europe fell by 26.9 per cent. in 2009 and made a partial recovery of around 22.6 per cent. in 2010, accounting for 14.4 per cent. of worldwide production, according to the WSA. Production continued to increase in 2011, rising by 5.0 per cent., but fell again by 3.9 per cent. in 2012. Crude steel production decreased by 1.7 per cent. in 2013, increased by 1.3 per cent. in 2014 and decreased by 2.8 per cent. in 2015 and 1.1 per cent. in 2016, respectively. Crude steel production jumped by 5.7 per cent. in 2017 amid economic recovery, reaching a production volume of 211 million tonnes and accounting for 12.5 per cent. of worldwide production in 2017, according to the preliminary data prepared by the WSA. Consumption of steel in Europe has remained below pre-recession levels in recent years, according to the WSA. Consumption of finished steel products was 202 million tonnes in 2017, compared with 199 million tonnes in 2016 and 233 million tonnes at the 2007 peak.

Germany and Turkey are the largest consumers of finished steel products in Europe, representing 20.4 per cent. and 16.6 per cent. of consumption, respectively, in 2017, due to their prominent automotive, appliance, construction and manufacturing industries, according to the WSA.

Middle Eastern and North African ("MENA") Market

The Middle Eastern and North African steel market is relatively small in terms of production and consumption. In 2016, the Middle East produced 31 million tonnes and North Africa produced 7 million tonnes according to the preliminary data prepared by the WSA. In 2017, the Middle East produced 35 million tonnes of crude steel and North Africa produced 8 million tonnes. Although production growth slowed in the Middle East during the global economic downturn, production did not decline as with most countries worldwide, according to the WSA. More specifically, between 2008 and 2016, production grew at an average annual rate of 8.3 per cent. in the Middle East. However, production declined at an average rate of 2.9 per cent. in North Africa for the same period. In 2017, crude steel production increased by 10.9 per cent. and 25.6 per cent. in the Middle East and North Africa, respectively. Political instability has affected crude steel production in North Africa, where production has never returned to a pre-recession peak that exceeded 9 million tonnes in 2007.

Consumption in the MENA region continued to grow during the financial crisis, reflecting a trend toward greater steel consumption per capita in the region, according to the WSA. Consumption of steel products within MENA has been steadily increasing and reached 64.5 million tonnes in 2009, with an average growth rate of 9.4 per cent. for the 2000-2009 period. Consumption fell by 1.4 per cent. in 2010, but then grew continuously until 2014 when it reached 73.5 million tonnes. In 2015, consumption of steel products fell by 0.8 per cent. to 72.9 million tonnes. In

2016, consumption of steel products decreased by 0.5 per cent. year-on-year to 72.6 million tonnes. In 2017, consumption of steel products remained flat year-on-year. The growth and subsequent flattening are attributable mainly to comparable trends in the construction and property sector. The MENA region is a net importer of finished steel products. Net imports calculated by Metinvest internally on the basis of the WSA data on crude steel equivalents increased to 42.0 million tonnes in 2015, representing a 3.2 per cent. increase compared to 2014.

CIS Market (including Ukraine)

Production of crude steel in the CIS (including Ukraine) has not yet recovered to pre-recession levels. It decreased by 2.1 per cent. in 2014, and again by 4.3 per cent. in 2015. However, it recovered partially in 2016, when it increased by 0.5 per cent. to 102 million tonnes according to the WSA. In 2017, production of crude steel remained relatively flat year-on-year.

Apparent consumption of finished steel products in the CIS (including Ukraine) increased by 4.0 per cent. to 57 million tonnes in 2012 and by a further 2.0 per cent. to 59 million tonnes in 2013, from 55 million tonnes in 2011. In 2014, 2015 and 2016, it declined by 4.5 per cent., 9.2 per cent. and 2.7 per cent., respectively, reaching 49 million tonnes.

According to the preliminary data prepared by the WSA, consumption of finished steel products in the CIS is expected to grow by 3.6 per cent. to 51 million tonnes year-on-year in 2017, due to the recovery of consumption in Russia and Ukraine.

Ukrainian Market

Domestic production and consumption of steel products has been significantly affected by the military conflict in the Donetsk and Luhansk regions that started in 2014 and is still on-going. According to Metal Expert, domestic production of crude steel decreased sharply by 31.9 per cent. from 32.8 million tonnes in 2013 to 23.0 million tonnes in 2015. In 2016, production recovered partially by 5.8 per cent. to 24.3 million tonnes. However, in 2017, production of crude steel decreased again by 8.1 per cent. to 22.3 million tonnes due to the seizure of steel plants located in the non-controlled territory and the termination of their operations. According to Metal Expert, domestic consumption of steel products declined from 6.6 million tonnes in 2013 to 5.5 million tonnes in 2014 and further to 4.0 million tonnes in 2015. In 2016, domestic consumption increased by 23.1 per cent. to 4.9 million tonnes due to the recovery of the Ukrainian economy. Domestic consumption of steel products increased further by 6.5 per cent. to 5.3 million tonnes in 2017.

Trade Restrictions

As a major Ukrainian steel producer which obtained 74.5 per cent. of its revenue from sales of metallurgical products in 2017 outside Ukraine, and given the worldwide increase of protectionist measures, Metinvest may face trade restrictions in foreign markets relating to the sales of steel products originating in Ukraine. WTO members may impose trade restrictions such as anti-dumping duties, safeguard measures and countervailing duties within the parameters established by the WTO rules. Several steel-importing countries, including the European Union (EU), Eurasian Economic Union (EAEU), the United States, Canada, Indonesia, Brazil, Thailand and Mexico, currently have trade restrictions in place with respect to certain steel imports from Ukraine. The most important of these measures in relation to Metinvest's business are set out below.

In October 2017, the European Commission imposed anti-dumping measures on hot rolled flat steel products produced in four countries, including Ukraine. Imports from Ukraine are subject to a duty of €60.5 per tonne until October 2022. In January 2018, Metinvest requested the European Commission to carefully assess the additional commitment offered and to continue the undertaking assessment with the purpose of seeking a constructive solution in the framework of the proceeding.

In January 2011, the Eurasian Economic Commission introduced five-year anti-dumping measures consisting of duties varying from 19.4 per cent. to 37.8 per cent. in relation to Ukrainian small- and medium-diameter steel pipes, including duties on oil and gas line pipes of up to 820 mm in diameter manufactured by Ilyich Steel and other Ukrainian plants. As a result of a sunset review (completed in 2016), the duties will remain in force until 2021.

In October 2017, the Eurasian Economic Union imposed an anti-dumping measure in the form of an anti-dumping duty on hot-rolled steel angles originating in Ukraine, imported into the customs territory of the Eurasian Economic Union in the amount of 37.89 per cent. until October 2022.

In 2013, the US rolled over an anti-dumping duty in relation to imports of Ukrainian rebars in the amount of 41.69 per cent. until July 2018. In February 2014, the US imposed an anti-dumping duty in relation to hot-rolled flat coils in the amount of 90.33 per cent. until February 2019. In 2015, the US International Trade Commission completed a sunset review in relation to an anti-dumping duty on certain cut-to-length carbon steel plates originating, *inter alia*, in Ukraine and extended duties of 81.43 per cent. for Azovstal and 155 per cent. for Ilyich Steel until 2020.

In 2010, Canada imposed anti-dumping duties in relation to hot-rolled carbon steel plates and high-strength low-alloy steel plates originating in or exported from Ukraine, in the amount of 15 per cent. for Azovstal and other Metinvest companies and 21.3 per cent. for other Ukrainian steel exporters until January 2020. In August 2016, the Canadian International Trade Tribunal issued its expiry review related to flat hot-rolled carbon and alloy steel sheet and strip and retained its order with respect to the dumping of the subject goods from Ukraine in the form of a 77 per cent. anti-dumping duty until August 2021.

India has a number of trade restrictions in force: a 10 per cent. safeguard duty in respect of hot-rolled coils (until March 2018) and an 8 per cent. safeguard duty on hot-rolled flat sheets and plates import effective until November 2019, and which will be reduced to 6 per cent. from 23 November 2018, if the import price falls below a certain level. Additionally, since August 2016, India has been applying minimum import prices on a range of steel products. An anti-dumping investigation in relation to cold-rolled coils and sheets originating, among others, in Ukraine resulted in an anti-dumping duty at a rate which is equivalent to the difference between the U.S.\$576 and the landed value of the subject goods until August 2021.

In January 2016, the National Tariff Commission of Pakistan imposed anti-dumping duties in the range from 18.36 per cent. to 18.92 per cent. on imports of cold-rolled coils and sheets from exporters based in Ukraine.

In May 2012, Brazil initiated an anti-dumping investigation in relation to heavy steel plates imported from various countries, including Ukraine. Azovstal and Ilyich Steel made submissions in the investigation. In October 2013, a duty of U.S.\$261.79 per tonne was imposed on imports from Ukraine for a period of five years.

In 2016, Mexico's Ministry of Economy imposed an anti-dumping duty on imports of hot-rolled plates (applicable anti-dumping duty is 60 per cent.) and rebars (applicable anti-dumping duty is 41 per cent.). There is also a hot-rolled coils anti-dumping duty of 25 per cent. effective until 2020. On 14 November 2017, Mexico initiated an anti-dumping investigation concerning imports of steel sheets originating from, among others, Italy. Metinvest Italian production sites actively participate in the investigation in due course of dumping and common injury defence.

Thailand applies anti-dumping duties against imports of Ukrainian hot-rolled steel both in coils and not in coils. Since May 2003, Ilyich Steel products have been subject to duty in the amount of 32.17 per cent., and a result of a sunset review in 2015, this duty will remain until May 2020.

Malaysia's Ministry of International Trade & Industry initiated a safeguard investigation against hot-rolled coils in September 2015 and imposed a safeguard duty in the amount of 10.40 per cent. until July 2018.

Indonesia applies an anti-dumping duty on hot-rolled coils amounting to 12.33 per cent. until April 2019.

In March 2018, the U.S. imposed a 25 per cent. import tariff on steel products imported from third countries. Although certain countries can be exempted from these tariffs, Ukrainian steel products have not been exempted as of the date of this Offering Memorandum. In the year ended 31 December 2017, Metinvest's revenue from steel exports to the U.S., amounted to approximately U.S.\$62 million. See "*Risk Factors—Risks Relating to Metinvest—Trade restrictions may adversely affect the Group's exports of its steel and its business*".

Overview of the Steel Production Process

The primary components of steel production are coke production, iron-making, steelmaking and steel-rolling. The following is a brief summary of these processes.

Coke Production

Coke is a solid product of the coal coking process. Coke contains 86 per cent. to 90 per cent. carbon and is used as the main fuel in blast furnaces. Coke is produced by heating coking coal that has been ground and dressed without excess air at temperatures of 1,100°C to 1,200°C (pyrolysis) for 16 to 18 hours in coke ovens. Once discharged from the ovens, coke is delivered to blast furnaces for use in iron making.

Other products of the coking process include coke-oven gas and various by-products made from the coke-oven gas. Coke-oven gas is used as gaseous fuel in other shops of steel plants and by-products are often supplied to chemical departments for further processing.

Iron making

Prepared iron ore raw materials (sinter and pellets) and coke are used for hot metal production. Coke, natural gas and pulverised coal serve as fuel for blast furnaces. Coke-oven gas, together with top gas from blast furnaces, is used as fuel for heating stoves. Sinter, pellets and coke are mixed and added into blast furnace from the top using skips. Fuel combustion, reduction of iron from oxides, carbonisation of iron with partial reduction of silicon and manganese, melting of all components of burden and slag-making all occur inside the blast furnace.

Hot metal is tapped into hot metal transfer ladles and delivered to the steelmaking machinery to be converted into steel. Hot metal can also be delivered to a pig iron casting machine that produces pig iron for sale as a semi-finished product. Slag from blast furnaces is fed to slag processing units, where part of the slag is granulated in granulating units and the rest is processed into crushed rock and slag sand.

At many steel plants, top gas produced in the blast furnaces during the iron-making process is also used as a fuel for stoves, coke ovens, boilers, rolling mills and for other purposes.

Steelmaking

Steel is produced from raw materials using one of three production techniques.

Oxygen converter process. The oxygen converter process is based on the interaction of process oxygen (practically pure oxygen) with impurities in liquid hot metal. Scrap and hot metal are charged into the vessel and oxygen is then blown via a lance into the vessel, oxidising carbon and other impurities (silicon, manganese, etc.). Metallurgical lime and fluorspar are fed into the vessel to form slag, which absorbs impurities during the steelmaking process. The oxygen converter process is generally the most modern and efficient means by which to produce large volumes of high-quality steel. This process accounted for 73.8 per cent. of the steel produced worldwide in 2016.

Electric arc furnaces. Electric arc furnaces produce steel by applying heat generated by electricity arcing between graphite electrodes and a metal bath. The main components of the electric arc furnace are a furnace shell with a tapping device and work opening, and a removable roof with electrodes and a tilting device. The steps in the electric arc furnace production process consist of charging, melting, oxidising or purifying and deoxidising or refining. The charge includes scrap, iron, ore, fluxes (lime, fluorspar), reducing agents (carbon) and ferroalloys. Further scrap may be added after the ignition of the electric arc and melting. Temperatures in the electric arc furnace may reach as high as 3,500°C in order to melt alloying components that are otherwise difficult to melt. During the refining stage, iron oxides contained in the slag react with the carbon of the bath, which has the effect of rinsing away impurities. The metallurgical process of the oxidation and reduction phases can be replaced by secondary metallurgical treatment further downstream in the production process. This process accounted for 25.7 per cent. of the steel produced worldwide in 2016.

Open-hearth process. Steel is produced in the open-hearth process by melting scrap and hot metal on the hearth of a combustion reverberating furnace bath. Scrap, flux and ore are charged into the furnace prior to heating. Fuel is burned in the furnace and the heat necessary to melt the raw materials is provided from the burning fuel. Hot metal is charged and slag is formed and flushed. During melting, the oxidation of carbon and other impurities (such as silicon and manganese) takes place. Metallurgical lime, fluorspar and brickbats are used to form slag, which absorbs impurities during the steelmaking process. Open-hearth furnaces are disadvantaged by relatively high operating costs due to high levels of energy consumption, high levels of pollutants and relatively low productivity. Open-hearth furnaces are also less suited for continuous casting than oxygen converters or electric arc converters and, as a result, open-hearth furnaces generally work through the less efficient ingot-casting process. For a number of years, the general trend worldwide has been for open-hearth furnaces to be replaced by more efficient and environmentally cleaner oxygen converters and electric arc furnaces. This process accounted for 0.4 per cent. of the steel produced worldwide in 2016.

Steel Rolling

Cast steel is a relatively weak mass of coarse, uneven metal crystals or "grains". Rolling the steel makes this coarse grain structure re-crystallise into a much finer grain structure, giving greater toughness, shock resistance and tensile (stress) strength. Rolling is also the main method used to shape steel into different products. The rolling process consists of passing the steel between two rolls revolving at the same speed but in opposite directions. The gap between the rolls is less than the thickness of the steel being rolled, resulting in the steel being reduced in thickness and, at the same time, lengthened. In addition to hot rolling, in which the steel is rolled at a high temperature, steel may also be rolled at ambient temperatures, resulting in a different set of properties.

Iron Ore Mining and Processing Industry

Global Overview

The iron ore industry is closely linked to the steel industry. Iron ore is the core resource used in the steel production process.

The current situation in the global iron ore industry is characterised by a high degree of consolidation, with the "Big Four" producers (Vale, Rio Tinto (Pilbara operations), BHP and Fortescue) accounting for approximately 69 per cent. of the global iron ore trade in 2016 (according to Metinvest estimates and WSA data, and assuming all of Australian production is exported). According to Metinvest estimates and published annual and interim reports of the producers, the ten largest iron ore producers globally in 2016 were:

- Vale, which produced approximately 349 million tonnes of iron ore;
- Rio Tinto, which produced approximately 348 million tonnes of iron ore (saleable iron ore production on a 100 per cent. basis for mines with 50+ per cent. stake, IOC production data included);

- BHP Billiton, which produced approximately 262 million tonnes of iron ore (saleable iron ore production on a 100 per cent. basis for mines with 50+ per cent. stake);
- Fortescue Metals Group, which produced approximately 171 million tonnes of iron ore (saleable iron ore production on a 100 per cent. basis for mines with 50+ per cent. stake);
- Anglo American, which produced approximately 58 million tonnes of iron ore (comprising Kumba & Minas Rio);
- ArcelorMittal, which produced approximately 55 million tonnes of iron ore (own production);
- Metalloinvest, which produced approximately 41 million tonnes of iron ore (total iron ore concentrate production, including internally utilised and intragroup sales);
- CSN, which produced approximately 32 million tonnes of iron ore (own production, excluding third parties' purchases);
- Metinvest, which produced 30 million tonnes of iron ore (total IO concentrate production, including internally utilised and intragroup sales); and
- Cliffs Natural Resources, which produced approximately 28 million tonnes of iron ore (including US and Asia Pacific segments).

The major iron ore-producing countries are Australia, Brazil and China. Management estimates that, in 2016, Australia and Brazil together accounted for approximately 75 per cent. of the global iron ore trade, exporting different kinds of iron ore products (pellets, lumps and fines). The majority of Chinese production is lower-quality iron ore (below 30 per cent. Fe), which requires further processing predominantly into a concentrate with 64-66 per cent. Fe content, and caters primarily to the domestic Chinese steel mills. The key driver of the global steel market is China, which has accounted for nearly half of global steel consumption in recent years, according to the WSA. According to data provided by the Ministry of Development of Brazil, in 2015 and 2016, Brazil's exports of iron ore continued to grow by 6.3 per cent. and 2.1 per cent. year-on-year to 366 and 374 million tonnes, respectively. In 2017, Brazil's exports of iron ore increased by 2.6 per cent. year-on-year to 384 million tonnes. Australian exports for the same periods also increased substantially: in 2015 and 2016, exports of iron ore from Australia increased by 6.9 per cent. and 5.6 per cent. to 767 and 810 million tonnes, respectively, according to the Australian Bureau of Statistics. In 2017, Australian exports of iron ore increased by 2.5 per cent. year-on-year to 830 million tonnes. China remains a net importer of iron ore with total imports in 2017 increasing by 4.9 per cent. year-on-year to 1,075 million tonnes, according to the Customs General Administration of China. In 2015 and 2016, domestic production of iron ore decreased by 8.2 per cent. and 5.7 per cent. year-on-year, respectively, further increasing China's dependence on iron ore imports. In 2017, domestic iron ore production recovered by 1.9 per cent. year-on-year in 2017, according to the National Bureau of Statistics of China.

The main importers of iron ore are the major steel-producing countries, including China, Japan, Germany and South Korea. Historically, Europe, Japan and China have been the major iron ore consumption centres. China has experienced the greatest growth in iron ore consumption, with an increase in iron ore imports of approximately 1,436.5 per cent. from 70 million tonnes in 2000, to 1,075 million tonnes in 2017, according to the Customs General Administration of China. In 2016, Europe (excluding the CIS) and Japan decreased their iron ore imports by 7.0 per cent. and by 0.8 per cent, respectively. Overall, iron ore trade increased in 2016 by an estimated 4.9 per cent., with China's share of the total increasing from 63.2 per cent. in 2015 to 64.7 per cent. in 2016.

The table below shows growing iron ore export volumes from Australia and Brazil and import volumes to China for the years 2015, 2016 and 2017.

Exports/Imports of iron ore

	Year ended 31 December		
	2015	2016 (million tonnes)	2017
Australia.....	767	810	830
Brazil	366	374	384
China	953	1,025	1,075

In early 2010, the system of annual contracts and benchmark prices that had existed since the 1960s was replaced with new short-term pricing mechanisms linked to the spot market. Prior to this change, iron ore prices were first agreed between one of the major iron ore producers and a steelmaker during annual negotiations. The agreed price then became a benchmark followed by the rest of the industry for a year. However, the strong growth in the size of the internationally traded iron ore market prompted the development of a large spot market for the product.

This emerging trend, coupled with the cumbersome and backward-looking nature of the annual contract pricing system, gave rise to growing disparity between spot and contract prices. This placed major producers at a substantial disadvantage by allowing steelmakers to exploit price arbitrage opportunities between contract and spot sales. The move to revolutionise the obsolete pricing system was pioneered in March 2010 by BHP Billiton, which negotiated the first settlement with Asian customers on the basis of shorter-term landed price contracts. This practice, which used spot-linked quarterly contracts rather than annual contracts, was soon adopted by Vale and Rio Tinto. The share of spot market sales as against contract-based settlement has been gradually increasing since 2010 and currently amounts to approximately 80 per cent. of total sales. For instance, approximately 20 per cent. of Rio Tinto's sales in 2016 were priced with reference to the prior quarter's average index lagged by one month. The remainder was sold either on the current quarter average, the current monthly average or on the spot market. However, various pricing schemes based on the previous dynamics of spot prices (including different time lags) are also being used. It is expected that the global spot market for seaborne iron ore will continue to grow, bringing a gradual but complete shift from contract to spot sales. Many commodities (crude oil, natural gas, thermal coal, copper) have shifted from contract sales to spot sales over the course of the past 10 to 20 years, increasing the liquidity of the commodity and derivatives markets.

Iron ore prices are influenced by fluctuations in global supply and demand, as well as by transportation costs. Iron ore prices have varied significantly in the past and could vary significantly in the future and are also positively correlated with demand from steel producers. For example, iron ore prices collapsed in 2009, primarily due to lower commodity demand caused by the global financial crisis. While demand for iron ore in the developed world remained subdued following the decline in 2009, strong growth in demand in developing economies, combined with limited supply, resulted in an increase in world iron ore prices in 2010 and 2011. From 2011 until early 2016, iron ore prices have tended to fall, mainly due to a growing imbalance between supply and demand caused by substantial increases in seaborne iron ore supplies (mainly from Australia and Brazil). In 2016 and 2017, iron ore prices remained volatile trading mostly in the range of U.S.\$50-70 per dry tonne with short-term spikes above U.S.\$90 per dry tonne and drops to U.S.\$40 per dry tonne.

According to Bloomberg, the benchmark price of 62 per cent. Fe iron ore fines CFR China increased marginally to U.S.\$137 per dry tonne in 2013 compared to U.S.\$131 in 2012, after which prices fell to U.S.\$97 and U.S.\$55 per dry tonne in 2014 and 2015, respectively. In the middle of December 2015, prices fell to a multi-year low of U.S.\$38.5 per dry tonne. According to Bloomberg, in the first quarter of 2016, the price increased for the first time quarter-on-quarter since the fourth quarter of 2013 to a quarterly average of U.S.\$49 per dry tonne compared to U.S.\$46 per dry tonne in the fourth quarter of 2015. Prices reached U.S.\$72 per dry tonne in the fourth quarter of 2016 whereas the average price per dry tonne amounted to U.S.\$59 in 2016. In 2017, prices increased on average by 21.4 per cent. year-on-year and reached U.S.\$72 per dry tonne. The increases in 2016 and 2017 were mainly caused by the economic stimulus measures adopted by the Chinese government and steel production growth, strong global demand for higher-grade products due to efforts to improve steel production efficiency. Other factors that led to higher prices were the

imposition of stricter environmental controls, the closure of induction furnaces in China which resulted in a greater utilisation of furnaces that use iron ore products as their key raw material, and also due to increased prices for steel products and several delays in additional capacity launches.

The significantly higher profitability of global steel producers (including those located in China) during the years 2016 and 2017, caused by production cuts in the Chinese steel industry and the rise in protectionist measures globally, resulted in increased demand for high-grade ore products, aiming to improve blast furnace productivity and maximise steel output. Stricter environmental controls also contributed to higher demand for iron ore with higher Fe content compared to other, lower grade ore products. High and volatile hard coking coal prices also contributed to the higher use of high-grade ore to reduce coking coal consumption.

The table below shows the spot price (62 per cent. Fe iron ore fines CFR China) averages by year for 2015 to 2017.

	Year ended 31 December		
	2015	2016	2017
Daily spot price average, 62% Fe iron ore fines, U.S.\$ per dry tonne, CFR China	55	59	72

Source: Bloomberg

Metinvest's Iron Ore Markets and Competitors

Ukraine accounts for approximately 3.8 per cent. of the world's iron ore reserves, according to the 2017 report by the USGS. According to the USGS, Ukraine has approximately 6.5 billion tonnes of iron ore reserves, containing around 2.3 billion tonnes of iron (according to the USGS, for Ukraine, reserves consist of the A+B categories of the former Soviet Union's reserves classification system). The largest iron ore deposits are located in the Kryvyi Rih iron ore basin, the Kremenchuk iron ore basin, the Bilozerskyi iron ore basin and the Kerch iron ore basin (the latter of which is located in disputed territory on the Crimean Peninsula. See "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*").

In 2017, Ukraine produced 70.5 million tonnes of saleable iron ore and was one of the ten largest iron ore producers globally according to Ukrainian Industry Expertise and Metinvest estimates.

The Ukrainian iron ore industry is partially domestically oriented. Ukraine exported 37.6 million tonnes of merchant iron ore products in 2017. Ukraine also imported 0.49 million tonnes of iron ore in 2017. Central and Eastern Europe and China are the main markets for Ukrainian exports. Russia is virtually the only source of Ukrainian imports.

The following table sets out information on the largest Ukrainian concentrate producers for the periods indicated. This table includes concentrates that are converted to pellets.

	2013		2014		2015		2016		2017	
	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production
Northern GOK (Metinvest)	15,000	21%	13,420	19%	13,152	19%	11,634	18%	11,366	18%
Ingulets GOK (Metinvest)	15,344	21%	15,056	22%	12,903	19%	12,783	20%	11,429	18%
Poltava GOK (Ferrexpo)	13,201	18%	13,727	20%	14,378	21%	14,135	22%	12,918	21%
Southern GOK (Metinvest)	10,937	15%	10,952	16%	11,389	17%	11,282	18%	12,270	20%
NGOK (ArcelorMittal Kryvyi Rih) ...	10,075	14%	9,913	14%	10,133	15%	8,957	14%	9,130	15%

	2013		2014		2015		2016		2017	
	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production
Central GOK (Metinvest)	6,582	9%	6,412	9%	6,154	9%	5,224	8%	4,669	8%
Vostok Ruda ..	316	0%	185	0%	7	0%	0	0%	0	0%
Total	71,455	100%	69,665	100%	68,115	100%	64,014	100%	61,781	100%

Source: Metal Expert, Management estimates.

The following table sets out information on the largest Ukrainian pellet producers for the periods indicated.

	Year ended 31 December									
	2013		2014		2015		2016		2017	
	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production	thousand tonnes	share of Ukrainian production
Northern GOK (Metinvest)	10,838	46%	8,634	39%	7,690	36%	8,882	40%	7,420	37%
Poltava GOK (Ferrexpo)	10,633	45%	11,021	50%	11,662	54%	11,201	50%	10,444	52%
Central GOK (Metinvest)	2,314	10%	2,260	10%	2,306	11%	2,303	10%	2,250	11%
Total	23,785	100%	21,915	100%	21,657	100%	22,386	100%	20,114	100%

Source: Management estimates.

Iron ore producers

Metinvest's competitors include major CIS mining companies, such as Metalloinvest, NLMK, Evraz, Severstal and Eurasian Resources Group ("**ERG**"). Metalloinvest's mining division includes two mining and processing plants in Russia: Lebedinsky GOK and Mikhailovsky GOK. Other major mining and processing plants in the CIS include NLMK's Stoilensky GOK, Evraz's Kachkanarsky GOK, Severstal's Karelsky Okatysh, and ERG's Sokolov-Sarbai Mining Production Association ("**SSGPO**").

Metalloinvest. Metalloinvest's mining division includes two mining and processing plants in Russia: Lebedinsky GOK and Mikhailovsky GOK. These plants produce iron ore concentrate with an iron content of 65-70 per cent., pellets of 63-67 per cent. and iron ore briquettes (hot briquetted iron) with an iron content of 90 per cent. Metalloinvest produced 40.3 million tonnes of iron ore (including iron ore concentrate and sinter ore) and 25.1 million tonnes of pellets in 2017 (that is 1.0 per cent. and 0.4 per cent. lower than in 2016, respectively). In 2017, Metalloinvest increased its production of hot briquetted iron by 22.6 per cent. to 7.0 million tonnes. Metalloinvest in 2017 mainly sold its iron ore products to the domestic market. Sales in Russia accounted for 61 per cent. of total sales, 25 per cent. of total iron ore sales were made to Europe and 5 per cent. to Asia.

NLMK. NLMK owns Stoilensky GOK, which produces iron ore concentrate with an iron ore content of 66.3 per cent., sinter ore with an iron ore content of 52 per cent. and pellets with an iron ore content of 64.6 per cent. In 2016, NLMK launched Stoilensky pelletising plant with an annual production capacity of approximately 6 million tonnes of pellets. In 2017, Stoilensky GOK produced 9.6 million tonnes of iron ore concentrate, 1.5 million tonnes of sinter ore and 6.0 million tonnes of pellets. In 2017, total production of iron ore products amounted to 17.1 million tonnes, representing a 0.4 per cent. decrease year-on-year.

Evraz. The iron ore division of Evraz includes: Evrazruda, which owns a number of ore-mining and ore-enrichment enterprises in the Kemerovo Region of Russia; and Kachkanarsky GOK, located in Sverdlovsk region of Russia, which produces sinter and pellets. In 2017, total production of iron ore products of Evraz decreased by 9.4 per cent. year-on-year and amounted to 18.0 million tonnes.

Severstal. Severstal iron ore assets include Karelsky Okatysh, the biggest iron ore producer in Russia, which produces pellets with an iron content of 63.6-66.5 per cent. and Olenogorskiy GOK (Olcon), which produces iron ore concentrate with an iron content of 65.6 per cent. In 2017, Karelsky Okatysh sold 11.1 million tonnes of pellets, representing an increase of 2.7 per cent. year-on-year. Olcon sold 4.3 million tonnes of iron ore concentrate in 2017, a 3.6 per cent. increase compared to 2016.

Sokolov-Sarbai Mining Production Association ("SSGPO"). SSGPO is one of the largest iron ore mining and processing enterprises in Kazakhstan and is owned by Eurasian Resources Group. SSGPO's operations include the Sokolovsky, Sarbaisky, Kacharsky and Korzhinkolskiy iron ore open-pits, the Sokolovsky underground mine, dolomite and limestone open pits, as well as crushing, concentrating and pelletising facilities. SSGPO produces iron ore concentrate with an iron content of approximately 66 per cent. and pellets with an iron content of 63 per cent. Annual production capacity accounts for 8 million tonnes of iron ore concentrate and 7 million tonnes of pellets.

In addition to the CIS iron ore producers in Russia and Kazakhstan, Metinvest's competitors include Ukrainian iron ore companies, such as Ferrexpo's Poltavsky GOK and Yeristovsky GOK.

Ferrexpo. Ferrexpo produces pellets with an iron content of 62 per cent. or 65 per cent. Ferrexpo owns Poltavsky GOK and Yeristovsky GOK. Yeristovsky GOK (also known as Ferrexpo Yeristovo Mining) is a new open-pit mine located in close proximity to Poltavsky GOK. The first ore was reached at the mine in the second half of 2012. Currently, ore extracted from Yeristovsky GOK is sent to Poltavsky GOK's processing complex to be used in the production of pellets. In 2016, Yeristovsky GOK mined 14.1 million tonnes of crude ore compared to 14.0 million tonnes in 2015. In 2016, Poltavsky GOK mined 28.3 million tonnes of crude ore compared to 25.0 million in 2015. Total concentrate production in 2016 from both GOKs equalled 14.0 million tonnes, a 2.6 per cent. decrease compared to 2015. Total pellets production in 2015 from both GOKs and from purchased concentrate equalled 11.2 million tonnes, a 4.0 per cent. increase compared to 2015.

Chinese and South East Asian Market

China is the world's largest consumer of raw materials for steelmaking. China had domestic iron ore reserves of approximately 21 billion tonnes, containing around 7.2 billion tonnes of iron and domestic production of approximately 1,137 million tonnes of iron ore in 2017, according to the National Bureau of Statistics of China. Chinese iron ore generally has a much lower Fe content compared to imported iron ore. Domestic production is high in cost and price responsive. By comparison, China imported 1,025 million tonnes of iron ore in 2016 and 1,075 million tonnes of ore in 2017. Imports grew at an average annual rate of 6.9 per cent. between 2009 and 2017, after having grown by 27.6 per cent. per year, on average, from 2000 to 2009. In 2017, imports rose by 4.9 per cent. over 2016, according to the Customs General Administration of China. Increased imports were mainly driven by higher steel production and reduced domestic iron ore supply. Economic stimulus measures introduced by the Chinese government resulted in construction and steel production increase and consequent iron ore demand increase. Closure of steel capacities, mainly induction furnaces, effectively replaced the demand for scrap with the demand for iron ore. Robust steel demand and consequent increased steel prices amid insufficient domestic iron ore supply resulted in increased needs for imported raw materials which supported iron ore prices.

Production Process

Iron ore in Ukraine is extracted from either open-pit or underground mines. After extraction, the ore is processed further in order to increase its iron concentration. The iron ore is then crushed to a powder-like consistency, and iron-rich particles are separated from the waste rock by magnetic separation to produce iron ore concentrate. The concentrate is then formed into pellets or sinter that is suitable for use as blast furnace feed.

Sinter Production

To produce sinter, iron ore, iron ore concentrate and iron-bearing materials (blast furnace dust, screenings of sinter and pellets, scale, waste and slime), flux (limestone) and coke breeze are weighed and mixed to form sinter burden. This sinter burden is then granulated and laid in two layers in sinter machines. The sinter burden becomes sinter at temperatures of 1,070°C to 1,200°C through the combustion of carbon from the coke breeze, while air is simultaneously drawn through the sinter burden by means of exhausters. After crushing, screening and cooling, the sinter is ready for delivery to blast furnaces.

Pellet Production

In the production of iron ore pellets, concentrate is mixed with water and other additives, such as magnetite ore. The resulting slurry is dried, mixed with binding agents and baked at approximately 1,300°C. After the pellets have been screened and undersized material removed, they are ready for use in blast furnaces.

Coal Mining and Coke Production

Overview

The main types of coal include thermal (steam) coal and metallurgical (coking and PCI) coal. Steam coal is used in electricity generation and industrial applications, while coking coal is used to manufacture coke for use in steelmaking and other metallurgical and non-metallurgical applications. Coking coal swells and cokes when heated in coking ovens to produce hard coke, whose characteristics are essential in steelmaking operations. Approximately 400-500 kilograms of coke is used per tonne of hot metal produced. Coke is sometimes supplemented by the direct injection of pulverised coal (pulverised coal injection, or PCI) to a blast furnace, at rates of 100-200 kilograms per tonne of hot metal. PCI uses less expensive steam and semi-soft coking coal to reduce costs.

According to the BP Energy Review, in 2016, the United States, China and Russia had the world's largest coal reserves of 252, 244 and 160 billion tonnes, respectively. Ukraine has the world's seventh largest coal reserves after the United States, China, Russia, Australia, India and Germany. The CIS countries have coal reserves of approximately 223 billion tonnes, including Ukraine's coal reserves of approximately 34 billion tonnes, accounting for 19.6 per cent. and 3.0 per cent. of the world's coal reserves, respectively, according to the BP Energy Review. North America has coal reserves of approximately 259 billion tonnes, accounting for 22.8 per cent. of the world's coal reserves, according to the BP Energy Review.

According to Ukrainian Industry Expertise, world production of coking coal (excluding PCI coal) started to increase rapidly in the beginning of the twenty-first century amid growing steel production in China as a key coking coal consumer. World coking coal production increased from 475 million tonnes in 2001 to 750 million tonnes in 2007. During the global crisis of 2008-2009, coking coal production decreased to 710 million tonnes, but increased by 10 per cent. in 2010. Growth in production of coking coal was slowing in 2011-2015 and equated to 0.6 per cent. in 2015. In 2016, the global coking coal production slightly reduced. Extremely low prices caused financial difficulties for many coal-mining companies. Most of them were forced to curtail their capital expenditure programmes and many producers operating in the U.S. filed for Chapter 11 bankruptcy proceedings. Nevertheless, according to preliminary data, global coking coal production slightly increased in 2017 to 900 million tonnes, as a result of significantly improved pricing conditions in the sector, and producers with spare capacity were able to increase their production to meet demand.

Further, more than 95 per cent. of world coal production comes from ten countries with China, Australia, the United States, Russia, India and Canada being the largest coking coal-producing countries according to Ukrainian Industry Expertise. The world's largest metallurgical coal producers (excluding coal producers located in China) include BHP (including BHP-Mitsubishi Alliance and BHP Mitsui Coal), Teck, Anglo American and Rio Tinto.

According to Ukrainian Industry Expertise, the world's top exporters of high-quality coking coal in 2017 were Australia (171 million tonnes), the United States (49 million tonnes) and Canada (25 million tonnes). The world's top three coking coal importers were Japan, China and India. These countries imported approximately 179 million tonnes of coking coal in 2017, comprising more than half of total coking coal imports. Given that most of the supply to the seaborne coking coal market is concentrated among the top three exporting countries, disruptions to operations are likely to cause problems in the supply chain and cause coking coal prices to rise in the short term. Several events during 2016 and 2017 led to sizeable supply disruptions and affected pricing conditions. More specifically, in 2016, China introduced production restrictions by limiting the working days to 276 per year, and implemented a closures plan to reduce excessive capacity. Two other factors leading to supply disruptions and affecting pricing conditions were the occasional disruptions in production of several Australian mines and a 41 per cent. decrease in exports from U.S. producers in 2016 compared to exports in 2012, which translates to a decrease of 26 million tonnes to 37 million tonnes for the above period, according to Bloomberg, as nearly half of U.S. producers filed for bankruptcy. Similarly, the tropical cyclone, Debbie, in Queensland resulted in a force majeure event for a major rail operator in Australia, an outcome that decreased Australian exports by 23 per cent. year-on-year in the second quarter of 2017 to 38 million tonnes, according to Bloomberg. Australia, the biggest coal exporter, did not compensate for the losses in supply until the very end of the year, an outcome that significantly tightened the market balance.

China, as one of the world's largest importers of coking coal, has a significant influence on the coking coal market, in addition to the U.S. and Australia. Even though a major portion of the Chinese steel industry was loss making in 2015, after steel prices recovered in 2016, Chinese steel producers were able to gain some profits and increase their production, an outcome that eventually improved coking coal demand. Because China introduced production restrictions by limiting the working days to 276 per year, and implemented a closures plan to reduce excessive capacity, Chinese mills and traders were forced to increase imports, particularly from Mongolia and Australia. Also, in 2017, increases in steel production in China supported metallurgical coal demand.

Following the decrease in coking coal prices as a result of the global economic downturn in 2008 and 2009, the prices for coal increased globally (including in the CIS) in 2010 and 2011, but starting from 2012 prices fell until late 2015. According to Bloomberg, the contract price (the average of the quarterly contract price values) for hard coking coal FOB Australia reached U.S.\$289 per tonne on average in 2011 and then fell to U.S.\$210 per tonne in 2012, U.S.\$159 per tonne in 2013, U.S.\$126 per tonne in 2014 and U.S.\$102 per tonne in 2015. The price continued to decrease until the second quarter of 2016, when it increased by 3.7 per cent. quarter-on-quarter from U.S.\$81 per tonne in the first quarter of 2016 up to U.S.\$84 per tonne in the second quarter of 2016. In the fourth quarter of 2016, the price increased sharply to U.S.\$200 per tonne. In the first quarter of 2017, the price increased to U.S.\$285 per tonne and then dropped to U.S.\$194 per tonne in the second quarter of 2017, and to U.S.\$170 per tonne in the third quarter of 2017. In the fourth quarter of 2017, the price increased to U.S.\$192 per tonne.

In 2016 and 2017, the continuing metallurgical coal price volatility made the process of contract price negotiations difficult and long-lasting for the parties involved such as the consumers and suppliers, metallurgical companies that consume coking coal and coking coal producers. Cyclone Debbie, which hit Australia at the end of the first quarter of 2017, resulted in delays in fixing contract prices for the second quarter of 2017. In early June 2017, one of the key coking coal consumers, NSSMC, initiated a process of transferring to a system of spot price linked contracts. Three indices were proposed by market participants: the Platts Premium Low Vol FOB Australia; the Steel Index's Premium Hard Coking Coal; and the Argus premium hard low volatile coking coal index. Also, an average price for the period from March until May 2017 was proposed as an indicator for the second quarter of 2017. Subsequently, the contract prices for the second quarter and the third quarter of 2017 were published, amounting to U.S.\$194 and U.S.\$170 per tonne, respectively. The contract price system (in the form it used to be before) for hard coking coal ceased to exist, while the share of spot linked pricing system increased.

Average spot market prices generally followed the same dynamics as the contract prices. According to Bloomberg, spot market FOB Australia premium hard coking coal prices amounted to U.S.\$117 per tonne in 2014 and U.S.\$90 per tonne in 2015. In 2016, the average spot price increased and reached U.S.\$143 per tonne. In the first

quarter of 2017, average spot coking coal prices dropped by 37.0 per cent. quarter-on-quarter to U.S.\$167 per tonne from U.S.\$267 per tonne in the fourth quarter of 2016. In the second quarter of 2017, average spot coking coal prices increased by 15.0 per cent. quarter-on-quarter to U.S.\$192 per tonne whereas it decreased by 1.5 per cent. quarter-on-quarter to U.S.\$189 per tonne in the third quarter of 2017. In the fourth quarter of 2017, it increased again by 5.6 per cent. quarter-on-quarter to U.S.\$200 per tonne.

After a short-term increase in coking coal prices in the second quarter of 2017, which was caused by physical supply disruptions following the effects of Cyclone Debbie in Western Australia, prices decreased to approximately U.S.\$150 per tonne by the end of the second quarter of 2017. Prices increased from July 2017 until mid-September when prices peaked approximately U.S.\$200 per tonne. The key reasons for this increase were supply disruptions in China and Australia. Although Australian coal supply had recovered from Cyclone Debbie, disruptions at other mines kept the Australian supply constrained over July and August 2017. For example, the workforce of Appin, an underground mine in Australia, was withdrawn on 28 June 2017 due to safety concerns. Similarly, Cook Colliery, also a mine in Australia, remained closed because of flooding. In addition, three fatal accidents in China's Shanxi mines triggered stringent safety checks and further restricted metallurgical coal supply during the period. Lastly, the continued growth in steel production in China caused higher demand for raw materials, including coking coal.

Coal market in Ukraine

Production of coking coal in Ukraine has been gradually drifting downwards for the last decade. During 2010-2012, coking coal production remained relatively flat at the level of approximately 25 million tonnes, however, in 2013, it declined again by 4 per cent. The Ukrainian coking coal industry experienced a significant decrease in production volumes during 2014 and 2015, when coking coal production contracted by a factor of almost three. This significant loss of production volumes was mainly the result of the military conflict in the Donetsk and Luhansk regions. Coking coal consumption also declined in the same periods as many coke and steel plants were impacted by the conflict. In 2016, volumes of raw mined coking coal in Ukraine stabilised at the level of 9.4 million tonnes, an increase of 3 per cent. year-on-year. This excludes coking coal from mines located within territories which the Ukrainian authorities do not control as a result of the conflict and that do not provide publicly available data.

However, in 2017, volumes of coking coal production in Ukraine declined mainly due to a rail blockage preventing trade between the conflict area in eastern Ukraine and the rest of the country. Specifically, in 2017, production decreased by an additional 24 per cent. year-on-year to 7.1 million tonnes per year, mainly due to the loss of control of Krasnodon Coal by Metinvest on 15 March 2017.

Increasing requirements for higher quality coking coal and decreased production of domestic coal stimulated growth of coking coal imports to Ukraine. According to Ukrainian Industry Expertise, the share of coking coal imports in total coking coal consumption in Ukraine has been increasing since 2002 and amounted to approximately 45 per cent. in 2013. Since 2014, when the conflict in the Donetsk and Luhansk regions began, the share of coking coal imports increased to 52 per cent. in 2014, 63 per cent. in 2015 and 67 per cent. in 2016. In 2017, the share of coking coal imports peaked at 76 per cent. of total coking coal consumption.

According to Metal Expert, published annual and interim reports of the producers, as well as management estimates (with respect to Metinvest), the five largest coking coal producers headquartered in the CIS in 2017 were (in each case including non-CIS production): Evraz, which produced approximately 22.4 million tonnes of raw coking coal; Mechel, which produced approximately 14.3 million tonnes of raw coking coal; Sibuglemt, which produced 9.1 million tonnes of raw coking coal; Severstal, which produced 8.7 million tonnes of raw coking coal; and Metinvest, which produced 6.2 million tonnes of raw coking coal (including production of Krasnodon Coal, one of the Seized Assets).

According to EnergoBusiness, the largest coking coal producers in Ukraine in 2017 were Coal Company "Pokrovs'ke" (Donetsksteel) and Krasnolimanskoye Ltd., which produced 4.3 and 0.9 million tonnes of raw coking coal, respectively.

Production Process

Ukrainian coal is extracted by underground mining. After mining, depending on the ash content of the coal, the coal is processed in a preparation plant, where it is crushed and washed. All Ukrainian coking coal must be prepared before use in coke making. Coking coal is then transported to coke making plants and integrated steel plants for conversion to coke for use in the production of hot metal.

BUSINESS DESCRIPTION

Overview

Metinvest is the largest vertically integrated mining and steel business in Ukraine, operating assets in each stage of the production chain from iron ore mining and processing, coking coal mining and coke production, through to semi-finished and finished steel production, pipe rolling and coil production as well as the production of other value-added products. In the year ended 31 December 2017, Metinvest produced 27.5 million tonnes of iron ore concentrate, 7.6 million tonnes of crude steel and 2.6 million tonnes of coking coal compared to the year ended 31 December 2016, where it produced 29.6 million tonnes of iron ore concentrate, 8.3 million tonnes of crude steel and 3.0 million tonnes of coking coal.

For the year ended 31 December 2017, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$8,931 million and U.S.\$2,044 million, respectively. By comparison, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$6,223 million and U.S.\$1,153 million, respectively, for the year ended 31 December 2016. For the year ended 31 December 2015, Metinvest's consolidated revenue and consolidated Adjusted EBITDA (including share in EBITDA of joint ventures) amounted to U.S.\$6,832 million and U.S.\$525 million, respectively.

Based on 2017 production, Metinvest was one of the world's fifteen largest iron ore producers (excluding Chinese and Indian companies), based on management estimates and published operating results of the largest iron ore producing companies, and the largest producer of iron ore in Ukraine, according to Metal Expert. In addition, according to the World Steel Association, Metinvest was the 37th largest crude steel producer in the world in 2016. As at 31 December 2017, Metinvest ranked as the largest producer of crude steel in Ukraine and one of the largest crude steel producers in the CIS, according to Metal Expert.

For the year ended 31 December 2017, the metallurgical segment accounted for 37 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 63 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures). For the year ended 31 December 2016, the metallurgical segment accounted for 57 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 43 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures). For the year ended 31 December 2015, the metallurgical segment accounted for 15 per cent. of Metinvest's consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures), while the mining segment accounted for 85 per cent. of its consolidated Adjusted EBITDA (before corporate overheads and eliminations and including share in EBITDA of joint ventures).

- **Metallurgical segment.** In the year ended 31 December 2017, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$7,411 million and U.S.\$808 million, respectively, compared to U.S.\$5,027 million and U.S.\$737 million, respectively, in the year ended 31 December 2016. In the year ended 31 December 2015, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$5,407 million and U.S.\$486 million, respectively. The metallurgical segment's principal products include: finished steel products, such as flat and long steel products and pipes; semi-finished steel products, such as slabs and billets; pig iron; and coke. In the years ended 31 December 2017, 2016 and 2015, finished steel products comprised approximately 71 per cent., 78 per cent. and 74 per cent., respectively, of Metinvest's total steel sales volumes. Metinvest has nine industrial assets in the metallurgical segment:

- Ilyich Steel, the fourth-largest Ukrainian integrated steel producer, according to Metal Expert;
 - Azovstal, the third largest Ukrainian steel producer, according to Metal Expert;
 - Ferriera Valsider, a producer of plates and coils located in Italy;
 - Promet Steel, a producer of shapes and bars located in Bulgaria;
 - Metinvest Tramel and Spartan UK, producers of plates located in Italy and in the United Kingdom, respectively;
 - Avdiivka Coke and Zaporizhia Coke, producers of coke and chemicals located in Ukraine; and
 - Inkor Chemicals, a producer of refined naphthalene and phenol and cresol products located in Ukraine.
- **Mining segment.** In the year ended 31 December 2017, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,520 million and U.S.\$1,380 million, respectively. In the year ended 31 December 2016, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,196 million and U.S.\$548 million, respectively. In the year ended 31 December 2015, this segment's external revenue and Adjusted EBITDA (including share in EBITDA of joint ventures) were U.S.\$1,425 million and U.S.\$88 million, respectively. Metinvest's key products in this segment are merchant iron ore concentrate and pellets and coking coal concentrate. Metinvest has four industrial assets in the mining segment, including three major iron ore enrichment works located in the Kryvyi Rih region of Ukraine:
 - Northern GOK and Ingulets GOK, the second and the third largest iron ore mining companies in Ukraine by production volume, according to Metal Expert;
 - Central GOK, the sixth largest iron ore mining company in Ukraine by production volume, according to Metal Expert; and
 - United Coal, a producer of coking coal based in the United States.

Metinvest's trading and logistical assets serve both segments. Metinvest sells steel, iron ore, coke and coal products to non-CIS international markets in Europe, the Middle East and North Africa and Southeast Asia through Metinvest International; to the Ukrainian market through Metinvest Ukraine and Metinvest-SMC; and to CIS markets (primarily the Russian Federation and Belarus) through Metinvest Ukraine, Metinvest Eurasia and Metinvest Distribution. In addition, Metinvest-Shipping, a company based in Mariupol, provides transportation and forwarding services for Metinvest's cargoes by railway and for their transshipment via sea ports, while Belgorodmetalloznab provides warehouse and transshipment services for Metinvest in the Russian Federation.

Seized Assets in eastern Ukraine

In February 2017, the self-proclaimed authorities on the temporarily non-controlled territory in Ukraine announced their intention to seize businesses located on the temporarily non-controlled territory and to require them to comply with local fiscal, regulatory and other requirements, which contradict Ukrainian legislation. On 15 March 2017, management determined that it had lost control over the operations of entities located on the temporarily non-controlled territory, including Yenakiieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke (collectively, the "**Seized Assets**"). Since then, Metinvest stopped economic activity in this territory, including mining of raw materials and production of finished steel products as

well as supplies of raw materials and finished steel products from and into the conflict area. Most employees of the Seized Assets have been dismissed while a small number have been relocated to other Metinvest operations.

In the year ended 31 December 2016, the Seized Assets generated revenue of U.S.\$702 million and gross profit of U.S.\$41 million. From 1 January to 15 March 2017, when they were seized, the Seized Assets generated revenue of U.S.\$137 million and gross profit of U.S.\$15 million. As of 15 March 2017, the Seized Assets' aggregate consolidated tangible assets located on the temporarily non-controlled territory amounted to U.S.\$515 million (5 per cent. of Metinvest's total consolidated assets). Due to the loss of control over the assets of the Seized Assets located on the temporarily non-controlled territory, management performed a revaluation of property, plant and equipment and determined that the value of these assets is zero. Also, other assets (inventories and certain intangible assets) of the Seized Assets were fully impaired. This resulted in the recognition of property, plant and equipment impairment amounting to U.S.\$433 million and impairment of inventory and replaceable equipment amounting to U.S.\$82 million. Metinvest's cost of sales also increased as it had to obtain coking coal from other sources, which may have been on less favourable terms than what they could obtain from the Seized Assets. Metinvest's ability to yield the desired product mix was affected due to the loss of long products produced by the Seized Assets. In the short term, management does not believe the Group is able to regain control of the Seized Assets. However, Metinvest is still the legal owner of the Seized Assets. The Seized Assets have been designated as Unrestricted Subsidiaries under the Conditions as of the Issue Date and, as such, will not be subject to restrictions under the Conditions; see *"Risk Factors—Risks Relating to the Notes and the Guarantees—The Seized Assets are not subject to restrictive covenants in the Notes"*.

If management adopts the position that control over the Seized Assets was lost as at 15 March 2017, the net assets of the Seized Assets in the amount of U.S.\$13 million (before the impairment disclosed in note 7 of the 2017 Financial Statements) would be deconsolidated and the fair value of accounts payable due to the Seized Assets and accounts receivable due from the Seized Assets would be recognised. Additionally, a reclassification of U.S.\$601 million of accumulated net negative currency translation reserve ("**CTR**") from "other comprehensive income" to "profit/(loss)", as described in note 4 of the 2017 Financial Statements, would be required. If the Seized Assets are disposed of or abandoned in the future, the full amount of CTR as of that date would need to be reclassified from "other comprehensive income" to "profit/(loss)". However, for purposes of the Conditions, this reclassification of U.S.\$601 million would not reduce Consolidated Net Income (as defined in the Conditions).

The Seized Assets collectively have certain outstanding trade debts owed to suppliers. To maintain these supplier relationships, Metinvest intends to discharge these trade debts on behalf of the Seized Assets, which will result in receivables owing to it by the Seized Assets. The Seized Assets also owe certain receivables to Metinvest and Metinvest owes certain payables to the Seized Assets, which Metinvest intends to net off, resulting in a net receivable owing to Metinvest. In addition, Krasnodon Coal owes certain amounts to Metinvest Holding LLC under a bond which is currently in default. Metinvest may write off all or part of these existing and future receivables and other obligations owed by the Seized Assets. These existing and future receivables and other obligations owed by the Seized Assets to Metinvest and their write off are permitted under the Conditions.

The above events have also affected other subsidiaries, whose operations are physically located on the controlled territory in Ukraine. As such, Metinvest charged impairment provision on tangible assets located on the temporarily non-controlled territory, but belonging to the subsidiaries whose operations are physically located on the controlled territory, as a result of the inability to access such assets. This resulted in recognition of an additional property, plant and equipment impairment of U.S.\$19 million and impairment of inventory and replaceable equipment of U.S.\$10 million. Metinvest continues to conduct its operations through these affected subsidiaries.

For further information, please see note 4 and note 7 of the 2017 Financial Statements.

Competitive Strengths

- **Vertically integrated business.** Vertical integration is a key element of Metinvest's strategy to secure access to raw materials for steel production (including coal to meet its energy needs) and to reduce overall unit production costs. Through vertical integration, Metinvest utilises significant internal sources of raw materials to reduce its exposure to fluctuating raw material prices. As at 31 December 2017, Metinvest had approximately 1,254 million tonnes of proven and probable iron ore reserves (based on management estimates) and approximately 126 million tonnes of proven and probable coal reserves at United Coal (based on management estimates). As at 31 December 2017, Metinvest was 282 per cent. self-sufficient in iron ore and 34 per cent. self-sufficient in coking coal, calculated as actual coal concentrate production divided by actual consumption of coal concentrate, including coal consumption for PCI, to produce coke required for production of hot metal in the metallurgical segment. In March 2017, Metinvest lost control of Krasnodon Coal, one of its key coking coal assets, which resulted in a deterioration of its coking coal self-sufficiency. Nevertheless, Metinvest has been actively diversifying its coking coal shipments' geographical regions, including supplies of premium quality products from Australia and Canada, in addition to strengthening its cooperation with Ukrainian producers. Moreover, the majority of coal produced from United Coal was redirected to Metinvest's production in order to meet the Group's raw materials needs. (See "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*" and "*Risk Factors—Risks Relating to Metinvest—Metinvest is dependent on third party suppliers for a portion of its raw materials, and the externally purchased raw materials Metinvest uses to produce steel, such as coking and PCI coal, are subject to price fluctuations that could increase Metinvest's costs of production*".) Metinvest sells excess iron ore and coke products (not needed in its own production) externally, diversifying its revenue base. Metinvest believes that its ability to source raw materials internally or from affiliates provides it with greater stability of operations, better quality control and improved flexibility in planning its steel production. In addition, management believes that vertical integration enables Metinvest to achieve economies of scale and reduce per unit costs.
- **Strong market position and increasing capacity.** Based on 2017 production, Metinvest was one of the world's fifteen largest iron ore producers (excluding Chinese and Indian companies), based on management estimates and published operating results of the largest iron ore-producing companies. In addition, according to the World Steel Association, in 2016, Metinvest was the 37th largest crude steel producer in the world. Metinvest is the largest producer of iron ore and crude steel in Ukraine, according to Metal Expert. Metinvest produced 44.5 per cent. of the aggregate volume of iron ore concentrate (total concentrate, including concentrate used for further reprocessing into pellets) in Ukraine in the year ended 31 December 2017, according to Metal Expert. In the year ended 31 December 2017, Metinvest's share in Ukraine's metallurgical coke production was 54.0 per cent., according to UkrKoks. Similarly, in the year ended 31 December 2017, Metinvest's market share was 35.8 per cent. of the total volume of Ukraine's crude steel, according to Ukrmetallurgprom and based on management estimates. Management believes that Metinvest's strong market position, combined with strong historical cash flow generation, will enable it to capitalise on the expected mid- to long-term growth of the export and Ukrainian markets for its products. As a result of active mergers and acquisitions and after the acquisition of Ilyich Steel, Metinvest's annual production capacity has reached 9.6 million tonnes in crude steel, 8.0 million tonnes in hot rolled flat products and 2.6 million tonnes in hot rolled long products (excluding the assets in the temporarily non-controlled territory of Ukraine but including the assets in Italy, Bulgaria and the United Kingdom).
- **Low cost producer.** Management believes that Ukraine is one of the lowest-cost regions for steel production in the world, enabling Metinvest to benefit from lower production costs compared to some of its competitors elsewhere in the world. In particular, Metinvest benefits from:

- **Secure access to raw materials.** As at 31 December 2017, Metinvest was more than fully self-sufficient in iron ore for its steel producing assets, based on production capacity. Currently, Metinvest is cooperating with the state-owned Ukrainian railway operator, Ukrzaliznytsia, to eliminate bottlenecks at some of the major railway routes to Mariupol, including Kamysh Zarya–Volnovakha, enabling Metinvest to use more efficiently the production potential of its steelmaking assets located in Mariupol. See also "*Risk Factors—Risks Relating to Metinvest—Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so*".
- **Low transportation and logistics costs with prime location of assets.** Metinvest's production facilities benefit from access to relatively low-cost sea and rail transport. Azovstal and Ilyich Steel are located in the port city of Mariupol on the Sea of Azov. Azovstal operates its own port facilities. Because of increased shortage of rolling stock in Ukraine, Metinvest plans to minimise risks related to logistical operations. In particular, Metinvest has extended its cooperation agreement with Lemtrans, a major private Ukrainian railway operator and a related party to Metinvest, until the end of 2020. According to the terms of the agreement, Lemtrans will cover approximately 50 per cent. of Metinvest's demand in open-top cars by providing its own rolling stock. Metinvest's favourable geographic location also allows for the relatively inexpensive shipment of its products to Ukrainian, European, the CIS, Middle Eastern and North African markets. Since March 2017, Metinvest has broken off its logistics links with the assets which are located in the conflict area. See also "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*" and "*Risk Factors—Risks Relating to Metinvest—Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so*".
- **Low labour costs.** Ukraine currently has relatively low labour costs, including lower pension obligations (which are paid by employers in the form of regular payroll-related contributions to the state pension fund), particularly when expressed in U.S.\$ and Euro as compared to some other steel producing countries and regions such as the United States, Western Europe, Japan and South Korea. In addition, Metinvest is continuously working to optimise its headcount.
- **Capital expenditures to maintain cost competitiveness.** Metinvest is investing in modern technology in order to reduce production costs and maintain its cost competitiveness. Metinvest currently employs pulverised coal injection (PCI) technology in the blast furnace shop of Azovstal and also began building a new continuous casting machine (CCM-4) at Ilyich Steel. Metinvest plans to modernise a sinter plant at Ilyich Steel and a number of blast furnaces at Ilyich Steel and Azovstal. These projects aim to increase operating efficiency and cut production costs in addition to reducing emissions harmful to the environment. Metinvest continues to invest in upgrading its equipment and employing new technologies in the mining segment in order to improve the Group's operational efficiency and financial performance. Among others, Metinvest invested in a crushing and conveying system at Northern GOK and Ingulets GOK, in addition to the major overhaul of the pelletising machine, Lurgi 552A, at Northern GOK. Moreover, in October 2017, Central GOK finished the reconstruction of its pelletising plant, which permits the production of pellets with homogenous size and of higher endurance, enabling Metinvest to charge higher price premiums.
- **Growing geographical diversification.** Management believes that Metinvest is uniquely geographically positioned to benefit from access to the mature markets of Western Europe and North America, following its acquisitions in those regions in the last eight years. Management also believes this places Metinvest in

a strong position to access the growing markets of Eastern Europe, the Middle East and North Africa. Metinvest also aims to enter a new sub-segment, DRI grade pellets. The first commercial production is expected to commence in 2019-2020 and would expand and diversify Metinvest's geographical sales by increasing shipments to the Middle East and Africa, and North America.

- **Access to Ukrainian and export markets with the potential for high growth in the long term and broad product range.** Management believes that Metinvest has a leading market position in a broad range of products and expects reasonable long-term growth in export and Ukrainian markets, including sales of iron ore for the global and Ukrainian steel-producing sectors. Ukraine's manufacturing, agriculture and construction sectors are well-positioned for growth in the next decade on the background of increasing fixed asset investments. Management also believes that Metinvest's diversified steel product range reduces Metinvest's exposure to fluctuations in demand for any particular steel product and consequently reduces its reliance on the performance of any particular steel-consuming industry.
- **Diversified end customer base.** Metinvest exports a substantial portion of its steel products to more than 1,000 customers in over 75 countries, principally in Europe, the CIS, the Middle East and Africa, North America and South East Asia. Sales of steel products outside Ukraine accounted for 75 per cent. of Metinvest's total metallurgical segment sales in the year ended 31 December 2017. Metinvest's customers operate in a number of industries, including steelmaking and rolling, pipe-making, construction, shipbuilding, engineering, energy and automobile production. Management believes that Metinvest's diversified customer base contributes to the stability of its revenue base and margins, provides it with additional growth opportunities (in particular, in the developing markets of the Middle East, South East Asia, the CIS and China) and reduces Metinvest's reliance on the economy of any single market or performance of any particular industry.
- **Experienced management team.** Metinvest's senior management team combines extensive industry and market experience with financial and management expertise, and includes individuals who have been involved in Metinvest's business for an average of between five and ten years. At the operational level, Metinvest has developed, and continues to refine, an improved management structure that is focused on enhancing accountability and decision-making processes. Equipped with international experience and advanced business qualifications, the management team's ability to improve the performance of the Issuer's assets is evidenced by Metinvest's increased operating efficiency implemented through various cost reduction measures despite the highly volatile current operating environment (see "*Management—Metinvest's Management Team*").
- **Strong corporate governance.** Metinvest recognises the importance of strong corporate governance and aims to develop its corporate structure in accordance with international best practices. The Issuer has a supervisory board (the "**Supervisory Board**"), which advises the Management Board and is responsible for approving a number of significant decisions related to the Group's operations, including Metinvest's long-term business strategy and annual business plans. The Supervisory Board currently consists of ten members, of whom seven are appointed by the joint meeting of System Capital Management Limited and Clarendale Limited, and three by companies of the SMART Group. In line with best practices in corporate governance, the Supervisory Board has several committees including the Strategy and Investments Committee, including the Technological Sub-committee, Audit and Finance Committee, Health, Safety and Environmental Committee and the Appointments and Compensations Committee.

Strategy

In 2017, the Group updated its corporate and technological strategy. Despite the changes in Metinvest's operations associated with the Seized Assets, Metinvest remains committed to its strategic goals.

- **Sustaining a competitive advantage in steelmaking by increasing operational efficiency and vertical integration.** Metinvest intends to seek competitive advantage and to enhance its profitability and security of supply by increasing vertical integration through the following means.
 - ***Increasing operational efficiency and achieving best practices in steelmaking through focused investments in advanced technologies.*** Metinvest plans to maximise the efficiency of its operating facilities and use of resources through the use of advanced know-how and operating efficiency projects to increase production volumes, develop new products, optimise the structure of product portfolio, improve quality, reduce emissions and costs, and enhance safety:
 - ***Investing in new, state-of-the-art steelmaking technologies.*** Metinvest invests in new, state-of-the-art steelmaking technologies. In 2016, the implementation of a pulverised coal injection ("PCI") project was started at Azovstal. Currently, PCI units have been launched at blast furnaces No. 4 (November 2016) and No. 2 (September 2017). It is also expected that a PCI unit will start to operate at blast furnace No. 3 in the third quarter of 2018. The implementation of PCI technology will allow Azovstal to considerably reduce the consumption of natural gas and coke by replacing them with cheaper PCI coal. Metinvest also plans to build new air blocks at Azovstal and Ilyich Steel, and intends to implement various environmental projects, including the modernisation of a sinter plant at Ilyich Steel and the major overhaul of several blast furnaces at Azovstal and Ilyich Steel, aiming to reduce harmful emissions.
 - ***Further modernisation of the existing asset base.*** Metinvest intends to invest in existing assets to optimise production processes, to increase the diversity of its product mix and to improve its cost competitiveness. By the end of 2018, Metinvest plans to complete the construction of a casting continuous machine (CCM-4) at Ilyich Steel. The launch of CCM-4 will enable Metinvest to modernise its method of casting steel ingots, to reduce the production costs of semi-finished products by reducing metal losses and energy consumption, in addition to increasing the production of crude steel and finished steel products. As part of its modernisation programme, Metinvest intends to upgrade its hot strip mill and cold rolling shop at Ilyich Steel, as well as its rail mill at Azovstal. These projects will allow Metinvest to improve the quality of and expand its finished steel product portfolio. For example, Metinvest's hot-rolled coils production weight has increased due to the completed modernisation of Metinvest's mill coiler, which is the first stage of the hot strip mill upgrade at Ilyich Steel. Part of Metinvest's corporate and technological strategy is the construction of crusher and conveyor systems at Northern GOK and Ingulets GOK, and of floatation a system at Northern GOK, and the upgrade of beneficiation and pelletising facilities at Central GOK, investments which will allow the production of high-premium DRI grade pellets. In 2017, Northern GOK also began a major overhaul of the pelletising machine Lurgi 552A.
 - ***Continue improving Metinvest's self-sufficiency in raw materials.*** Metinvest seeks to increase and diversify its captive base for high-quality coking coal, which is an important factor in strengthening its vertical integration. Metinvest also seeks to pursue efficient supply strategies for other key raw materials including high-quality coking coal, PCI coal, ferroalloys and scrap. Due to the loss of control over Krasnodon Coal and the increased quality requirements for coking coal and coke, Metinvest diversified the sources for its coking coal purchases. More specifically, Metinvest started to import coking coal from Canada and Australia, in addition to its traditional coking coal import sources such as Russia and the United States. Metinvest also plans to optimise the structure of its coking coal purchases as it increases intercompany coal purchases from United Coal and its purchases by rail from suppliers in its nearest markets, including Ukraine.

- ***Increase production capacity by growing organically and by pursuing selective acquisition opportunities.*** Metinvest seeks, in the long term, to increase its production capacity by growing organically and by pursuing selective acquisition opportunities. Metinvest intends to enhance its cost competitiveness by maximising the utilisation of its existing capacity, by expanding the capacity of its steel and coking coal production facilities and optimising production of iron ore concentrate. In the long term, Metinvest expects to continue its structured approach to acquisitions to facilitate its strategy of vertical integration and improve its steel product mix, including through reducing its share of semi-finished product offerings. In its core business areas, Metinvest may consider acquisition opportunities to gain access to additional sources of raw materials or to production facilities with higher-margin products.
- ***Establish and sustain a continuous improvement culture.*** Metinvest is committed to establishing a culture of continuous improvement. In 2015-2017, it continued to implement its Continuous Improvement Programme ("**CIP**") based on Lean principles. The aim of the CIP is to train and incentivise employees to identify and eliminate inefficiencies. The targeted improvements focus on repair and maintenance optimisation, productivity, cost reduction, quality improvement and working capital optimisation. In 2016, the operational improvements yielded variable costs savings of U.S.\$187 million in the metallurgical segment and were immaterial in the mining segment. In 2017, the operational improvements yielded variable costs savings of U.S.\$8 million in the metallurgical segment and U.S.\$92 million in the mining segment, respectively.
- ***Increase personnel productivity.*** Metinvest seeks to increase its operating efficiency by managing headcount, outsourcing non-core operations (such as repair and maintenance and other support functions) and streamlining administrative structures.
- **Strengthening its position in key strategic markets. Metinvest intends to strengthen its position in key strategic markets by focusing on finished products and differentiating finished products for particular requirements.** This is expected to result in broader product lines, increased sales in markets with strong demand for finished products, and enhanced long-term customer relationships and service. Metinvest has faced numerous anti-dumping investigations from several countries during the last three years. Although most of these investigations did not have a substantial impact on Metinvest's financial condition, anti-dumping measures imposed by the European Union on hot rolled flat steel products originating from certain countries, including Ukraine, has effectively barred almost 700 thousand tonnes of imported hot-rolled coils from Ukraine. Consequently, Metinvest had to diversify part of its volume sales to other markets, including the Middle East, Africa and Far East markets. To mitigate the effects of these anti-dumping measures, Metinvest increased its strategic investments that focus on downstream products, including cold-rolled, galvanised coils and hollow sections.
- ***Increasing its focus on finished products.*** Metinvest aims to increase its production and sales of high value added, or premium, products to penetrate premium markets. In 2017, management finalised updating the Group's corporate and technological strategy. Metinvest will focus on its flat products in the medium term, mostly hot-rolled, cold-rolled and coated coils. In 2017, Metinvest continued its strategic investments in CCM-4 at Ilyich Steel, completed the installation of a new down-coiler and hot-strip mill to increase coil weight and initiated a major revamp to improve the quality and the product mix of hot-rolled coils. Metinvest's high value added steel products accounted for 42 per cent. of its total steel products external sales in 2017. In the iron ore business, Metinvest's goal is to minimise shipments of iron ore concentrate to China and increase production of higher-margin pellets, focusing on European customers. In 2017, Metinvest achieved substantial progress in the production of 70.5 per cent. Fe content concentrate and is planning to produce experimental DRI-grade pellets in 2018. In 2017, Metinvest approved an investment project to upgrade two pelletising machines at Northern GOK

in order to achieve the pellets specification stipulated by Atlantic Basin Premium (Platts). In 2017, 65 per cent. Fe pellets constituted 54 per cent. of the total pellets external sales, an increase of 16 per cent. compared to 2016.

- ***Improving product portfolio mix.*** In 2016, Metinvest initiated a long-term partnership with the local coater Modul-Ukraine. Under the partnership's terms, Metinvest provides reliable supply of cold-rolled coils to increase its partner's production of galvanised and colour-coated coils. In 2017, Metinvest initiated a long-term cooperation programme to increase the production of galvanised coils with Unisteel, LLC (Ukraine), which operates a galvanising line with production capacity of up to 100 thousand tonnes per year. In January 2018, Metinvest entered into a sales and purchase agreement for the acquisition Unisteel LLC, the completion of which is currently subject to the fulfilment of several conditions precedent. Both projects aim to increase the sales of higher value added products in the Ukrainian market. Under its new product strategy, Metinvest will continue to pursue opportunities in the segments of hollow sections (construction tubes) cold-rolled and coated products to improve profitability and increase sales in the Ukrainian market. In 2017, Metinvest began cooperating with Dneprovskiy Iron & Steel Works and it was agreed that a part of the plant's steel products will be sold through Metinvest's distribution facilities. This partnership will allow Metinvest to partially mitigate the negative effects of losing control over Yenakiieve Steel, given the similarity of the product portfolios of Dneprovskiy Iron & Steel Works and Yenakiieve Steel.
- ***Increasing sales of steel products in the Ukrainian and regional markets.*** Metinvest is well-positioned to capitalise on the expected growth in demand for finished products in the Ukrainian and other regional markets in the long term. Due to the military conflict in the certain parts of the Donetsk and Luhansk regions of Ukraine, Ukrainian steel demand collapsed in 2014-2015, reaching its lowest levels since Ukraine's independence from the Soviet Union. In 2016, the situation stabilised, and the industrial production and construction sectors have slightly improved. The apparent consumption of steel products in Ukraine increased by 23.0 per cent. in 2016 and 6.1 per cent. in 2017, according to Metal Expert. As the largest supplier of steel products in Ukraine, Metinvest is well-positioned to increase its sales to the Ukrainian market as the Ukrainian industrial production and construction sectors improve. In 2015, Metinvest established representative sales offices in Poland and Spain. These offices will focus on strengthening Metinvest's cooperation with its local steel product customers in a more responsive and efficient manner. As part of the reorganisation, Metinvest-SMC became the main seller of steel products.
- ***Building long-term customer relationships and delivering high-quality customer service worldwide.*** Metinvest seeks to become the preferred supplier of steel products for its key customers by building strong relationships through long-term framework contracts, as well as targeting key industries and markets, integrating its products with end-users, providing customer technical support and strengthening the Metinvest brand by continuing to build a reputation for quality and reliability. Specifically, Metinvest was a co-founder of The Ukrainian Steel Construction Association ("**UkrSCA**") in 2013. The creation of UkrSCA is intended to contribute to the development of the Ukrainian steel market. Metinvest, as a member of the Ukrainian Steel Construction Centre ("**USCC**"), is actively involved in the expansion of the steel construction market and assisting steelwork fabricators in exporting their products to nearby markets. In addition, USCC has introduced European building codes for structural steelwork which are compliant with EU construction standards. Furthermore, Metinvest commissioned a new shot blasting and priming facility at Metinvest Trametal, an Italian re-rolling operation of the Group specialising in the production of hot-rolled plates. The line was put into serial production following the completion of performance tests at the end of March 2016. This helped

improve Metinvest's value proposition to its customers in the shipbuilding segment and improve sales of higher value added products. In 2017, Metinvest approved its new sales and distribution strategy for the European market with a focus on end-user customers and aims to develop additional services through steel service centres (either wholly-owned or under partnership agreements). In 2017, Metinvest launched a customer relationship management ("CRM") initiative, aimed at streamlining sales, production and delivery processes, improving its value proposition, enhancing communications and inviting more feedback from its customers with the ultimate goal to improve overall customer experience.

- **Achieving business excellence through the systematic use of outstanding practices in managing the Group and achieving results.** Metinvest seeks to manage its operations more efficiently by transforming its operating model, creating a unified corporate culture of employee commitment and efficient business processes and maintaining transparency of operations and corporate responsibility.
- ***Developing a new operating model.*** Metinvest believes that leveraging the advantages of integration is the key to market leadership. Metinvest aims to manage every link in the value chain: from mining and processing iron ore and coal to making and selling semi-finished and finished steel products. Metinvest established a new Operations Directorate based on its Mining and Metallurgical Segments on 1 September 2016. The core objective of the transformation is to ensure close cooperation between the Group's mining and metallurgical production assets and centralise the management of all production processes. This organisational structure also prioritises client relationships by merging Metinvest's segmental sales units into a single sales function, whose head will report directly to the General Director. Metinvest has also centralised its other functions, such as procurement and logistics, into a supply chain function within the managing company. Metinvest implemented a centralised Sales and Operational Planning function, which is intended to provide Metinvest with a more efficient and transparent planning process, and help it to identify and implement cost-effective solutions.
- ***Creating a unified corporate culture and maximising employees' commitment.*** While operating in multiple locations, Metinvest seeks to create a unified corporate culture. Metinvest launched the Corporate University, a unified training system for Metinvest's personnel, and the Leadership Academy, a specialised development programme for high-potential managers. Both are tailored to Metinvest's strategy of seeking to unify its corporate culture. Metinvest is also developing its talent management system. For example, at Azovstal, selected key managers were seconded to leading producers in South Korea and Germany. Metinvest continues to implement a series of human resources programmes to train production workers in the use of new technologies and development of their leadership skills, which is expected to improve the skills of line managers, and improve the transparency of personnel performance evaluations and the remuneration policy.
- ***Creating unified and efficient business processes.*** Metinvest is standardising and automating its business processes through enhancements to its data processing ("SAP") and enterprise resource planning system ("ERP"). Having installed a SAP framework and completed the concept design for pilot implementation, Metinvest is implementing a SAP system at certain of its plants (Ingulets GOK, Central GOK and Ilyich Steel). SAP's installation at the Azovstal plant is planned for 2018.
- ***Maintaining transparency of operations and corporate responsibility.*** Metinvest intends to continue to retain and build an experienced and motivated professional management team and maintain the transparency and efficiency of its management system through high corporate governance standards and setting and retaining key performance indicators. Metinvest also publishes social responsibility reports within the framework of its global reporting initiative,

which provides details of how Metinvest fulfils its responsibilities as a corporate citizen by engaging in a variety of activities that contribute to the creation of a better society.

History

The Issuer was incorporated as a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid* or *B.V.*) on 21 May 2001 under the laws of The Netherlands and has its corporate seat (*statutaire zetel*) in Rotterdam, The Netherlands. Its registered address is Nassaulaan 2A, 2514 JS 's-Gravenhage, The Netherlands.

In October 2004, as part of a comprehensive reorganisation of the SCM Group, the Issuer became the ultimate holding company of the Metinvest group. The main purpose of the restructuring was to streamline the various businesses of the SCM Group by establishing separate holding companies for each major area of the SCM Group's operations with the aim of increasing the value of each business and improving transparency and corporate governance across each business line. The Issuer was designated as a holding company for the SCM Group's mining and steel business and was wholly owned by the SCM Group until November 2007. The majority of the entities within newly-formed Metinvest had been controlled by the SCM Group since the early 2000s. As a result of the reorganisation, the SCM Group transferred to the Issuer direct or indirect control over all of its steel, iron ore, coal and coke production assets, as well as related sales and logistics companies.

In 2007, the Issuer acquired 82.46 per cent. of the share capital of Ingulets GOK.

In 2008, the Issuer, indirectly through its subsidiaries, completed the acquisition from the Malacalza family of the entire equity interest in Metinvest Trametal, located in Italy, and its wholly owned subsidiary Spartan UK, located in the United Kingdom. These acquisitions were undertaken in order to expand Metinvest's operations in Western Europe, which previously comprised an Italian rolling mill, Ferriera Valsider. These acquisitions increased Metinvest's annual plate production capacity by 0.8 million tonnes and its Western European annual flat products production capacity reached 1.2 million tonnes.

In 2007, the SCM Group negotiated a transaction with the SMART Group whereby the SMART Group was to acquire veto rights over the management of the Issuer (through the acquisition of one additional share in the share capital of the Issuer) and the right to appoint three (out of ten) members of Metinvest's Supervisory Board and Metinvest was to acquire control over Makiivka Steel and Promet Steel. The transfer of shares in Promet Steel was completed in December 2009 following the receipt of approvals from competition authorities in various jurisdictions. Metinvest also acquired control over Makiivka Steel through the right to appoint the members of Makiivka Steel's management. In October 2010, Metinvest acquired 90.18 per cent. of the share capital of Makiivka Steel.

In 2008, Metinvest acquired 100 per cent. of the share capital of Inkor Chemicals, the only producer of refined naphthalene, phenols and cresols in Ukraine and one of the largest producers of naphthalene in Europe.

In 2009, Metinvest acquired 100 per cent. of the share capital of United Coal, a coal producer located in the United States.

In 2010, Metinvest transferred its entire interest in the share capital of Kryvyi Rih Central Mining Machines Repairing Plant, Kryvyi Rih Central Mining Equipment Plant, Avlita and Marine Industrial Complex to the SCM Group. It also acquired, through a series of transactions, a 96 per cent. effective interest in the share capital of Ilyich Steel. During 2011-2016, Metinvest's effective interest in the share capital of Ilyich Steel increased from 96 per cent. to 99.32 per cent. As part of the acquisition of Ilyich Steel, Metinvest also acquired control over Komsomolske Flux (a large Ukrainian producer of limestone), Kindrativka Refractory Plant (a Ukrainian producer of refractory materials) and a number of ancillary enterprises. In November 2011, Metinvest transferred its entire interest in the share capital of certain agricultural and other companies that it had acquired together with Ilyich

Steel to LLC Harvest Holding, which is part of the SCM Group. Metinvest also transferred its entire interest in the share capital of Kindrativka Refractory Plant to a third party buyer.

In July 2011, Metinvest, jointly with two other investors, acquired from a group of sellers, known as the Industrial Group (the "**Industrial Group**"), a 50 per cent. interest in the Industrial Group's steel and mining business (the "**Zaporizhstal Group**"). The Zaporizhstal Group's holdings included a majority interest in Zaporizhstal, one of the largest steelmakers in Ukraine, and significant stakes in various other entities engaged in the steel and mining sector in Ukraine, including PrJSC "Zaporizhya Iron Ore Plant", Zaporizhia Coke and Zaporizhia Refractories. In July 2012, Metinvest exercised its option (acquired from the Industrial Group in August 2011 for a consideration of U.S.\$30 million) to purchase the remaining 50 per cent. stake in the Zaporizhstal Group for U.S.\$300 million. In August 2012, Metinvest acquired a further 24.9 per cent. interest in the Zaporizhstal Group from one of its co-investors in the initial 2011 transaction for U.S.\$212 million. As a result of these and other related transactions in 2011-2012, Metinvest accumulated an aggregate interest of 99.8 per cent. in the Zaporizhstal Group, including an indirect effective interest of 49.903 per cent. in Zaporizhstal. The total consideration paid by Metinvest for its interest in the Zaporizhstal Group was U.S.\$750 million. As at 31 December 2012, Metinvest's investment in Zaporizhstal was classified as a joint venture due to the fact that strategic financial and operating decisions require participation of and consents from the other shareholders of Zaporizhstal. As of the date of this Offering Memorandum, Metinvest has no definitive plans to increase its equity interest in Zaporizhstal.

In 2012-2013 Metinvest completed a number of acquisitions, including:

- a 9.99 per cent. stake in Yenakiieve Coke;
- an 85.21 per cent. stake in Belgorodmetalloznab, a scrap metal and warehouse logistics company located in Russia;
- a 43.7 per cent. interest in the share capital of Zaporizhia Refractories;
- a 4.73 per cent. interest in the share capital of Promet Steel;
- a 23.5 per cent. interest in the share capital of Central GOK;
- a 15.0 per cent. interest in the share capital of Northern GOK;
- a 3.1 per cent. interest in the share capital of Ingulets GOK;
- a 26.0 per cent. interest in the share capital of Zaporizhia Coke; and
- a 55.1 per cent. interest in the share capital of Donetsk Coke and a further 40.0 per cent. of the share capital of Yenakiieve Coke.

In order to develop an international network of Sales and Distribution Metinvest formed Limited Liability Company Metinvest Distributsiya ("**Metinvest Distribution**") in Belarus, Metinvest Singapore PTE. Ltd. in Singapore, Metinvest Carpathia S.R.L. in Romania; Metinvest Iberica, SL in Spain and Metinvest Polska sp. z o. o. in Poland from November 2013 to June 2015.

In June 2013, Metinvest incorporated Limited Liability Company "Metinvest Mariupol Machining and Repair Plant" as a new company registered in Ukraine to provide maintenance and repair services to Metinvest's metallurgical assets located in Mariupol.

In July 2013, Metinvest signed development agreements with Black Iron, pursuant to which it invested an initial amount of U.S.\$20 million in the development of the Shymanivske Project and the Zelenivske Project during the

period of April to July 2014 by subscribing for a 49 per cent. interest in the share capital of the holding company of Black Iron (Cyprus) Ltd ("**BKI Cyprus**"). In 2014, the Group acquired a 36 per cent. interest in BKI Cyprus for U.S.\$15 million and an additional 13 per cent. interest in BKI Cyprus for U.S.\$5 million. As a result of these transactions, the Group held a 49 per cent. interest in BKI Cyprus. In January 2016, Metinvest sold its entire interest in the share capital of BKI Cyprus to a third party buyer.

In September 2013, Metinvest acquired Limited Liability Company "Dipromet" which was then renamed Limited Liability Company "Metinvest Engineering" and which provides engineering services to the Metinvest group.

In October and November 2013, Metinvest formed United Coal Finance Sarl as a new company registered in Switzerland and Metinvest Investments Limited and Metinvest Capital UK Limited as new companies registered in the United Kingdom to carry out financial transactions.

In February 2014, MetalUkr Holding Limited (Cyprus), which is wholly owned by Metinvest, transferred 78.31 per cent. of Northern GOK, 99.48 per cent. of Central GOK (increasing the Issuer's interest to 99.56 per cent.), 0.25 per cent. of Azovstal (increasing the Issuer's interest to 74.5 per cent.) and 1.21 per cent. of Khartsyzsk Pipe (increasing the Issuer's interest to 93.0 per cent.) to Metinvest as part of the ongoing restructuring.

In June 2014, the Issuer acquired a 99.0 per cent. interest in Metinvest Eurasia, LLC from Metinvest International.

In July 2014, Metinvest acquired 1.89 per cent. of the share capital of Northern GOK from SCM Holdings.

In July 2014, the SCM Group and the SMART Group completed the merger of their metals and mining assets under Metinvest (which started in 2007) pursuant to the terms of a shareholders' agreement dated 7 July 2014. The SMART Group contributed to the statutory capital of Metinvest 100 per cent. of the shares in Trosilia Holdings Ltd. (Cyprus), which indirectly owned 44.78 per cent. of the shares in Southern GOK. Metinvest also holds a direct interest of 0.79 per cent. in Southern GOK, which it acquired from shareholders of Evraz group in June 2014. Furthermore, an additional class B share was issued in July 2014 for the benefit of the SMART Group. As a result, SCM Cyprus' interest in the Issuer is now 71.24 per cent. and the SMART Group's interest is 23.76 per cent. The remaining 5 per cent. interest in the Issuer in the form of class C shares has been acquired from the previous owners of Ilyich Group for the benefit of SCM and the SMART Group. It is the intention of SCM and SMART Group to dispose of the remaining 5 per cent. interest (after receiving any required governmental approvals), such that the ultimate beneficial interest of SCM in the Issuer will be 75 per cent. minus 1 share, and the ultimate beneficial interest of SMART Group in the Issuer will be 25 per cent. plus 1 share.

In the years 2014-2015, Metinvest also incorporated a number of companies, including:

- Limited Liability Company "Metinvest Business Services", a new company registered in Ukraine to provide accounting services to the Metinvest group;
- Limited Liability Company "Metinvest-Promservice", a new company registered in Ukraine to provide maintenance and repair services to the Metinvest group;
- Limited Liability Company "Metinvest Finance", a new company registered in the Russian Federation to carry out trading and financial transactions;
- Limited Liability Company "Social Initiatives Krivoy Rog", a new company registered in Ukraine to implement the Group's social responsibility programmes in Kryvyi Rih; and
- a UK branch of Metinvest B.V.

In January 2016, Metinvest transferred its entire interest in the share capital of BKI Cyprus to a third party buyer for U.S.\$6 million.

On 15 March 2017, Metinvest lost control of the Seized Assets. See "*Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

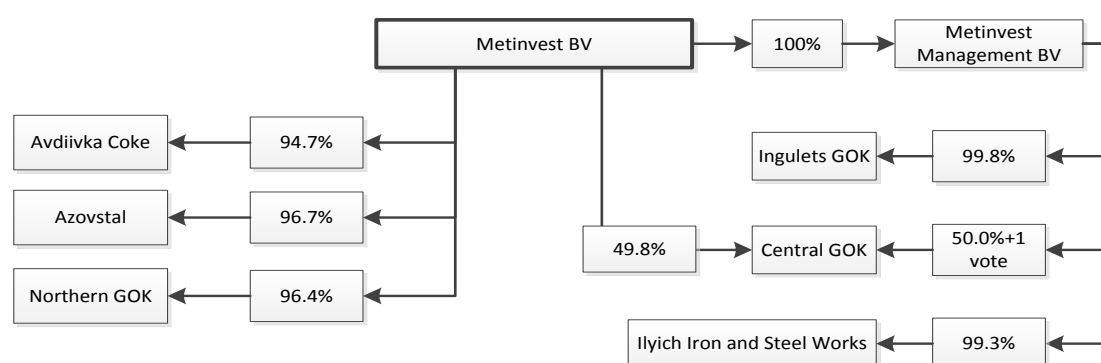
See also "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Summary of Acquisitions and Disposals*" for further information on Metinvest's acquisitions and disposals during the period under review.

In January 2018, Metinvest entered into a sales and purchase agreement for the acquisition of 100 per cent. of the share capital of Unisteel, LLC, a Ukrainian producer of zinc-coated hot-dip galvanised coils with annual production capacity of up to 100 thousand tonnes that is currently insolvent. The completion of the acquisition is still pending subject to the fulfilment of several conditions precedent. Metinvest plans to negotiate with Unisteel LLC's creditors to settle its unpaid debt.

SCM Cyprus owns 71.24 per cent. of the issued share capital of the Issuer. SCM Cyprus is a member of the SCM Group. Mr Rinat Akhmetov is the ultimate beneficial owner of the SCM Group. Adeona Holdings Ltd., Majorone Trading Ltd. and Celebrom Investments Ltd., all part of the SMART Group own 23.76 per cent. of the issued share capital of the Issuer. The SMART Group is beneficially owned by Mr Vadym Novynskyi. Clarendale Ltd. owns 5.00 per cent. of the issued share capital of the Issuer. This ownership stake has been acquired by SCM Holdings, which is a member of the SCM Group, for the benefit of the SCM Group and the SMART Group.

Operational Structure

The following diagram shows a simplified summary of the Group's corporate structure and the Issuer's beneficial ownership in each of the Guarantors as of 31 December 2017, reflecting the establishment of the sub-holding company Private Company with Limited Liability Metinvest Management B.V., a company registered in The Netherlands ("**Intermediate Holdco**"). See "*Listing and General Information—Information Relating to the Guarantors*".

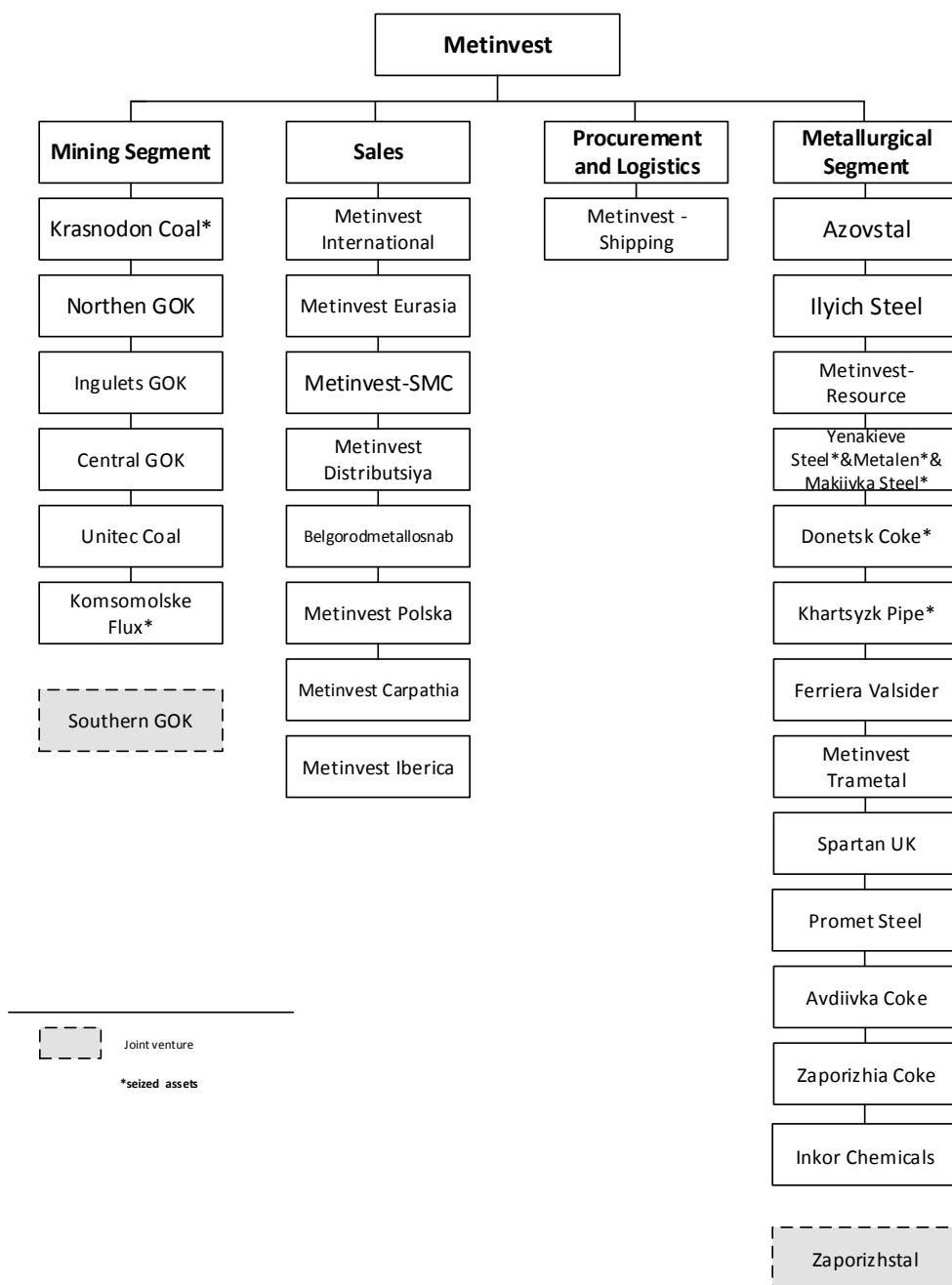


*The Intermediate Holdco will not be a Guarantor under the Notes and may be subject to unwinding in the future. In such case, its assets and its subsidiaries will be transferred to the Issuer.

Metinvest's Reporting Segments

Metinvest's reporting segments are organised in line with its strategy of vertical integration. Metinvest reports two segments (Metallurgical and Mining), reflecting its focus on finished goods. The metallurgical segment concentrates on the production of steel and coke, while the mining segment oversees the development of raw material enterprises and logistics. The production assets within these reporting segments are supported by trading

and logistics assets. The chart below shows the material subsidiaries assigned to each of Metinvest's reporting segments as well as material sales, procurement and logistics Group companies that support these production assets, as of the date of this Offering Memorandum.



Metallurgical Segment

Metinvest's metallurgical segment is responsible for its steel and coke products. Metinvest conducts its steel business primarily through the Azovstal and Ilyich Steel metallurgical plants, the Ferriera Valsider plates and coils mill, the Metinvest Trametal and Spartan UK plate mills and the Promet Steel shapes and bars mills. Metinvest conducts its steel trading and distribution businesses through Metinvest International, Metinvest Eurasia, Metinvest Distribution and Metinvest-SMC. The metallurgical segment also comprises coke-producers Avdiivka Coke and Zaporizhia Coke as well as chemical-producer Inkor Chemicals.

Mining Segment

Metinvest conducts its iron ore extraction and processing business primarily through Northern GOK, Ingulets GOK and Central GOK. Metinvest conducts its coal business through United Coal.

Operations Directorate

Metinvest established a new Operations Directorate based on its Mining and Metallurgical Segments on 1 September 2016 to ensure close cooperation between the Group's mining and metallurgical production assets and centralise the management of all production processes.

Steel Business

Overview

The following table sets forth Metinvest's sale volumes of its products for the periods indicated:

	Year Ended 31 December	
	2016	2017
	<i>(million tonnes)</i>	
Semi-finished products ⁽¹⁾	2.4	3.5
Flat products ⁽¹⁾	6.9	7.4
Long products	1.9	1.2
Coke and chemical products	1.1	1.4

Note:

(1) Including Zaporizhstal resales.

The following table sets forth Metinvest's geographical split of product sales by volume for the periods indicated:

	Year Ended 31 December	
	2016	2017
	<i>(per cent.)</i>	
Europe.....	39%	35%
Middle East and North Africa.....	22%	22%
CIS.....	9%	9%
South East Asia.....	2%	3%
North America	6%	8%
Other regions	2%	1%
Ukraine	20%	23%

Metinvest's integrated model enables it to benefit from lower production costs compared to some of its competitors elsewhere in the world. In particular, Metinvest is self-sufficient in iron ore for its steel operations. This enables Metinvest to benefit from a secure supply of key raw materials and also from relatively low raw material transportation costs. Metinvest controls most of its own logistics, including owning and operating some of its own railcars, and also benefits from access to relatively low-cost sea and rail transport.

Products

The table below shows Metinvest's consolidated sales attributable to its principal metallurgical products for the periods indicated:

	Year Ended 31 December								
	2015			2016			2017		
	<i>U.S.\$ million</i>	<i>thousands of tonnes</i>	<i>% of revenues</i>	<i>U.S.\$ million</i>	<i>thousands of tonnes</i>	<i>% of revenues</i>	<i>U.S.\$ million</i>	<i>thousands of tonnes</i>	<i>% of revenues</i>
Semi-finished products.....	880	2,880	16%	675	2,423	14%	1,448	3,492	20%
Pig iron ⁽³⁾	379	1,467	7%	350	1,392	7%	606	1,689	8%
Slabs.....	274	782	5%	227	711	5%	521	1,146	7%
Square billets ⁽³⁾	228	631	4%	98	320	2%	321	657	4%
Finished products	3,857	8,354	71%	3,778	8,791	75%	4,905	8,536	66%
Flat products	3,084	6,726	57%	2,954	6,854	59%	4,211	7,351	57%
<i>incl. resales</i>	1,098	2,659	20%	953	2,537	19%	1,461	2,781	20%
Long products ⁽³⁾	710	1,562	13%	824	1,937	16%	694	1,185	9%
Tubular products ⁽³⁾	63	66	1%						
Coke products.....	206	1,040	4%	171	1,080	3%	461	1,427	6%
Other products and services⁽⁴⁾.....	464	N/A	9%	403	N/A	8%	597	N/A	8%
Total Segment Sales	5,407	12,274	100%	5,027	12,294	100%	7,411	13,455	100%

Notes:

- (1) Including: (i) metal products purchased from third parties; and (ii) resales of products purchased from Zaporizhstal and other producers.
- (2) Including logistics.
- (3) These figures include the Seized Assets's production up to 15 March 2017, when they were seized.
- (4) Including U.S. \$5 million and U.S.\$2 million of tubular products in 2016 and 2017 respectively.

Metinvest's sales outside Ukraine primarily comprise shapes and bars sold to the construction sector, rolled products generally sold to the shipbuilding and machine-building sectors and pipes for oil and gas production and transportation. In Ukraine, Metinvest sells the majority of its steel products to the construction, railway and pipe-manufacturing sectors. Following its acquisition of Ilyich Steel in 2010, Metinvest has made certain changes to its product mix, for example, increasing its production of coils and flat products and reducing its production of semi-finished products, in order to achieve higher margins.

The following table shows production output of Metinvest's principal metallurgical products for the periods indicated:

	Year Ended 31 December	
	2016	2017
	<i>(thousand tonnes)</i>	
Pig iron ⁽¹⁾	1,230	1,403
Slabs.....	734	1,343
Billets ⁽¹⁾	298	15
Flat products.....	4,385	4,675
Long products ⁽¹⁾	1,918	912
Pipes and rails.....	182	218
Total	8,747	8,566

Notes:

- (1) These figures include the Seized Assets's production up to 15 March 2017, when they were seized.

Production Facilities

Metinvest primarily produces slabs, plates, shapes, rails and bars at Azovstal and pig iron, slabs, plates, coils and pipes at Ilyich Steel. Metinvest also produces plates and coils at Ferriera Valsider, plates at Metinvest Tramelal and Spartan UK and shapes and bars at Promet Steel.

Azovstal

Azovstal is located in Mariupol, approximately six kilometres from Mariupol port. Azovstal owns and operates a marine transportation facility at Mariupol, which provides cabotage transportation of goods from Azovstal to Mariupol port and other Black Sea ports. In the years ended 31 December 2015, 2016 and 2017 Azovstal produced 41.8 per cent, 44.1 per cent, and 55.9 per cent. of Metinvest's total crude steel production (including production of the Seized Assets), respectively.

The supply of raw materials to Azovstal was disrupted at the end of July 2014 when railway lines were partially destroyed due to military action in the Donetsk region. In addition, natural gas supplies to the steel plants in Mariupol were interrupted on 12-14 June 2015 after artillery shelling damaged a key gas pipeline. As a result, in 2015, production of crude steel declined by 239 thousand tonnes period on period to 3,206 thousand tonnes at Azovstal. See also *"Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition"*.

History

Azovstal was established in 1930 as a state-owned enterprise to supply steel to the developing pipe, heavy machinery and shipbuilding industries in the former Soviet Union. Construction of Azovstal's facilities began in 1930. During the period between 1948 and 1953, a complex of rolling mills for the production of rails, heavy shapes and sections was constructed, and, as a result, Azovstal became one of the first Ukrainian integrated iron and steel manufacturers. In 1973, a 3,600 plate steel mill was commissioned and in 1977 the basic oxygen furnace steelmaking plant was put onstream. In 1981, the electric furnace steelmaking plant commenced operations. However, production at the electric furnace steelmaking plant was discontinued in 1994, due to insufficient demand for the special-purpose alloy steel produced at that plant.

In October 1996, pursuant to an order of the State Property Fund of Ukraine (SPF), Azovstal was transformed into an open joint stock company, with the SPF and Azovstal's Organisation of Leaseholders (a cooperative comprising its management and employees) holding 62.1 per cent. and 37.9 per cent., respectively, of Azovstal's share capital. In 1997, Azovstal's Organisation of Leaseholders established Joint Stock Company Trade House "Azovstal" (THA) and contributed its entire shareholding in Azovstal to the share capital of THA. Following an increase in Azovstal's share capital in June 1998, the SPF's interest decreased to 56.5 per cent. and the THA's interest increased to 43.5 per cent. of Azovstal's share capital.

Pursuant to Azovstal's privatisation plan (approved by the SPF on 28 October 1996), the SCM Group acquired 25 per cent. of the share capital of Azovstal from the SPF. The remainder was acquired by Azovstal's employees and management, and also by Server Management Ltd. and Leman Commodities S.A. Lehman Commodities S.A. was later acquired by the SCM Group.

By January 2003, the SCM Group's interest in THA increased to 74.8 per cent. In 2005, Azovstal acquired Open Joint Stock Company Markokhim Coke Plant. Following the reorganisation of the SCM Group, Metinvest now owns 96.74 per cent. of the shares of Azovstal.

Facilities

The following table shows a breakdown of Azovstal's main production facilities by unit for the years indicated:

		Annual Production Capacity	Production		
			Year Ended 31 December		
Main Facilities			2015	2016	2017
			(thousands of tonnes)		
Coke Plant.....	3 batteries ⁽¹⁾	1,543 ⁽²⁾	1,237	1,166	1,279
Blast Furnaces ⁽⁴⁾	4 furnaces	4,619	2,825	3,177	3,777
Basic Oxygen Furnaces.....	2 furnaces	5,300	3,206	3,705	4,265
Continuous Casting ⁽⁵⁾	4 slab casters	4,683	2,732	3,150	3,550
Steel Ingots	3 casting platforms	N/A	474	555	715
Plate Mill ⁽⁶⁾	Mill 3600 3 stands	2,083	658	754	1,003
Rail and Structural Mill ⁽⁷⁾	Reversing mill stand 1,000 and 3 stand mill 800	1,490	114	186	250
Heavy Section Mill	Stand 800 and 3 stand mill 650	1,101	279	272	336
Rail Fasteners Mill.....	6 production lines	228 ⁽⁸⁾	7	7	9
Grinding Ball Mill.....	2 mills	170 ⁽⁸⁾	112	109	105

Notes:

- (1) Metinvest closed coke batteries No. 5, No. 6 and No. 7 in 2012.
- (2) Moist wharf coke, a finished coke product containing 6.0 per cent. moisture, which was discharged from a coking battery, normalised to shipping temperature (quenched with water and processed with inert gas) and not screened.
- (3) Dry coke is produced by the destructive distillation of coal in coke ovens and is used primarily in the manufacture of pig iron.
- (4) From 2014 to 2016, Metinvest carried out extensive capital repairs of blast furnace No. 4 (2nd grade). The blast furnace was put into operation in March 2016. Metinvest then proceeded to implement pulverised coal injection technology at blast furnace No. 4 (2016) and blast furnace No. 2 (2017) and is planning to implement the same technology at the other furnaces. Metinvest is planning to introduce iron ore raw materials screening technology, which will be implemented during the reconstruction of blast furnaces which are specified in the Technological Strategy. In November 2015, due to a lack of orders, blast furnace No. 3 (with production volume of 1,800 cubic metres and annual production capacity of 1.1 million tonnes) was put out of operation. Capital repairs of the above mentioned blast furnace with revamping elements (furnace stack implementation of PCI technology, iron ore raw materials screening technology and the installation of an aspiration system at the casting yard and skip pit (in a similar way to blast furnace No. 4 begin in 2017 and is scheduled to be completed in summer of 2018. See "—Metallurgical Segment Investment Programme".
- (5) Metinvest reconstructed continuous casting machine No. 5 (replacement of mould and oscillator) and intends to reconstruct continuous casting machine No. 3 into a bloom caster.
- (6) Metinvest constructed an accelerated cooling system in plate mill No. 3600 in 2012. See "—Metallurgical Segment Investment Programme".
- (7) Metinvest is planning to reconstruct the Rail and Structural Mill.
- (8) Design capacity value is provided.

Azovstal operates an integrated steel production plant located on a site of approximately 1,000 hectares. Azovstal has a right of permanent use over 967 hectares and all of its production facilities are located on this land, except for its chemical-recovery manufacturing platform and filtration station, which are located on leased land. Azovstal leases the remainder of the land. The production plants consist of coke and chemical production facilities, five blast furnaces, steelmaking facilities (basic oxygen furnaces) and several rolling mills.

Coke production. The coke plant currently consists of three coking batteries with an aggregate annual production capacity of 1.5 million tonnes of wharf coke with a moisture content of 6.0 per cent. Azovstal produced 1.3 million tonnes of dry coke in the year ended 31 December 2017. Azovstal also operates coke and chemical production facilities, including plants producing coal-tar pitch, ammonium sulphate, crude benzol and gas sulphur.

Azovstal commissioned new coke batteries No. 3 and No. 4 in 2003 and 2006, respectively. Azovstal closed the (outdated) battery No. 8 in 2006, and the (outdated) batteries No. 5, No. 6 and No. 7 in 2012. The commissioning of coke batteries No. 3 and No. 4 resulted in an increase in Azovstal's annual wharf coke production capacity by 166,900 tonnes, improvements in coke quality, a reduction in overall production costs, and a reduction in dust and

carbon dioxide emissions by approximately 180 tonnes per year. The annual production capacity of each of batteries No. 3 and No. 4 is 455 thousand tonnes of wharf coke, with a moisture content of 6.0 per cent. each.

Iron production. Azovstal operates four blast furnaces with a total operating volume of 6,953 cubic metres. In 2016, after extensive capital repairs, Azovstal commissioned blast furnace No. 4 with an efficient operating volume of 2,002 cubic meters. The commissioning of the furnace was followed by the implementation of environmental measures, the regeneration of aspiration systems in the casting yards and the skip pit and the replacement of the electrostatic precipitator with a fabric filter. These improvements helped Azovstal to achieve an emission level of 20 mg/m³. In November 2015, due to the lack of orders, blast furnace No. 3 (with a production volume of 1,800 cubic metres and an annual production capacity of 1.1 million tonnes) was decommissioned. Repair works for the above blast furnace with revamping elements began in 2017 and are scheduled to complete in the summer of 2018.

Azovstal produces conversion iron for use in its own steel production. The aggregate annual production capacity of its four blast furnaces is 4.6 million tonnes of iron. Azovstal produced 3.2 million and 3.8 million tonnes of iron in the years ended 31 December 2016 and 2017, respectively. Azovstal's iron production by-products are used by its other production facilities. For example, slag is used to manufacture construction materials and blast furnace gas is used as fuel for furnaces in the rolling mills and boilers of the thermal power plant and the turboblower shop.

Steel production. Until mid-2011, Azovstal produced steel at a basic oxygen furnace plant and an open-hearth plant. In May 2011, Metinvest closed its open-hearth furnaces and transferred its steel production to basic oxygen furnaces. The basic oxygen furnace plant comprises two top-blowing basic oxygen furnaces, a continuous casting plant with four slab casters, three steel refining units, two twin ladle furnaces and a twin vacuum degasser. Since 2011, the manufacture of open-hearth furnace steel (including rails) has been mastered in the basic oxygen furnace plant with casting into ingots. The annual production capacity of the basic oxygen plant is 5.3 million tonnes. In the year ended 31 December 2017, Azovstal produced 4.3 million tonnes of steel, comprising of 3.6 million tonnes of slabs and 0.7 million tonnes of ingots, respectively.

Rolling mills. The rolling mills complex comprises: a plate mill (with an annual production capacity of 2.1 million tonnes), a rail and structural steel mill (with an annual production capacity of 1.5 million tonnes), a heavy section mill (with an annual production capacity of 1.1 million tonnes), a rail fastener mill (with an annual production capacity of 228 thousand tonnes) and a grinding ball mill (with an annual production capacity of 170 thousand tonnes). In the year ended 31 December 2017, Azovstal produced 1.6 million tonnes of rolled products.

Quality control

Azovstal operates a quality management system which complies with the requirements of the ISO 9001:2015 international standard and satisfies the applicable API Specification Q1 (9th edition) requirements. Azovstal's quality management system is also certified by TÜV NORD CERT GmbH (Germany) for compliance with the ISO 9001:2015 international standard. Azovstal is licensed to use the API official monogram for certain certified types of plates. Azovstal's plates have been certified by various international certification associations, including: Lloyd's Register, Germanischer Lloyd, Det Norske Veritas, the American Bureau of Shipping, Bureau Veritas, Registro Italiano Navale (RINA), Nippon Kaiji Kyokai (NKK), the Indian Register of Shipping (IRS), TÜV NORD CERT GmbH, the Shipping Register of Ukraine and the Russian Maritime Register of Shipping. Metinvest's slabs have been certified by Lloyd's Register, the American Bureau of Shipping, Bureau Veritas and the Korean Register of Shipping (KRS). Metinvest's bars, rails and rail fasteners have been certified by the State Enterprise "Certification Body for Automated and Automatic Control Systems and Railroad Transportation Conditions".

During the certification classification process, classification associations carry out mandatory checks of elements of the enterprise's quality control system.

Azovstal's production technology and product quality control is carried out according to the applicable standards, technical conditions, technological instructions and other normative documentation by its quality control

department, which in collaboration with other structural subdivisions of the enterprise departments ensures the functioning of Azovstal's quality management system.

Ilyich Steel

Through a series of transactions during the second half of 2010, Metinvest acquired a 96 per cent. effective interest in the share capital of Ilyich Steel, a Ukrainian integrated steel producer. During 2011-2016, Metinvest's effective interest in the share capital of Ilyich Steel increased from 96 per cent. to 99.32 per cent. Ilyich Steel is located in Mariupol, approximately 23 kilometres from Mariupol port. In the years ended 31 December 2016 and 2017, Ilyich Steel produced 33 per cent. and 41 per cent. of Metinvest's total crude steel production (including production of the Seized Assets), respectively.

The supply of raw materials to Ilyich Steel was disrupted at the end of July 2014 when railway lines were partially destroyed due to military action in the Donetsk region. In addition, natural gas supplies to the steel plants in Mariupol were interrupted on 12-14 June 2015 after artillery shelling damaged a key gas pipeline. As a result, in 2015, production of crude steel declined by 899 thousand tonnes period on period to 2,645 thousand tonnes at Ilyich Steel. See also *"Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition"*.

History

Ilyich Steel was established in 1897 as pipe shop "Nikopol" within the Mariupol mining and smelting society. In 1927, Ilyich Steel started to develop into a diversified metallurgical and partial machine-building enterprise. In the 1930s, Ilyich Steel became an educational centre for qualified personnel at leading Soviet steel plants, such as MMK (Russia), Azovstal and Zaporizhstal.

Between 1954 and 1969, Ilyich Steel's blast furnaces No. 1 and No. 2 were reconstructed, while additional facilities were put in place, being blast furnaces No. 3, No. 4 and No. 5, an open-hearth plant (with the world's largest furnaces at the time), an oxygen-converter plant, a slabbing mill, plants with continuous broadstrip mills with cold and hot rolling, one of the largest sinter plants in Europe and a number of auxiliary shops.

In 1983, its plate rolling mill 3000 commenced production of SAW LD pipes.

During the last two decades, Ilyich Steel developed its electric weld pipe shop and limekiln, as well as three continuous casters, a steel refining unit and an energy station at the oxygen converter plant.

Facilities

The following table presents Ilyich Steel's main production facilities by unit for the years indicated:

		Annual Production Capacity	Production		
			Year Ended 31 December		
Main Facilities			2015	2016 <i>(thousands of tonnes)</i>	2017
Sintering plant	12 sintering machines	12,165	9,523	9,052	10,204
Blast furnaces	4 furnaces ⁽¹⁾	4,678	3,577	3,818	4,164
Limekiln shop	2 furnaces	438	294	305	277
Basic oxygen furnaces	3 furnaces	3,100	2,645	2,736	3,096
Continuous casting	4 Continuous casting machines	3,100	2,447	2,736	3,096
Plate mill	Mill 3000 two stands				
	Mill 1700 with slabbing 1150	6,900	3,302	3,366	3,672
Electric welded pipe shop	2 production lines	135	62	88	87

	Main Facilities	Annual Production Capacity	Production		
			Year Ended 31 December		
			2015	2016	2017
				(thousands of tonnes)	
Electric welded pipe shop 2.....	2 production lines ⁽²⁾	263	0	1	64

Notes:

- (1) BF No. 1 with operating volume of 1033 cubic metres and annual production capacity of 1.0 million tonnes has been out of operation since September 2014.
- (2) Electric Welded Pipe Shop – 2 was entered into operation at the end of 2016.

Sintering plant. Ilyich Steel operates one of the largest sintering plants in Europe, with 12 sintering machines located on a site of approximately 77 hectares in size. The sintering plant produces up to 100 per cent. of the sinter required for the blast furnaces. The annual production capacity of the sintering plant is 12.2 million tonnes. In the years ended 31 December 2016 and 2017, Ilyich Steel produced 9.1 million and 10.2 million tonnes of sinter, respectively.

Iron production. Currently four blast furnaces are in operation with a total operating volume of 7,602 cubic metres. Blast furnace No. 1 (with an operating volume of 1,033 cubic metres and an annual production capacity of 1.0 million tonnes) has been out of operation since September 2014. The annual production capacity of the blast furnaces is 4.7 million tonnes of iron. In the years ended 31 December 2016 and 2017, Ilyich Steel produced 3.8 million and 4.2 million tonnes of iron, respectively. The blast furnaces produce hot iron for the basic oxygen plant and cast pig iron. Pig iron produced at Ilyich Steel has a low content of detrimental impurities, such as phosphorus and sulphur. Ilyich Steel's unit for desulphurisation can lower sulphur content to 0.001-0.003 per cent.

Steel production. Ilyich Steel produces steel at a basic oxygen furnace plant. The basic oxygen furnace plant comprises three basic oxygen furnaces, with an annual production capacity of 3.1 million tonnes. In the years ended 31 December 2016 and 2017, Ilyich Steel produced 2.7 million and 3.1 million tonnes of crude steel, respectively.

Rolling mills. The rolling mills complex comprises several plate mills (with an annual production capacity of 2.4 million tonnes), a coil rolling mill (with an annual production capacity of 3.5 million tonnes) and a cold rolling mill (with an annual production capacity of 1.0 million tonnes). The rolling mills complex is primarily used for plate finishing treatment. In the years ended 31 December 2016 and 2017, Ilyich Steel produced 3.4 million and 3.7 million tonnes of rolled products, respectively.

Quality control

Ilyich Steel has a quality management system. The quality management system has been certified by TÜV SÜD Management Service GmbH for compliance with the requirements of the ISO 9001:2015 international standard and by LLC "Technical and Management Services" for compliance with the requirements of the DSTU ISO 9001:2009 international standard. The quality management system covers all structural divisions of Ilyich Steel involved in the development and manufacture of the main types of finished products.

Ilyich Steel's products are certified by the following recognised classification societies: Lloyd's Register (United Kingdom), the American Bureau of Shipping (U.S.), Germanischer Lloyd (Hamburg), TÜV SÜD Industrie Service GmbH (Germany), the Russian Maritime Register of Shipping (Russia), Bureau Veritas (France), DNV GL (Norway/Germany), RINA (Italy), IRS (India), Turkish Lloyd's (Turkey), the Shipping Register of Ukraine (Ukraine) and Russian River Register of Shipping (Russia).

The Certificates of Compliance cover more than 200 types of flat rolled steel and demonstrate compliance with the requirements of different international standards (including EN, ASTM, JIS, DIN). If rolled products are shipped to

the European Union, Ilyich Steel has the right to stamp the CE-mark on metal products manufactured in conformity with the requirements of the EN 10025:2004 and EN 10219:2006 international standards.

Ilyich Steel has Certificates from TÜV SÜD Industrie Service GmbH, which cover the production of hot-rolled structural sheets and plates, including high-strength quality steel grades according to the EN 10025-1,2,3,4,5 international standards; strips for the manufacture of large-diameter pipes intended for gas and oil pipelines and boiler steels, including high-strength heat and cold-resistance grades according to the EN 10028-3 international standard and cold-rolled steel products according to the EN 10130 international standard; galvanised rolled products according to the EN 10346 international standard; electric-welded water and gas supply pipes of 16-1,168 mm, welded rectangular (15x10 mm; 150x100 mm) and square (15x15 mm; 130x130 mm) hollow sections according to the EN10219 international standard; and steel for pressure vessels which is certified to be in compliance with European Directive 2014/68/EC and AD 2000-Merkblatt W 0. Besides the above, Ilyich Steel has the licence for use of the mark of hot-rolled product compliant with IS 2062.

Product quality control, incoming control of raw materials, scrap, ferroalloys, fuel and refractories are carried out by Ilyich Steel's quality control department. The organisation of certification activity relating to the quality management system and products is coordinated by the certification and standardisation department of the technical division.

Ferriera Valsider

Ferriera Valsider produces heavy plates and hot-rolled coils from concast slabs. It is located in the town of Vallesse di Oppeano in Verona, Italy, which is situated approximately 120 kilometres from the Marghera port. Ferriera Valsider's facilities are located on a site approximately 145 hectares in size, which is owned by Ferriera Valsider.

History

Ferriera Valsider has been part of the steel and rolled products division of Metinvest since 2006. In July 2001, Metinvest acquired 49.0 per cent. of the shares in Ferriera Valsider (previously Databook 3 S.r.l.). In 2006, Metinvest purchased a further 21.0 per cent. of the shares in Ferriera Valsider from Steel Investments B.V., raising its participation in Ferriera Valsider to 70.0 per cent. In December 2012, Metinvest B.V. sold its 70 per cent. stake in Ferriera Valsider to Metinvest Trametal.

Facilities

The following table shows a breakdown of Ferriera Valsider's main production facilities by unit for the years indicated:

			Production		
			Year Ended 31 December		
	Main Facilities	Annual Production Capacity	2015	2016	2017
(thousands of tonnes)					
Plate rolling mill.....	1 mill	400 ⁽¹⁾	170	173	155
Hot rolled coil steckel mill	1 mill	600 ⁽¹⁾	442	455	507

Note:

(1) Capacity depends on the balance between plates and coils within the product mix.

Ferriera Valsider operates a plate rolling mill and a hot-rolled coil steckel mill. The annual production capacity of the plate rolling mill and hot rolled coil steckel mill depends on the balance between plates and coils within the product mix and is approximately 600 thousand tonnes for the hot-rolled coil mill and 400 thousand tonnes for the plate-rolling mill. In the years ended 31 December 2016 and 2017, Ferriera Valsider produced approximately 173

thousand and 155 thousand tonnes of plates and approximately 455 thousand and 507 thousand tonnes of hot-rolled coil, respectively. The production line of the plate-rolling mill is semi-automatic, whereas the production line of the hot-rolled coil mill is fully automated.

Quality control

Ferriera Valsider's quality management system has been certified by DNV GL under the ISO 9001:2000 international standard and DNV GL has also issued Ferriera Valsider with an Approval of Manufacturer certificate for rolled steel products and an OHSAS 18001:2007 certification for the management of Health and Safety in the workplace. Ferriera Valsider also holds a Certificate of Factory Production Control for hot-rolled products and a quality assurance system certificate, in each case, from TÜV.

In 2009, Ferriera Valsider received an Environmental Management System Certificate under the ISO 14001:2004 international standard from Det Norske Veritas and an Integrated Environmental Authorisation from the Environment Sector of the Province of Verona.

Ferriera Valsider's quality control is carried out by its quality control department, which carries out inspections and tests on finished goods at the request of Ferriera Valsider's customers and on raw materials at the request of its sales department.

Metinvest Tramatel

Metinvest Tramatel is a steel plate manufacturer headquartered in Genoa, Italy with a production site in the municipality of San Giorgio di Nogaro (Udine), which is located approximately one kilometre from the Nogaro port and about 30 kilometres from the Monfalcone port. Metinvest Tramatel owns its own facilities, which are located on a site approximately 14 hectares in size.

History

Metinvest Tramatel was established in 1985. Following the acquisition of its production plant at San Giorgio from Metallurgica San Giorgio in 1994, Metinvest Tramatel began to produce heavy plates in 1995, focusing on the Italian market. Between 1996 and 2000, Metinvest Tramatel pursued a strategy of technological modernisation and expansion, including: replacing its existing descaling machine and hot leveller in 1996, which resulted in an improvement in surface quality; overhauling its reheating push furnace in 1998, which resulted in better control of the re-heating process, an increase in productivity and a reduction in the consumption of gas and other consumables; and installing a heat treatment furnace in 1999. Metinvest Tramatel also installed a new furnace with rolls for heat treatment in 2000. This allowed Metinvest Tramatel to normalise plates and therefore expand into the pressure vessel sector and the oil and gas sector, and also to expand its existing product offerings to the construction sector (particularly to "yellow goods" producers) and the shipbuilding sector. From 2001 onwards, Metinvest Tramatel shifted its focus towards other European markets outside Italy, in particular Germany, Austria and the United Kingdom. In 2003, Metinvest Tramatel commissioned a new quarto rolling mill. In 2008, Metinvest Tramatel completed the construction of a new heat treatment furnace. Metinvest acquired Metinvest Tramatel in February 2008. In December 2012, Metinvest Tramatel purchased a 70 per cent. interest in the share capital of Ferriera Valsider from Metinvest B.V.

Facilities

Metinvest Tramatel's quarto (reversing) rolling mill has an annual production capacity of 600 thousand tonnes of plates for use in ship-building, pipe manufacturing and for other industrial purposes. In the years ended 31 December 2016 and 2017, Metinvest Tramatel produced approximately 529 thousand and 540 thousand tonnes of plates, respectively.

In 2016, Metinvest Trametel launched a new module for processing steel plate on quarto plate, which is a shot blasting and priming line with an annual capacity of 100 thousand tonnes. The new module facilitated sales of treated plate to high-value end user customer segments like shipbuilders and manufacturers of complex steel structures.

Quality control

Metinvest Trametel's quality management system has been certified by DNV GL under the ISO 9001:2000 international standard. Metinvest Trametel also holds various other certifications from internationally recognised testing bodies, such as Bureau Veritas, Registro Italiano Navale (RINA), the Lloyd's Register of Shipping, Germanischer Lloyd and the American Bureau of Shipping (ABS). Metinvest Trametel obtained various European certifications for its products (including plates) under the ADW1/AD2000W1 (TUV), Marking CE (EN 10025:2004) and NF-ACIER standards.

Metinvest Trametel's quality control department carries out product quality control and also manages product certifications. The quality control department monitors Metinvest Trametel's products throughout the production process, including monitoring the quality of the input materials used. Mechanical tests on product samples and raw materials are carried out at the in-house test laboratory, which is equipped with destructive and non-destructive testing technologies.

Spartan UK

Spartan UK is a steel plate producer located in the city of Newcastle, England, which is situated approximately 15 kilometres from the port of Sunderland, allowing its products to be shipped to all of the main Northern European markets. Spartan UK's facilities are located on a site approximately 2.8 hectares in size, which it owns.

History

Spartan UK was established in 2001 and has been part of Metinvest since February 2008. Spartan UK's main equipment is its reversing mill, which is a refurbished unit originally manufactured in 1976.

Between 2001 and 2005, Spartan UK pursued a strategy of technical modernisation and expansion. In 2001, Spartan UK revamped its existing plant and digitised its production process. In 2002, Spartan UK added new burners to the main re-heating furnace (increasing productivity by 50 per cent. and reducing specific consumption and gas emissions) and installed a modern water-treatment plant (improving the quality of the water and minimising the discharge of polluted water into the river, as required by environmental regulations). In 2002, Spartan UK also installed a new double-arm slab oxycutting machine and replaced its chain-drive conveyors with new motor-driven conveyors. In 2003, Spartan UK upgraded its cranes to improve the handling of materials inside the plant and fitted its cranes with back-up batteries to improve safety standards. In 2004, Spartan UK installed a new hot leveller for thin plates (reducing cold levelling rework), installed a new automation system to control the rolling process (including load cells and laser thickness measurement) and relocated the main pulpit. In 2017, Spartan installed a new slab furnace with a capacity of 20 thousand tonnes per year.

Facilities

Spartan UK produces plates in a reversing mill using slabs, over 98 per cent. of which are supplied by Metinvest with the remainder sourced from third parties. Spartan UK's annual production capacity is approximately 220 thousand tonnes of plates. In the years ended 31 December 2016 and 2017, Spartan UK produced approximately 197 thousand and 213 thousand tonnes of plates, respectively.

Quality control

Spartan UK's quality management systems have been certified by Vd TÜV under the ISO 9001:2008 international standard. Spartan UK also holds various other certifications from internationally recognised testing bodies including TÜV, PED, CPD, TRD100 and AD2000.

Spartan UK's product quality control is carried out by its quality control department, which also manages its product certifications. The quality control department monitors Spartan UK's products throughout the production process. Mechanical tests on samples of the product as well as the raw material are carried out at Spartan UK's in-house test laboratory, which is equipped with destructive and non-destructive testing equipment.

Promet Steel

Promet Steel is a long steel products manufacturer located in the city of Bourgas, Bulgaria, which is situated approximately 25 kilometres from the Bourgas port. Promet Steel's facilities are located on a site 822 hectares in size, which it owns.

History

Promet Steel was established in 1980 pursuant to an order of the Bulgarian Council of Ministers. Promet Steel's rolling mill No. 300 and the related infrastructure were constructed between 1980 and 1986. Metinvest acquired Promet Steel in 2009.

Facilities

The following table shows Promet Steel's main production facilities by unit for the years indicated:

		Annual Production Capacity	Production		
			Year Ended 31 December		
Main Facilities			2015	2016	2017
<i>(thousands of tonnes)</i>					
Rolling mill No. 300	1 mill	700	329	417	263
Rebar production.....	—	N/A ⁽¹⁾	298	386	240
Section rolling	—	N/A ⁽¹⁾	31	32	23

Note:

(1) Data not available. Capacity depends on the production programme implemented at the facility from time to time.

Rolling mill No. 300 is a medium section rolling mill that produces hot-rolled long steel products, including rebars, rounds and strips angles. Promet Steel operates a continuous production cycle, with four groups of workers working in two shifts. Promet Steel's facilities also include a specialised rebar production facility and section rolling facility, two staves and a finished product warehouse. Promet Steel also owns railway tracks, warehouses, water storage facilities and pump houses near its main facilities.

Quality control

Promet Steel's integrated quality management systems have been certified by SGS-Bulgaria under the ISO 9001:2008, ISO 14001 and OHSAS 18001 international standards. Promet Steel holds various other certifications from internationally recognised testing bodies including TÜV, PED, CPD, TRD100 and AD200. Promet Steel also holds product certifications from TÜV Rheinland/Berlin-Brandenburg for hot-rolled structural steel products, KIWA N.V. for reinforcing steel and LGA Bautechnik GmbH, ELLOT, SIMPTTEST, CARES, Italian Norm D.M., CERTIF/LNEC, UkrSEPRO and class PC52 (according to Romanian standard STAS) for reinforcing

steel bars. In addition, Promet Steel has received product conformity certificates from internationally recognised testing bodies, such as TUV Rheinland Group, LGA Bautechnik GmbH, KIWA Product Certificate/KOMO, SIMPTTEST, ELOT, CERTROM, Servizio Tecnico Centrale, CERTIF/LNEC and NISI.

The quality control department, which is supported by Promet Steel's laboratory, monitors Promet Steel's products throughout the production process, including monitoring the quality of input materials used.

Zaporizhstal Joint Venture

Zaporizhstal is a fully integrated iron and steel producer located in the city of Zaporizhia, Ukraine. Zaporizhstal has an annual production capacity of 4.2 million tonnes of pig iron, 4.1 million tonnes of crude steel and 3.7 million tonnes of rolled products.

Through a series of transactions between July 2011 and August 2012, Metinvest acquired an indirect effective interest of 49.903 per cent. in the share capital of Zaporizhstal. As the strategic financial and operating decisions relating to Zaporizhstal require the participation and approval of Zaporizhstal's other shareholders, Metinvest's investment in Zaporizhstal is classified as a joint venture. Capacity volumes and operating results in respect of Zaporizhstal set out below are stated in full, notwithstanding the fact that Zaporizhstal is classified as a joint venture and not as a subsidiary of Metinvest.

History

Zaporizhstal was founded in 1931 and produced its first pig iron product in 1933. In 1935, the first open-hearth furnace was commissioned and in 1937, the first slabbing mill was also commissioned. In the following two years, the first cold-rolled and hot-rolled steel workshops were constructed and put into operation.

In 1962, the first iron-mould foundry shop in Europe was commissioned at Zaporizhstal. A year later, a unique cold-rolling mill "2800" was constructed for the production of carbon, alloy and stainless steel sheets. In 1974, Zaporizhstal was an expert producer of ground and polished steel plates. In the same year a tandem open-hearth furnace was commissioned. In 1997, Zaporizhstal was re-organised as an open joint stock company.

In 2011, a pulverised coal injection complex was commissioned. The introduction of this energy-saving technology eliminates the use of expensive natural gas and partially reduces the consumption of coke in iron production.

In 2013, a new sintering machine No. 1, with a state-of-the-art gas-purification system, was commissioned at Zaporizhstal.

In 2014, the reconstruction of blast furnace No. 4 was completed.

As a result of the reconstruction, the productivity of the furnace increased by 11 per cent., from 1,000 thousand tonnes to 1,112 thousand tonnes per year. Also during the reconstruction, the furnace was equipped with aspiration systems for iron tapping and for raw material charging, which ensure full compliance of the furnace operation in accordance with International environmental standards. The total project cost amounted to U.S.\$60 million. The potential savings of the project are approximately U.S.\$119 million with a payback period of 17 months.

See also "*—Legal Proceedings*".

Facilities

Zaporizhstal operates an integrated steel production plant located on a site of approximately 556 hectares. The production plant consists of a sintering plant, four blast furnaces, steelmaking facilities (open-hearth furnaces) and several rolling mills.

The following table shows a breakdown of Zaporizhstal's main production facilities by unit for the years indicated:

	Main Facilities	Annual Production Capacity	Production		
			Year Ended 31 December		
			2015	2016	2017
			<i>(thousands of tonnes)</i>		
Sintering Plant.....	6 sintering machines	5,986	5,978	5,630	5,853
Blast Furnaces Shop	4 furnaces	4,500	3,808	3,606	3,795
Open Hearth Furnaces.....	9 furnaces	4,073	3,979	3,891	3,926
Slabbing Mill	1 mill	4,430	3,517	3,537	3,433
Hot Rolling Mill.....	Continuous hot strip mill	3,689	3,428	3,469	3,337
Cold Rolling Mills	2 mills	1,122	935	955	923
Tinplate production.....	2 continuous cold strip mills	50	5	7	9
Roll-forming Mill.....	3 mills	500	15	20	31

Notes:

- (1) Capacity volumes and operating results in this table are stated in full for the years indicated, notwithstanding that Zaporizhstal is classified as a joint venture and not as a subsidiary of Metinvest.

Sintering plant. Zaporizhstal operates a sintering plant with six sintering machines located on a site approximately 0.4 hectares in size. The sintering plant produces up to 100 per cent. of the sinter required for the blast furnaces. The annual production capacity of the sintering plant is 6.0 million tonnes. In the years ended 31 December 2016 and 2017, Zaporizhstal produced 5.6 million and 5.9 million tonnes of sinter, respectively.

Iron production. Iron production at Zaporizhstal comprises four blast furnaces with a total operating volume of 6,052 cubic metres. Zaporizhstal produces iron which is used to make high-quality-steel, heavy iron castings and also commercial pig iron. A specific feature of the iron produced by Zaporizhstal is its low content of sulphur and phosphorous, which has created high demand for Zaporizhstal's iron products in the global market. In the years ended 31 December 2016 and 2017, Zaporizhstal produced 3.6 million and 3.8 million tonnes of iron, respectively.

Steel production. The steel production shop was put in operation in 1937. The shop currently comprises nine open-hearth furnaces each with a capacity of 250 to 500 tonnes, with a total steel output capacity of approximately 4.1 million tonnes per year. Steel is produced using hot metal and the scrap-and-ore process. In order to intensify the steelmaking process oxygen, is blown into all of the furnaces. The steel produced includes low-carbon and medium-carbon, structural and ordinary grades and is teamed to form ingots of up to 20 tonnes which are used in the production of steel sheet products. In the years ended 31 December 2016 and 2017, Zaporizhstal produced 3.9 million and 3.9 million tonnes of steel, respectively.

Rolling mills. The rolling mills at Zaporizhstal comprise a slabbing mill (with an annual capacity of 4.4 million tonnes), a hot-rolling mill (with an annual capacity of 3.7 million tonnes), two cold-rolling mills (with an aggregate annual capacity of 1.1 million tonnes) and a roll-forming mill (with an annual capacity of 0.5 million tonnes). In the years ended 31 December 2016 and 2017, Zaporizhstal produced 3.4 million and 3.2 million tonnes of rolled merchant products, respectively.

Quality control

The integrated system of quality management, power efficiency, labour safety and environmental control meets the requirements of ISO 9001:2015, of OHSAS 18001, ISO 14001:2015 and ISO 50001:2011. The quality management system, which meets the requirements of International Standard ISO, has been implemented and certified at Zaporizhstal since 2003, while the integrated system of quality management, labour protection and ecology is developed in accordance with the requirements of International Standards ISO 9001, ISO 14001, OHSAS 18001 and certified since 2008.

Since 2013, the system has been certified according to the requirements of the International Standard ISO 50001:2011. Currently, the system covers the production of sinter, iron, steel slabs made of carbon, low-alloyed and alloyed steel, hot-rolled and cold-rolled stock in coils and sheets, steel strips, roll-formed sections, tin-plates, oxygen, nitrogen and inert gases, and processes management.

The system of quality management, labour protection and environmental control was certified by BUREAU VERITAS certification authorities in accordance with the requirements of ISO 9001:2015, OHSAS 18001: 2007 and ISO 14001:2015.

The energy management system meets the requirements of the ISO 50001:2011 and is certified by the TMS Ukraine certification authority (TÜV SÜD).

Zaporizhia Refractories

Zaporizhia Refractories is one of the largest enterprises in Ukraine specialising in the production of high-quality refractory products and materials. Its products include various types of chamotte, high-alumina products and magnesia products. Zaporizhia Refractories also produces unmoulded refractories. Zaporizhia Refractories sells its products in both domestic and international markets to customers based primarily in the CIS, Europe and Asia.

In the year ended 31 December 2016, Zaporizhia Refractories produced approximately 99.4 thousand tonnes of refractory products (excluding unmoulded refractories), including 47.5 thousand tonnes of chamotte, 12.3 thousand tonnes of high-alumina products and 39.6 thousand tonnes of magnesia products. In the year ended 31 December 2017, Zaporizhia Refractories produced approximately 99.4 thousand tonnes of refractory products (excluding unmoulded refractories), including 47.5 thousand tonnes of chamotte, 12.3 thousand tonnes of high-alumina products and 39.6 thousand tonnes of magnesia products.

Production at Zaporizhia Refractories started in 1933. Its high-alumina products workshop, which is unique in Ukraine, was commissioned in 1961. In 1997, Zaporizhia Refractories underwent a large-scale modernisation, which involved the installation of modern production equipment and the reconstruction of some sections of its workshops. Zaporizhia Refractories was re-organised as a joint stock company in 1995, as a public joint stock company in 2011 and as a private joint stock company in 2016. In 2013, Metinvest acquired a 43.7 per cent. interest in Zaporizhia Refractories. Metinvest now owns 45.39 per cent. of the shares of Zaporizhia Refractories. A further 49.21 per cent. of shares in Zaporizhia Refractories is owned, directly and indirectly, by Zaporizhstal (a joint venture in which Metinvest holds an indirect effective interest of 49.903 per cent.).

Coke Business

Production Facilities

The table below shows production by Metinvest of its principal coke and chemical products for the years indicated:

	Main Facilities	Production		
		Year Ended 31 December		
		2015	2016	2017
		<i>(million tonnes)</i>		
<i>Aydiivka Coke</i>				
Coke	4.0 ⁽¹⁾	1.9	2.3	2.6 ⁽²⁾
<i>Zaporizhia Coke</i>				
Coke	1.4 ⁽¹⁾	0.8	0.8	0.8 ⁽²⁾
<i>Inkor Chemicals</i>				
Napthalene	0.06	0.015	0.017	0.020
Phenols and cresols	0.03	0.002	0.002	0.003

	Main Facilities	Production		
		Year Ended 31 December		
		2015	2016	2017
			(million tonnes)	
Other chemical products.....	—	0.006	0.010	0.010

Note:

- (1) Moist wharf coke, a finished coke product containing 6 per cent. moisture which was discharged from a coking battery and normalised to shipping temperature (quenched with water or processed with inert gas) and was not screened.
- (2) Dry coke is produced by the destructive distillation of coal in coke ovens and is used primarily in the manufacture of pig iron.

In the years 2016 and 2017, Metinvest's total coke production amounted to 4,736 thousand tonnes and 4,325 thousand tonnes, respectively.

Avdiivka Coke

Avdiivka Coke is located in the Donetsk region of Ukraine and is one of the largest coke and chemical plants in Europe (excluding Russia). It sells coke to Azovstal and Ilyich Steel, as well as to customers outside the Metinvest group, such as Zaporizhstal and Dneprovskiy Iron & Steel Works. Avdiivka Coke currently produces coke from its eight coke batteries. In the years ended 31 December 2016 and 2017, Avdiivka Coke's total output of dry coke was 2.3 million and 2.6 million tonnes, respectively, and Avdiivka Coke sold approximately 85 per cent. of its metallurgical coke production to other Metinvest entities.

Avdiivka Coke experienced minor property damage to its non-core assets and disruptions in its electricity supply as a result of damage to transmission lines caused by artillery fire during the military action in parts of the Donetsk and Luhansk regions of Ukraine. As a result, production at these facilities had to be halted. In October 2014, Avdiivka Coke's electricity supply was restored. Production resumed at a reduced pace, however, given the state of the coke batteries after hot conservation, the limited supply of coal and limited deliveries of coke products to the plant which resulted from damage to railway infrastructure in the surrounding area. In 2015, with the resumption of hostilities, the facilities (including the plant, equipment, buildings, road and rail infrastructure) were again damaged by artillery fire. In addition, four high-voltage lines supplying the plant were damaged and supplies of raw materials and rolling stock were repeatedly interrupted by fighting. Since the end of January 2017, Avdiivka Coke completely lost power as a result of military actions. Two coke oven batteries were decommissioned and the plant had to work with five batteries due to interruptions in the external power supply. In April 2017, the plant connected to a new external power transmission line from the controlled territory of Ukraine. Since May 2017, three coke oven batteries have been put into operation and the plant currently operates eight coke oven batteries. See also "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

Avdiivka Coke was privatised pursuant to the amended privatisation plan approved by the SPF on 12 March 1997. Pursuant to the privatisation plan, 9.59 per cent. of the shares in Avdiivka Coke were allocated to the employees and management of Avdiivka Coke, 51.65 per cent. of the shares in Avdiivka Coke were sold at tender to various purchasers, 31.61 per cent. of the shares in Avdiivka Coke were sold at auction to various purchasers and 7.15 per cent. of the shares in Avdiivka Coke were sold on the Ukrainian Stock Exchange to the highest bidder. Metinvest currently holds a 94.72 per cent. effective interest in Avdiivka Coke.

Zaporizhia Coke

Zaporizhia Coke is one of Ukraine's leading coke and chemicals producers, having a full technological cycle of coal processing and recovery of chemical products in coking. Metinvest produces more than 25 types of products and has more than 30 key customers engaged in ferrous and non-ferrous metallurgy, chemical, agricultural and

other sectors. Zaporizhia Coke also sells high-quality coke to Ilyich Steel and Zaporizhstal. Zaporizhia Coke has been part of Metinvest since July 2013 (see "*—History*"), and has been consolidated as a subsidiary of Metinvest since December 2012.

Currently, the plant produces coke from its three coke-oven batteries. In the years ended 31 December 2016 and 2017, total output of dry coke was approximately 0.8 million and 0.8 million tonnes, respectively.

In the years ended 31 December 2016 and 2017, Zaporizhia Coke processed approximately 79 thousand and 94 thousand tonnes of coal tar, respectively, and produced approximately 43 thousand and 51 thousand tonnes of coal tar pitch, respectively. In the years ended 31 December 2016 and 2017, Zaporizhia Coke processed approximately 14 thousand and 12 thousand tonnes of benzene, respectively, and produced approximately 9 thousand and 8 thousand tonnes of premium-grade benzene, respectively. Metinvest currently indirectly holds a 73.7527 per cent. interest in Zaporizhia Coke.

Inkor Chemicals

In August 2008, Metinvest acquired 100 per cent. of the share capital of Inkor Chemicals. Located in Dzerzhynsk, (currently renamed Toretsk) in the Donetsk region of Ukraine, Inkor Chemicals is the only producer of refined naphthalene and phenol and cresol products in Ukraine and is one of the largest producers of naphthalene in Europe. Inkor Chemicals' installed annual production capacity is 60 thousand tonnes of naphthalene and 30 thousand tonnes of phenols and cresols. Inkor Chemicals, together with Avdiivka Coke, controls the full production cycle, beginning with the processing of coal-tar to the acquisition of naphthalene fraction and phenol oil at Avdiivka Coke and finishing with the production of naphthalene at Inkor Chemicals. In 2008, Metinvest installed a new tray packaging line at Inkor Chemicals. In the years ended 31 December 2016 and 2017, Inkor Chemicals produced approximately 17 thousand and 20 thousand tonnes of naphthalene, respectively, and 1.7 thousand and 3.2 thousand tonnes of phenols and cresols, respectively.

Capital Investment Programme

The actual timing and cost of the implementation of Metinvest's investment programme may vary significantly from its estimates and depend on a variety of factors, including security and market conditions, levels of demand for Metinvest's products, the availability of funding, operating cash flow and other factors fully or partially outside Metinvest's control.

Metallurgical Segment Investment Programme

Metinvest spent U.S.\$196 million and U.S.\$275 million on implementing its investment programmes in the metallurgical segment in the years ended 31 December 2016 and 2017, respectively. Metinvest's ongoing and planned investment programmes involve the construction and modernisation of various elements of the steel production process and are aimed at reducing operating costs, increasing production capacity, improving the quality of Metinvest's products and reducing dust and carbon dioxide emissions (see "*—Steel Business—Production Facilities*").

Key investment projects from 2014-2017 include:

- the overhaul of blast furnace No. 4, the replacement of the turbine air blower, the construction of a PCI unit at blast furnace No. 4 and No. 2, the overhaul of blast furnace No. 3, the construction of a PCI unit at blast furnace No. 3, which began in the third quarter of 2017 and is expected to be completed in the third quarter of 2018 at Azovstal; and
- the overhaul of the blast furnace No. 4, the reconstruction of the dust-trapping facilities in basic oxygen furnace No. 2 which was completed, the reconstruction of the sinter plant, which is expected to be

completed in 2020; the construction of continuous casting machine No. 4 is expected to be completed in 2018 and the reconstruction of 1700 hot strip which commissioning is expected in the 2019 at Ilyich Steel.

Currently, Metinvest is not planning any significant investments for Avdiivka Coke.

Metinvest has developed a technological programme, which includes the closure of outdated open-hearth furnaces. As part of this programme, Metinvest closed its open-hearth furnaces at Azovstal in 2011. The remaining open-hearth furnaces at Ilyich Steel were closed in 2014. The programme also envisages casting all steel using continuous-casting machines, upgrading and increasing Metinvest's steel-rolling capacities and securing Metinvest's position in its target markets of long and flat products.

Metinvest also plans to increase its cost-efficiency by building a PCI system at each of its metallurgical plants. Construction of the PCI system was completed in 2012 at Ilyich Steel. The aggregate cost of implementing this project, including the post-construction phase, is approximately U.S.\$140 million. At Azovstal the construction of a PCI unit at blast furnaces Nos. 3 and 4, as the first stage of the project, started in 2014, are expected to be completed in the third quarter of 2018. The aggregate cost of implementing this project is expected to be approximately U.S.\$23 million (of which approximately U.S.\$18 million was spent by 31 December 2017).

Generally, Metinvest is working on increasing energy efficiency at all stages of the production process with a view to reduce its energy cost and improve product quality to gain market share in new premium markets. As a result, in 2017, Metinvest reviewed its Technological Strategy 2030.

Iron Ore Business

Overview

Metinvest conducts its iron ore extraction and processing business primarily through Northern GOK, Ingulets GOK and Central GOK. In the year ended 31 December 2016, Metinvest produced 27.3 million tonnes of merchant iron ore concentrate and pellets, of which 37 per cent. were used internally for the production of steel products and 63 per cent. were sold to third parties. In the year ended 31 December 2017, Metinvest produced 26 million tonnes of merchant iron ore concentrate and pellets, of which 42 per cent. were used internally for the production of steel products and 58 per cent. were sold to third parties. In the years ended 31 December 2016 and 2017, total iron ore production through Northern GOK, Ingulets GOK and Central GOK amounted to 29,640 thousand tonnes and 27,464 thousand tonnes, respectively. In 2017, Northern GOK, Ingulets and Central GOK produced 11,366 thousand tonnes, 11,429 thousand tonnes and 4,669 thousand tonnes of iron ore, respectively, compared to 11,634 thousand tonnes, 12,783 thousand tonnes and 5,224 thousand tonnes, respectively, in 2016.

Based on 2017 production, Metinvest was one of the world's fifteen largest iron ore producers (excluding Chinese and Indian companies), based on management estimates and published operating results of the largest iron ore producing companies, and the largest producer of iron ore and crude steel in Ukraine, according to Metal Expert.

Products

Merchant iron ore concentrate and pellets are generally commodity products and most customers make purchases on the basis of price, including transportation costs. Metinvest processes iron ore into merchant iron ore concentrate and pellets prior to sale. Metinvest's iron ore business is an important part of Metinvest's vertical integration; in the year ended 31 December 2017, 56 per cent. of its sales of iron ore products (by revenue) were to other Metinvest segments. The remaining 44 per cent. of its sales (by revenue) were to third parties in Ukraine, China, Romania, Slovakia, Czech Republic and Poland. In the year ended 31 December 2016, 47 per cent. of its sales of iron ore products (by revenue) were to other Metinvest segments. The remaining 53 per cent. of its sales (by revenue) were to third parties in Ukraine, China, Romania, Slovakia, Czech Republic and Poland.

As at 31 December 2017, Metinvest's main external customers for iron ore included Zaporizhstal (a joint venture in which Metinvest holds an indirect effective interest of 49.903 per cent.), ArcelorMittal Sourcing, U.S. Steel Kosice and Citic Metal.

Metinvest intends to increase its production of pellets, which tend to generate higher profit margins compared to merchant iron ore concentrate (see "*Iron Ore Business Investment Programme*" below).

The table below shows production by Metinvest of its principal iron ore products (excluding production volumes for internal consumption) for the periods indicated:

	Year Ended 31 December		
	2015	2016	2017
		(million tonnes)	
Merchant iron ore concentrate	13.7	10.9	9.3
Pellets	6.7	6.1	5.7
Total	20.4	17.1	15.1

Production Facilities

The following table sets forth Metinvest's production of merchant iron ore concentrate and pellets for the periods indicated:

	Iron Content (as at 31 December 2017) ⁽¹⁾ (per cent.)	Production		
		Year Ended 31 December		
		2015	2016	2017
			(million tonnes)	
Northern GOK				
Merchant iron ore concentrate	66.39	4.8	1.95	3.8
Pellets	64.15	7.7	8.9	7.4 ⁽³⁾
Ingulets GOK				
Merchant iron ore concentrate (magnetic separation)	65.18	6.6	6.4	5.9
Merchant iron ore concentrate (flotation)	67.81	5.0	5.1	4.3
Central GOK				
Merchant iron ore concentrate	68.19	3.7	2.7	2.3
Pellets	65.93	2.3	2.3	2.3

Notes:

- (1) Average iron content achieved in the year ended 31 December 2017.
- (2) Including production volumes for internal consumption.
- (3) Total production including production from Ingulets GOK iron ore concentrate and 6.8 from own ore.

Northern GOK

Northern GOK is one of the largest iron ore mining enterprises in Europe by production, according to Ukrudprom. It produces merchant concentrate with iron ore content of approximately 65.0 per cent.-66.4 per cent. and pellets with iron ore content of approximately 62.0 per cent. – 65.5 per cent. It has an annual iron ore concentrate production capacity of 12.8 million tonnes, including pellet production capacity of 10.3 million tonnes. It is located in the city of Kryvyi Rih in Dnipropetrovsk Oblast, which is situated approximately 460 kilometres from Azovstal and Ilyich Steel.

Northern GOK extracts and processes iron ore to produce pellets and merchant iron ore concentrate. Northern GOK currently mines iron ore from two open pit quartzite fields through a process of drilling and blasting and by

removal of overburden to external dumps. The iron ore is then transported by rail to, and further processed at, on-site crushing, beneficiation and pelletisation plants.

In the years ended 31 December 2016 and 2017, Northern GOK produced 1.95 million and 3.8 million tonnes of merchant concentrate, and 8.9 million and 7.4 million tonnes of pellets (of which 6.8 million tonnes of pellets were produced from own ore), respectively. In the years ended 31 December 2016 and 2017, approximately 53 per cent. and 55 per cent., respectively, of this output was consumed internally by Metinvest's steel production facilities, while the remainder was sold to external customers, respectively.

Northern GOK was privatised in several stages. On 3 August 1999, the SPF approved the amended privatisation plan for the sale of 35.74 per cent. of the shares in Northern GOK at tender, while a 50.0 per cent. plus 1 share stake was retained by the state. In November 2003, LLC Artanic, a company controlled by the SCM Group, acquired 35.74 per cent. of the shares in Northern GOK from unrelated, third party LLC firm Nezalezhnist. In July 2004, the SPF sold its remaining 50.0 per cent. plus 1 shareholding in Northern GOK to LLC Artanic. The SPF approved the completion of the privatisation of Northern GOK on 13 September 2004. Metinvest currently holds a 96.42 per cent. interest in Northern GOK.

Ingulets GOK

Ingulets GOK is one of the largest iron ore mining enterprises in Ukraine, according to Ukrudprom. It produces merchant concentrate with iron ore content of 65.2 per cent. to 68.5 per cent. Ingulets GOK sells its merchant concentrate to steel mills outside Metinvest, and also supplies merchant iron ore concentrate to Azovstal, Yenakieve Steel and Ilyich Steel. It is located in Kryvyi Rih in Dnipropetrovsk Oblast, approximately 610 kilometres from Azovstal and Ilyich Steel. Ingulets GOK was established in 1965 and was acquired by Metinvest in November 2007 from the SMART Group. Metinvest currently holds a 99.77 per cent. interest in Ingulets GOK.

Ingulets GOK extracts and processes iron ore to produce merchant iron ore concentrate. It has an annual iron ore concentrate production capacity of 12.52-13.51 million tonnes. It currently mines iron ore from its sole open pit quartzite field through a process of drilling and blasting and by removal of overburden to external dumps. The iron ore is then transported by rail to, and refined at, Ingulets GOK's beneficiation and flotation facilities.

In the years ended 31 December 2016 and 2017, Ingulets GOK's output was 11.5 million and 10.3 million tonnes of merchant concentrate, respectively. Approximately 38 per cent. and 46 per cent. of this output was consumed internally by Metinvest's steel production facilities in the years ended 31 December 2016 and 2017, respectively, while the remainder was sold to external customers.

Central GOK

Central GOK is the sixth largest iron ore mining company in Ukraine by production volume, according to Ukrudprom. Central GOK is located in the city of Kryvyi Rih in Dnipropetrovsk Oblast.

Central GOK extracts and processes iron ore and produces merchant iron ore concentrate and pellets. It produces merchant concentrate with an iron ore content of 65.0 per cent. to 68.4 per cent. and pellets with an average iron ore content of 61 per cent. to 66 per cent. It has an annual iron ore concentrate production capacity of 6.2 million tonnes, including a pellet production capacity of 2.2 million tonnes. Central GOK currently mines iron ore from its three open-pit quartzite fields and one underground mine through a process of drilling, blasting and removing any overburden to external dumps. The iron ore is then transported by rail to, and subsequently refined at, its beneficiation facilities. The iron ore is then further processed at its crushing, concentration and pelletisation plants.

In the years ended 31 December 2016 and 2017, Central GOK produced 2.3 million and 2.3 million tonnes of pellets and 2.7 million and 2.3 million tonnes of merchant iron ore concentrate, respectively. Approximately 5 per

cent. of this output was consumed internally by Metinvest's steel production facilities in the year ended 31 December 2016, while the remainder was sold to external customers located predominantly outside Ukraine. In the year ended 31 December 2017, all merchant concentrate was sold to external customers.

Central GOK was privatised pursuant to the amended privatisation plan approved by the SPF on 29 October 1999. Pursuant to the privatisation plan, 0.6 per cent. of the shares in Central GOK were allocated to the employees and management of Central GOK, 11.97 per cent. were sold at certificate auctions to various purchasers, 25.0 per cent. plus one share were sold to Detroit Cold Rolling Company L.C. on 31 January 2001 and 12.43 per cent. of the shares were sold on the stock exchange to the highest bidder. A 50.0 per cent. plus one share stake was also retained by the state. On 20 January 2003, Detroit Cold Rolling Company L.C. sold its 25.0 per cent. plus one share shareholding to the SCM Group and on 16 July 2004, the SPF sold 50.0 per cent. plus one share in Central GOK to the SCM Group. The SPF approved the completion of the privatisation of Central GOK on 17 May 2001. Metinvest currently holds a 99.75 per cent. interest in Central GOK.

Southern GOK (associate)

Metinvest acquired a direct interest of 0.79 per cent. in Southern GOK in June 2014 and a 44.8 per cent. effective interest in July 2014.

Southern GOK was the first enterprise in the CIS region to be purpose-built for mining and enrichment of iron magnetite quartzite in order to obtain iron ore concentrate and agglomerate. Southern GOK operates an open-pit-based iron ore mine. It produces iron ore concentrate with an iron content of 65.2 per cent. and 67.7 per cent., and agglomerate with an iron ore content of approximately 54.7 per cent. and 61.0 per cent. It has an annual iron ore concentrate production capacity of 11.2 million tonnes, including an agglomerate production capacity of 2.4 million tonnes. Southern GOK is located in the city of Kryvyi Rih in Dnipropetrovsk Oblast.

Southern GOK extracts and processes iron ore to produce merchant iron ore concentrate and agglomerate. Southern GOK currently mines iron ore from its one open-pit quartzite field through a process of drilling, blasting and by removal of any overburden to external dumps. The iron ore is then transported by rail to crushing, beneficiation and agglomeration plants.

In the years ended 31 December 2016 and 2017, Southern GOK produced 9.6 million and 10.7 million tonnes of merchant concentrate and 2.1 million and 1.9 million tonnes of agglomerate, respectively. Approximately 26 and 11 per cent. of all agglomerate produced by Southern GOK was consumed by Metinvest's steel production facilities (Azovstal and Yenakieve Steel (before its seizure in March 2017)) in the years ended 31 December 2016 and 2017, respectively, while the remainder was sold to external customers. Merchant concentrate was sold only to external customers.

Quality control

Metinvest has a quality management system (certified by Bureau Veritas and the Ukrainian state enterprise Krivbasstandartmetrologia) in compliance with its standards and with the standards required for producers of merchant iron ore concentrate and pellets. Metinvest's quality management system is also certified under the ISO 9001 standard.

Metinvest is involved in various programmes aimed at improving the quality of its products. For example, the quality of iron ore concentrate at Central GOK, Northern GOK and Ingulets GOK was raised to premium quality by increasing the iron content. In the year ended 31 December 2017, Metinvest produced 4.3 million tonnes of premium quality iron ore concentrate, with 67.4-68.5 per cent. iron content at Ingulets GOK; 1.6 million tonnes of premium quality iron ore concentrate, with 68.4 per cent. iron content at Northern GOK and 3.9 million tonnes of premium quality iron ore concentrate, with 68.4 per cent. iron content at Central GOK.

Iron Ore Business Investment Programme

Metinvest spent U.S.\$174 million and U.S.\$258 million on implementing its investment programmes in the mining segment in the years ended 31 December 2016 and 2017, respectively.

Metinvest is currently undertaking investment programmes with respect to Northern GOK, Ingulets GOK and Central GOK. These investment programmes involve the construction and modernisation of various elements of the iron ore production process and aim to decrease the production cost, improve the quality of products and improve the safety and environmental standards of the facilities.

Major projects in the mining segment included construction of crusher and conveyor systems in deep quarries in Northern GOK and Ingulets GOK to be maintained at current levels and to reduce the costs of iron ore production and transportation. The aggregate cost of implementing this project is expected to be approximately U.S.\$160 million (of which approximately U.S.\$149 million had been spent by 31 December 2017). In 2012, Metinvest also approved the start of the construction of a conveyor ore transportation complex at Ingulets GOK, with an expected aggregate cost of approximately U.S.\$40 million.

Another project is the replacement of gas cleaning units at Lurgi 552-A and Lurgi 552-B pelletising machines at Northern GOK aimed to improve the safety and environmental standards of the facilities.

In 2018, Metinvest will begin projects to improve pellet quality, namely the modernisation of OK-306, Lurgi 278-A, Lurgi 552-A and Lurgi 552-B pelletising machines at Northern GOK and the re-equipment of beneficiation facilities to produce DRI-quality pellets at Central GOK to improve mechanical properties of pellets.

Coal Business

Overview

Metinvest conducts its coal business through United Coal.

Production facilities

The table below shows production by Metinvest of its raw coking coal for the years indicated:

	Annual Production Capacity	Production		
		Year Ended 31 December		
		2015	2016	2017
		(million tonnes)		
<i>United Coal</i>				
Raw coking coal.....	8.1	5.5	4.9	5.9
Coke concentrate ⁽¹⁾	N/A	2.9	2.3	2.5

Notes:

(1) Includes coal concentrate produced from raw coal purchased from third parties.

United Coal

United Coal is a producer of coking coal located in the central Appalachian region of the United States. United Coal was founded in 2004 and acquired by Metinvest in April 2009. Through its subsidiaries, United Coal mines produces coking coal using both underground and surface mining techniques in the states of West Virginia, Virginia, and Kentucky. Due to a fall in demand for steam coal in its target markets, United Coal ceased production of steam coal at the end of 2012. Currently, United Coal produces coking coal almost exclusively. In the year

ended 31 December 2015, United Coal's output of raw coking coal amounted to 5.5 million tonnes, while the coking coal concentrate production volume amounted to 2.8 million tonnes. In the year ended 31 December 2016, United Coal's output of raw coking coal was 4.9 million tonnes, while the coking coal concentrate production volume was 2.3 million tonnes. In the year ended 31 December 2016, Metinvest used 44 per cent. of the coal produced by United Coal. The remaining 56 per cent. was sold to third parties. In the year ended 31 December 2017, United Coal's output of raw coking coal was 5.9 million tonnes, while the coking coal concentrate production volume was 2.5 million tonnes. In the year ended 31 December 2017, Metinvest used 86 per cent. of the coal produced by United Coal. The remaining 14 per cent. was sold to third parties.

Coal Business Investment Programme

In the years ended 31 December 2016 and 2017, United Coal invested U.S.\$8 million and U.S.\$30 million, respectively.

Reserves

Metinvest's iron ore reserves have been evaluated according to international and Ukrainian methodologies. International reporting methodologies classify a deposit as either a mineral resource or an ore reserve. Mineral resources are further divided into three categories: an inferred mineral resource (whose geological characteristics can be estimated with a low level of confidence), an indicated mineral resource (whose geological characteristics can be estimated with a reasonable level of confidence) and a measured mineral resource (whose geological characteristics can be estimated with a high level of confidence). Ore reserves are divided into probable ore reserves and proved ore reserves. Probable ore reserves are the economically mineable part of an indicated and, in some circumstances, measured mineral resource. Proved ore reserves are the economically mineable part of a measured mineral resource. The application of "modifying factors" is required for a mineral resource to become an ore reserve. See "*Appendix II: Classification of Reserves and Resources*" and "*Risk Factors—Risks Relating to Metinvest—Estimates of Metinvest's mining reserves and resources are subject to assumptions and uncertainties and estimates of its resources are speculative*".

Metinvest has consulted with SRK, an international consulting firm, in relation to its ore reserves and mineral resources located in Ukraine. In relation to Central GOK and Northern GOK's iron ore reserves and resources, Metinvest established computerised, three-dimensional geological and mining optimisation models which confirm the current ore reserve and mineral resource statements reported as at 1 January 2010. The mineral resource and ore reserve statements for Central GOK and Northern GOK are derived from the depletion of the latest available estimates (dated 2008) to reflect the position as at 1 January 2010. In relation to Ingulets GOK, the mineral resource and ore reserve statements are derived from a translation of the latest available Ukrainian state-approved reserve classification system into the mineral resource and ore reserve statements reported as at 1 January 2010, without recourse to similar processes as established for Central GOK and Northern GOK. Furthermore, for the mineral resource and ore reserve statements as presented for Northern GOK and Ingulets GOK, the following apply:

- measured and indicated mineral resources are inclusive of those mineral resources modified to produce ore reserves;
- where necessary, mineral resources and ore reserves assume that special permits will be extended for a minimum time period required to deplete and process the ore reserves. In addition, significant amounts of waste rock must be mined and stored to fully deplete the stated ore reserves as reported herein. Currently, in the immediate areas surrounding the mining assets, land ownership is an issue and in certain instances, as at 1 January 2010, Metinvest did not have access to sufficient land nor the legal right to dispose of the total quantum of waste rock planned to be mined at that time. Management believes that this issue is unlikely to impact operations in the short term (albeit at increased operating expenditures). However, the land issue is significant and warrants continued attention by Metinvest;

- for Central GOK and Northern GOK, open-pit mine mineral resources are reported within an optimised shell assuming a long-term price of US\$200/dmtu;
- ore reserves are reported assuming Metinvest's long-term price assumptions ranging between US\$140/dmtu and US\$150/dmtu;
- the modifying factors assumed in deriving the ore reserves as reported include the following:
 - for Central GOK: dilution (3 per cent. to 6 per cent.), dilutant (FeMAG 3 per cent. to 6 per cent.), ore losses (3 per cent. to 6 per cent.) and yield (34 per cent.);
 - for Northern GOK: dilution (1 per cent.), dilutant (FeMAG 0 per cent.), ore losses (1 per cent.) and yield (42 per cent.); and
 - for Ingulets GOK: dilution (4 per cent.), dilutant (FeMAG 10 per cent.), ore losses (1 per cent.) and yield (36 per cent.);
- the economic viability of the ore reserves is informed by the assumed long term prices, the modifying factors and the historical operating expenditure for calendar year 2009 as noted below:
 - for Central GOK: U.S.\$14/tmilled (US\$45/dmtu);
 - for Northern GOK: U.S.\$16/tmilled (US\$35/dmtu);
 - for Ingulets GOK: U.S.\$12/tmilled (US\$35/dmtu);
- the economic viability of the ore reserves are contingent upon Metinvest's assumed expansions at the various iron ore assets which are in turn supported by the assumed capital expenditure programmes. See *"Coal Business—Coal Business Investment Programme"*;
- Metinvest undertook a similar consultation process with respect to its coal reserves located in the United States. The Cardno audit, which took place in 2009, was conducted expressly to provide the necessary documentation and independent verification for filings with the SEC. Accordingly, the reserve audit focused on those portions of the coal deposits that qualify as demonstrated (proven and probable) coal reserves, as defined in SEC Industry Guide 7. The Cardno audit has been updated by a 2015 Cardno evaluation that provided coal tonnage and quality estimates which are compliant with SEC Industry Guide 7 and U.S. Geological Survey Circular 891 Standards. Reserve numbers have been updated yearly by United Coal Company Engineering since the Cardno evaluation. Additionally, Metinvest controls coal tonnes that are classified as resources or "non-reserve coal deposits" under SEC guidelines;
- Metinvest believes that the resource estimates, on which it based its estimates of the ore reserves, are reasonable. Estimates of ore reserves are based only on that portion of the deposit that meets accepted international industry standard guidelines for classification as proven and probable reserves; and
- Metinvest's reserves are based on drilling, underground data observed during mining and geological data, and represent the part of the mineral resources that could be legally and economically extracted or produced at the time of the reserve determination.

Adjustments to Metinvest's proved and probable reserves

The following table sets forth adjustments to Metinvest's proved and probable reserves (as at the reporting dates specified below) to reflect actual mined production for the period from the reporting date to 31 December 2017 see also "Appendix II: Classification of Reserves and Resources":

		Year Ended 31 December				
	Proved and probable reserves	2010-2014	2015	2016	2017	Adjusted reserves as at 31 December 2017
		(million tonnes)				
Iron ore	1,866 ⁽¹⁾	410.3	71.7	65.9	64.1	1,254
Coal—United Coal (US) ⁽²⁾	151.0 ⁽³⁾	15.7	2.9	2.3	2.5	126.0 ⁽³⁾

Notes:

(1) According to JORC methodologies, as at 1 January 2010 (SRK Reserves Report).

(2) According to SEC methodologies, as at 1 July 2015 (Cardno Reserves Report).

(3) Including addition of new reserves and withdrawal of thermal coal reserves.

Iron Ore Reserves and Resources

The following tables set out Metinvest's iron ore reserves and mineral resources according to JORC methodologies as at 1 January 2010.

JORC Reserves (by type)			
	Tonnage	Fe Grade	
	<i>(million tonnes)</i>	<i>(magnetite)</i>	<i>(total)</i>
<i>Proved Reserves</i>			
Central GOK ⁽¹⁾	452	21.35%	31.83%
Northern GOK ⁽²⁾	508	24.23%	31.73%
Ingulets GOK ⁽³⁾	63	24.46%	33.65%
Total Proved Reserves	1,022	22.97%	31.89%
<i>Probable Reserves</i>			
Central GOK ⁽¹⁾	258	21.77%	31.95%
Northern GOK ⁽²⁾	205	27.10%	34.25%
Ingulets GOK ⁽³⁾	381	25.23%	34.11%
Total Probable Reserves	844	24.63%	33.48%
<i>Total Ore Reserves</i>			
Central GOK ⁽¹⁾	709	21.50%	31.88%
Northern GOK ⁽²⁾	713	25.06%	32.45%
Ingulets GOK ⁽³⁾	444	25.12%	34.04%
Total Proved and Probable Reserves	1,867	23.72%	32.61%
<i>Measured Resources</i>			
Central GOK ⁽¹⁾	879	22.46%	33.11%
Northern GOK ⁽²⁾	1,053	25.47%	32.69%
Ingulets GOK ⁽³⁾	61	25.17%	34.63%
Total Measured Resources	1,993	24.14%	32.94%

JORC Reserves (by type)

	Tonnage	Fe Grade	
<i>Indicated</i>			
Central GOK ⁽¹⁾	1,248	23.78%	33.42%
Northern GOK ⁽²⁾	1,442	26.54%	34.66%
Ingulets GOK ⁽³⁾	864	25.62%	34.63%
Total Indicated Resources	3,554	25.34%	34.22%
<i>Measured and Indicated Resources</i>			
Central GOK ⁽¹⁾	2,127	23.23%	33.29%
Northern GOK ⁽²⁾	2,495	26.09%	33.83%
Ingulets GOK ⁽³⁾	926	25.59%	34.63%
Total Measured and Indicated Resources	5,547	24.91%	33.76%
<i>Inferred Resources</i>			
Central GOK ⁽¹⁾	562	23.76%	33.33%
Northern GOK ⁽²⁾	1,312	27.49%	35.82%
Ingulets GOK ⁽³⁾	12	19.85%	31.48%
Total Inferred Resources	1,855	26.34%	35.05%
<i>Total Mineral Resources</i>			
Central GOK ⁽¹⁾	2,689	23.35%	33.30%
Northern GOK ⁽²⁾	3,807	26.57%	34.52%
Ingulets GOK ⁽³⁾	937	25.52%	34.59%
Total	7,432	25.27%	34.09%

Notes:

- (1) Approximately 96.4 million tonnes of iron ore reserves and resources were extracted from Central GOK's mines in aggregate between 1 January 2011 and 30 June 2016.
- (2) Approximately 203.0 million tonnes of iron ore reserves and resources were extracted from Northern GOK's mines in aggregate between 1 January 2011 and 30 June 2016.
- (3) Approximately 217.5 million tonnes of iron ore reserves and resources were extracted from Ingulets GOK's mines in aggregate between 1 January 2011 and 30 June 2016.

The following tables set out Metinvest's iron ore reserves extracted in the years ended 31 December 2010, 2011, 2012, 2013 and 2014, 2015, 2016 and 2017.

	Year ended 31 December 2015				
	2010-2014	2015	2016	2017	Total
	<i>(million tonnes)</i>				
Central GOK	75.3	14.7	12.7	12.6	115.3
Northern GOK.....	160.8	28.5	25.4	25.1	239.8
Ingulets GOK	174.1	28.5	27.8	26.4	256.7
Total	410.3	71.7	65.9	64.1	611.9

Coal Reserves

The following table sets out United Coal's coal reserves evaluated by Cardno, according to the SEC methodology, as well as adjustments by management to United Coal's coal reserves (as at the reporting dates specified below).

United Coal Reserves Estimate as at	was added, if not included in Estimated Reserves ⁽¹⁾	was extracted	Adjusted United Coal Reserves Estimate as at
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United Coal's subsidiaries	31 December 2009										31 December 2017 ⁽²⁾	
	United Coal	Cardno	Year ended 31 December				Year Ended 31 December				United Coal	Cardno
			2010-2014	2015	2016	2017	2010-2014	2015	2016	2017		
			<i>(moist, recoverable thousands of tonnes)</i>									
Carter Roag Coal Company.....	41,137	41,136	1,331	(17,032)	453	2,513	1,825	549	360	312	24,941	24,940
Pocahontas Coal Company.....	63,206	63,023	(34,379)	(19,469)	13,029	—	2,240	—	—	66	19,112	18,929
Sapphire Coal Company.....	12,030	11,661	(2,819)	(6,557)	—	—	3,209	—	—	—	—	—
Wellmore Coal Company.....	34,581	35,229	22,581	(23,041)	24,041	1,642	—	1,281	1,336	1,385	48,578	49,226
Affinity Coal Company.....	—	—	40,306	(5,543)	—	2,582	1,825	1,336	828	695	32,942	32,942
Total (proven and probable).....	150,954	151,049	27,020	(71,641)	37,523	6,737	15,701	2,939	2,323	2,457	125,573	126,038

Notes:

- (1) The unaudited reserve adjustments made by Metinvest may include: lease/purchase acquisitions; leases that were terminated or sold; redefining resources and reserves based on new data such as core holes, outcrop, or mine data; and negative adjustments made in mined areas that result in sterilised coal or blocks of coal rendered un-mineable due to mining activity or where additional data disqualifies a block as a reserve. The unaudited reserve adjustments have been included for information only and have not been independently verified.
- (2) Adjusted United Coal reserves estimates exclude unaudited reserve adjustments.

United Coal's coal reserves were estimated based on industry-accepted guidelines for total coal/seam thickness, coal quality, coal recoverability, product yield, and other practical permitting and mining limitations. Cardno independently audited 100 per cent. of the United Coal reserve area focusing on those portions of United Coal's coal deposits that qualify as demonstrated (proven and probable) reserves, as defined in SEC Industry Guide 7. United Coal also controls coal tonnes that are classified as resources or "non-reserve coal deposits" under SEC guidelines which have not been included here.

Licences and permits

In Ukraine, Metinvest must obtain: (i) special permits for subsoil use; and (ii) mining allotment acts from governmental authorities to explore and extract iron ore and coal from its deposits in Ukraine, according to Ukrainian legislation governing mining activities, in particular, the Code of Ukraine "on Subsoil", dated 27 July 1994, as amended from time to time (the **Subsoil Code**), and the Mining Law of Ukraine, dated 6 October 1999, as amended from time to time. Metinvest is also subject to other requirements associated with such special permits and mining allotment acts, including payments for subsoil use, obtaining relevant insurance, payments of environmental tax and other duties.

Special permits for subsoil use are generally granted on a competitive basis through auctions conducted by the State Geology and Subsoil Service of Ukraine (the **State Geology Service**). However, in some cases the applicable legislation enables special permits to be granted without auction or following a different procedure. Special permits are issued for terms of up to five years for the geological survey of mineral deposits, including research and industrial development of mineral deposits of general use, and for terms of up to 20 years for the extraction of minerals. Each special permit is granted for the type of subsoil use and within the area specified in such permit.

A subsoil user is not authorised to bestow, sell or otherwise transfer the rights granted by a permit. The contribution of such rights to the charter capital of other entities (including existing subsidiaries of the relevant subsoil user) and their transfer into joint ventures are also prohibited.

The conditions for the use of natural resources are set forth in an agreement between the permit owner and the State Geology Service. The permit owner must commence its use of the subsoil area within two years after the issuance of the special permit, otherwise the right of subsoil use may be terminated by the State Geology Service (by way of annulment of the special permit).

For the purpose of subsoil use under a special permit, Metinvest must also apply to the State Service of Ukraine on Labour Issues (the **State Labour Service**) to obtain a mining allotment act which evidences a right to use a particular subsoil area for industrial development of nationwide minerals. Mining allotment acts are issued under the Regulation of the Cabinet of Ministers of Ukraine No. 59 "On Approval of Regulation on Procedure for the

Provision of Mining Allotments", dated 27 January 1995. In order to apply for the issuance of a mining allotment act, an applicant should have: (i) a relevant special permit for the subsoil use; and (ii) a duly approved project of mining reserves development. A mining allotment act is issued in accordance with the borders of the subsoil area specified in the relevant special permit. A subsoil user is not authorised to transfer the rights granted by the mining allotment act (in full or in part) to a third party.

A special permit may be suspended by the State Geology Service in certain circumstances, including: breach of conditions of subsoil use; if the activities of the permit holder impose a direct threat to health or life of individuals; non-performance within specified time periods of orders of state authorities to remedy a violation of subsoil use or environmental protection legislation. The period of suspension of the special permit does not increase the initial term of validity of the special permit, unless the suspension is found not compliant with applicable law by a court judgment.

The right to use subsoil may be terminated (i.e., special permits may be cancelled) in certain circumstances, including, without limitation: if there is no necessity for further subsoil use; if the permit holder relinquishes its right to the use of subsoil rights; if the permit holder is reorganised or liquidated (except for cases prescribed by law); if the permit holder applies methods of subsoil use which negatively affect the state of subsoil, pollute the environment or endanger health; if the information submitted by the permit holder is later found to be untrue; if the permit holder fails to implement directions given by the relevant authorities on the elimination of certain violations; if the permit holder uses the subsoil rights for purposes other than those provided for in the permit or fails to meet other requirements envisaged by the special permit; if the permit holder fails (without due reason) to commence mining activities within two years from the date of issuance of the special permit; or if the subsoil site is expropriated in accordance with applicable law.

Re-issuance of a special permit (without an extension of its term) must be sought in certain cases envisaged by law (including certain corporate reorganisations through an organisation form change), and the originally issued special permit would lose its validity upon the expiry of the statutory period for its re-issuance.

On 15 October 2014, the ATO Law became effective. The ATO Law establishes that the licences and permits issued to the legal entities that carry out their business activities in the anti-terrorist operation territory, the terms of which have expired at the time of the relevant anti-terrorist operation, shall be prolonged for the duration of the anti-terrorist operation. See also *"Risk Factors—Risks Relating to Metinvest—The Group's mining and metallurgical business depends on obtaining special permits issued by the Ukrainian government and other regulatory authorities, and such permits may be withheld, revoked or not renewed"*.

Metinvest's Iron Ore Special Permits

Metinvest conducts its exploration and production activities under a number of special permits and mining allotment acts held by its operating subsidiaries.

Re-issued permits

In May 2016, each of Central GOK, Ingulets GOK, Northern GOK and Ilyich Steel changed company type from a public joint stock company to a private joint stock company and applied for the re-issuance of its special permits for subsoil use in respect of all mines (except for the Gigant-Glyboka mine and mines which are currently in the process of conservation). As of the date of this Offering Memorandum, all special permits were re-issued by the competent authorities.

The re-issuance of special permits triggered a requirement to re-issue mining allotment acts. As of the date of this Offering Memorandum, most of the respective mining allotment acts were re-issued.

Central GOK

Central GOK operates under several mining special permits granted in relation to mines in Dnipropetrovsk and Kirovograd oblasts containing iron quartzite. Most of the special permits to extract iron quartzite are valid for a period of 29 years and will expire on 11 April 2030, save for a special permit related to the workings of the Ordzhonikidze mine, which is valid for 36 years and will expire on 20 October 2037.

Central GOK has also applied for the extension and the amendment of the special permit related to the workings of the Gigant-Glyboka mine, which was valid for ten years and expired on 2 September 2014. In December 2014, the State Geology Service refused to extend and amend the special permit related to the workings of the Gigant-Glyboka mine. Central GOK challenged the position of the State Geology Service in two parallel court proceedings, initiated on different grounds. One of these proceedings has been terminated and Central GOK's claim has been dismissed, while the second court proceeding is pending. Metinvest does not consider that failure to extend this special permit would have a material adverse effect for Central GOK as the Gigant-Glyboka mine is not currently used to extract minerals.

Central GOK holds a number of mining allotment acts in relation to iron quartzite deposits in Dnipropetrovsk and Kirovograd oblasts, which will expire on various dates between 2030 and 2037, except for a mining allotment act regarding the Gigant-Glyboka mine which was granted for two years and expired in September 2014. The act related to the workings of the Ordzhonikidze mine was re-issued on 8 November 2017.

Ingulets GOK

Ingulets GOK operates under a special permit granted in relation to iron quartzite mines in Dnipropetrovsk. The special permit is valid for a period of 38 years and will expire on 15 May 2037.

Ingulets GOK holds a mining allotment act granted in relation to the Ingulets GOK's deposit valid until 15 May 2037.

Northern GOK

Northern GOK operates under several mining special permits granted in relation to mines in the Dnipropetrovsk oblast containing iron and iron quartzite. The special permits are valid for a period of 20 to 40 years, one of which will expire in 2026 and the other two in 2037.

In February 2016, the State Geology Service issued an order suspending Northern GOK's special permit with respect to the Gannivske deposit (one of three deposits and workings in the Dnipropetrovsk oblast used by Northern GOK to extract iron ore) and establishing a deadline for remedying breaches by Metinvest. On 15 April 2016, the Dnipropetrovsk Circuit Administrative Court satisfied Northern GOK's claim and cancelled the order of the State Geology Service on suspension of the special permit. On 6 July 2016, the Dnipropetrovsk Administrative Court of Appeal upheld the decision of the court of first instance. The State Geology Service filed an appeal challenging the decision of the Dnipropetrovsk Administrative Court of Appeal with the High Administrative Court of Ukraine. Proceedings are currently pending, but Northern GOK does not believe that the challenge will succeed.

In August 2017, the State Geology Service issued another order suspending Northern GOK's special permits with respect to the Gannivske and Pervomaiske deposits (both located in Dnipropetrovsk oblast). On 2 October 2017, Northern GOK filed a claim with the Dnipropetrovsk Administrative Circuit Court seeking to cancel the order of the State Geology Service in part relating to its special permits. Simultaneously, Northern GOK filed a motion to suspend the order's effect in relevant part for the duration of the court proceedings. On 3 October 2017, the Dnipropetrovsk Circuit Administrative Court granted the Northern GOK's motion and suspended the effect of the order in respect of the Northern GOK's special permits for the duration of the court proceedings. Further, on 27

October 2017, the Dnipropetrovsk Circuit Administrative Court satisfied Northern GOK's claim and cancelled the order in respect of the Northern GOK's special permits.

Both resolutions of the Dnipropetrovsk Circuit Administrative Court dated 3 October 2017 and 27 October 2017 were reversed on appeal by resolutions of the Dnipropetrovsk Administrative Court of Appeal dated 19 December 2017 and 18 January 2018, respectively.

Northern GOK filed cassation appeals challenging the above resolutions of the Dnipropetrovsk Administrative Court of Appeal with the Administrative Court of Cassation in the Supreme Court of Ukraine. The cassation proceedings are currently pending.

Northern GOK holds a number of mining allotment acts in relation to the Gannivske and Pervomaiske deposits and the Pershotravneva mine. The mining allotment acts for the Gannivske and Pervomaiske deposits are valid for a period of twenty years and will expire on 20 October 2037. The mining allotment act for the extraction of minerals from the territory of the Pershotravneva mine is valid until 25 September 2026.

Ilyich Steel

Ilyich Steel holds a special permit granted in relation to deposits in the Dnipropetrovsk oblast containing iron ore. The special permit is valid for a period of 13 years and will expire on 7 July 2019.

On 4 September 2015, the State Geology Service issued an order to suspend the Ilyich Steel special permit to use subsoil. In 2015 and 2016 Ilyich Steel successfully challenged the order both in the court of first instance and in the appellate court. In September 2016, the State Geology Service challenged the appellate court's decision on cancellation of its order. The High Administrative Court of Ukraine rejected the appeal, thereby retaining in force the decisions of the appellate court and the court of first instance.

Ilyich Steel holds a mining allotment act granted in relation to the Ilyich Steel's deposit valid until 7 July 2019.

Metinvest's Coal Licences and Special Permits

United Coal

United Coal, through its operating subsidiaries located in Virginia, West Virginia and Kentucky, is a party to various mineral leases, surface leases and permits in respect of underground coal mines, surface coal mines and preparation plants located in Virginia and West Virginia. While the term of such mineral leases can vary, they typically expire once all mineable and merchantable is mined and associated reclamation activities are completed. Corresponding permits are valid for a period of five years and are typically renewed for additional five-year periods until reclamation is complete.

In addition, Metinvest's business outside Ukraine depends on the continuing validity of licences, the issuance of new licences and compliance with the terms of such licences, which may involve uncertainties and additional costs to Metinvest.

Any or all of these factors may affect Metinvest's ability to obtain, maintain or renew necessary licences. If Metinvest is unable to obtain, maintain or renew necessary licences and special permits or is only able to obtain or renew them with newly introduced material restrictions, it may be unable to benefit fully from its reserves and implement its long-term expansion plans, which may materially adversely affect Metinvest's business, results of operations and financial condition.

As Metinvest currently plans to extend its licences at their scheduled termination and believes that it will be entitled to do so, its reserves are stated based on the maximum projected useful lives of the relevant fields.

However, there can be no assurance that Metinvest will be able to extend its licences, or that its licences will not be withdrawn prior to their scheduled expiration. See "*Risk Factors—Risks Relating to Metinvest—The Group's mining and metallurgical business depends on obtaining special permits issued by the Ukrainian government and other regulatory authorities, and such permits may be withheld, revoked or not renewed*".

Marketing and Distribution

Metinvest sells its steel and iron ore products to export markets (excluding the CIS) through Metinvest International, based in Geneva. Metinvest-SMC, located in Kyiv, sells Metinvest's steel products in the Ukrainian market and CIS market (except for Belarus). Metinvest Distribution, located in Minsk, sells Metinvest's steel products in the Belarusian market. Metinvest Eurasia sells Metinvest's steel products to the Russian market (including most transit supplies to the Belarusian market). Metinvest sells its coke and coal directly through its Ukrainian subsidiaries.

The table below shows Metinvest's consolidated sales by region and product segment for the years indicated.

	Year Ended 31 December					
	2015 ⁽¹⁾		2016 ⁽¹⁾		2017	
	Sales volume	Amount of revenues	Sales volume	Amount of revenues	Sales volume	Amount of revenues
	(thousand tonnes)	(million U.S.\$)	(thousand tonnes)	(million U.S.\$)	(thousand tonnes)	(million U.S.\$)
Ukraine, of which:						
Metallurgical ⁽²⁾	2,983	1,151	2,472	1,129	3,043	1,889
Mining ⁽³⁾	7,315	468	8,168	477	4,848	578
Europe, of which:						
Metallurgical ⁽²⁾	4,793	2,090	4,762	1,989	4,697	2,605
Mining ⁽³⁾	2,790	165	4,251	278	6,832	614
Middle East and North Africa, of which:						
Metallurgical ⁽²⁾	3,372	1,266	2,683	948	2,931	1,469
Mining ⁽³⁾	498	39	14	1	—	—
CIS, of which:						
Metallurgical ⁽²⁾	1,267	602	1,166	591	1,146	775
Mining ⁽³⁾	—	—	—	—	—	—
South-East Asia, of which:						
Metallurgical ⁽²⁾	265	116	226	76	420	197
Mining ⁽³⁾	10,034	635	5,656	337	3,698	308
North America, of which:						
Metallurgical ⁽²⁾	379	111	767	217	1,083	416
Mining ⁽³⁾	1,379	118	1,359	103	354	20
Other countries, of which:						
Metallurgical ⁽²⁾	209	71	216	77	135	60
Mining ⁽³⁾	—	—	—	—	—	—
Total	35,284	6,832	31,742	6,223	29,187	8,931

Notes:

- (1) Sales volumes and revenues include resales of products of Zaporizhstal and other producers.
- (2) Metallurgical sales volumes include resales of products of other producers.
- (3) Mining sales volumes include resales of flux and dolomite products, coking coal.

Metallurgical Segment

In the year ended 31 December 2017, approximately 68 per cent. of Metinvest's steel sales were paid for by way of letter of credit, bank guarantee or insurance coverage; 12 per cent. of sales were made on open payment terms under which customers were allowed up to 30 days to make payments; and the remaining 20 per cent. of sales were made on pre-payment terms.

The delivery terms and conditions are based on Incoterms 2010 (in some cases Metinvest contracts on Incoterms 2000, which are defined by the International Chamber of Commerce). Delivery terms for Metinvest's Ukrainian steel sales are "free carrier" (FCA) to railway stations located near its steel production facilities or "carriage paid to" (CPT) a nominated destination. Metinvest's steel sales to Russia and the CIS region are delivered on an "at frontier basis" (DAF) to the Ukrainian border or "carriage paid to" (CPT) to a nominated destination. Metinvest's steel sales to its customers outside the CIS region are delivered on the basis of "free on board" (FOB) or "cost and freight" (CFR).

Delivery terms for Metinvest's Ukrainian sales of metallurgical coke are "free carrier" (FCA) to railway stations located near its coke production facilities.

Mining Segment

In the year ended 31 December 2017, approximately 9 per cent. of Metinvest's iron ore sales were prepaid; 43 per cent. of Metinvest's iron ore sales were paid for within 5 to 30 days of shipment and 0.3 per cent. of Metinvest's iron ore sales were paid for 60 days after shipment. Approximately 48 per cent. of Metinvest's iron ore sales were paid for by way of letter of credit.

Delivery terms for Metinvest's Ukrainian iron ore sales are "free carrier" (FCA) to railway stations located near its steel production facilities. Metinvest's sales of iron ore to Czech Republic, Slovakia, Romania, Serbia, Hungary and Poland are delivered on an "at frontier" basis (DAF), a "delivered at place" basis (DAP) and on the basis of "free on board" (FOB). Metinvest's iron ore sales requiring sea transport are delivered to the respective ports (Yuzhny, Odesa, and Illiychevsk) on a "cost and freight" (CFR) basis. Metinvest generally bears all transportation costs in relation to iron ore deliveries to its customers located in China.

United Coal enters into most of its contracts on a "free on board" (FOB) delivery basis to ports in Norfolk and Baltimore in the United States.

Customers and Pricing

Metallurgical Segment

In the year ended 31 December 2017, the top five external steel and coke customers represented, in aggregate, approximately 22 per cent. of Metinvest's total volume of products sold, and almost all of Metinvest's steel production (by volume) was sold on the spot market. In this period, Metinvest's top three external customers for steel and coke products were Zaporizhstal, Marcegaglia SPA and DJJ, together accounting for approximately 18 per cent. of total volume of steel and coke products sold.

In the year ended 31 December 2016, the top five external steel and coke customers represented, in aggregate, approximately 13 per cent. of Metinvest's total volume of products sold, and almost all of Metinvest's steel production (by volume) was sold on the spot market. In this period, Metinvest's top three external customers for steel and coke products were Zaporizhstal, Marcegaglia SPA and SDI, together accounting for approximately 9 per cent. of total volume of steel and coke products sold.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations for the Years Ended 31 December 2015 and 2016" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations for the Years Ended 31 December 2016 and 2017" for information in relation to the sale prices of Metinvest's steel products.

Mining Segment

In the year ended 31 December 2017, approximately 58 per cent. of external iron ore concentrate and pellets were sold under annual contracts with a monthly adjustment mechanism; and 12 per cent. of external iron ore concentrate and pellets were sold under annual contracts with a price adjustment mechanism for every shipment. Metinvest sold the remaining 30 per cent. on the spot market.

In the year ended 31 December 2017, the top five external coal and iron ore products customers represented, in aggregate, approximately 73 per cent. of total volume of coal sold in that period. Metinvest's top three external customers for iron ore products and coking coal were Zaporizhstal, ArcelorMittal Sourcing and U.S. Steel Kosice, which purchased 9.6 million tonnes of coking coal and iron ore products and accounted for approximately 57 per cent. of Metinvest's total volume of coal and iron ore products sold in the year ended 31 December 2017.

In the year ended 31 December 2016, approximately 33 per cent. of external iron ore concentrate and pellets were sold under annual contracts with a monthly adjustment mechanism; and 8 per cent. of external iron ore concentrate and pellets were sold under annual contracts with a price adjustment mechanism for every shipment. Metinvest sold the remaining 59 per cent. on the spot market.

In the year ended 31 December 2016, the top five external coal and iron ore products customers represented, in aggregate, approximately 65 per cent. of total volume of coal sold in that period. Metinvest's top three external customers for iron ore products and coking coal were Zaporizhstal, ArcelorMittal Sourcing and Dneprovskiy Iron & Steel Works, which purchased 8.7 million tonnes of coking coal and iron ore products and accounted for approximately 49 per cent. of Metinvest's total volume of coal and iron ore products sold in the year ended 31 December 2016.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations for the Years Ended 31 December 2015 and 2016" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations for the Years Ended 31 December 2016 and 2017" for information in relation to the sale prices of Metinvest's steel products.

Raw Materials and Energy

The principal raw materials used by Metinvest in the production of steel include: merchant iron ore concentrate, pellets, metallurgical coke, scrap metal, dolomite and ferroalloys. Metinvest is self-sufficient as to most of the raw materials needed for steel production. For the year ended 31 December 2016, raw materials accounted for approximately 28 per cent. of Metinvest's cost base, with natural gas and electricity accounting for approximately 5 per cent. and 9 per cent., respectively. For the year ended 31 December 2017, raw materials accounted for approximately 25 per cent. of Metinvest's cost base, with natural gas and electricity accounting for approximately 4 per cent. and 6 per cent., respectively.

The table below sets forth Metinvest's usage of its primary raw materials by the metallurgical segment, as well as the average cost per tonne of these materials for the years indicated.

	Year Ended 31 December		
	2015	2016	2017
Usage (thousand tonnes):			

Iron ore ⁽¹⁾	6,781	5,266	6,476
Pellets	3,320	5,014	3,988
Coke	4,502	4,660	4,168
Scrap metal	970	989	897
Ferroalloys	114	127	125
Average cost per tonne (UAH):			
Iron ore ⁽¹⁾	1,203	1,342	1,793
Pellets	1,594	1,771	2,683
Coke	4,093	4,073	7,542
Scrap metal	3,674	4,415	6,633
Ferroalloys	32,918	28,496	42,087
Average cost per tonne (U.S.\$):			
Iron ore ⁽¹⁾	56	52	68
Pellets	73	69	101
Coke	189	159	283
Scrap metal	172	173	249
Ferroalloys	1,524	1,116	1,582

Note:

(1) Includes sinter purchased from third parties, iron ore concentrate and sintering ore.

Iron ore

Metinvest was more than fully self-sufficient in iron ore for its steel production needs, based on its production volumes for the year ended 31 December 2017. Excess iron ore products are sold in the market. In the year ended 31 December 2017, 182 per cent. of excess merchant iron ore products in volumes were sold domestically or were exported.

Coal and Coke

Metinvest was approximately 34 per cent. self-sufficient in coking coal as at 31 December 2017 (based on the consumption of coking coal required for pig iron production in the year ended 31 December 2017, and assuming all coking coal concentrate produced is consumed internally). In the year ended 31 December 2016, only 20 per cent. of the coking coal consumed by Metinvest was supplied internally. Metinvest purchased 80 per cent. of its coal requirements from third party suppliers (including 4 per cent. from DTEK, a member of the SCM Group, and the remaining 76 per cent. from other third party suppliers) during this period. In the year ended 31 December 2017, only 24 per cent. of the coking coal consumed by Metinvest was supplied internally. Metinvest purchased 76 per cent. of its coal requirements from third party suppliers (including 4 per cent. from DTEK, a member of the SCM Group, and the remaining 71 per cent. from other third party suppliers) during this period.

In the years ended 31 December 2016 and 2017, Metinvest purchased approximately 751 thousand and 861 thousand tonnes of PCI coal from third party suppliers, respectively.

Although Metinvest is self-sufficient in the coke that it needs for steel production based on its annual capacity, Metinvest enters into contracts for purchases of coke depending on the time, location and quality of coke in order to ensure concentrates are sufficient for its metallurgical segment.

Ferroalloys, fluxes and refractory materials

Metinvest sources fluxes from related entities Dokuchayevsk Flux and Dolomite Plant and Novotroitsk Ore Mining (which are members of the SCM Group).

Metinvest purchases ferroalloys from various external sources, including: Nikopol Ferroalloy Plant, Zaporizhia Ferroalloy Plant, Glencore International AG, Eramet Comilog, CBMM, Anglo American, EVRAZ, Kazzinc, Rusal, etc. All ferroalloys are supplied pursuant to one-year contracts with formula pricing (from LME, LMB, CRU or Platts).

Metinvest purchases refractory materials from Zaporizhia Refractories and various external sources, such as: Dalmond Trade House Ltd, SEEIF Ceramic A.S., Kumas Manyezit Sanayi A.S., Vesuvius Poland Spolka Z O.O., SMZ – Revimex A.S., Calderys, RHI AG, Magnesita refractories GMBH and Puyang Refractories group. All ferroalloys and refractory materials are supplied pursuant to one-year contracts.

Scrap metal

A significant proportion of the scrap metal used by Metinvest is sourced externally, via its subsidiary Metinvest-Resource, a scrap metal trading company.

Metinvest also has its own scrap-processing facilities at Azovstal and Ilyich Steel that allow it to utilise a wide range of sizes of scrap iron. These facilities include gas cutting lines, two scrap shears, baling presses and three slag-handling complexes. Metinvest sources approximately 60 per cent. of its scrap metal requirements internally. Metinvest purchases scrap on the basis of annual contracts, although prices are set on a monthly basis in order to reflect changes in market prices. See also "*Risk Factors—Risks Relating to Metinvest—Metinvest may receive contaminated scrap metal*".

Electricity

Metinvest's manufacturing facilities consume large amounts of electricity, requiring on average approximately 800 million kilowatt hours per month. Metinvest's primary use of electricity is at its Azovstal and Ilyich Steel facilities (including an oxygen plant, a thermal power plant, a converter plant, a plate mill, smelter facilities and rolling mills), as well as at Ingulets GOK and Northern GOK. DTEK, a company affiliated with Metinvest, supplied approximately 8.3 billion kilowatt hours to Metinvest in the year ended 31 December 2016, which amounts to approximately 86 per cent. of Metinvest's electricity requirements. In the year ended 31 December 2017, DTEK supplied approximately 7.7 billion kilowatt hours, which amounts to approximately 86 per cent. of Metinvest's electricity requirements. DTEK supplies electricity on the basis of an agreement with Metinvest which is renewed on an annual basis. Electricity tariffs are subject to regulation by the National Energy and Utilities Regulatory Commission of Ukraine ("**NERC**"), which sets base tariffs for both industrial and household customers. Payments for electricity are calculated and paid every month based on the amount consumed each month and the prevailing wholesale electricity price in Ukraine. In the year ended 31 December 2016, the total electricity consumption by Metinvest's Ukrainian facilities was approximately 8.4 billion kilowatt hours, at an average cost of approximately U.S.\$0.055 per kilowatt hour, which represents less than 9 per cent. of the total cost of sales. In the year ended 31 December 2017, the total electricity consumption by Metinvest's Ukrainian facilities was approximately 7.6 billion kilowatt hours, at the average cost of approximately U.S.\$0.05 per kilowatt hour, which represents less than 9 per cent. of the total cost of sales.

Natural gas

Metinvest's primary use of natural gas is at its blast furnaces, open-hearth furnaces, rolling mills and roasting machines. Before 2013, Metinvest obtained natural gas for its Ukrainian facilities from the state-owned company Naftogaz, which sourced gas from Russia, Turkmenistan and Uzbekistan. Metinvest's contracts provide for unrestricted supplies of gas to cover its requirements. Natural gas transportation tariffs are set by the NERC. Metinvest has not experienced any problems with supplies of natural gas in the last five years. In the year ended 31 December 2016, natural gas consumption by Metinvest facilities was 966 billion cubic meters. In the year ended 31 December 2017, natural gas consumption by Metinvest facilities was 1,041 billion cubic meters.

In 2017, Metinvest's Ukrainian enterprises obtained 100 per cent. of their natural gas from DTEK. DTEK supplies natural gas on the basis of a formula-based agreement (Term Sheet) with Metinvest which is renewed on an annual basis. When purchasing natural gas, Metinvest employs strict trading principles and competitive pricing is a key factor in its choice of supplier.

See further "*Risk Factors—Risks Relating to Ukraine—Any further unfavourable changes in Ukraine's relationship with Russia may adversely affect the Ukrainian economy and thus Metinvest's business*".

Transportation

Overview

Metinvest manages its supply chain through its centralised logistics and purchase directorate, which provides transportation services for all of Metinvest's production facilities and is also responsible for the development of Metinvest's transport infrastructure.

Transportation costs influence Metinvest's operations indirectly as a component of raw material costs, as well as affecting the prices Metinvest can charge customers for its products and, consequently, the competitiveness of its products. See also "*Rail transport*" and "*Risk Factors—Risks Relating to Metinvest—Damage to the rail network and other infrastructure as a result of the ongoing conflict in eastern Ukraine has adversely affected the Group's business and results of operations, and could continue to do so*".

In Ukraine, Metinvest's steel production facilities benefit from relative proximity to target markets. Azovstal and Ilyich Steel are located in the port city of Mariupol, on the Sea of Azov. Azovstal also operates its own port facilities. In addition, Metinvest controls most of its own logistics, including owning and operating its own fleet of 2,504 gondola railcars (in October 2017, these railcars were leased to Lemtrans for operation under a renewed three-year framework agreement). Also, Metinvest owns 1,684 specialised railcars (such as hoppers, flatcars and cisterns for chemical products). In the year ended 31 December 2016, these specialised railcars carried approximately 2.6 million tonnes of cargo, or 4.6 per cent. of Metinvest's aggregate annual cargo transportation. Metinvest's favourable geographic location allows for the relatively inexpensive shipment of products to the CIS, Middle Eastern, European and Asian markets. In the year ended 31 December 2017, these specialised railcars carried approximately 1.7 million tonnes of cargo, or 2.8 per cent. of Metinvest's aggregate annual cargo transportation. Metinvest's favourable geographic location allows for the relatively inexpensive shipment of products to the CIS, Middle Eastern, European and Asian markets.

The transportation infrastructure in eastern Ukraine has been damaged by the military action and sabotage in that region, which has affected and may further affect Metinvest's production. See further "*Risk Factors—Risks Relating to Metinvest—Civil disturbances, political instability and military action have negatively impacted and may continue to negatively affect the Group's business, results of operations and financial condition*".

Rail transport

From October 2017, the majority of Metinvest's gondola railcar shipments within Ukraine have been carried out by Lemtrans (a company controlled by the SCM Group, which operates fleet of approximately 15,000 gondola railcars and leases 2,504 gondola railcars from Metinvest) under a three-year framework agreement. Under this agreement, Lemtrans is responsible for ensuring the stable provision of cargo railway transportation services to Metinvest within Ukraine using its own and Metinvest's gondola railcars, thus reducing Metinvest's risk of shipment failure. Metinvest also uses other private carriers' railcars for a small number of shipments to more distant markets in the CIS and the Baltic states. In the year ended 31 December 2016, 95 per cent. of Metinvest's Ukrainian freight was delivered by rail and the remaining 5 per cent. was delivered by alternative transport (cabotage, auto transportation). In the year ended 31 December 2017, 98 per cent. of Metinvest's Ukrainian freight was delivered by rail and the remaining 2 per cent. was delivered by alternative transport (cabotage, auto transportation).

Rail tariffs (infrastructure component) in Ukraine are regulated by the state and are set by the government, generally upon the application of the Ministry of Infrastructure of Ukraine which oversees Ukrzaliznytsia. Rail tariffs (denominated in UAH) were increased by 15 per cent. and 15 per cent. in the years ended 31 December 2016 and 2017, respectively.

Sea transport

Metinvest transports part of its products by sea from ports in Ukraine to, among others: the ports of Marghera, Taranto and Monfalcone in Italy; Sunderland in UK; Antwerp in Belgium; Setubal and Aveiro in Portugal; Gijon and Bilbao in Spain; Bourgas in Bulgaria; Alexandria and Damietta in Egypt; Pohang in Korea; Abu Dhabi in the United Arab Emirates; and Beilun, Zhangjiangang and Zhoushan in China.

Metinvest uses Capesize vessels to export iron ore produced by the Group and, depending on market conditions, Capesize or Panamax vessels to import coking coal from the United States (Eastern American ports Newport News, Norfolk and Baltimore), Australia (Hay Point, Kembla), Canada (Roberts Bank) to the Yuzhny and Illichivsk ports near Odesa.

The following table shows the volumes of Metinvest's products transported by sea for the years indicated:

	Year Ended 31 December		
	2015	2016	2017
	<i>(million tonnes)</i>		
Steel products.....	6.8	6.9	6.9
Iron ore	13.9	7.3	3.9
Coal.....	4.9	2.5	4.7
Other	0.2	0.3	0.3
Total	25.8	17.0	15.8

Port handling

Metinvest conducts transshipments in Ukraine mainly through the following ports:

- Port Yuzhny (the deepest sea port in Ukraine, where Capesize vessels can be fully loaded) and Chernomorsk port. These ports are used for export shipments of iron ore products and import shipments of coking coal;
- Mariupol Sea Trade Port (the closest sea port to Ilyich and Azovstal steelworks). This port is used for shipments of metal products but also as an important part of the alternative channel for coking coal import and iron ore's transportation from Kryvyi Rih to Mariupol;
- Odesa and Mykolaiv sea ports (deep-sea ports in Ukraine). These ports are used for long-distance shipments of rolled steel products (including to West Africa, the Persian Gulf, India and the Far East); and
- Izmail Port (a river port located on the Danube delta). This port is used for shipments via the Danube River.

Azovstal has its own port on the Sea of Azov, which is mainly used for cabotage shipments of steel products to deep-sea ports in Ukraine (Odesa, Chernomorsk). Starting from 2014, Azovstal port was used as an additional route for cabotage transportation of raw materials to Azovstal and Ilyich Steel. Metinvest delivers goods to/from the Azovstal port using its internal rail junction.

The following table shows the aggregate trans-shipment volumes of Metinvest's products (by sea and by river) for the years indicated:

	Year Ended 31 December		
	2015	2016	2017
		(million tonnes)	
Steel products.....	7.3	7.0	7.2
Iron ore	16.6	9.8	4.7
Coal.....	3.5	2.5	3.8
Other	0.4	0.3	0.4
Total	27.8	19.6	16.1

Road transport

Metinvest used to transport some of its products and raw materials by road. From June 2013, Metinvest has used the railway instead of road transport to convey rolled steel products from Azovstal and Ilyich Steel to Mariupol port. In the years ended 31 December 2016 and 2017, the volume of railway-only cargo transportation from steel plants in Mariupol to the Mariupol sea port accounted for 86.0 thousand and 164.8 thousand tonnes, respectively.

Capital Expenditures

In 2017, Metinvest initiated the project of purchasing 1,800 open rail wagons to reduce operating costs in wagon component, at a total cost of approximately U.S.\$70 million (U.S.\$29 million of which had been spent by 31 December 2017).

Health and Safety

In the year ended 31 December 2016, Metinvest spent U.S.\$66 million on health, labour protection and safety, representing approximately 1 per cent. of its revenues for that period. In the year ended 31 December 2017, Metinvest spent approximately U.S.\$80 million on health, labour protection and safety, representing approximately 1 per cent. of its revenues for that period. Each company within Metinvest has a fully staffed health and safety department that consults the line organisation on safety issues, ensures compliance with laws and regulations and submits annual reports with incident and injury statistics to the state supervisory authorities.

Ukraine

Most of Metinvest's facilities are located in Ukraine. Ukrainian health and safety legislation imposes stringent standards and regulations on industrial companies. The State Service of Ukraine on Labour Issues inspects working conditions, safety standards and equipment at Metinvest's Ukrainian facilities every year. Metinvest is required, under Ukrainian labour safety legislation, to dedicate 0.5 per cent. of its payroll expenses for the previous year to labour protection and safety. Metinvest believes that it is in compliance in all material respects with applicable health and safety legislation in Ukraine.

The main health and safety risks at Metinvest's production facilities include potential industrial accidents, equipment outage (due to equipment failure, the need for unplanned maintenance or otherwise), unusual or unexpected geological conditions, environmental hazards, labour disputes, changes in the regulatory environment, extreme weather conditions and other natural phenomena. The number of the lost time injuries at Metinvest's Ukrainian facilities was 99 and 76 in 2016 and 2017, respectively, while the number of work-related fatalities in the same periods were nine and three. A relative indicator such as Lost Time Incident Frequency Rate (**LTIFR**) per million hours has decreased in the past years (0.738 and 0.695 in 2016 and 2017, respectively). Management believes that the decrease in absolute numbers of lost time injuries and work-related fatalities since 2011 and the

downward trend in the LTIFR are due to management's focus on safety issues and the rigorous implementation of corporate safety standards based on global best practices. The Fatality Frequency Rate in the years ended 31 December in 2016 and 2017 was 0.067 and 0.027, respectively.

Metinvest's health, safety and environmental (**HSE**) strategy sets out a number of safety improvement actions relating to Metinvest's people, processes, systems and facilities. Metinvest plans to significantly reduce the number of fatalities, occupational injuries and process accidents through the effective implementation of priority health and safety initiatives. Metinvest has introduced new, improved methods of monitoring health and safety compliance and investigating health and safety incidents in the workplace. Metinvest's management makes regular visits to its production facilities to inspect safety compliance and ensure that an adequate level of commitment to health and safety is maintained by local management teams. In 2008, Metinvest introduced an "immediate incident notification process". This entails that Metinvest's Chief Executive Officer is informed of any work-related fatality within two hours, and of any lost time injury within 24 hours. Metinvest also introduced a "root cause analysis" procedure which is aimed at identifying an initiating cause of a causal chain which led to each incident in order to ensure a thorough investigation is carried out and also as a prevention measure. In 2011, Metinvest implemented a Contractor Safety Management standard that set the same high safety requirements for contractors as for company employees (adopting a "one workforce" approach). In accordance with the standard, all potential contractors are screened to ensure their ability to deliver their services in a safe manner. Safety requirements are set out in detail in the contract and Metinvest works with the contractor to ensure that such requirements are met. Metinvest recently introduced a number of procedures aimed at ensuring a systematic approach to risk analysis both immediately prior to each work task and on a regular basis for high-risk processes and activities. In particular, in May 2013 Metinvest introduced its Cardinal Rules of Safety to ensure strict adherence to the most important safety rules at company sites.

In 2010, Metinvest adopted a health strategy for further development of medical emergency response capabilities, the promotion of wellness in the workplace and occupational health practices and procedures. Good results were achieved in the area of medical emergencies though concerted efforts since 2010. In this period, all of the key medical professionals working at the Group assets completed a five-day ACLS/ATLS induction training course, and 71 per cent. of all sickbays were supplied with basic sets of modern equipment (crash bags, basket and scoop stretchers, cervical collars, vacuum splints and automatic external defibrillators). Internal trainer groups were established at 50 per cent. of Metinvest's facilities, and sustainable programmes of refresher first aid training for non-medical personnel were introduced at the above-mentioned sites. In 2012, 15 per cent. of managing company employees were re-trained in CPR and AED algorithms and emergency response equipment was placed at all of Metinvest's offices. Approximately 4,500 first aiders were trained by the end of 2012. Reality-based scenario medical emergency drills were run at 80 per cent. of Metinvest's facilities in 2012. A Corporate Emergency Response Standard was introduced in 2011 and was implemented in 2012. In addition, an algorithm for advanced pre-shift, pre-employment and periodical medicals for HSE critical specialities was developed and approved in 2012.

Metinvest is constantly seeking to develop the health and safety competencies of its employees. Between 2008 and 2017, over 95,937 employees were trained in corporate safety standards (including 12,403, 6,688 and 6,320 employees in 2015, 2016 and 2017, respectively). These in-house courses are provided in addition to mandatory health and safety training required by the relevant Ukrainian legislation. Metinvest is using external consultants for the purposes of training but is also developing its internal training capabilities. 53 internal trainers (recently retired, former company employees) have been trained and coached to deliver seminars on corporate safety standards. The project has been functioning since September 2009. Since its launch, internal trainers have trained over 86,225 employees in corporate standards. In 2011, Metinvest received World Steel Association's Safety and Health Excellence Recognition Award for the internal trainers project. Several Metinvest companies, including Azovstal, Northern GOK, Central GOK, Ingulets GOK and Inkor Chemicals are currently certified under International Health and Safety Management System – OHSAS 18001. Metinvest plans to obtain OHSAS 18001 certificates for all Metinvest companies.

European Union

Metinvest's facilities located in Europe are subject to stringent EU legislation on labour safety as well as applicable national legislation drafted in accordance with EU standards. In particular, in Italy, Decree 81/08 obliges Italian companies including Metinvest Trametal and Ferriera Valsider to continuously improve and upgrade the levels of safety of their production sites, plants and equipment, and also their safety management.

Metinvest Trametal has never been the object of actions or penalties in relation to breaches of legislation on health and safety. Its HSE Department ensures compliance with current legislation and develops internal best practices in relation to staff training, procedures and measures to improve safety levels. It also collects statistical data on accidents, occupational diseases, incidents and near misses, and produces monthly reports. Since 2009, Ferriera Valsider has worked to develop and implement a health and safety management system, and in September 2012, Ferriera Valsider's health and safety management system was certified as conforming with internationally recognised International Health and Safety Management System (OHSAS 18001) standards. Metinvest Trametal's aim is to ensure a safe workplace for its employees through continuous training, building a culture of safety, eliminating risks and improving preventive and protective measures. For several years, Ferriera Valsider has collected and analysed data regarding near misses and non-conformity to safety legislation in order to apply the necessary corrective actions.

The aggregate number of lost time injuries at Metinvest Trametal and Ferriera Valsider was five, both in 2016 and 2017, with no fatalities throughout this period. LTIFR per million hours worked at these facilities was 6.903 and 6.730 in 2016 and 2017, respectively.

Spartan UK had three incidents of breaches of health and safety regulations in 2016. LTIFR per million hours worked at these facilities was 12.450 in 2016. Its HSE Department ensures compliance with current legislation and strives to achieve best practices through continual improvements in procedures and training. Regular surveys from external liability insurance providers have re-enforced compliance and have noted good improvements. Spartan UK also continues to invest in health and safety improvements throughout the site.

United States

Metinvest facilities located in the United States are subject to stringent standards and regulations on coal mining operations imposed by the Federal Mine Safety & Health Administration and the State government. In particular, United Coal's underground mining operation is inspected on a quarterly basis, in addition to periodical spot inspections by their relevant state agencies and the Federal Mine Safety & Health Administration ("**MSHA**"). Routinely MSHA and/or State Agency Inspector(s) are present on a daily basis including weekends and off-shifts. Surface operations and preparation plants are inspected biannually by both agencies. The state and federal agencies conduct inspections of the working conditions, equipment and compliance with safety standards and regulations. United Coal has a designated health and safety department that consults the line organisation on safety issues and ensures compliance with laws, regulations and company policies. This department also submits monthly/quarterly reports with incident, injury and man-hour statistics to the State and Federal regulatory agencies.

In 2015, United Coal's facilities had 12 lost time incidents and four restricted work incidents, with the number of nonfatal days lost ("**NFDL**") incident rate of 1.96 (compared to a national average of 2.68), and no work-related fatalities). In the six months ended 30 June 2016, United Coal's facilities had six lost time incidents and four restricted work incidents, with the NFDL incident rate of 2.30 (compared to a national average of 2.82), and no work-related fatalities. All incidents, including near-miss events, are thoroughly investigated by operations management and the health and safety group. Root cause and causal factors contributing to the incident are identified and the prevention of reoccurrence is determined and an appropriate action plan is implemented. It is expected that this process will allow United Coal to continue on its positive trend of reducing reportable incidents. United Coal has been recognised numerous times over the past several years for its outstanding safety efforts. Each of the respective divisions of Metinvest has received safety awards from MSHA and/or State regulatory agencies.

For example, the Star Bridge Preparation Plant had gone over 8.5 years without a lost time or restricted work incident. In 2015, Star Bridge and Affinity Plant both received the Sentinels of Safety Award for their outstanding safety performance. Every United Coal underground mine has proximity detection equipment installed on continuous miners, shuttle cars, and scoops. Affinity Mine has also installed audible and visual alarms on the roof bolt machines to help prevent incidents involving the roof bolt machine. United Coal has taken a leadership position in the industry with proximity detection on underground equipment and the Affinity Mine is the first underground coal mine in the United States with proximity detection on all haulage equipment. United Coal has also added camera systems to its large surface equipment which provides a layer of protection in preventing small vehicles and personnel from being run over by the larger equipment.

The aggregate number of lost time injuries at United Coal was 11 and five in 2016 and 2017, respectively, with one fatality in 2017. LTIFR per million hours worked at these facilities was 9.246 and 2.918 in 2016 and 2017, respectively. The Fatality Frequency Rate ("**FFR**") in the year ended in 2017 was 0.584.

Metinvest's health and safety strategy sets out a number of upstream activities related to improving regulatory compliance, incident prevention, hazard recognition and training. Compliance with MSHA, State Agencies and company policy is continually monitored by site health and safety personnel and corporate compliance audit team members. Quarterly compliance audits are also conducted at all sites. Audit teams are comprised of executive team members, corporate personnel, subsidiary personnel and site hourly employees. The audits are routinely conducted on off shifts to expose all site employees to the audit process and to reinforce Metinvest's safety commitment. The area management programme is a major component of the Metinvest's Managed Safety Programme and is used at all sites to strengthen regulatory compliance, help to reduce incidents and increase safety awareness. The area management process focuses on accountability and improves compliance by providing layers of protection to identify deficiencies, with an emphasis on taking prompt action to correct the deficiency when found. Annually all executive, mid-level and operations managers attend an in-house safety summit where each subsidiary shares their past year safety performance results, safety goals, upstream activities and best safety practices. Outside safety experts also participate and present information to the group pertaining to their area of expertise in safety, training and compliance. United Coal also has three specially-trained mine rescue teams available in the event of a mine emergency. The teams practice monthly and participate in exercises and mock emergencies several times a year working with other teams. They also regularly visit subsidiary mines to familiarise themselves with the mine layout and ventilation systems. The mine rescue teams are trained in firefighting, rescue and recovery operations as well as advanced first aid.

Environmental Matters

Ukraine

As part of its operations, Metinvest discharges waste water into bodies of water, discharges pollutants into the air and disposes of waste products. These activities are regulated by various Ukrainian environmental laws and regulations which set standards for health and environmental quality, provide for penalties and other liabilities for the violation of such standards, and establish, in certain circumstances, obligations to compensate for environmental damage and to restore environmental conditions. The authorised state bodies of Ukraine set the maximum permitted quantities for the emission and disposal of pollutants, as well as for waste disposal, by enterprises. Such state bodies approve individual emission and disposal limits within these parameters for each Metinvest company on the basis of an application filed by Metinvest, which vary depending on the type and scale of environmental impact. All of Metinvest's permits specify the statutory pollution limits which they must not exceed. All primary air pollutants from stationary sources, including CO, SO₂ and NO_x, are measured by proprietary certified laboratories according to schedules prescribed by the relevant environmental permits and cross-checked by local environmental authorities. The Ukrainian authorities carry out periodic site inspections to ensure that these limits are observed. In some regions with a deeply industrialised environment and close proximity to residential areas, Metinvest's plants have special regulations depending on weather conditions. Local

communities and state agencies equipped with laboratories closely monitor the plants' compliance with these restrictions.

In compliance with applicable Ukrainian legislation, Metinvest makes regular environmental payments to the Ukrainian state budget to compensate for pollution generated by its operations. These payments amounted to U.S.\$6.6 million and U.S.\$6.6 million in 2016 and 2017, respectively. The amount of these payments was set by the environmental authorities pursuant to the new Tax Code adopted in 2010 and the payments are adjusted each year based on proportional growth and a rate established by the Tax Code. Metinvest's annual payments are based on expected environmental impact levels. The level of payments has been subject to change, partially due to increases in environmental tariffs and partially due to fluctuating production.

A significant number of Metinvest's operating facilities were commissioned before current environmental standards came into force. In order to reduce the environmental impact of its operations, Metinvest is currently undertaking an engineering programme, based on its Technological Strategy, to improve environmental standards at all of its facilities. Metinvest invested U.S.\$7.6 million in 2015, U.S.\$3 million in 2016 and U.S.\$3 million in 2017, into environmental technology for its businesses. In the year ended 31 December 2017, Metinvest allocated U.S.\$225 million in environmental safety (including both capital and operational improvements).

In addition, in 2016 and 2017 Metinvest implemented a range of capital and operational environmental improvement projects, including:

- the reconstruction of the cast house de-dusting system during the overhaul of blast furnace No. 4 at Azovstal with a total cost of U.S.\$0.7 million; and
- the reconstruction of the gas cleaning system for basic oxygen furnace No. 1 at Ilyich Steel with a total cost of U.S.\$4.5 million.

Planned environmental improvement works for 2015-2017 include the following projects, which are expected to reduce polluting dust emissions:

- reconstruction of the gas cleaning system at Ilyich Steel's sinter plant (12 sintering machines) (expected 85-90 per cent. reduction);
- reconstruction of the gas cleaning system for basic oxygen furnace No. 2 at Ilyich Steel (expected 50 per cent. reduction); and
- modernisation of the gas cleaning system for kilns Nos. 1 and 2 at Northern GOK (expected 83 per cent. reduction).

Ten of Metinvest's plants, including Azovstal, Northern GOK, Ingulets GOK, Central GOK, Ferriera Valsider, Inkor Chemicals and Zaporizhia Coke, have already been certified compliant with the ISO:14001 environmental standards, whilst the other plants are currently taking steps to obtain certifications. Metinvest expects that all of its facilities will be certified as ISO:14001 compliant within the next several years.

The Ukrainian environmental authorities carry out environmental audits of Metinvest's industrial assets on a regular basis. If, as a result of such audit, Metinvest is found to be in breach of the relevant environmental regulation, it will be issued with a compliance order specifying the breach, necessary rectifying measures and the time period during which Metinvest is required to rectify the breach. The time periods for remedying any breaches are usually negotiable and can be extended if necessary.

Other than routine requests from the environmental authorities in relation to non-material breaches and a number of court orders in respect of pollution of the Sea of Azov by Azovstal in 2010 (in an aggregate amount not exceeding

U.S.\$1.3 million), Metinvest has not incurred any material environmental liabilities and has not been subject to material environmental investigations in the past. However, there can be no assurance that: there are no undiscovered potential liabilities; that future uses or conditions will not result in the imposition of environmental liability upon Metinvest or expose it to third-party actions; or that environmental regulations will not become more stringent in the future. See *"Risk Factors—Risks Relating to Metinvest—Metinvest's operations are subject to environmental laws and regulations that may be difficult and costly to comply with, and future changes in or unanticipated breaches of, such laws and regulations could require Metinvest to incur increased costs"*.

In November 2012, Metinvest temporarily suspended operations at Azovstal and took the decision to accelerate the closure of three obsolete coke batteries and Azovstal's sinter plant in response to the environmental situation in Mariupol. At this time, a malodorous smog occasioned environmental protests in the city. According to experts engaged by Metinvest to assess the situation, the likely cause of the smog was the increased concentration of recycled organic matter in the sludge pond at Azovstal's sinter plant, combined with unfavourable meteorological conditions. The sludge pond was being drained as part of the approved environmental programme for the conservation of the Sea of Azov. The closure of Azovstal's sinter plant prompted the transfer of sinter production to Ilyich Steel.

It is expected that the Ukrainian environmental legislation will become more stringent in the next few years as the relevant Ukrainian legislation is approximated to EU regulatory norms as part of the implementation of the Association Agreement and the DCFTA. See also *"Risk Factors—Risks Relating to Ukraine—A failure to develop relations with the EU might have negative effects on the Ukrainian economy and Metinvest's business"*. Based on the applicable regulatory requirements, certain Metinvest companies, including Ingulets GOK (located in Ukraine) and United Coal (located in the United States), have created general reserves which may be used to cover environmental liabilities and compliance costs, although these reserves may not be sufficient. See also *"Risk Factors—Risks Relating to Metinvest—Metinvest's operations are subject to environmental laws and regulations that may be difficult and costly to comply with, and future changes in or unanticipated breaches of, such laws and regulations could require Metinvest to incur increased costs"*.

European Union

Metinvest subsidiaries located in Europe are also required to comply with applicable European environmental legislation which ensures a high level of environmental protection and defines the main obligations of the companies in relation to environmental protection, including conducting environmental impact assessments, obtaining necessary authorisations and permissions for emissions in water, soil and the atmosphere. The legislation also prescribes limits and technical parameters for emissions.

In particular, Metinvest Tramel has recently obtained the renewal of its integrated environmental authorisation in accordance with EU legislation. Compliance with the relevant restrictions is controlled through constant monitoring of all sources of potential contamination in various environmental materials. All inspections conducted by the environmental agency in order to verify compliance with environmental legislation and in particular the provisions of the integrated environmental authorisation have always ended in success.

Ferriera Valsider manages its integrated environmental authorisation in accordance with EU legislation through constant monitoring of its environmental impact (surface and underground water pollution, atmosphere pollution, acoustic impact and solid and liquid industrial waste). Ferriera Valsider's Environmental Management System, which is compliant with the ISO:14001 standards, ensures a continuous environmental impact assessment.

Spartan UK holds an integrated environmental authorisation in accordance with EU legislation and this is constantly monitored by the Environment Agency of England. The environmental management system is aligned with ISO:14001 standards, but as yet accreditation has not been pursued. Metinvest is required under the EU's Integrated Pollution Prevention and Control regime to monitor its noise pollution levels due to its close proximity

to a residential area. Monitoring is conducted through regular and close dialogue with the relevant governmental authorities.

United States

Metinvest's subsidiaries located in the United States are required to comply with various federal and state environmental laws, applicable to coal mining operations, including the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act and the Endangered Species Act.

To ensure environmental compliance, internal audits are conducted by junior management staff at all of United Coal's active mining operations on a monthly basis and quarterly environmental audits are conducted at each operation by the senior corporate management group. Any corrective work that is required is logged into a computerised work order tracking system, and overdue task reports are automatically generated and sent to senior management for follow up.

Insurance

General description of insurance programmes

In accordance with Ukrainian legislation, Metinvest maintains mandatory insurance policies covering certain types of risk, including accident and health insurance, third party liability insurance for hazardous industrial assets and motor liability coverage. Non-mandatory insurance held by Metinvest covers most of its production facilities in respect of motor hull, property damage and business interruption (including "inter-dependency" coverage for key production facilities in Ukraine), and provides coverage for, among others, every construction risk regarding several projects. Property damage and business interruption policies in respect of European and U.S. assets of Metinvest are in place as well.

See also "*Risk Factors—Risks Relating to Metinvest—Metinvest's mining and steel manufacturing operations are subject to a number of operational risks and hazards, including the significant risk of disruption or damage to persons and property*" and "*Risk Factors—Risks Relating to Metinvest—Metinvest does not carry the types of insurance coverage customary in more economically developed countries for a business of its size and nature*". Management believes that insurance programmes covering Metinvest's assets are in line with typical insurance coverage for other large industrial enterprises.

Loss record

In respect of all settled losses, occurred in 2012-2014, Metinvest recovered a total amount of U.S.\$5.7 million. In January 2015, a fire occurred on the conveying line of crushing workshop No. 2 of Northern GOK, damaging the route used for transporting ore. Production was fully restored within four months. The final independent assessment of the loss less deductibles amounts U.S.\$0.6 million. In August 2015, a crane collapsed at the sinter workshop of Yenakiieve I&SW, damaging the railways and the loading docks. The loss was investigated by Matthews Daniel International, an independent loss adjuster. The final independent assessment of the loss less deductibles amounted to U.S.\$5.2 million. In the years 2016 and 2017, no major losses in respect of property damage and business interruption occurred.

Legal Proceedings

Proceedings against Limited Liability Company "Metinvest Holding"

In 2014, Limited Liability Company "Mako-Trading" (as claimant) initiated proceedings against Limited Liability Company "Metinvest Holding" (as defendant) for the recovery of UAH203,872,161 (approximately U.S.\$7.7 million) in respect of raw materials supplied by the claimant. The courts of first and second instance upheld the

claim in full, but the High Commercial Court of Ukraine annulled the judgments of the courts of first and second instance and remanded the case for a new trial to the court of first instance. In September 2015, the proceedings were suspended by the court of first instance pending the completion of an expert's report. Upon completion of the expert's report, which confirmed the claimed amount, the case was remanded to the court. Currently, the proceedings are suspended for procedural reasons and no decision has been made as of the date of this Offering Memorandum.

Proceedings against Yenakiieve I&SW

On 11 November 2015, the Supreme Court of Ukraine upheld the judgment of the court of first instance in favour of KRIOW (as claimant) against Yenakiieve I&SW (as defendant) for the recovery of a debt in the amount of UAH276,021,884.71 (approximately U.S.\$10.5 million) due under an agency agreement. In March 2016, Yenakiieve I&SW obtained a ruling from the Zaporizhia Region Commercial Court allowing it to repay the debt in 22 equal instalments of UAH12,546,449.30 (approximately U.S.\$0.5 million each), starting from March 2016. In April 2016, the Donetsk Commercial Court of Appeal upheld the ruling of the Commercial Court of the Zaporizhskiy Region. Yenakiieve I&SW has filed an appeal against the above judgments to the High Commercial Court of Ukraine, seeking a repayment of the debt in 60 equal instalments. By its ruling, dated 18 May 2016, the Commercial Court of the Zaporizhskiy Region has suspended enforcement of the judgment. On 5 January 2017, the Donetsk Commercial Court of Appeal cancelled the ruling of the Commercial Court of the Zaporizhskiy Region dated 18 May 2016. On 17 March 2017, Yenakiieve I&SW voluntarily repaid its debt to KRIOW. Nevertheless, the enforcement proceedings in relation to this case are still pending since the enforcement fee amounting to UAH27,609,496.48 (approximately U.S.\$1.1 million), which is payable to the state enforcement authorities, remains unpaid by Yenakiieve I&SW. Consequently, the existing seizures of property and bank accounts of Yenakiieve I&SW in the amounts of UAH276,094,964.71 and UAH303,704,461.19 (approximately U.S.\$10.5 and U.S.\$11.5 million, respectively) are still in place.

Bankruptcy proceedings against Krasnodon Coal

Bankruptcy proceedings against Krasnodon Coal are still pending. The bankruptcy proceedings were not progressed during 2014 and 2015 because the case materials were lost during counter-terrorism operations in the Luhansk Region. In February 2016, the Commercial Court of the Luhansk Region approved the list of creditors' claims for a total amount of UAH933.3 million (approximately U.S.\$35.4 million) (90 per cent. of which is claimed by the members of the Group). In March 2016, a creditors' committee of Krasnodon Coal was elected. The committee obliged the insolvency administrator to perform an analysis of financial, business and investment activities of Krasnodon Coal and review its market position for the period between 2013 and 2015 in order to consider further courses of action in bankruptcy proceedings (liquidation, sanation (solvency restoration) or settlement agreement). In August 2016, the creditors' committee decided to settle the case by allowing Krasnodon Coal to repay its debts during the period of ten years. An amicable settlement agreement was submitted to the tax authorities for execution, however, the tax authorities refused to execute. Currently, the proceedings are suspended for procedural reasons and no decision has been made as of the date of this Offering Memorandum.

Proceedings against Krasnodon Coal

In 2003, Krasnodon Coal entered into an electricity supply agreement with State Enterprise "Regional Electricity Networks" (Luhansk Branch) ("**Regional Electricity Networks**").

In July 2016, Regional Electricity Networks submitted a claim against Krasnodon Coal for the amount of UAH222,324,694.34 (approximately U.S.\$8.4 million) (including UAH140,358,521.51 of arrears and UAH11,447,982.29 of accrued interest) to the Luhansk Region Commercial Court. Currently, the proceedings are suspended for procedural reasons and no decision has been made as of the date of this Offering Memorandum.

The outstanding proceedings of the Seized Assets are described here, given they are legally part of the Group.

Certain Metinvest group companies are also subject to certain tax disputes; see *"Risk Factors—Risks Relating to Taxation—The interpretation and application of Ukrainian tax laws and regulations are not fully developed and are subject to frequent change and interpretation, which may increase the risk of operating and investing in Ukraine"* and *"Risk Factors—Risks Relating to Taxation—Metinvest operates in many jurisdictions with highly complex and variable tax regimes, and changes in tax rules and the outcome of tax assessments and audits and limitations on the ability to deduct interest expenses could have a material effect on Metinvest's financial results"*.

Information Technology

The responsibility for information technology within Metinvest rests with Metinvest Holding LLC, which supports more than 26,000 users, who are all covered by Microsoft cloud services and on-premise licences.

While Metinvest's priority has been ensuring high standards of service and serving subsidiaries at an operational level, Metinvest has implemented a strategy to integrate and centralise IT services to meet the challenges of a changing business environment and also to further Metinvest's business strategy. As part of this strategy, Metinvest:

- implemented a single, corporate IT network connecting all Metinvest companies, IT services, devices and users based on the equipment provided by Cisco, whose technology and architecture provides reliability, flexibility and security to all network services;
- established the hybrid datacentres architecture with two synchronous active-active on-premise datacentres and one cloud datacentre on Microsoft Azure. Metinvest also generally uses Office365 for infrastructure service and SAP HANA Enterprise Cloud for SAP business applications, which significantly increases the reliability of its centralised IT services and provides a high level of business continuity;
- implemented a dedicated information security function that was centralised in 2017 which provides security services to all subsidiaries of the Group. The function's priority tasks are to counter external and internal cyber-attacks, ensure confidentiality and protect against leakage of critical information, and ensure compliance with regulatory requirements. The Information Security Management System is risk-oriented, and adapted to new challenges and risks. Annual internal and external (CISCO and Microsoft) information security audits are conducted in order to obtain an unbiased assessment of the current state of Metinvest's information security performance. The recommendations developed based on the audit results are aimed at introducing new mechanisms to improve the efficiency of existing mechanisms;
- accomplished a number of projects aimed at improving its operating model. One of those projects is the standardisation and harmonisation of business processes, by implementing a unified information SAP system on the Group's subsidiaries and the creation of a consolidated information area. By January 2018 this project had been successfully implemented in seven companies (including three mining and processing plants: Ilyich Steel, Metinvest-SMC, Metinvest Holding LLC (Kyiv)).
- sales and operations planning is carried out centrally in Metinvest Holding LLC's SAP APO system and all subsidiaries are included in the planning optimisation perimeter. Planning results optimise supply chain logistics and sales order structures; and
- consolidated financial statements in accordance with IFRS and performed budget consolidation using the SAP BPC system. Maintenance of master data is centralised and performed using the SAP Master Data Governance system. Procurement process inputs and services have been automated using the SAP ERP system, implemented by means of two interconnected solutions (Supplier Lifecycle Management and Supplier Relationship Management); all of Metinvest's SAP systems are cross-integrated.

Most of Metinvest's companies have Disaster Recovery Plans, which harness clustering and virtualisation technology, as well as Enterprise Storage Systems, including EMC, VNX and VPLEX Storage Systems. Additionally, Metinvest has implemented arrangements for storing back-up information electronically, including Microsoft System Center Data Protection Manager, EMC Data Domain and Azure Backup Services. Metinvest's use of market-leading technology sourced from the world-leading suppliers ensures the reliability of its IT systems.

Metinvest obtained rights to use its principal equipment and technology upon purchase. Management does not consider the registered patents to be material to its business.

Employees

The below table shows the average number of Metinvest full-time employees and employees by segment in the years ended 31 December 2015, 2016 and 2017:

	Average number of employees		
	Year ended 31 December		
	2015	2016	2017
Metallurgical segment			
Steelmaking	48,491	44,417	35,552
Coke making	6,231	5,850	5,673
Mining segment			
Iron ore mining	17,362	17,072	16,901
Coal mining ⁽¹⁾	10,629	8,620	0
United Coal	714	735	807
Logistics	232	209	211
Shared service centre	438	794	1,322
Headquarters	978	707	624
Total:	85,075	78,404	61,090

Note:

(1) Represented Krasnodon Coal.

Most of Metinvest's employees are employed at enterprises in Ukraine. As at 31 December 2017, 1.8 per cent., 1.2 per cent. and 0.5 per cent. of Metinvest's employees are based in Europe, the United States and Russia, respectively. Metinvest generally does not have individual contracts with its employees in Ukraine and the United States other than with its senior managers and general directors. Metinvest has employment contracts with its employees located in Europe and Russia. Metinvest is currently seeking to increase its operating efficiency by optimising its personnel structure, primarily by executing a controlled reduction in headcount, outsourcing non-production activities and streamlining its administrative structures. Total headcount was reduced by 22.1 per cent. over the year ended 31 December 2017, mainly due to Metinvest's loss of control of its assets in certain parts of the Donetsk and Luhansk regions. While productivity (as measured by tonnes of production per employee) in Metinvest's Ukrainian operations is generally below western European standards, its production facilities in Ukraine are in many instances among the principal employers in their respective towns and regions. As a result, reductions in the workforce are generally constrained by relevant Ukrainian labour legislation as well as other political and social considerations. For these reasons, Metinvest manages reductions in the number of personnel it employs gradually and in a controlled manner.

Most of Metinvest's employees in Ukraine engaged in iron ore mining and steel production are members of the Trade Union of Metallurgists and Miners of Ukraine. Metinvest's employees in the United States and Russia are not currently members of any trade union. Metinvest's employees based in Europe are generally members of trade

unions, including the Italian Union of Metal-Mechanical Workers, the Italian Union of Metallurgic Workers and Unite the Union (in the United Kingdom).

No Metinvest facility has experienced any significant strikes or other cases of industrial action or labour disputes during the last six years.

Remuneration levels for Metinvest's employees in Ukraine are set in accordance with Metinvest's Compensation Policy. To ensure fair remuneration for employees in different business units and enterprises within the Metinvest group, as well as Metinvest's competitiveness by industry standards, the remuneration system is based on the Hay Group's international grading system.

Metinvest makes mandatory, monthly contributions to the Ukrainian state retirement fund and other mandatory state funds as part of its statutory employer's contribution to social security taxes on behalf of its employees. Metinvest also makes contributions to the state with respect to the pensions of its Ukrainian employees. Pensions are then paid directly by the state to the employees. There is no automatic retirement age for workers in Ukraine, although the statutory retirement age is 60. Employees working in hazardous conditions may retire earlier, at age 50 or 55, depending on the type of their employment. Metinvest's employees have an average age of 41.

Industry Associations

In 2007, Metinvest became a member of the World Steel Association ("**WSA**"). The WSA is one of the largest and most dynamic industry associations in the world, with members in every major steel-producing country. WSA represents over 150 steel producers (including nine of the world's ten largest steel companies), national and regional steel industry associations, and steel research institutes. WSA members represent around 85 per cent. of the world's steel production. Metinvest is the only member of the WSA that represents Ukraine.

In 2009, Metinvest joined the American Chamber of Commerce in Ukraine, a non-governmental non-profit organisation representing business leaders and experts from more than 600 member organisations which include the biggest investors and largest multinationals operating in Ukraine.

In 2010, Metinvest joined the European Business Association ("**EBA**"). The EBA is a non-profit organisation which aims to improve the investment climate in Ukraine by representing the interests of European and Ukrainian investors. The EBA was established as a forum for discussion and resolution of the challenges facing the private sector in Ukraine. Founded in 1999, the EBA's membership currently includes almost 900 European, international and Ukrainian companies.

Metinvest is also a member of various Ukrainian associations, including the Ukrainian Chamber of Commerce and Industry ("**UCCI**"), a non-governmental non-profit, self-governing organisation incorporating approximately 10,000 enterprises, companies, business associations, banks and other bodies. The main objective of the UCCI is to create favourable conditions for Ukrainian businesses, protect the interests of the Ukrainian business community and deepen relations with international business partners. Metinvest's industry association memberships include (but are not limited to) Ukrmetallurgprom, Ukrudprom and the Ukrainian Federation of Metallurgists.

Corporate Social Responsibility Associations

Metinvest provides a number of benefits to its workers, including financial assistance, health improvement programmes and medical insurance, bonus payments, payments towards important events (for example, marriages and births), improvement of living conditions, pension programmes, educational grants and several other additional benefits. In addition, Metinvest provides to its employees various recreational facilities such as sanatoriums, recreation centres, children's camps and sports centres.

Metinvest also invests considerable effort and resources into training employees at all levels of seniority and providing them with opportunities for professional growth and development. In 2015, 36,354 employees completed one or more training courses, including health and safety. This represented 41 per cent. of the workforce. 9,256 managers underwent at least one course and spent an average of 3.4 days each receiving training.

In 2016, 36,190 employees completed one or more training courses for professional skills development, including health and safety. This represented 46 per cent. of total workforce headcount. As well in 2016, 28,379 training programmes were delivered aimed at managerial competencies development. 10,755 managers underwent at least one course and spent an average of 3.2 days each receiving training.

In 2017, 37,518 employees completed one or more training courses for professional skills development, including health and safety. This represented 61 per cent. of total workforce headcount. As well in 2017, 22,279 training programmes were delivered aimed at managerial competencies development. 11,021 managers underwent at least one course and spent an average of 2.6 days each receiving training.

Social Programmes

Metinvest takes its role as a corporate citizen of Ukraine seriously and takes responsibility for its local communities. In many cases, Metinvest's plants are a key employer and economic anchor for these communities. Metinvest has reacted to economic and political uncertainty (particularly with regard to the conflict in eastern Ukraine), for example, through increased financial support as a company and personal commitments from thousands of Metinvest employees. In 2015, Metinvest spent approximately U.S.\$24 million on social initiatives. This included U.S.\$16 million in humanitarian aid to support those affected by the events in the Donetsk and Luhansk regions and U.S.\$1 million to help restore infrastructure in the conflict area. Numerous buildings, facilities and transport links in Mariupol have been damaged or destroyed during the conflict. The Group has spearheaded a concerted effort to ameliorate the situation. Notably, in the Vostochny district of the city (which was hit by heavy shelling in early 2015) employees from Metinvest's enterprises in Mariupol, Ilyich Steel and Azovstal, spent almost five months helping to restore daily life for residents. In Avdiivka Coke, which was struck multiple times during 2015, Metinvest (as the main local employer) and the local administration jointly participated in restoring infrastructure and social facilities. To coordinate the work, Metinvest established a social partnership programme named "We Will Revive Avdiivka Together". In 2015, Metinvest restored 15 social facilities, 69 apartment blocks and 135 private houses in the city. In 2016, Metinvest spent U.S.\$5.4 million on communities, carefully targeting priority initiatives and completed two important projects that began in 2015 to restore infrastructure and residential accommodation in Avdiivka and Sartana near Mariupol. Notable projects include the restoration of the Administrative Services Centre in Mariupol, which involved USAID and whose inauguration ceremony was attended by the president of Ukraine. Other projects include repairing hospitals and community facilities in Avdiivka and Kryvyi Rih.

In 2017, Metinvest continued to implement its traditional social partnership programmes where, in close cooperation with municipal governments, Metinvest identifies key projects that could benefit and improve quality of life for each community. In 2017, Metinvest spent U.S.\$8.5 million on communities. Notable projects include supporting the relocation of higher educational institutions from Donetsk Region to Mariupol, the restoration of hospitals and community infrastructure in Kryvyi Rih and Avdiivka.

In 2013, Metinvest started "Green Centre Metinvest", an environmental programme established to landscape urban spaces, remove waste and improve the urban environment. The programme works in cooperation with the local communities, NGOs, experts and authorities to support local environmental initiatives, environmental education and ecological volunteer work.

In October 2015, Metinvest published its social report for 2013-2014. The document was prepared in accordance with the international Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI 4.0) and the principles of the UN Global Compact.

MANAGEMENT

Corporate Governance Structure of Metinvest

Metinvest B.V.'s corporate governance structure consists of a general meeting of shareholders (the "**General Meeting of Shareholders**"), the Management Board and the Supervisory Board.

General Meeting of Shareholders

Under Dutch law and the Articles of Association of the Issuer, the General Meeting of Shareholders of the Issuer is authorised to resolve, among others, the following matters:

- to issue shares;
- to exclude or limit pre-emptive rights;
- to acquire shares and to transfer shares in the capital of the Issuer held by the Issuer;
- to reduce the share capital of the Issuer;
- to determine the remuneration of the Directors;
- to adopt the annual accounts;
- to allocate profits; and
- to amend the Articles of Association of the Issuer, to dissolve the Issuer and to merge and demerge the Issuer.

Management Board

The Management Board consists of one Director A and one Director B. Director A is appointed by a joint meeting of holders of class A shares and holders of class C shares (which are currently held by SCM Cyprus and Clarendale Limited, respectively). Director B is appointed by a meeting of holders of class B shares (which are currently held by the SMART Group).

Under Dutch law, the Management Board is responsible for the management (*bestuur*) of the Issuer. Under the Articles of Association of the Issuer, the Issuer may only be represented by the entire Management Board (i.e. Director A and Director B, acting jointly). In performing their duties, the Directors must act in the best interests of the Issuer and the Issuer's business. The Articles of Association of the Issuer do not specify the term of office of members of the Management Board.

Mr Yuriy Ryzhenkov was appointed Director A and CEO of the Issuer with effect from 14 July 2014.

ITPS (Netherlands) B.V. was appointed Director B of the Issuer with effect from 14 July 2014. ITPS (Netherlands) B.V. is a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) incorporated under the laws of The Netherlands with its corporate seat at The Hague, The Netherlands and its registered office at Nassaulaan 2A, 2514 JS 's-Gravenhage, The Netherlands, registered with the Dutch Trade Register of the Chamber of Commerce under number 27168222. ITPS (Netherlands) B.V. is a Dutch trust office active in the provision of international tax planning and structuring services. The directors of ITPS (Netherlands) B.V. are Mr John Willekes Macdonald, residing at Laan van Meerdervoort 1224, 2455 CD, The Hague, The Netherlands, born in The Hague, The Netherlands, on 11 September 1966, holder of a valid Dutch passport No.

NMD3FFD57 and Mr Jacob Broers, residing at Brugweg 125E, 2741 LA Waddinxveen, The Netherlands, born in Nieuwer-Amstel, The Netherlands, on 21 November 1962, holder of a valid Dutch passport No. NW4C5PCC5. According to the Articles of Association of ITPS (Netherlands) B.V., each director has the power to solely represent ITPS (Netherlands) B.V. in each and every respect without limitation.

Supervisory Board

The Supervisory Board consists of ten members, of whom seven are appointed by the SCM Group and three by the SMART Group.

The duty of the Supervisory Board is to supervise the activity of the Management Board and the general course of affairs in the Issuer and the Group and the business connected therewith. The Supervisory Board shall assist the Management Board by giving advice.

Decisions relating to the following matters, among others, must be approved or ratified by a resolution of the Supervisory Board: the Group's strategic goals; the Group's investment programme for each calendar year; the Group's annual business plan; appointments at the level of top management, approval of their compensation system and Key Performance Indicators ("KPIs"), and decisions on annual bonuses; and recommendations to the shareholders relating to the appointment or re-appointment of external auditors, approval of the Group's annual reports and financial statements, and all mergers and acquisitions to be undertaken by the Group.

The Supervisory Board has also constituted four committees for the consideration of specific matters:

- **Strategy and Investments Committee.** The key responsibility of the Strategy & Investments Committee is to review and provide recommendations to the Supervisory Board in the following areas: strategic objectives of the Group, including existing and new businesses, investment and M&A projects. The Strategy & Investments Committee consists of eight members. The Strategy & Investments Committee is assisted by the Technological Sub-Committee advising and assisting the executive management in the development and implementation of its technological strategy.
- **Health, Safety and Environmental Committee.** The Health, Safety & Environmental Committee's remit is to provide the management team with support in implementing the highest standards of health, labour, and environmental safety culture throughout the Group. The Health, Safety & Environmental Committee consists of four members.
- **Audit and Finance Committee.** The remit of the Audit & Finance Committee is to analyse and support the Group's internal audit function. The Audit & Finance Committee consists of four members.
- **Appointments and Compensations Committee.** The Appointments & Compensations Committee is responsible for the following areas: making recommendations to the Supervisory Board on dismissals and new appointments for senior positions within the Metinvest group; and making recommendations to the Supervisory Board on KPIs and annual bonuses for senior management, as well as on the Metinvest group's motivation, assessment and reward systems. The Appointments & Compensations Committee consists of four members.

Metinvest's Management Team

General Director

Yuriy Ryzhenkov has been the General Director and Chief Executive Officer of Metinvest since December 2013. Prior to that, Mr Ryzhenkov worked for DTEK, where he served as Chief Operating Officer and Member of the Board of Directors from 2010 to 2013 and as Chief Financial Officer from 2007 to 2010. From 2002 to 2007, Mr

Ryzhenkov held the position of Deputy CFO and Finance Director of International Steel and Tube Industries Limited ("**ISTIL**", Donetsk-London). He worked as Manager of Economic Analysis and Informatics at CJSC Mini Steel Mill ISTIL (Ukraine) in 2000 and as the assistant to the CFO at Donetsk Iron and Steel Works from 1996 to 2000. Mr Ryzhenkov graduated from Donetsk State Technical University with a diploma in international economics and from King's College London (United Kingdom) with a BSc (Hons) in business management, both in 2000. He obtained his MBA from the London Business School in 2006.

Management Team

The key members of Metinvest's management team are:

Name	Age	Position
Yuliya Dankova	38	Chief Financial Officer
Aleksandr Pogozhev	50	Director of Metallurgical Segment and interim Director of Metinvest's Mining Segment
Andriy Yemchenko	57	Chief Technology Officer
Oleg Tokar	52	Director for Safety and Ecology
Svetlana Romanova	40	Chief Legal Officer
Dmytro Nikolayenko	41	Sales Director
Oleg Shudra	40	Internal Audit Director
Nataliya Strelkova*	47	Director of Human Resources and Social Policy
Aleksey Komlyk	40	PR and Regional Development Director
Olga Ovchinnikova	40	Economics and Business System Director
Alexey Gromakov	44	Procurement and Logistics Director
Sergiy Detyuk	38	Chief Information Officer

*Until 15 April 2018.

Yuliya Dankova has been Chief Financial Officer of Metinvest since July 2016. Prior to that, she served as the interim Chief Financial Officer since March 2016. Before that, she was the Director of the Controlling department in the Finance directorate from 2015, and the Financial Control Director of the mining segment from 2010. From 2004 to 2010, Ms Dankova headed the Finance department at the Group's iron ore mining and enrichment assets in Kryvyi Rih. From 2001 to 2003, she worked in the Bank Card department in the Kyiv branch of UkrSibbank; and from 2000 to 2001, she was an Economist in the Sales and External Economic Relations department at Southern GOK. She holds an MBA from the LINK International Institute of Management (Russia) and a diploma with honours in Foreign Trade Management from Kryvyi Rih Technical University (Ukraine).

Alexander Pogozhev has been Chief Operations Officer since 1 September 2016. He previously occupied the position of Director of Metinvest's Metallurgical Division (prior to 1 October 2011, the Steel and Rolled Products Division) from December 2010 to August 2016 and was an interim Director of Metinvest's Mining Division from

1 April 2016 to 31 August 2016. He has extensive professional experience at large enterprises within the metallurgical industry. From 1991 to 2010, Mr Pogozhev worked at JSC Severstal, where he held executive positions, including the position of the Chief Operations Officer, and since 2008, Mr Pogozhev held the position of the Chief Operations Director of Severstal International, USA. Mr Pogozhev has a degree in financial management from the Moscow State Academy of Management (Russia) and an MBA from the Business School of Northumbria University (United Kingdom).

Andriy Yemchenko has been Chief Technology Officer since March 2018. Prior to that, from 2007 to 2018, he was a Deputy of CEO on strategic development at PSC Donetsksteel. From 2004 to 2007, he was the director of Directorate for Corporate planning at PSC Donetsksteel. From 1993 to 2004, he was the Deputy CEO at Consortium Energo. Mr. Yemchenko graduated from the Donetsk Polytechnical University with a diploma in metal treatment under pressure and he has a PhD in metal treatment under pressure.

Oleg Tokar has been Director for Safety and Ecology since August 2012. He previously occupied the position of Head of the Safety Department of Directorate for Safety and Ecology at Metinvest Holding LLC from 2008 to 2011. Mr Tokar was the Deputy Director of the Health, Safety and Environment Department, Business Unit Processing and Trade and Member of the Advisory Board on Health, Safety and Environment at OJSC TNK-BP Management from 2005 to 2008. From 2002 to 2005, he was Project Manager at DuPont Safety Resources and from 1993 to 2002 was Head of Supply Department at Polar Lights Company. He was Quality Control Engineer at the factory for the production of electronic equipment, Scientific and Production Association Index from 1980 to 1991. Mr Tokar was an English interpreter at Arkhangelsk Center of Foreign Languages and has obtained the NEBOSH (The National Examination Board in Occupational Safety and Health) General Certificate. He has also graduated as an Engineer-Designer-Technologist at production of electronic equipment from the Kharkiv National Aerospace University in 1990.

Svetlana Romanova has been Chief Legal Officer of Metinvest since September 2012. From 2008 to 2012, she was a Partner in the Kyiv office of the global law firm Baker McKenzie, where she was previously employed as a lawyer from 2000. From 1998 to 2000, Mrs Romanova worked at Cargill, Inc. (USA), covering CIS legal issues. During the period from 1997 to 1998, she worked as an Assistant in Legal Studies at the University of Iowa's College of Law. Mrs Romanova has a master's degree in International Law and Translation (English) from Kyiv Taras Shevchenko National University, as well as an LLM in International and Comparative Law from the University of Iowa's College of Law. She has also completed coursework in International Management at the University of St Thomas' Graduate School of Business (St Paul, Minnesota, USA).

Dmytro Nikolayenko has been Sales Director of Metinvest Holding LLC since October 2011. He occupied the position of Sales Director of the Steel and Rolled Products at Metinvest Holding LLC from 2010. Prior to that, he was the Chief Executive Officer of Metinvest-SMC from 2007 to 2010. Mr Nikolayenko held the position of General Director of SM Leman from 2003 to 2007 and Director of Energostal from 1997 to 2003. Mr Nikolayenko graduated from the National University of "Kyiv-Mohyla Academy" in 1996 with a degree in economics. He obtained his MBA from the IMI (Kyiv) in 2002.

Oleg Shudra has been the Internal Audit Director since April 2015. Prior to that, he was the Director of Controlling Department at Metinvest Holding LLC from 2010. From 2008-2010, Mr Shudra was Director at PricewaterhouseCoopers, Ukraine, and Senior Manager from 2005 to 2008. He obtained his master's degree in production management from Kyiv National Economic University in 1998. He has been a member of the Association of Chartered Certified Accountants ("FCCA") since 2001 and the Chartered Financial Analysts Institute ("CFA Institute") since 2007.

Nataliya Strelkova was Director of Human Resources and Social Policy of Metinvest from June 2010 to April 2018. Prior to that, she was the HR Director of MTS-Russia from 2006 to 2010, and HR Policy Director of MTS OJSC from 2004 to 2006. Mrs Strelkova held the position of Senior Specialist of the HR Policy Department of YuKOS Oil Company (Russia) from 2001 to 2004. She served as HR Director of the ESN Group (Russia) from

1999 to 2001. Mrs Strelkova graduated from the Moscow State University in 1996 with a diploma in organisational psychology, and obtained a diploma in the physics of nuclear reactors and nuclear power generation systems from Moscow Engineering and Physics Institute in 1992. She obtained her MBA from the IMD (Lausanne, Switzerland) in 2010. The Group is currently in the process of appointing a successor.

Aleksey Komlyk has been PR and Regional Development Director of Metinvest since November 2013. From 2011 to 2013, he served as Managing PR Director at JSC AFK Sistema (Russia). From 2008 to 2011, Mr Komlyk was Managing Partner at Mosso Communication Agency (Austria). He previously worked at JSC Uralkali (Russia), serving as Vice President of PR from 2006 to 2008 and as Head of the Media Relations Office from 2003 to 2006. Mr Komlyk graduated from Irkutsk State Pedagogical University (Russia) in 1998 with a degree in English and German languages. He is a member of the Russian PR Association (PACO).

Olga Ovchinnikova has been Economics and Business System Director since April 2018. Prior to that, she served as Logistics Director of Metinvest from February 2013 until April 2018. From 2012 to 2013, Ms Ovchinnikova held the position of Logistics Director of Metinvest's Supply Chain Management Directorate. From 2006 to 2011, Ms Ovchinnikova held the position of Logistics Department Manager at Severstal-Resource (Severstal's raw materials division). She worked as Head of Operational Department at Alyanstransoil (Alliance Oil Company, Russia) from 2002 to 2006. Ms Ovchinnikova graduated from Moscow State University of Railway Engineering (Russia) in 1998, majoring in economics and management of transportation, and from the National Research University "Higher School of Economics" (Russia) in 2008, majoring in logistics and supply chain management.

Alexey Gromakov has been Procurement and Logistics Director since April 2018. Prior to that, he served as Director for Corporate Strategy and Regional Development at Beeline from 2015 to 2018. From 2009 to 2015, Mr Gromakov held the position of Director of the department of management of purchasing activity at Aeroflot-Russian Airlines. Mr Gromakov graduated from State University of Management (Russia) and obtained a diploma in Project Management from George Washington University. He obtained his MBA from Kingston University (London, England). Mr Gromakov obtained a diploma on Strategy and Innovation from the Business School of Oxford University.

Sergiy Detyuk has been Chief Information Officer since March 2016. Before that, he worked at DTEK as Chief Information Officer from 2009 to 2016, and Deputy Finance Director for IT from 2007 to 2009. Prior to DTEK, he headed the Information Technology department at Dniprospetsstal from 2006 to 2007 and at ISTIL from 2004 to 2006. From 2000 to 2004, he was Deputy Manager of a project to create a corporate information system at Ukrpidshypnyk. Mr Detyuk has completed a corporate MBA programme at the London School of Business (UK, Ukraine) and has an MBA from Kyiv-Mohyla Business School (Ukraine). He also holds a master's in Computer Programming and a diploma in Financial Economics, both from Donetsk State Technical University (Ukraine).

Remuneration of Management

The aggregate amount of salaries and bonuses paid by Metinvest as a group to its management team (including the Chief Executive Officer) in the year ended 31 December 2017 and the year ended 31 December 2016 was U.S.\$13.3 million and U.S.\$11.5 million, respectively.

The contracts with the members of Metinvest's senior management do not provide for any pension or other benefits upon termination of respective contracts.

Share Options

As of the date of this Offering Memorandum, neither the Issuer nor any member of the Group has a share option plan and no share options have been granted to the members of the Management Board of the Issuer, Metinvest's management or employees.

Debt Securities

As of the date of this Offering Memorandum, certain members of Metinvest's management team hold the Existing 2021 Notes amounting in aggregate to U.S.\$1,074,000.

Litigation Statement about Directors and Management

As of the date of this Offering Memorandum, no member of the Management Board or of Metinvest's senior management for at least the previous six years:

- has any convictions in relation to fraudulent offences;
- has performed an executive function as a senior manager or a member of the administrative, management or supervisory bodies of any company at the time of or preceding such company's bankruptcy, receivership or liquidation; or
- has been subject to any official public incrimination and/or sanction by any statutory or regulatory authority (including any designated professional body) or has ever been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of a company or from acting in the management or conducting the affairs of a company.

Conflicts of Interests

Except as discussed immediately above, there is no actual or potential conflict of interests between the duties of any of the members of the Management Board and Metinvest's management team and their respective private interests.

SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

Shareholders

The table below sets forth certain information regarding the ownership of shares in the share capital of the Issuer as of the date of this Offering Memorandum.

	Number of Shares	Class of Shares	Percentage of Share Capital
Shareholder			
SCM Cyprus	6,750	A	71.24%
SMART Group companies (Adeona Holdings Limited, Majorone Trading Limited and Celebrom Investments Limited)	2,251	B	23.76%
Clarendale Limited	474	C	5.00%
Total:	<u>9,475</u>		<u>100%</u>

The issued and fully paid share capital of the Issuer comprises 6,750 class A shares, 2,251 class B shares and 474 class C shares, each with a par value of €10. Each share carries one vote. In addition, holders of class A shares and holders of class B shares are entitled to a right of pre-emption upon the issue of class A shares and class B shares (save in cases where this right is withheld by virtue of mandatory legal provisions), pro rata to the total amount of shares of that class held by such holders on the date of the resolution to issue shares of that class. Class C shares do not carry pre-emptive rights, but such rights vest in holders of class A shares and class B shares, pro rata to their respective stakes in the Issuer and net of class C shares. Holders of class B shares are entitled to appoint Director B of the Issuer, while Director A is appointed by a joint meeting of holders of class A shares and holders of class C shares.

SCM Cyprus owns 71.24 per cent. of the issued share capital of the Issuer. SCM Cyprus is a member of the SCM Group. Mr Rinat Akhmetov is the ultimate beneficial owner of the SCM Group. Adeona Holdings Limited, Majorone Trading Limited and Celebrom Investments Limited, all part of the SMART Group own 23.76 per cent. of the issued share capital of the Issuer. The SMART Group is beneficially owned by Mr Vadym Novynskyi. Clarendale Ltd. owns 5.00 per cent. of the issued share capital of the Issuer. This ownership stake has been acquired by SCM Holdings, which is a member of the SCM Group, for the benefit of the SCM Group and the SMART Group.

An affiliate of SCM Cyprus has been involved in a protracted commercial dispute with Raga Establishment Limited ("**Raga**") over the sale of PJSC "Ukrtelecom" ("**Ukrtelecom**"), a major Ukrainian telecommunications company. SCM Cyprus was not a party to the actual transaction regarding the sale of Ukrtelecom and was not a guarantor or surety provider. However, Raga initiated proceedings in Cyprus against several respondents, including SCM Cyprus, attempting to collect from these respondents, as damages, the amounts allegedly due from the affiliate of SCM Cyprus that originally acquired Ukrtelecom.

In December 2017, upon the application of Raga, the District Court of Nicosia in Cyprus issued a provisional freezing order against SCM Cyprus and other respondents. In January 2018, Raga also obtained an attachment from the Amsterdam district court over the shares of the Issuer held by SCM Limited. The Issuer is not a party to this dispute, and neither the Cypriot freezing order nor the Dutch attachment affects the Group's legal capacity to incur debt, give guarantees or operate in the ordinary course of business. The freezing order and the attachment are conservatory measures, aimed at preserving SCM Cyprus' assets for the potential claim Raga may have on SCM

Cyprus. Only if the legal dispute between SCM Cyprus and Raga ends in favour of Raga, Raga may enforce a judgement awarding compensation for damages against SCM Cyprus by means of an enforced sale of the Issuer's shares to a third party. Such an occurrence may trigger a change of control under the Notes, which carries certain risks; see "*Risk Factors—Risks Relating to the Notes and the Guarantees—The Issuer may not be able to finance a redemption at the option of the Noteholders upon a change of control*".

The SCM Group is challenging these provisional orders. The hearing of SCM Group's challenge of the Dutch attachment is scheduled for 22 March 2018, and the hearing of its challenge of the Cypriot freezing order is scheduled for 30 March 2018.

To the best of the Issuer's knowledge, there are no arrangements in place that could result in a change of control. Save as disclosed above, there are no other persons who could, directly or indirectly, exercise control over the Issuer.

Save as disclosed in this "*Shareholders and Related Party Transactions*" section, none of the members of the Management Board or members of Metinvest's management team had or has any interest(s) in any transaction(s) which were effected by Metinvest and which were either unusual in their nature or conditions, or significant to Metinvest's business during the years ended 31 December 2015, 2016 and 2017, and which remain outstanding or unperformed.

None of the Issuer's shareholders of any class has voting rights which differ from any of the other holders of the Issuer's shares of that same class.

Shareholders' Agreement

In July 2014, the SCM Group and SMART Group completed the merger of their metals and mining assets under Metinvest (which started in 2007) pursuant to the terms of a shareholders' agreement dated 7 July 2014 (the "**Shareholders' Agreement**"). Under the Shareholders' Agreement, the SMART Group received a number of additional rights with respect to the Metinvest group, including: the right to veto certain matters within the remit of the Supervisory Board and a General Shareholders' Meeting of the Issuer; the right to appoint three of the ten Supervisory Board members of the Issuer (the other seven members of the Supervisory Board being appointed by a joint meeting of the SCM Group and Clarendale Limited); and the right to appoint one of the Issuer's two directors (one of the directors, who serves as the CEO of the Issuer and the Group, is appointed by a joint meeting of the SCM Group and Clarendale Limited). Furthermore, an additional class B share was issued in July 2014 for the benefit of the SMART Group.

The Shareholders' Agreement provides that each of SCM (SYSTEM CAPITAL MANAGEMENT) Ltd. and the SMART Group companies has a right of first refusal in the event that either elects to sell shares in the Issuer. In addition, if either disposes of its shares in the Issuer, the other party is entitled to join in the offer and has the right to sell its shares. Decisions at shareholders' meetings are taken by unanimous vote of the class A and B shareholders. In the case of a deadlock, a deadlock resolution mechanism is provided for in the Shareholders' Agreement.

Related Party Transactions

In the normal course of its business, Metinvest enters into transactions with related parties. For purposes of the Financial Statements, parties are considered to be related if one party has the ability to control the other party, is under common control, or can exercise significant influence over the other party in making financial and operational decisions. In considering each potential related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

Other than the transactions with related parties described herein, Metinvest did not engage in any transactions with members of Metinvest's management team or members of the Issuer's Board during the period under review.

Metinvest seeks to conduct all transactions with related parties on market terms and in accordance with applicable legislation. The terms and conditions of sales to related parties are determined based on arrangements specific to each contract or transaction taking into account existing pricing arrangements for similar types of transactions with unrelated parties. However, there can be no assurance that any or all of these transactions have been or will be conducted on market terms.

Transactions with related parties during 2015, 2016 and 2017 and significant outstanding balances as at 31 December 2015, 2016 and 2017 are set out below.

Sales to related parties

Metinvest sells its products, mainly comprising iron ore, coal and metal products, to related parties. Total sales to related parties, including the SMART Group and Zaporizhstal, in the years ended 31 December 2015, 2016 and 2017 amounted to U.S.\$734 million, U.S.\$529 million and U.S.\$1,016 million, respectively.

Metinvest sells coke and coking coal in the ordinary course of business to Zaporizhstal and other related parties. In the years ended 31 December 2015, 2016 and 2017, coke and coking coal sales amounted to U.S.\$349 million, U.S.\$250 million and U.S.\$530 million, respectively.

Metinvest also sells iron ore and scrap metal in the ordinary course, of business to related parties, including Zaporizhstal. In the years ended 31 December 2015, 2016 and 2017 total sales of iron ore to related parties amounted to U.S.\$163 million, U.S.\$116 million and U.S.\$276 million, respectively. In the same periods, total sales of scrap metals to related parties amounted to U.S.\$49 million, U.S.\$35 million and U.S.\$33 million, respectively.

In the years ended 31 December 2015, 2016 and 2017, Metinvest sold steel products to related parties in the amount of U.S.\$68 million, U.S.\$58 million and U.S.\$81 million, respectively.

The sales of other products to related parties in the years ended 31 December 2015, 2016 and 2017 amounted to U.S.\$105 million, U.S.\$70 million and U.S.\$96 million, respectively.

Purchases from related parties

Metinvest purchases from related parties metal products, electricity, gas, spare parts, raw materials for use in its operations, primarily coke and coking coal, as well as other services. Total purchases of products and services from related parties in the years ended 31 December 2015, 2016 and 2017 amounted to U.S.\$2,193 million, U.S.\$2,159 million and U.S.\$2,736 million, respectively.

In the years ended 31 December 2015, 2016 and 2017, Metinvest purchased rolled metal products from Zaporizhstal and other related parties for a total amount of U.S.\$1,127 million, U.S.\$950 million and U.S.\$1,478 million, respectively.

In the years ended 31 December 2015, 2016 and 2017, Metinvest purchased electricity from the DTEK Group for a total amount of U.S.\$454 million, U.S.\$439 million and U.S.\$386 million, respectively. In July 2013, Metinvest also started purchasing gas from DTEK Trading. Such purchases totalled U.S.\$105 million, U.S.\$182 million and U.S.\$241 million in the years ended 31 December 2015, 2016 and 2017, respectively.

The purchase of raw materials and spare parts from Dokuchayevsk Flux and Dolomite Plant, Novotroitsk Ore Mining, Kryvyi Rih Mining Equipment Plant, Kryvyi Rih Iron Ore Plant and Southern GOK (which became a

related party in relation to Metinvest in January 2013) in the years ended 31 December 2015, 2016 and 2017 totalled U.S.\$69 million, U.S.\$116 million and U.S.\$126 million, respectively.

In the years ended 31 December 2015, 2016 and 2017, Metinvest purchased coke and coking coal from Yenakiieve Coke (which became a related party in relation to Metinvest in November 2012) and DTEK for a total amount of U.S.\$79 million, U.S.\$107 million and U.S.\$71 million, respectively.

Metinvest purchases drilling, blasting, forwarding and other services from related parties. In the years ended 31 December 2015, 2016 and 2017, payments for such services to related parties including Joint Stock Company Krivbasvzryvprom, Lemtrans LLC, Insurance Company ASKA, Ferro Shipping Limited and First Ukrainian International Bank amounted to U.S.\$331 million, U.S.\$300 million and U.S.\$316 million, respectively.

Trade and other receivables and payables

As at 31 December 2017, Metinvest had an outstanding balance of U.S.\$974 million of trade and other receivables (excluding loans issued) from related parties, primarily related to supplies of iron ore, coke and coal products to Zaporizhstal and Yenakiieve Coke, prepayments made to DTEK Group companies for gas and electricity and dividends receivable from Southern GOK. The trade and other receivables balances were U.S.\$464 million and U.S.\$325 million as at 31 December 2016 and 2015, respectively.

As at 31 December 2017, Metinvest had an outstanding balance of U.S.\$971 million of trade and other payables comprising:

- U.S.\$157 million due to the SCM Group and related entities, including U.S.\$55 million in relation to dividends accrued (compared to U.S.\$180 million and U.S.\$177 million as at 31 December 2016 and 2015, respectively);
- U.S.\$50 million due to its associates, including U.S.\$46 million to Yenakiieve Coke Plant (compared to U.S.\$81 million and U.S.\$58 million as at 31 December 2016 and 2015, respectively);
- U.S.\$317 million due to its joint venture Zaporizhstal in relation to the purchase of metal products (compared to U.S.\$200 million and U.S.\$200 million as at 31 December 2016 and 2015, respectively);
- U.S.\$48 million due to the SMART Group, all in relation to dividends accrued; and
- U.S.\$400 million due to Southern GOK in relation to purchases of concentrate and agglomerate (compared to U.S.\$310 million and U.S.\$210 million as at 31 December 2016 and 2015, respectively).

As at 31 December 2017, Metinvest had an outstanding balance of U.S.\$103 million of short-term dividends payable comprising U.S.\$55 million due to the SCM Group (compared to U.S.\$40 million and U.S.\$40 million as at 31 December 2016 and 2015, respectively), and U.S.\$48 million due to the SMART Group (compared to U.S.\$48 million and U.S.\$48 million as at 31 December 2016 and 2015, respectively). Metinvest had no long-term dividends payable to related parties as at 31 December 2017, 2016 and 2015.

The Seized Assets collectively have certain outstanding trade debts owed to suppliers. To maintain these supplier relationships, Metinvest intends to discharge these trade debts on behalf of the Seized Assets, which will result in receivables owing to it by the Seized Assets. The Seized Assets also owe certain receivables to Metinvest and Metinvest owes certain payables to the Seized Assets, which Metinvest intends to net off, resulting in a net receivable owing to Metinvest. In addition, Krasnodon Coal owes certain amounts to Metinvest Holding LLC under a bond which is currently in default. Metinvest may write off all or part of these existing and future receivables and other obligations payable to it by the Seized Assets in the future. These existing and future

receivables and other obligations owed by the Seized Assets to Metinvest and their write-off are permitted under the Conditions.

Borrowings from related parties

Metinvest had outstanding non-bank borrowings from related parties of U.S.\$460 million as at 31 December 2017, including principal of U.S.\$369 million and interest accrued of U.S.\$91 million (compared to U.S.\$425 million and U.S.\$393 million as at 30 December 2016 and 2015, respectively). Also see "*Description of Indebtedness—Non-bank borrowings—Shareholder loans*". These shareholder loans are subordinated in favour of lenders under the PXF Facility Agreement and the holders of the Amended 2021 Notes and the Notes; see "*Description of Indebtedness—Non-bank borrowings—Shareholder subordination*".

Loans to related parties

As at 31 December 2017, Metinvest had an outstanding balance of U.S.\$226 million of loans granted to related parties (compared to U.S.\$216 and U.S.\$211 million as at 31 December 2016 and 2015, respectively), including:

- U.S.\$98 million of loans granted to Zaporizhstal (compared to U.S.\$98 million and U.S.\$101 million as at 31 December 2016 and 2015, respectively);
- U.S.\$87 million of loans granted to the SMART Group (compared to U.S.\$82 million and U.S.\$75 million as at 31 December 2016 and 2015, respectively); and
- U.S.\$41 million of loans granted to the SCM Group (compared to U.S.\$36 and U.S.\$35 million as at 31 December 2016 and 2015, respectively).

All amounts specified in this subsection represent outstanding principal, interest and capitalised interest (where applicable) balances as at the specified date.

Sponsorship and charitable payments

In 2016 and 2017, Metinvest's aggregate sponsorship and other charitable payments totalled U.S.\$6 million and U.S.\$10 million, respectively, all of which was paid to non-related parties. In 2015, Metinvest's aggregate sponsorship and other charitable payments totalled U.S.\$17 million, of which U.S.\$11 million was paid to related parties (in the form of non-refundable financial assistance), including U.S.\$11 million through the Foundation for Development of Ukraine. Metinvest's aggregate sponsorship and other charitable payments to non-related parties in this period amounted to U.S.\$6 million.

Acquisition and disposal of subsidiaries

There were no acquisitions and disposals of subsidiaries during the years ended 31 December 2017, 2016 and 2015.

DESCRIPTION OF INDEBTEDNESS

As of the date of this Offering Memorandum, the Issuer's indebtedness comprises:

Amended 2021 Notes

As of the Issue Date, the Amended 2021 Notes will have the following terms.

Overview

The maturity date of the Amended 2021 Notes is 31 December 2021. Interest on the Amended 2021 Notes accrues at the rate of 7.500 per cent. per annum and is payable semi-annually in arrear on 18 June and 18 December.

Guarantees

The Amended 2021 Notes are guaranteed by the Guarantors. The Amended 2021 Notes constitute direct, unsecured, unsubordinated and unconditional obligations of the Issuer and at all times rank *pari passu* and without any preference among themselves and among the Notes. Each guarantee under the Amended 2021 Notes constitutes a senior, unsubordinated and unsecured obligation of the relevant Guarantor. The guarantees of the Amended 2021 Notes may be released under certain circumstances as set forth in the terms and conditions of the Amended 2021 Notes.

Terms and conditions of the Amended 2021 Notes

The terms and conditions of the Amended 2021 Notes are identical to the terms and conditions of the Notes, except in respect of the following:

- Interest accrues at the rate of 7.500 per cent. per annum and is payable semi-annually in arrear on 18 June and 18 December; and
- The maturity date is 31 December 2021.

The PXF Facility Agreement

Overview

On 19 March 2018, the Issuer entered into an amendment and restatement agreement with, among others, the PXF Agent (the "**Amendment and Restatement Agreement**"). The Existing PXF Facility will be restated pursuant to and on the terms documented in the amended and restated PXF facility agreement (the "**PXF Facility Agreement**") on the date that the conditions precedent under the Amendment and Restatement Agreement are satisfied (the "**Effective Date**"). The final maturity date will be the earlier of (i) the date falling 54 months after the Effective Date and (b) 31 December 2022 (the "**Termination Date**"). The Amendment and Restatement Agreement also provides for the common security, which is held for the benefit of (i) the lenders under the Existing PXF Facility and (ii) the holders of the Existing 2021 Notes, to be released on the Effective Date.

The total commitments under the PXF Facility Agreement will be determined by a number of factors, including the number of lenders who participate in the PXF Shift (see "*Tender Offer, Consent Solicitation and PXF Shift*"), new lenders who may participate in the PXF Facility Agreement and existing lenders who may increase their existing commitments in accordance with the terms of the Amendment and Restatement Agreement. The total commitments under the PXF Facility Agreement cannot, however, exceed the total commitments in place under the Existing PXF Facility on the date of the Amendment and Restatement Agreement.

Security and Guarantees

Security and guarantees will be provided in respect of the PXF Facility Agreement, including the following:

- (a) Security assignments granted by Azovstal, Ilyich Steel, Ingulets GOK, Northern GOK and Metinvest International in respect of their respective rights under certain export contracts and offtake contracts;
- (b) Pledges of rights in relation to certain bank accounts granted by Metinvest International, Azovstal, Ilyich Steel and Ingulets GOK; and
- (c) English law governed uncapped guarantees (suretyship agreements) from Ilyich Steel, Central GOK, Ingulets GOK and a guarantee from Metinvest Management B.V.

Interest

The rate of interest for each interest period is the aggregate of a fixed rate per annum and LIBOR. Default interest provisions apply.

Repayments

First Year Deleveraging Amount: In monthly instalments, ending on and including the date falling 12 months after the Effective Date, the Issuer will repay an amount (the "**First Year Deleveraging Amount**") equal to the aggregate of:

- (a) the amount necessary to reduce the principal outstanding under the PXF facility on close of business on the Effective Date to the amount equal to 65 per cent of the difference between (i) the amount of principal under the Existing PXF Facility outstanding at close of business on 1 November 2017 (which was U.S.\$1,122,917,823.09) and (ii) the PXF commitments which shift to the Notes and which are purchased by the Issuer pursuant to the terms of the Amendment and Restatement Agreement; and
- (b) the amount necessary to reduce the aggregate amount of each new or increase lenders' commitments which are outstanding on the Effective Date by 15 per cent.

Subsequent repayment instalment: Following the payment of the First Year Deleveraging Amount, the Issuer will repay the outstanding principal in equal monthly instalments, ending on and including the Termination Date.

Prepayments

The PXF Facility Agreement allows for voluntary prepayments (subject to a *de minimis* amount) and requires mandatory prepayment in full or part as follows:

- (a) *Upfront prepayment:* On the Effective Date, the Issuer must make a prepayment of the PXF loan in an amount necessary to reduce the amount of principal outstanding as at close of business on the Effective Date to the amount equal to 80% of:
 - (i) the amount of principal outstanding under the Existing PXF Facility as at close of business on 1 November 2017;
 - less*
 - (ii) the amount of principal which is transferred and cancelled pursuant to the PXF Shift. Also see "*Tender Offer, Consent Solicitation and PXF Shift*".

- (b) *Excess note proceeds*: No later than the date falling 7 Business Days after the Effective Date, the Issuer must pay an amount in relation to any excess proceeds of the Notes (the "**Excess Note Proceeds**"), meaning the lower of:
 - (i) The amount by which the proceeds of the Notes exceeds the aggregate of:
 - (1) USD150,000,000 (in case the aggregate commitment of those lenders who subscribe for the Notes as part of the PXF Shift equal or exceed USD200,000,000) or USD200,000,000 (in case the aggregate commitment of those lenders who subscribe for the Notes as part of the PXF Shift is less than USD200,000,000);
 - (2) All amounts applied in connection with the repurchase of the Existing 2021 Notes (including accrued interest); and
 - (3) Any direct fees or expenses incurred by the Issuer in connection with the Amendment and Restatement Agreement, the issuance of the Notes or the tender offer and / or consent solicitation in respect of the Existing 2021 Notes; or
 - (ii) The First Year Deleveraging Amount.
- (c) Illegality (including as a result of any trade, economic or financial sanctions enacted, administered or enforced by the United Nations, the US, Switzerland, the United Kingdom; or the European Union or member state from time to time thereof); and
- (d) On a change of control or sale of all or substantially all of the assets of the Issuer and its restricted subsidiaries whether in a single transaction or a series of related transactions.

General Undertakings

The PXF Facility Agreement contains certain undertakings, restricting the ability of the Issuer and its restricted subsidiaries to:

- (a) enter into amalgamations, demergers, mergers, consolidations or corporate reconstructions;
- (b) make any change to the general nature of their business;
- (c) make acquisitions;
- (d) dispose of assets;
- (e) create or permit to subsist any security over assets;
- (f) enter into transactions, other than on arm's length basis;
- (g) make distributions in relation to share capital;
- (h) make loans or grant guarantees;
- (i) incur financial indebtedness; and
- (j) issue shares.

Financial Covenants

The PXF Facility Agreement contains certain financial covenants, tested at the end of each Relevant Period (as defined below). The financial covenants are as follows:

- (a) *Gearing Ratio.* The ratio of borrowings to consolidated tangible net worth in respect of each period of twelve months ending on or about 30 June or 31 December of each year (the **Relevant Period**) shall not exceed 1:1.
- (b) *Interest Cover.* Interest cover in respect of each Relevant Period shall not be less than 5:1.
- (c) *Net Worth.* Consolidated tangible net worth shall not at any time be less than:
 - (i) USD 3,000,000,000 with effect from the date on which the compliance certificate in respect of the Relevant Period ending 31 December 2020 is delivered to the Agent; and
 - (ii) USD 2,500,000,000 at all times prior to the above referenced date; and
- (d) *Debt Cover Ratio.* The ratio of total net debt to Consolidated EBITDA as at the last day of each Relevant Period for that Relevant Period shall not at any time exceed 3:1.

Events of Default

The PXF Facility Agreement contains events of default, including in relation to:

- (a) non-payment;
- (b) a breach of financial covenants;
- (c) misrepresentation, cross-default, insolvency, insolvency proceedings, creditor's process, unlawfulness and invalidity, unrelated business, change of ownership, audit qualification, repudiation and rescission of agreements, accounts, litigation, convertibility/transferability, moratorium and subordination agreement, revocation of authorisations, material adverse change, actions undermining guarantees and change in law;
- (d) the actual or deemed insolvency of a material company;
- (e) any corporate action, legal proceedings or other procedure or step taken in relation to the insolvency of a material company;
- (f) the cessation of business of any material company subject to certain exceptions, including in respect of Avdiivka Coke as a result of armed hostilities or acts of war for no longer than twelve months;
- (g) any variation or waiver of commercial contracts or any circumstance giving rise to the termination, frustration, repudiation, rescission or cancellation of any commercial contract (likely, in the reasonable opinion of the majority lenders, to have a material adverse effect on the ability of a transaction party to perform its obligations under the finance documents).
- (h) any expropriation, nationalisation, sanctions, seizure, compulsory acquisition, intervention, restriction or other action by or on behalf of any governmental, regulatory or other authority or other person which effect would be to limit or substantially curtail the authority or ability of a material company to conduct its business (excluding Avdiivka Coke where such limitation or curtailment subsists for no longer than four months).

- (i) any breach by Metinvest International:
- (i) to accept deliveries above certain aggregate values (subject to applicable grace periods); or
- (ii) of the terms of an acknowledgement of assignment.

Deutsche Bank EUR25 Million Loan Facility ("ECA Facility")

On 6 August 2012, the Issuer entered into the ECA Facility. The loan has the benefit of a suretyship issued by Ingulets GOK. The facility is repayable in equal semi-annual instalments by 10 July 2022. As at 31 December 2017, the amount outstanding under the ECA Facility was approximately €13.5 million.

Railway facility

On 5 December 2017, Metinvest-Shipping entered into a loan agreement with PJSC Taskombank (Ukraine) for the total amount of U.S.\$7.35 million to partly finance rail wagon purchases. The facility matures on 4 February 2023 and is secured by the railway wagons which are purchased using proceeds from this facility.

Trade finance facilities

The Group uses trade finance facilities to finance purchases of inventory and receivables. Those facilities are short term, uncommitted and can be cancelled by the relevant banks at very short notice, and do not permit redrawing any amounts. The Group uses trade lines with weighted average interest rates of 3.5 per cent. per annum, and the maturity of its trade lines generally has terms of less than one year. As at 31 December 2017, Metinvest had U.S.\$288 million of principal outstanding under its trade finance facilities. The majority of these trade lines are drawn by Metinvest International, the main trading company of the Group. As at 31 December 2017, Metinvest International had U.S.\$179 million outstanding under its trade finance facilities compared with U.S.\$94 million as at 31 December 2016. The Group's trade lines are typically secured by pledges of inventories and/or the assignment of export proceeds.

Non-bank borrowings

Shareholder loans. The Issuer had outstanding shareholder loans from related parties in an aggregate amount of U.S.\$460 million as at 31 December 2017, including principal of U.S.\$369 million and interest accrued of U.S.\$91 million (compared to U.S.\$425 million and U.S.\$393 million as at 30 December 2016 and 2015, respectively). The original amount of the relevant facilities was U.S.\$444 million consisting primarily of amounts outstanding under a U.S.\$333 million loan granted by a party related to the SCM Group under an agreement dated 3 April 2014 and a U.S.\$111 million loan granted by a party related to the SMART Group under an agreement dated 3 April 2014, each of which bears interest at 9.5 per cent. per annum and is due to mature after the maturity date of the Notes. These shareholder loans were provided to the Issuer for short-term liquidity purposes in April-May 2014. U.S.\$75 million of the outstanding principal amount was repaid in July 2014. These shareholder loans are subordinated in favour of lenders under the PXF Facility Agreement and the holders of the Amended 2021 Notes and the Notes; see "*Shareholder Subordination*".

Shareholder subordination. The Issuer will subordinate the claims that each of Rainwell Limited and Eltrano Investments Limited (the "**Subordinated Creditors**") holds against it by entering into English law subordination deeds with the facility agent under the PXF Facility Agreement and the trustee under the Notes (the "**Shareholder Subordination Deeds**") on the Issue Date. Pursuant to the Shareholder Subordination Deeds, the Subordinated Creditors will agree that the Issuer's liabilities to the Subordinated Creditors are subordinated to the obligations under the PXF Facility Agreement, the Amended 2021 Notes and the Notes. The subordination will remain in place until the discharge of the liabilities owed by the Issuer to the relevant parties under the PXF Facility Agreement, the Amended 2021 Notes and the Notes.

Finance lease

Caterpillar Financial Leasing. On 12 May 2017, Ingulets GOK secured a new financing facility as part of an equipment leasing agreement. Ingulets GOK agreed to lease eight Caterpillar 785C off-highway trucks from Zeppelin Ukraine. On 25 October 2017, an additional two trucks were agreed under the same deal, so that the total number of trucks constituted ten units. Caterpillar Financial Ukraine LLC, the local lending arm of the US construction and mining equipment manufacturer, provided financing for this transaction for five years for the amount of approximately U.S.\$13.8 million. Delivery of the trucks began in September 2017 and was completed in January 2018. Security interest was granted by way of holding, by Caterpillar Financial Ukraine LLC, the sole and unrestricted legal ownership of the mining equipment leased to Ingulets GOK. As at 31 December 2017, approximately U.S.\$12 million was outstanding under this facility.

TERMS AND CONDITIONS OF THE 2023 NOTES

The U.S.\$944,515,000 7.750 per cent. senior notes due 23 April 2023 (the “**Notes**”, which expression shall in these terms and conditions (the “**Conditions**”), unless the context otherwise requires, include any further notes (the “**Additional Notes**”) issued pursuant to Condition 16 (*Further Issues*) and forming a single series with the Notes) of Metinvest B.V. (the “**Issuer**”) are constituted by the trust deed (as amended, varied or supplemented from time to time, the “**Trust Deed**”) dated 23 April 2018 between the Issuer, the Guarantors and Madison Pacific Trust Limited (the “**Trustee**”, which expression shall include all persons for the time being the trustee or trustees under the Trust Deed) as trustee for the Noteholders (as defined below). These Conditions include summaries of, and are subject to, the detailed provisions of the Trust Deed and the Surety Agreement (each defined below). The agency agreement (as amended, varied or supplemented from time to time, the “**Agency Agreement**”) dated 23 April 2018 has been entered into in relation to the Notes between the Issuer, the Guarantors, the Trustee and The Bank of New York Mellon, London Branch as initial principal paying agent and the other agents named therein. The principal paying agent, the other paying agents, the registrar and the transfer agents for the time being (if any) are referred to below respectively as the “**Principal Paying Agent**”, the “**Paying Agents**” (which expression shall include the Principal Paying Agent), the “**Registrar**” and the “**Transfer Agents**” (which expression shall include the Registrar), and collectively are referred to as the “**Agents**”. The Notes are unconditionally, irrevocably and jointly and severally guaranteed by the Guarantors (as defined below) under the Surety Agreement.

Copies of the Trust Deed, the Agency Agreement and the Surety Agreement are available for inspection during normal business hours at the principal office of the Trustee (presently at Suite 1720, 17/F, Tower 1, Admiralty Centre, 18 Harcourt Road, Admiralty, Hong Kong) and at the specified offices of the Paying Agents and the Transfer Agents, and will be sent in electronic form to any Noteholder upon written request made to the Trustee or any Paying Agent or Transfer Agent.

The Noteholders are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Trust Deed and the Surety Agreement and are deemed to have notice of those provisions applicable to them in the Agency Agreement.

On the Issue Date, (i) Yenakieve I&SW, (ii) Makiivka Steel, (iii) Metalen, (iv) Khartsyzsk Pipe, (v) Komsomolske Flux, (vi) Krasnodon Coal and (vii) Donetsk Coke will be Unrestricted Subsidiaries.

1 Form and Denomination and Title

1.1 Form and denomination:

The Notes are in registered form in the denomination of U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof. A definitive certificate (each, a “**Definitive Certificate**”) will be issued to each Noteholder in respect of its registered holding of Notes. Each Note and each Definitive Certificate will have an identifying number which will be recorded on the relevant Definitive Certificate and in the Register (as defined in Condition 1.2). The Notes may only be traded in denominations of U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof. For the avoidance of doubt, the relevant clearing systems are not required to monitor or enforce the minimum denomination.

Definitive Certificates issued with respect to Rule 144A Notes (“**Rule 144A Definitive Certificates**”) will bear the Rule 144A Legend (as defined in the Trust Deed), unless determined otherwise in accordance with the provisions of the Agency Agreement by reference to applicable law. Definitive Certificates issued with respect to the Regulation S Notes (“**Regulation S Definitive Certificates**”) will not bear the Rule 144A Legend.

Upon issue, the Rule 144A Notes will be represented by a Rule 144A global note certificate (the “**Rule 144A Global Note Certificate**”) and the Regulation S Notes will be represented by a Regulation S global certificate (the “**Regulation S Global Note Certificate**” and, together with the Rule 144A Global Note Certificate, the “**Global Note Certificates**”). The Regulation S Global Note Certificate will be deposited with The Bank of New York Mellon, London Branch as Common Depositary and registered in the name of The Bank of New York Depository (Nominees) Limited as nominee of the common depositary for Euroclear Bank S.A./N.V. (“**Euroclear**”) and Clearstream Banking, *société anonyme* (“**Clearstream, Luxembourg**”). The Rule 144A Global Note Certificate will be registered in the name of Cede & Co., as nominee of, and deposited with a custodian for, The Depository Trust Company (“**DTC**”).

Except in the limited circumstances described in the Global Note Certificates, owners of interests in Notes represented by the Global Note Certificates will not be entitled to receive physical Definitive Certificates in definitive form in respect of their individual holdings of Notes. The Notes are not issuable in bearer form.

1.2 Register:

The Registrar will maintain outside the United Kingdom a register (the “**Register**”) in respect of the Notes in accordance with the provisions of the Agency Agreement. In these Conditions, the “**holder**” of a Note means the Person in whose name such Note is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and “**Noteholder**” shall be construed accordingly.

1.3 Title:

Title to the Notes passes only by transfer and registration in the Register. The holder of each Note shall (except as otherwise required by a court of competent jurisdiction or applicable law) be treated as the absolute owner of such Note for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing on the Definitive Certificate relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft of such Definitive Certificate) and no Person shall be liable for so treating such holder.

2 Transfers of Notes

2.1 Transfers:

Subject to the terms of the Agency Agreement, Condition 2.4 and Condition 2.5, a Note may be transferred by delivering the Definitive Certificate in respect of it, with the endorsed form of transfer (or another form of transfer substantially in the same form and containing the same representations and certifications (if any), unless otherwise agreed by the Issuer) duly completed and signed, and any other evidence as the relevant Transfer Agent may require, at the Specified Office (as defined in the Trust Deed) of the relevant Transfer Agent. In the case of a transfer of part only of a holding of Notes represented by one Definitive Certificate, a new Definitive Certificate shall be issued to the transferee in respect of the part transferred and a further new Definitive Certificate in respect of the balance of the holding not transferred shall be issued to the transferor. No transfer of a Note will be valid unless and until entered on the Register.

Transfers of interests in the Notes evidenced by the Global Note Certificate will be effected in accordance with the rules of the relevant clearing system.

Upon the transfer, exchange or replacement of a Rule 144A Note, a Transfer Agent will only deliver Definitive Certificates with respect to Rule 144A Notes that bear the Rule 144A Legend if there is delivered to such Transfer Agent such satisfactory evidence as may be reasonably required by the Issuer,

that neither the Rule 144A Legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the U.S. Securities Act of 1933, as amended (the “**Securities Act**”).

An interest in Notes represented by the Rule 144A Global Note Certificate may be transferred to a person within the United States subject to any applicable transfer restrictions under the Securities Act.

2.2 Registration and delivery of Definitive Certificates:

Promptly and in any case within two business days of the surrender of a Definitive Certificate in accordance with Condition 2.1, the Registrar will register the transfer in question and deliver new Definitive Certificate(s) in respect of the principal amount of the Notes transferred (and, in the case of transfer in part only, the balance of Notes not so transferred) to each relevant holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant holder) by uninsured first-class mail (airmail if overseas) to the address(es) specified for the purpose by such relevant holder.

In this Condition 2.2, “**business day**” means a day on which banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.

Issues of Definitive Certificates upon transfers of Notes are subject to compliance by the transferor and transferee with the certification procedures described above and in the Agency Agreement and, in the case of the Rule 144A Notes, compliance with the Rule 144A Legend.

2.3 No charge:

The transfer of a Note, exercise of an option and partial redemption will be effected without charge by or on behalf of the Issuer, the Registrar or any Transfer Agent, but against such indemnity as the Registrar or (as the case may be) such other Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection therewith.

2.4 Closed periods:

Noteholders may not require transfers to be registered during the period of (i) 15 days ending on (and including) the due date for any payment of the principal of, premium on, if any, or interest on the Notes, (ii) 15 days prior to (and including) any date on which the Notes are due to be redeemed by the Issuer following exercise by it of its option pursuant to Condition 6.2 or on which the Notes are due to be repurchased from the Noteholders following any exercise of their option pursuant to Condition 6.3 or (iii) during the period of seven days ending on (and including) any Record Date (as defined below).

2.5 Regulations concerning transfers and registration:

All transfers of Notes and entries on the Register are subject to the detailed regulations concerning the transfer of Notes scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Trustee and the Registrar. A copy of the current regulations will be mailed (free of charge) by the Registrar and/or any other Transfer Agent to any Noteholder who requests in writing a copy of such regulations.

3 Guarantees and Status

3.1 Guarantee:

The Guarantors have, pursuant to the granting of a Guarantee under the Surety Agreement, jointly and severally, unconditionally and irrevocably guaranteed the moneys payable by the Issuer under the Trust

Deed, the Notes and the Agency Agreement. Each suretyship shall not constitute a guarantee obligation (in Ukrainian: *garantiya*) as that term is interpreted under Ukrainian law.

3.2 Addition of Guarantors:

The Issuer shall give not less than five Business Days' prior notice to the Trustee and the Noteholders in accordance with Condition 17 (*Notices*) of the addition of an Additional Guarantor and the execution and delivery to the Trustee by such Additional Guarantor of a Surety Agreement in connection therewith, provided that the Issuer may procure the accession of a relevant Subsidiary as an Additional Guarantor within a shorter notice period in order to ensure timely compliance with Condition 4.15.1(B). The addition of any Additional Guarantor(s) pursuant to this Condition 3.2 shall be conditional upon receipt by the Trustee of (x) an Opinion of Counsel as to the enforceability of the Surety Agreement of any such Additional Guarantor and as to the due capacity and authority of any such Additional Guarantor and (y) such other documents or certificates as the Trustee may reasonably require. The Trustee shall be entitled to accept and rely on the Opinion of Counsel referred to in sub-paragraph (x) above without further enquiry or liability to any Person as sufficient evidence of the matters certified therein.

3.3 Status of Notes and Guarantee:

The Notes constitute direct, unsecured, unsubordinated and unconditional obligations of the Issuer and shall at all times rank *pari passu* and without any preference among themselves and among the other Senior Notes. Each Guarantee constitutes or will constitute a senior, unsecured, unsubordinated obligation of the relevant Guarantor. The Notes and the Guarantees are:

- 3.3.1** senior unsecured obligations of the Issuer and of the Guarantors, *pari passu* in right of payment among each series of the Senior Notes and with any other existing or future unsecured and unsubordinated Indebtedness of the Issuer or the Guarantors;
- 3.3.2** senior in right of payment to all existing and future subordinated Indebtedness and any other subordinated liabilities of the Issuer and/or the Guarantors;
- 3.3.3** effectively subordinated in right of payment to any existing and future Indebtedness of the Issuer and of the Guarantors that is secured by liens, to the extent of the value of the assets securing such Indebtedness; and
- 3.3.4** in the case of the Notes, structurally subordinated to any existing and future obligations of the Issuer's Restricted Subsidiaries that are not Guarantors.

4 Covenants

So long as any Notes remain outstanding:

4.1 Limitation on Liens:

The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur, assume or suffer to exist any Lien, other than a Permitted Lien, on any of its assets, now owned or hereafter acquired, or any income or profits therefrom, securing Indebtedness, unless, at the same time or prior thereto, the Notes and the Guarantees (a) are secured equally and rateably therewith or (b) have the benefit of other security or other arrangement (in each case for so long as such other Indebtedness is so secured) to the satisfaction of the Trustee.

Any such Lien thereby created in favour of the holders of the Notes or any such Guarantee pursuant to this Condition 4.1 will be automatically and unconditionally released and discharged upon the release and discharge of the initial Lien to which it relates.

4.2 Incurrence of Indebtedness:

4.2.1 The Issuer will not, and will not permit any of its Restricted Subsidiaries to, Incur any Indebtedness except that if (i) no Potential Event of Default nor Event of Default shall have occurred and be continuing at the time, or would occur as a consequence, of the Incurrence of such Indebtedness and (ii) on the date of such Incurrence and after giving effect thereto on a pro forma basis (including a pro forma application of the net proceeds therefrom), the Consolidated Net Leverage Ratio for the Relevant Period immediately preceding the date on which such additional Indebtedness is Incurred would be 3.00 to 1.00 or lower:

- (A) the Issuer and the Guarantors may Incur Indebtedness;
- (B) any Non-Guarantor Subsidiary may Incur Indebtedness without having to comply with paragraph (C) below if, after giving pro forma effect to such Incurrence, the aggregate principal amount of outstanding Indebtedness (1) Incurred by Non-Guarantor Subsidiaries under this Condition 4.2.1(B) (including any Refinancing Indebtedness in respect thereof), (2) Incurred by Non-Guarantor Subsidiaries under Condition 4.2.2(O) and (3) secured by Liens under paragraph (mm) of the definition of “Permitted Liens” (without double-counting), does not exceed 20 per cent. of Total Assets; and
- (C) a Non-Guarantor Subsidiary may Incur Indebtedness if, within 90 days after such Incurrence, such Non-Guarantor Subsidiary executes and delivers to the Trustee a Surety Agreement pursuant to which such Restricted Subsidiary unconditionally and irrevocably guarantees the payment of all moneys payable by the Issuer under the Trust Deed.

4.2.2 Notwithstanding the foregoing Condition 4.2.1, the Issuer and/or (where applicable) its Restricted Subsidiaries will be entitled to Incur any or all of the following Indebtedness (collectively, “**Permitted Debt**”):

- (A) Indebtedness represented by the Senior Notes and the Senior Notes Guarantees outstanding on or immediately following the Issue Date, after giving effect to the application of proceeds of the Indebtedness being Incurred on the Issue Date, and any Indebtedness Incurred in respect of any capitalisation of interest or fees therefor;
- (B) Indebtedness of the Issuer or any of its Restricted Subsidiaries (other than the Senior Notes and the Senior Notes Guarantees) outstanding on or immediately following the Issue Date (including Indebtedness under the PXF Facility Agreement outstanding on or immediately following the Issue Date), after giving effect to the application of proceeds of the Indebtedness being Incurred on the Issue Date, and any Indebtedness Incurred in respect of any capitalisation of interest or fees therefor;
- (C) Indebtedness of the Issuer or any of its Restricted Subsidiaries owed to and held by the Issuer or any of its Restricted Subsidiaries; provided, however, that any subsequent issuance or transfer of any Capital Stock which results in any such Indebtedness being beneficially held by a Person other than the Issuer or a Restricted Subsidiary or any subsequent transfer of such Indebtedness to a Person other than to the Issuer or another Restricted Subsidiary of the Issuer shall be deemed, in each case, to constitute the Incurrence of such Indebtedness by the obligor thereon;
- (D) Indebtedness (a) of a Restricted Subsidiary of the Issuer Incurred and outstanding on or prior to the date on which such Restricted Subsidiary of the Issuer was acquired by or merged, consolidated, amalgamated or otherwise combined with (including pursuant to

any acquisition of assets and assumption of related liabilities) the Issuer or a Restricted Subsidiary or (b) Incurred by the Issuer or a Restricted Subsidiary to provide all or any portion of the funds utilised to consummate the transaction or series of related transactions pursuant to which any Person became a Restricted Subsidiary of the Issuer or was otherwise acquired by or merged, consolidated, amalgamated or otherwise combined with the Issuer or a Restricted Subsidiary; provided, however, with respect to each of clause (a) and (b), that on the date of such acquisition, merger, consolidation or amalgamation or combination and after giving pro forma effect thereto (x) the Issuer would have been entitled to Incur at least U.S.\$1.00 of additional Indebtedness pursuant to Condition 4.2.1 or (y) the Consolidated Net Leverage Ratio of the Issuer would not be more than it was immediately prior to giving pro forma effect to the Incurrence of such Indebtedness pursuant to this paragraph (D);

- (E) Refinancing Indebtedness in respect of Indebtedness Incurred pursuant to Condition 4.2.1 or pursuant to paragraph (A), (B) or (D) above or this paragraph (E);
- (F) Hedging Obligations Incurred by the Issuer or any of its Restricted Subsidiaries, provided they are entered into in the ordinary course of business and not for speculative purposes;
- (G) (i) obligations of the Issuer or any of its Restricted Subsidiaries in respect of bankers' acceptances, performance, bid, completion, surety or appeal bonds or similar instruments, guarantees or other obligations, judgment, advance payment, customs, VAT or other tax guarantees or similar instruments issued in the ordinary course of business of the Issuer or any Restricted Subsidiary of the Issuer or for governmental, tax or regulatory requirements and not in connection with the borrowing of money, including letters of credit or similar instruments in respect of such obligations and (ii) any customary cash management, cash pooling or netting or setting-off arrangements;
- (H) Indebtedness of the Issuer or any of its Restricted Subsidiaries arising from the honouring by a bank or other financial institution of a cheque, draft or similar instrument inadvertently drawn against insufficient funds; provided, however, that such Indebtedness is extinguished within five business days of its Incurrence;
- (I) Indebtedness of the Issuer or any of its Restricted Subsidiaries incurred in the ordinary course of business under trade finance facilities (including working capital and borrowing base facilities) on market terms in respect of receivables financings, factoring financings, forfaiting transactions, discounting transactions or any other trade finance facilities and documentary facilities including, without limitation, letters of credit, documentary credits and advance payment bonds on arm's length terms;
- (J) Purchase Money Indebtedness of the Issuer or any of its Restricted Subsidiaries, in an aggregate principal amount at any time outstanding not to exceed U.S.\$175 million (plus any unused amounts under paragraph (O) below as at the relevant date of determination);
- (K) Indebtedness Incurred in respect of workers' compensation claims, self-insurance obligations, reclamation bonds or similar obligations Incurred by the Issuer or a Restricted Subsidiary of the Issuer in the ordinary course of business and any contingent obligations in respect of early retirement or termination obligations, pension fund obligations or contributions or similar claims, obligations or contributions or social security or wage Taxes;

- (L) Indebtedness arising from agreements of the Issuer or a Restricted Subsidiary of the Issuer providing for indemnification, obligations in respect of earn-outs or other adjustments of purchase price or similar obligations, in each case, Incurred or assumed in connection with the acquisition or disposition of any business or assets or Person or Capital Stock of a Subsidiary of the Issuer (other than Indebtedness Incurred by any Person acquiring or disposing of such business or assets for the purpose of financing such acquisition or disposition); provided that in the case of a disposition, the maximum aggregate liability in respect of all such Indebtedness shall at no time exceed the gross proceeds, including the Fair Market Value of non-cash proceeds (measured at the time received and without giving effect to any subsequent changes in value), actually received by the Issuer or its Restricted Subsidiary in connection with such disposal;
- (M) guarantees or sureties by the Issuer or any Restricted Subsidiary of Indebtedness of the Issuer or any Restricted Subsidiary to the extent that the guaranteed Indebtedness was permitted to be Incurred under another paragraph of this Condition 4.2, provided that if the Indebtedness being guaranteed is subordinated to or *pari passu* with the Notes or a Guarantee, then in each case the guarantee must be subordinated to or *pari passu* with, as applicable, to the same extent as the Indebtedness guaranteed;
- (N) any guarantee, surety, indemnity or similar obligation issued by the Issuer or any Restricted Subsidiary (on terms similar to the arrangements in place as of the Issue Date or otherwise on terms as may be desirable in light of market conditions or any applicable rule, law or legislation) in favour of any Person on behalf of or at the request of an energy supplier in connection with any agreement or arrangement of or with such energy supplier directly or indirectly related to the supply of energy to the Issuer or any of its Restricted Subsidiaries (the “**Permitted Energy Supplier Guarantee**”); and
- (O) Indebtedness of the Issuer or any of its Restricted Subsidiaries in an aggregate principal amount at any time outstanding not to exceed U.S.\$100 million, provided that a Non-Guarantor Subsidiary may only Incur Indebtedness under this Condition 4.2.2(O) if, after giving pro forma effect to such Incurrence, the aggregate principal amount of outstanding Indebtedness (1) Incurred by Non-Guarantor Subsidiaries under this Condition 4.2.2(O), (2) Incurred by Non-Guarantor Subsidiaries under Condition 4.2.1(B) (including any Refinancing Indebtedness in respect thereof) and (3) secured by Liens under paragraph (mm) of the definition of “Permitted Liens” (without double-counting), does not exceed 20 per cent. of Total Assets.

4.2.3 For the purposes of determining compliance with this Condition 4.2, in the event that an item of Indebtedness meets the criteria of more than one of the categories of Permitted Debt described in paragraph (A) through (O) of Condition 4.2.2, or is entitled to be Incurred pursuant to Condition 4.2.1, the Issuer, in its sole discretion, will be permitted to classify such item of Indebtedness on the date of its Incurrence and only be required to include the amount and type of such Indebtedness in one of such paragraphs and will be permitted on the date of such Incurrence to divide and classify an item of Indebtedness in more than one of the types of Indebtedness described in Condition 4.2.1 and Condition 4.2.2, and from time to time to reclassify all or a portion of such item of Indebtedness, in any manner that complies with this Condition 4.2.

4.2.4 For the purposes of determining compliance with any U.S. dollar denominated restriction on the Incurrence of Indebtedness where the Indebtedness Incurred is denominated in a different currency, the amount of such Indebtedness will be the U.S. Dollar Equivalent determined by the Issuer on the date of the Incurrence of such Indebtedness (or in the case of any revolving credit

facility or letter of credit, the date such Indebtedness was first committed); provided, however, that (A) if any such Indebtedness denominated in a different currency is subject to a Currency Agreement with respect to U.S. dollars covering all principal, if any, and interest payable on such Indebtedness, the amount of such Indebtedness expressed in U.S. dollars will be as provided in such Currency Agreement and (B) the U.S. Dollar Equivalent of the principal amount of any such Indebtedness outstanding on the Issue Date shall be calculated based on the relevant currency exchange rate in effect on the Issue Date. The principal amount of any refinancing Indebtedness incurred in the same currency as the Indebtedness being Refinanced will be the U.S. Dollar Equivalent of the Indebtedness Refinanced determined on the date such Indebtedness was originally Incurred, except to the extent that (1) such U.S. Dollar Equivalent was determined based on a Currency Agreement, in which case the Refinancing Indebtedness will be determined in accordance with the preceding sentence and (2) the principal amount of the Refinancing Indebtedness exceeds the principal amount of the Indebtedness being Refinanced, in which case the U.S. Dollar Equivalent of such excess will be determined on the date such Refinancing Indebtedness is Incurred. Notwithstanding any other provision of this Condition 4.2, the maximum amount that the Issuer or a Restricted Subsidiary of the Issuer may Incur pursuant to this Condition 4.2 shall not be deemed to be exceeded with respect to any outstanding Indebtedness due solely to the result of fluctuations in the exchange rates of currencies.

4.2.5 The amount of any Indebtedness outstanding as of any date will be:

- (A) in the case of any Indebtedness issued with original issue discount, the amount of the liability in respect thereof determined in accordance with the Accounting Standards; and
- (B) the principal amount of the Indebtedness, in the case of any other Indebtedness.

4.3 Limitation on Restricted Payments:

4.3.1 The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, make any Restricted Payments, if at the time the Issuer or such Restricted Subsidiary makes such Restricted Payment:

- (A) a Potential Event of Default or an Event of Default shall have occurred and be continuing (or would result therefrom);
- (B) the Issuer would not, at the time of such Restricted Payment and after giving *pro forma* effect thereto as if such Restricted Payment had been made at the beginning of the Relevant Period, have been permitted to Incur an additional U.S.\$1.00 of Indebtedness pursuant to Condition 4.2.1; or
- (C) such Restricted Payment, together with the aggregate amount of all other Restricted Payments made by the Issuer and its Restricted Subsidiaries since the Issue Date (including Restricted Payments made pursuant to paragraphs (C), (E), (H), (M) and (N) of Condition 4.3.2 but excluding all other Restricted Payments permitted by Condition 4.3.2), would exceed the sum of (without duplication):
 - (1) 50% of the Consolidated Net Income accrued during the period (treated as one accounting period) beginning on 1 January 2017 and ending at the end of the most recent semi-annual period for which financial statements have been provided under Condition 4.17 prior to the date of such Restricted Payment (or, in case such Consolidated Net Income shall be a deficit, minus 100% of such deficit); plus

- (2) 100% of the aggregate Net Cash Proceeds and the Fair Market Value of property or assets or marketable securities received by the Issuer since the Issue Date from the issuance or sale of its Capital Stock (other than Disqualified Stock) (other than an issuance or sale to a Subsidiary of the Issuer and other than an issuance or sale to an employee stock ownership plan or to a trust established by the Issuer or any of its Subsidiaries for the benefit of their employees), any Subordinated Shareholder Funding or capital contribution received by the Issuer; plus
- (3) 100% of the aggregate Net Cash Proceeds and the Fair Market Value of property or assets or marketable securities received by the Issuer since the Issue Date from the issue or sale by the Issuer or any Restricted Subsidiary subsequent to the Issue Date of any Indebtedness that has been converted into or exchanged for Capital Stock of the Issuer (other than Capital Stock and convertible or exchangeable Disqualified Stock or debt securities sold to a Subsidiary of the Issuer) or Subordinated Shareholder Funding; plus
- (4) to the extent that any Restricted Investment that was made after the Issue Date is (a) sold, disposed of or otherwise cancelled, liquidated or repaid, 100% of the aggregate amount received in cash and the Fair Market Value of the property or assets or marketable securities received by the Issuer or any Restricted Subsidiary (other than from a Person that is the Issuer or a Restricted Subsidiary), or (b) made in an entity that subsequently becomes a Restricted Subsidiary, 100% of the Fair Market Value of the Restricted Investment of the Issuer and its Restricted Subsidiaries as of the date such entity becomes a Restricted Subsidiary; plus
- (5) to the extent that any Unrestricted Subsidiary of the Issuer designated as such after the Issue Date is redesignated as a Restricted Subsidiary or is merged or consolidated into the Issuer or a Restricted Subsidiary, or all of the assets of such Unrestricted Subsidiary are transferred to the Issuer or a Restricted Subsidiary, the Fair Market Value of the property received by the Issuer or Restricted Subsidiary or the Issuer's Restricted Investment in such Subsidiary as of the date of such redesignation, merger, consolidation or transfer of assets, to the extent such Investments reduced the Restricted Payments capacity under this clause (5) and were not previously repaid or otherwise reduced.

4.3.2 The preceding provisions will not prohibit any or all of the following (collectively, “**Permitted Payments**”):

- (A) any Restricted Payment made in exchange for, or out of or with the Net Cash Proceeds of (1) the substantially concurrent sale or issuance of Capital Stock of the Issuer (other than (x) Disqualified Stock and (y) Capital Stock issued or sold to a Restricted Subsidiary of the Issuer or pursuant to an employee stock ownership plan or to a trust established by the Issuer or any of its Restricted Subsidiaries for the benefit of their employees), or (2) substantially concurrent financing by means of Subordinated Shareholder Funding or cash capital contribution received by the Issuer; provided, however, that the amount of any such Net Cash Proceeds that are utilised for any such Restricted Payment will be excluded from the calculation of amounts under Condition 4.3.1(C)(2);
- (B) any purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Subordinated Obligations of the Issuer or a Guarantor made by exchange for, or out of, the proceeds of the substantially concurrent Incurrence of, Indebtedness of such

Person which is permitted to be Incurred pursuant to Condition 4.2, provided that such Indebtedness is subordinated to the Notes and the Guarantees to the same extent as such Subordinated Obligations;

- (C) dividends and distributions paid after the date of declaration thereof if, at such date of declaration, such dividend or distribution would have complied with Condition 4.3 provided, however, that at the time of payment of such dividend, no Event of Default shall have occurred and be continuing (or result therefrom);
- (D) the purchase, redemption or other acquisition or retirement for value of shares of Capital Stock of the Issuer or any of its Restricted Subsidiaries from any current or former employee, officer or director of the Issuer or any of its Restricted Subsidiaries (or permitted transferees of such current or former employee, officer or directors), pursuant to the terms of the agreements (including employment agreements) or plans (or amendments thereto) approved by the Board of Directors under which such individuals purchase or sell or are granted the option to purchase or sell, shares of such Capital Stock; provided, however, that the aggregate amount of such Restricted Payments (excluding amounts representing cancellation of Indebtedness) shall not exceed U.S.\$15 million in any calendar year;
- (E) so long as no Potential Event of Default or Event of Default has occurred and is continuing, loans and advances to employees, officers and directors of the Issuer or any Restricted Subsidiary of the Issuer the proceeds of which are used to purchase Capital Stock of the Issuer, in an aggregate amount not to exceed U.S.\$25 million at any one time outstanding;
- (F) the declaration and payments of dividends on Disqualified Stock of the Issuer or any Preferred Stock of any Restricted Subsidiary issued pursuant to Condition 4.2;
- (G) repurchases of Capital Stock deemed to occur upon exercise of stock options or warrants if such Capital Stock represents a portion of the exercise price of such stock options or warrants;
- (H) so long as no Potential Event of Default or Event of Default has occurred and is continuing or would be caused thereby, following a public Equity Offering, the declaration and payment of dividends or distributions on the Capital Stock of the Issuer up to 6.0 per cent. per annum of the net cash proceeds received by the Issuer in any such Equity Offering or any subsequent public Equity Offering; provided that if such public Equity Offering was of the Capital Stock of a direct or indirect parent of the Issuer, the net proceeds of any such dividend or distribution are used to fund a corresponding dividend or distribution in an equal or greater amount on the Capital Stock of such direct or indirect parent of the Issuer;
- (I) cash payments in lieu of the issuance of fractional shares in connection with the exercise of warrants or options or the conversion or exchange of Capital Stock of the Issuer or any Restricted Subsidiary; provided, however, that any such cash payment shall not be for the purpose of evading the limitation of the covenant described under this subheading
- (J) any payment, purchase, redemption, defeasance or other acquisition or retirement for value of Subordinated Obligations of the Issuer or any Guarantor, upon a Change of Control or Asset Sale, and provided that no Potential Event of Default or Event of Default shall have occurred and be continuing, to the extent required by the agreements governing

such Indebtedness at a purchase price not greater than 101 per cent. of the principal amount of such Indebtedness, in the case of a Change of Control, and 100 per cent., in the case of an Asset Sale, in each case plus any accrued and unpaid interest thereon, but only if the Issuer (or a third party to the extent permitted by these Conditions) has complied with its obligations under Condition 4.5 and Condition 6.3 and has repurchased the Notes to the extent validly tendered and not withdrawn in connection with such Change of Control Offer or Asset Sale Offer;

- (K) the payment of any Securitisation Fees and purchases of Securitisation Assets and related assets pursuant to a Securitisation Repurchase Obligation in connection with a Qualified Securitisation Financing;
- (L) the declaration or payment of any dividends or other distributions made by a Restricted Subsidiary of the Issuer to holders of its Capital Stock (or owners of an equivalent interest in the case of a Restricted Subsidiary of the Issuer that is an entity other than a corporation) on no more than a pro rata basis;
- (M) so long as no Potential Event of Default or Event of Default has occurred and is continuing, Restricted Payments in the amount not exceeding 75% of Consolidated Net Income for the Relevant Period immediately preceding the date of any such Restricted Payment, provided that the Consolidated Net Leverage Ratio for such Relevant Period does not exceed 1.0 to 1.0 on a pro forma basis after giving effect to any such Restricted Payments and any related transaction; and
- (N) so long as no Potential Event of Default or Event of Default has occurred and is continuing, other Restricted Payments in an aggregate amount outstanding at any time not to exceed U.S.\$20 million.

4.3.3 The Fair Market Value of property or assets (other than cash) shall be the Fair Market Value thereof as determined in good faith by an officer or the Board of Directors of the Issuer. The amount of all Restricted Payments (other than cash) will be the Fair Market Value on the date of the Restricted Payment of the asset(s) or securities proposed to be transferred or issued by the Issuer or such Restricted Subsidiary, as the case may be, pursuant to the Restricted Payment.

4.3.4 For purposes of determining compliance with Condition 4.3, in the event that a Restricted Payment (or portion thereof) meets the criteria of more than one of the categories of Permitted Payments described in paragraph (A) through (N) of Condition 4.3.2, or is permitted pursuant to Condition 4.3.1 and/or one or more of the paragraphs contained in the definition of “Permitted Investment”, the Issuer will be entitled to classify such Restricted Payment or Investment (or portion thereof) on the date of its payment or later reclassify (based on circumstances existing on the date of such reclassification) such Restricted Payment or Investment (or portion thereof) in any manner that complies with Condition 4.3, including as an Investment pursuant to one of more clauses contained in the definition of “Permitted Investment.”

4.4 Transactions with Affiliates:

4.4.1 The Issuer will not, and will not permit any Restricted Subsidiary of the Issuer to, enter into or permit to exist any transaction or a series of related transactions (including the purchase, sale, lease or exchange of any property, employee compensation arrangements or the rendering of any service) with, or for the benefit of, any Affiliate of the Issuer (an “**Affiliate Transaction**”); unless:

- (A) the terms of the Affiliate Transaction are no less favourable to the Issuer or such Restricted Subsidiary than those that could be obtained at the time of the Affiliate Transaction in arm's length dealings with a Person who is not an Affiliate; and
- (B) with respect to any Affiliate Transaction involving an aggregate value in excess of U.S.\$50 million, the Issuer delivers to the Trustee an Officers' Certificate confirming that such Affiliate Transaction complies with the preceding paragraph (A) and a copy of a resolution adopted by a majority of the Disinterested Directors of the Board of Directors of the Issuer or the relevant Restricted Subsidiary of the Issuer (or, in the event that there is only one such Disinterested Director, adopted by such Disinterested Director). The Trustee shall be entitled to rely on any such Officers' Certificate and resolution, without further investigation and without liability to any person.

4.4.2 The following items will not be deemed to be Affiliate Transactions and, therefore, will not be subject to the provisions of Condition 4.4.1:

- (A) any Restricted Payment that does not violate Condition 4.3 and any Permitted Investments (other than Permitted Investments described in paragraphs (c), (j)(i), (v) and (w) of the definition thereof);
- (B) any employment agreement, collective bargaining agreement or benefit arrangements with any employee, officer or director of the Issuer or any of its Restricted Subsidiaries, including under any stock option, stock incentive plans or similar plans, entered into in the ordinary course of business (including severance, termination and other similar payments to former or departing employees, officers or directors);
- (C) payment of reasonable fees and compensation and reimbursements of expenses (pursuant to indemnity arrangements or otherwise) to employees, officers, directors, consultants or agents of the Issuer or any of its Restricted Subsidiaries in the ordinary course of business;
- (D) transactions between the Issuer and its Restricted Subsidiaries and between and among the Issuer's Restricted Subsidiaries;
- (E) transactions with customers, clients, suppliers, purchasers or sellers and other providers of goods or services (including raw materials, energy and transport), lessors or lessees of plant, equipment and property or providers of employees or other labour (for the avoidance of doubt including, without limitation, DTEK, Zaporizhstal, Southern GOK and their respective Subsidiaries), in each case, in the ordinary course of business and which are otherwise on terms that are fair to the Issuer or the relevant Restricted Subsidiaries of the Issuer, in the reasonable determination of the members of the Board of Directors of the Issuer or the relevant Restricted Subsidiary or the senior management thereof, or are on terms at least as favourable to the Issuer or the relevant Restricted Subsidiary of the Issuer as might reasonably be obtained at such time from an unrelated third party (in each case, taken as a whole);
- (F) sponsorship payments made by the Issuer or any of its Restricted Subsidiaries in accordance with past practice and as approved by the Board of Directors;
- (G) any trade credit extended by the Issuer or any of its Restricted Subsidiaries to their respective customers on normal commercial terms and in the ordinary course of their respective trading activities;

- (H) issuances or sales of, and any contribution to the capital of the Issuer in exchange for, Capital Stock (other than Disqualified Stock) of the Issuer;
- (I) the Incurrence of any Subordinated Shareholder Funding (including any conversion or replacement of Capital Stock of the Issuer into Subordinated Shareholder Funding and the entry into the related loan agreement and Shareholder Loan Subordination Agreement) or any amendment thereto or any payment of interest or principal thereunder in compliance with these Conditions;
- (J) Management Advances;
- (K) transactions pursuant to, or contemplated by any agreement or arrangement of the Issuer and its Restricted Subsidiaries as in effect on the Issue Date and transactions pursuant to any amendment, modification or extension to such agreement or arrangement, so long as such amendment, modification or extension, taken as a whole, is not more disadvantageous to the holders of the Notes in any material respect than the original agreement or arrangement as in effect on the Issue Date;
- (L) transactions in the ordinary course of business with a Person (other than an Unrestricted Subsidiary) that is an Affiliate of the Issuer solely because a director of such Person is also a director of the Issuer or any direct or indirect parent of the Issuer; provided, however, that such director abstains from voting as a director of the Issuer or such direct or indirect parent, as the case may be, on any matter involving such other Person;
- (M) any guarantee or surety that does not violate Condition 4.2.2(N) and any Permitted Liens described in paragraph (i)(ii) of the definition thereof;
- (N) any transactions in respect of financial services (including any related security or guarantees) or insurance services in the ordinary course of business and on arm's length commercial terms between the Issuer and its Restricted Subsidiaries, on the one hand, and FUIB on the other hand, provided that, in the case of transactions exceeding U.S.\$100 million (other than in connection with depositing or holding any cash with FUIB in the ordinary course of business and on arm's length commercial terms, transactions permitted under the definition of Cash Equivalents, financial services in connection with the payment of salaries, transactions relating to currency exchange and transactions otherwise permitted under this Condition 4.4), the Issuer complies with the requirements under Condition 4.4.1(B);
- (O) transactions in the ordinary course of business with a Person (other than an Unrestricted Subsidiary) that is an Affiliate of the Issuer solely because the Issuer owns, directly or through a Restricted Subsidiary, Capital Stock in, or controls, such Person;
- (P) (x) Liens on Capital Stock of Unrestricted Subsidiaries and (y) any sale or other disposition of Capital Stock in a Seized Subsidiary that is an Unrestricted Subsidiary;
- (Q) (x) the forgiveness, release, netting off or write-off of trade and other receivables, Indebtedness or other obligations owed by a Seized Subsidiary to the Issuer or any Restricted Subsidiary on the Issue Date or in connection with the assumption, payment, settlement or other discharge by the Issuer or any Restricted Subsidiary of trade and other payables of such Seized Subsidiaries outstanding on the Issue Date or (y) the forgiveness, release, netting off or write-off of trade and other payables, Indebtedness or other obligations owed to a Seized Subsidiary by the Issuer or any Restricted Subsidiary;

- (R) any transaction effected as part of a Qualified Securitisation Financing; and
- (S) any transactions for which the Issuer or a Restricted Subsidiary delivers to the Trustee a written opinion from an Independent Financial Adviser that such Affiliate Transaction is (x) fair from a financial point of view to the Issuer or such Restricted Subsidiary taking into account all relevant circumstances or (y) on terms not less favourable to the Issuer or such Restricted Subsidiary than might have been obtained in a comparable transaction at such time on an arm's length basis from a Person who is not an Affiliate.

4.5 Asset Sales:

4.5.1 The Issuer will not, and will not permit any Restricted Subsidiary of the Issuer to, directly or indirectly, consummate any Asset Sale, unless:

- (A) the consideration received by the Issuer or the relevant Restricted Subsidiary of the Issuer, as the case may be, is at least equal to the Fair Market Value of the assets subject to such Asset Sale;
- (B) at least 75 per cent. of the consideration received in the Asset Sale by the Issuer or the relevant Restricted Subsidiary of the Issuer, as the case may be, is in the form of cash, Cash Equivalents or a combination thereof. For the purposes of this provision, each of the following shall be deemed to be cash:
 - (1) the assumption by the transferee of any liabilities, as recorded on the balance sheet of any of the Issuer or any Restricted Subsidiary of the Issuer (other than contingent liabilities and other than liabilities that are by their terms subordinated in right of payment to the Notes or any Guarantee) and the release of the Issuer or such Restricted Subsidiary from all such liabilities in connection with such Asset Sale;
 - (2) any securities, notes or other obligations received by the Issuer or any Restricted Subsidiary of the Issuer from such transferee that are within 365 days of the Asset Sale converted by the Issuer or such Restricted Subsidiary into cash or Cash Equivalents (to the extent of the cash or Cash Equivalents received in that conversion);
 - (3) any Capital Stock or assets of the kind referred to in Condition 4.5.2(A)(2);
 - (4) any Designated Non-Cash Consideration received by the Issuer or any Restricted Subsidiary in such Asset Sales having an aggregate Fair Market Value, taken together with all other Designated Non-Cash Consideration received pursuant to this clause (4) that is at that time outstanding, not to exceed U.S.\$75 million at the time of the receipt of such Designated Non-Cash Consideration (with the Fair Market Value of each item of Designated Non-Cash Consideration being measured at the time received and without giving effect to subsequent changes in value);
 - (5) Indebtedness of any Restricted Subsidiary of the Issuer that is no longer a Restricted Subsidiary as a result of such Asset Sale, to the extent that the Issuer and each other Restricted Subsidiary of the Issuer are released from any guarantee of such Indebtedness in connection with such Asset Sale; and

- (6) consideration consisting of Senior Indebtedness of the Issuer or any Guarantor received from Persons who are not the Issuer or any Restricted Subsidiary that is cancelled.

4.5.2 Within 365 days after the receipt of any Disposal Proceeds from an Asset Sale, the Issuer (or any of its Restricted Subsidiaries) may:

- (A) apply such Disposal Proceeds (at the option of the Issuer or Restricted Subsidiary):
 - (1) to the extent the Issuer or any Restricted Subsidiary, as the case may be, elects, or is required by the terms of any Senior Indebtedness (other than the requirements to make an Asset Sale Offer pursuant to Condition 4.5.4) to prepay, repay or purchase any Senior Indebtedness of the Issuer or its Restricted Subsidiaries (including the Senior Notes, but excluding, in each case, Indebtedness owed to the Issuer or an Affiliate of the Issuer), *provided, however*, that, in connection with any prepayment, repayment or purchase of Indebtedness pursuant to this paragraph (1), the Issuer or such Restricted Subsidiary will retire such Indebtedness and will cause the related commitment (if any) to be permanently reduced in an amount equal to the principal amount so prepaid, repaid or purchased;
 - (2) to invest in Additional Assets; or
 - (3) any combination of the foregoing; or
- (B) enter into a binding commitment to apply the Disposal Proceeds pursuant to Condition 4.5.2(A)(2) above; provided that such commitment shall be treated as a permitted application of the Disposal Proceeds from the date of such commitment until the earlier of (1) the date on which such acquisition or expenditure is consummated, and (2) the 180th day following the expiration of the aforementioned 365 day period.

4.5.3 Pending the final application of any Disposal Proceeds, the Issuer (or the applicable Restricted Subsidiary) may temporarily reduce Indebtedness or otherwise invest the Disposal Proceeds in any manner that is not prohibited by these Conditions.

4.5.4 Any Disposal Proceeds from Asset Sales that are not applied or invested as provided in Condition 4.5.2 will constitute “**Excess Proceeds.**” When the aggregate amount of Excess Proceeds exceeds U.S.\$100 million, within 10 Business Days thereof, or at any earlier time at the Issuer’s election, the Issuer will make an offer (an “**Asset Sale Offer**”) to all holders of Notes and, to the extent notified by the Issuer in such notice, make an offer to all holders of other Indebtedness that is *pari passu* with the Notes or any Guarantee to purchase, prepay or redeem with the proceeds of sales of assets, the maximum principal amount of Notes and such other *pari passu* Indebtedness (plus all accrued interest on the Indebtedness and the amount of all fees and expenses, including premiums, incurred in connection therewith) that may be purchased, prepaid or redeemed out of the Excess Proceeds. The offer price for the Notes in any Asset Sale Offer will be equal to 100 per cent. of the principal amount and the offer price for any *pari passu* Indebtedness may be no greater than 100 per cent. of the principal amount, in each case, plus accrued and unpaid interest and Additional Amounts, if any, to the date of purchase, prepayment or redemption, subject to the rights of holders of Notes on the relevant record date to receive interest due on the relevant interest payment date, and will be payable in cash. If any Excess Proceeds remain after consummation of an Asset Sale Offer, the Issuer and its Restricted Subsidiaries may use those Excess Proceeds for any purpose not otherwise prohibited by these Conditions. If the aggregate principal amount of Notes and other *pari passu* Indebtedness tendered into (or to be prepaid or redeemed in connection

with) such Asset Sale Offer exceeds the amount of Excess Proceeds, the Notes will be selected in the manner described under Condition 6.5, based on the amounts tendered or required to be prepaid or redeemed. Upon completion of each Asset Sale Offer, the amount of Excess Proceeds will be reset at zero. For the avoidance of doubt, the Issuer may make an Asset Sale Offer prior to the expiration of the 365-day period referred to above.

- 4.5.5** To the extent that any portion of Disposal Proceeds payable in respect of the Notes is denominated in a currency other than U.S. dollars, the amount thereof payable in respect of such Notes shall not exceed the net amount of funds in U.S. dollars that is actually received by the Issuer upon converting such portion of the Disposal Proceeds into U.S. dollars.
- 4.5.6** The Issuer will comply with the requirements of any applicable securities laws and regulations to the extent those laws and regulations are applicable in connection with the repurchase of the Notes as a result of an Asset Sale Offer. To the extent that the provisions of any securities laws or regulations conflict with the Change of Control, Asset Sale provisions of these Conditions, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under these Conditions by virtue of such compliance.

4.6 Limitations on Restrictions on Distributions from Restricted Subsidiaries:

- 4.6.1** The Issuer will not, and will not permit any Restricted Subsidiary of the Issuer to, create or otherwise cause or permit to exist or become effective any consensual encumbrance or restriction on the ability of any Restricted Subsidiary of the Issuer to (x) pay dividends or make any other distributions on its Capital Stock to the Issuer or a Restricted Subsidiary of the Issuer or pay any Indebtedness owed to the Issuer, (y) make any loans or advances to the Issuer or a Restricted Subsidiary of the Issuer or (z) transfer any of its property or assets to the Issuer or a Restricted Subsidiary of the Issuer, provided that (a) the priority of any preferred stock in receiving dividends or liquidating distributions prior to dividends or liquidating distributions being paid on common stock and (b) the subordination of (including the application of any standstill period to) loans or advances made to the Issuer or any Subsidiary to other Indebtedness Incurred by the Issuer or any Restricted Subsidiary, in each case, shall not be deemed to constitute such an encumbrance or restriction.
- 4.6.2** The preceding restrictions will not apply to encumbrances or restrictions arising under or by reason of:
- (A) any encumbrance or restriction pursuant to an agreement in effect at or entered into on the Issue Date, including pursuant to the Senior Notes Documents and the PXF Facility Agreement;
 - (B) any encumbrance or restriction with respect to a Restricted Subsidiary of the Issuer pursuant to an agreement relating to any Indebtedness or Capital Stock of a Person acquired by the Issuer or any of its Restricted Subsidiaries as in effect at the time of such acquisition (except to the extent such Indebtedness or Capital Stock was Incurred in connection with or in contemplation of such acquisition);
 - (C) any encumbrance or restriction arising pursuant to an agreement or instrument relating to any Indebtedness permitted to be Incurred subsequent to the Issue Date pursuant to Condition 4.2 if the encumbrances and restrictions contained in any such agreement or instrument taken as a whole are not materially less favourable to the Noteholders than (1) the encumbrances and restrictions contained in the PXF Facility Agreement and the Notes Documents, in each case, as in effect on the Issue Date (as determined in good faith by

the Issuer) or (2) is customary in comparable financings, where such encumbrances or restrictions will not materially impair the Issuer's ability to make principal or interest payments on the Notes or comply with the respective obligations of the Issuer or any Guarantor under the Notes Documents (as determined in good faith by the Issuer);

- (D) any encumbrance or restriction pursuant to an agreement effecting a Refinancing of Indebtedness Incurred pursuant to an agreement referred to in paragraph (A) to (C) above or this paragraph (D) or contained in any amendment to an agreement referred to in paragraph (A) to (C) above or this paragraph (D); provided, however, that the encumbrances and restrictions with respect to such Restricted Subsidiary contained in any such agreement, taken as a whole, are no less favourable to the Noteholders in any material respect than (1) encumbrances and restrictions with respect to such Restricted Subsidiary contained in such predecessor agreements or (2) is customary in comparable financings, where such encumbrances or restrictions will not materially impair the Issuer's ability to make principal or interest payments on the Notes or comply with the respective obligations of the Issuer or any Guarantor under the Notes Documents (as determined in good faith by the Issuer);
- (E) any encumbrance or restriction with respect to a Restricted Subsidiary of the Issuer imposed pursuant to an agreement entered into for the sale or disposition of all or substantially all the Capital Stock or assets of such Restricted Subsidiary pending the closing of such sale or disposition;
- (F) restrictions on cash or other deposits or net worth imposed by leases or other agreements entered into in the ordinary course of business;
- (G) existing under or by reason of applicable law, rule, regulation, decree or order of any governmental, local or regulatory authority or the terms of any license, authorisation, concession or permit;
- (H) customary limitations on the disposition or distribution of assets or property in joint venture agreements, asset sale agreements, sale-leaseback agreements, stock sale agreements and other similar agreements entered into in the ordinary course of business and in good faith; provided that (1) the encumbrance or restriction is not materially more disadvantageous to Noteholders than is customary in comparable financings and (2) such encumbrances or restrictions will not materially impair the Issuer's ability to make principal or interest payments on the Notes or comply with the respective obligations of the Issuer or any Guarantor under the Notes Documents (as determined in good faith by the Issuer); and
- (I) any encumbrance or restriction consisting of customary non-assignment provisions in contracts, leases and licenses entered into in the ordinary course of business;
- (J) any encumbrance or restriction contained in security agreements or mortgages securing Indebtedness of a Restricted Subsidiary of the Issuer to the extent such encumbrance or restriction restricts the transfer of the property subject to such security agreements or mortgages;
- (K) purchase money obligations and Finance Lease Obligations that impose restrictions on the property purchased or leased of the nature described in Condition 4.6.1;
- (L) Liens permitted to be Incurred under Condition 4.1 that limit the right of the debtor to dispose of the assets subject to such Liens; and

- (M) restrictions effected in connection with a Qualified Securitisation Financing that, in the good faith determination of the Board of Directors or a member of senior management of the Issuer, are necessary or advisable to effect such Qualified Securitisation Financing.

4.7 Limitation on Layering:

Neither the Issuer nor any Guarantor will Incur any Indebtedness that is or purports to be by its terms (or by the terms of any agreement governing such Indebtedness) subordinated in right of payment to any Senior Indebtedness of the Issuer or such Guarantor, unless such Indebtedness is also by its terms (or by the terms of any agreement governing such Indebtedness) made subordinated in right of payment to the Notes and the applicable Guarantee; provided that the foregoing limitation shall not apply to distinctions between categories of Senior Indebtedness that exist by reason of (x) any Liens or guarantees arising or created in respect of some but not all such Senior Indebtedness or (y) being secured on a junior priority basis or by virtue of the application of waterfall or other payment ordering provisions affecting different tranches of Indebtedness or (z) being unsecured.

4.8 Mergers and Similar Transactions:

4.8.1 The Issuer will not consolidate with or merge with or into, or convey, transfer or lease, in one transaction or a series of transactions, directly or indirectly, all or substantially all of the assets of the Issuer and its Restricted Subsidiaries taken as a whole to, any Person, unless:

- (A) either (x) the Issuer will be the surviving entity or (y) the resulting, surviving or transferee Person, if not the Issuer (the “**Successor Company**”), shall be a Person organised in an Approved Jurisdiction or Canada and the Successor Company (if not the Issuer) shall expressly assume, by documentation supplemental thereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, all the obligations of the Issuer under the Notes, the Trust Deed and the Agency Agreement;
- (B) immediately after giving pro forma effect to such transaction (and treating any Indebtedness which becomes an obligation of the Successor Company or any Restricted Subsidiary of the Successor Company as a result of such transaction as having been Incurred by such Successor Company or such Restricted Subsidiary at the time of such transaction), no Potential Event of Default or Event of Default shall have occurred and be continuing;
- (C) immediately after giving pro forma effect to such transaction, the Successor Company would, on the date of such transaction after giving pro forma effect thereto and any related financing transactions, be able to Incur an additional U.S.\$1.00 of Indebtedness pursuant to Condition 4.2.1 or (2) have a Consolidated Net Leverage Ratio no more than it was immediately prior to giving pro forma effect to such transaction; and
- (D) the Issuer shall have delivered to the Trustee an Officers’ Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, lease or transfer and such supplemental trust deed (if any) comply with the provisions of this Condition 4.8.1 and the Trust Deed and upon each of which the Trustee shall be entitled to rely without further investigation and without liability to any Person.

provided, however, that (C) will not be applicable to (x) a Restricted Subsidiary of the Issuer consolidating with, merging into or selling, leasing, assigning, transferring or otherwise disposing of all or part of its properties and assets to the Issuer (so long as no Capital Stock of the Issuer is distributed to any Person), (y) the Issuer disposing all or substantially all of its assets or merging

with an Affiliate of the Issuer solely for the purpose and with the sole effect of reincorporating the Issuer in another jurisdiction, or changing the legal form of the Issuer or (z) any sale, lease, assignment, transfer or other disposition of all or substantially all of the assets, consolidation or merger of the Issuer to or with any Guarantor.

The Successor Company will be the successor to the Issuer and shall succeed to, and be substituted for, and may exercise every right and power of, the Issuer under the Trust Deed and the Agency Agreement, and the predecessor Issuer, except in the case of a lease (in which case such predecessor Issuer shall become a Guarantor pursuant to Condition 3.2), shall be released from the obligation to pay the principal of and interest on the Notes.

4.8.2 The Issuer will not permit any Guarantor (other than any Guarantor whose Guarantee is to be released in connection with such transaction in accordance with the terms of these Conditions) to consolidate with or merge with or into, or convey, transfer or lease, in one transaction or a series of transactions, all or substantially all of its assets to any Person unless:

- (A) where the resulting, surviving or transferee Person is a Non-Guarantor Subsidiary, such Non-Guarantor Subsidiary shall be organised and existing under the laws of the jurisdiction under which such Guarantor was organised or under the laws of an Approved Jurisdiction or Canada, and such Non-Guarantor Subsidiary shall expressly assume, by executing and delivering to the Trustee a Surety Agreement, all the obligations of such Guarantor, if any, under its Guarantee; and
- (B) where the resulting, surviving or transferee Person is not the Issuer or a Restricted Subsidiary, either: (x) the Person acquiring the property in any such sale or disposition or the Person formed by or surviving any such consolidation or merger assumes, by executing and delivering to the Trustee a Surety Agreement, all the obligations of such Guarantor, if any, under its Guarantee; or (y) such sale or other disposition is otherwise not prohibited by these Conditions; and
- (C) immediately after giving effect to such transaction or transactions on a pro forma basis (and treating any Indebtedness which becomes an obligation of the resulting, surviving or transferee Person as a result of such transaction as having been issued by such Person at the time of such transaction), no Potential Event of Default or Event of Default shall have occurred and be continuing; and
- (D) the Issuer delivers to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, lease or transfer and such Surety Agreement, if any, complies with the provisions of this Condition 4.8.2 and the Trust Deed and upon each of which the Trustee shall be entitled to rely without further investigation and without liability to any person.

This Condition 4.8.2 will not apply to any Guarantor consolidating with or merging with or into or selling, conveying, assigning, transferring, leasing or otherwise disposing of all or substantially all of its assets to the Issuer or another Guarantor.

4.8.3 For the purposes of this Condition 4.8, the sale, lease, conveyance, assignment, transfer or other disposition of all or substantially all of the properties and assets of one or more Restricted Subsidiaries of the Issuer or a Guarantor, which properties and assets, if held by the Issuer or such Guarantor instead of such Restricted Subsidiaries, would constitute all or substantially all of the properties and assets of the Issuer or such Guarantor on a consolidated basis, shall be deemed to

be the transfer of all or substantially all of the properties and assets of the Issuer or such Guarantor.

4.9 Maintenance of Authorisations:

- 4.9.1** the Issuer will, and will cause each Material Subsidiary to, take all necessary action to obtain and do or cause to be done all things necessary to ensure the continuance of its corporate existence, its business and intellectual property relating to its business; and
- 4.9.2** the Issuer will, and will cause each Material Subsidiary to, obtain or make, and procure the continuance or maintenance of, all registrations, recordings, filings, consents, licences, approvals and authorisations, which may at any time be required to be obtained or made in any relevant jurisdiction for the purposes of the execution, delivery or performance of the Notes Documents and for the validity and enforceability thereof,

provided that, in any case, if the Issuer or the relevant Material Subsidiary remedies any failure to comply with Conditions 4.9.1 and 4.9.2 within 90 days of such failure, then this covenant shall be deemed not to have been breached.

4.10 Maintenance of Property:

The Issuer will, and will cause each Material Subsidiary to, cause all property used in the conduct of its or their core business to be maintained and kept in good condition, repair and working order and supplied with all necessary equipment and shall cause to be made all necessary repairs, renewals, replacements and improvements thereof, all as may be reasonably necessary so that the core business carried on in connection therewith may be properly conducted at all times; provided that if the Issuer or the relevant Material Subsidiary remedies any failure to comply with the above within 90 days of any non-compliance with the provisions of the preceding sentence or any failure relates to property with a value not exceeding U.S.\$250 million, this covenant shall be deemed not to have been breached. The Issuer and each Material Subsidiary shall not have to comply with this covenant to the extent that it is not possible to do so in respect of assets or operations: (i) of Avdiivka Coke or (ii) located or undertaken in the Uncontrolled Territory or in areas adjacent to and affected by the Uncontrolled Territory.

4.11 Payment of Taxes and Other Claims:

The Issuer will, and will cause each Material Subsidiary to, pay or discharge, or cause to be paid and discharged, before the same shall become overdue and without incurring penalties, (a) all Taxes levied or imposed upon, or upon the income, profits or property of, respectively, the Issuer or the Material Subsidiary (excluding the payment of applicable Taxes that are the subject of the Tax Proceedings) and (b) all lawful claims for labour, materials and supplies which, if unpaid, might by law become a Lien (other than a Permitted Lien) upon the property of, respectively, the Issuer or the Material Subsidiary (excluding any such claims in connection with the Existing Judgments); provided that none of the Issuer or the Material Subsidiaries shall be required to pay or discharge or cause to be paid or discharged any such Tax or claim (i) whose amount, applicability or validity is being contested in good faith by appropriate proceedings and for which adequate reserves in accordance with Accounting Standards as consistently applied or other appropriate provisions have been made or (ii) whose amount, together with all such other unpaid or undischarged taxes, assessments, charges and claims of the Issuer and its Material Subsidiaries, not so contested and for which adequate reserves, if necessary, in accordance with Accounting Standards as consistently applied or other appropriate provisions have been or will be made does not in the aggregate exceed U.S.\$100 million.

4.12 Maintenance of Insurance:

The Issuer will, and will cause each Material Subsidiary to, obtain and maintain insurance with an insurer or insurers of sufficient standing (in the reasonable judgment of the Issuer or the relevant Material Subsidiary) against such losses and risks and in such amounts as are prudent and customary in the businesses in which it is engaged in the jurisdiction(s) where it operates; provided that if the Issuer or the relevant Material Subsidiary remedies any failure to comply with the above within 365 days of any non-compliance with the provisions of the preceding sentence or if such potential losses or risks (which may be assessed by reference to the actual risks and losses borne by the Issuer or the relevant Material Subsidiary over the preceding three years) do not exceed U.S.\$250 million, this covenant shall be deemed not to have been breached. The Issuer and each Material Subsidiary shall not have to comply with this covenant to the extent that it is not possible to do so in respect of assets or operations: (i) of Avdiivka Coke or (ii) located or undertaken in the Uncontrolled Territory or in areas adjacent to and affected by the Uncontrolled Territory.

4.13 Environmental Compliance:

The Issuer will, and will cause each Material Subsidiary to, comply with all Environmental Laws and obtain and maintain any Environmental Licences and take all reasonable steps in anticipation of known or expected future changes to or obligations under the same, except where failure to do so does not and will not have a Material Adverse Effect.

4.14 Change of Business:

The Issuer shall not, and shall cause the Material Subsidiaries not to, make any material change to the Core or Related Business.

4.15 Additional Guarantors and Limitations on Guarantees:

4.15.1 The Issuer (A) may from time to time appoint any of its Restricted Subsidiaries as an Additional Guarantor and (B) shall appoint any one or more of its Restricted Subsidiaries as Additional Guarantors as is necessary to ensure that within 60 days after the date on which financial statements are delivered by the Issuer for each fiscal year in accordance with Condition 4.17.1, in each case in respect of such fiscal year, the combined EBITDA and PPE of the Guarantors, taken as a whole, account for not less than (1) 70 per cent. of Metinvest's Adjusted EBITDA and (2) 65 per cent. of Metinvest's Total Production Assets, respectively, provided that the Guarantee of any Additional Guarantor may be released at any time if, after such release, the combined EBITDA and PPE of the remaining Guarantors, taken as a whole, account for not less than (1) 75 per cent. of Metinvest's Adjusted EBITDA as determined by reference to the Adjusted EBITDA in the most recently available annual or semi-annual consolidated financial statements of Metinvest prepared in accordance with Accounting Standards and (2) 70 per cent. of Metinvest's Total Production Assets, respectively.

4.15.2 The Issuer shall not permit any Non-Guarantor Subsidiary, directly or indirectly, to guarantee (or grant a surety in respect of) any other Indebtedness of the Issuer or any Guarantor which such Non-Guarantor Subsidiary is not otherwise permitted to incur under Condition 4.2, unless such Non-Guarantor Subsidiary is also appointed by the Issuer, and becomes, an Additional Guarantor, such Guarantee of such Additional Guarantor ranking equal with or senior to, its guarantee in respect of such other Indebtedness. If such other Indebtedness being guaranteed (or in respect of which a surety is granted) by such Restricted Subsidiary is a Subordinated Obligation, such guarantee of a Subordinated Obligation shall be subordinated in right of payment to the Guarantee

of the Notes to at least the same extent that such Subordinated Obligation is subordinated to the Notes.

- 4.15.3** The Issuer will cause any Restricted Subsidiary designated as an Additional Guarantor pursuant to Conditions 4.15.1 and 4.15.2 to (A) execute and deliver to the Trustee a Surety Agreement and will become vested with all the duties and obligations of a Guarantor and (B) waive and not in any manner whatsoever claim or take the benefit or advantage of any rights of reimbursement, indemnity or subrogation or any other rights against the Issuer or another Restricted Subsidiary of the Issuer as a result of any payment by such Restricted Subsidiary under its Guarantee. The Trustee shall (at the expense of the Issuer) enter into such Surety Agreement or such other document as may be required to be executed pursuant to this Condition 4.15 in a form and manner satisfactory to the Trustee.
- 4.15.4** Notwithstanding Conditions 4.15.1 to 4.15.3, the Issuer shall not be required to cause any Restricted Subsidiary, and no Restricted Subsidiary shall be required, to grant a Guarantee in respect of the Notes to the extent that (A) such Guarantee would reasonably be expected to give rise to or result in (x) any violation of applicable law or regulation which cannot be avoided or otherwise prevented through measures reasonably available to the Issuer or such Restricted Subsidiary of the Issuer (including, but not limited to 'whitewash' or similar procedures), (y) liability or criminal sanctions for the officers, directors or (except in the case of a Restricted Subsidiary that is a partnership) shareholders of such Restricted Subsidiary (or, in the case of a Restricted Subsidiary that is a partnership, the directors or shareholders of the partners of such partnership), (z) any cost, expense, liability or obligation (including with respect of any taxes) other than reasonable out-of-pocket expenses and other than reasonable expenses incurred in connection with any governmental or regulatory filings or (B) such Restricted Subsidiary is prohibited or restricted from providing such Guarantee as a result of general corporate or contractual restrictions applicable to such Restricted Subsidiary, after the Issuer has used its commercially reasonable efforts (without requiring the Issuer to (x) incur any cost, expense, liability or obligation (including with respect of any taxes) other than reasonable out-of-pocket expenses and counsel fees (including reimbursement of costs of the Trustee) and other reasonable expenses incurred in connection with any governmental or regulatory filings or corporate actions (y) procure any change in jurisdiction of organisation of such Restricted Subsidiary or (z) purchase any minority shareholder interests in such Restricted Subsidiary), to enable such Restricted Subsidiary to provide such Guarantee.
- 4.15.5** Condition 4.15.2 will not be applicable to any guarantees of any Restricted Subsidiary (a) existing on the Issue Date or pursuant to an amendment, modification, refinancing, replacement, exchange, renewal or extension to such guarantee existing on the Issue Date, so long as such amendment, modification, refinancing, replacement, exchange, renewal or extension, taken as a whole, is not more disadvantageous to the holders of the Notes in any material respect than the original guarantee as in effect on the Issue Date or (b) given to a bank or trust company having combined capital and surplus and undivided profits of not less than U.S.\$250 million, whose debt has a rating, at the time such guarantee was given, of at least BBB+ or the equivalent thereof by Fitch, BBB+ or the equivalent thereof by Standard & Poor's and at least Baa1 or the equivalent thereof by Moody's, in connection with the operation of cash management programmes established in the ordinary course of business for the benefit of the Issuer or any of its Restricted Subsidiaries.
- 4.15.6** Notwithstanding Conditions 4.15.1 to 4.15.3, each Guarantee may be limited as necessary to recognise certain defences generally available to guarantors (including those that relate to fraudulent conveyance or transfer, voidable preference, financial assistance, corporate purpose,

capital maintenance or similar laws, regulations or defences affecting the rights of creditors generally) or other considerations under applicable law.

4.15.7 A Guarantor will be automatically and unconditionally released and discharged from its Guarantee:

- (A) upon any sale, exchange, transfer or other disposition of Capital Stock of such Guarantor or any holding company of such Guarantor to a Person that is not the Issuer or a Restricted Subsidiary (which sale, exchange, transfer or other disposition is not prohibited by these Conditions) and the Guarantor ceases to be a Restricted Subsidiary as a result of the sale, exchange, transfer or other disposition;
- (B) upon any sale, exchange, transfer or other disposition of all or substantially all of the assets of such Guarantor (including by way of merger, consolidation, amalgamation or combination) to a Person that is not the Issuer or a Restricted Subsidiary (which sale, exchange, transfer or other disposition is not prohibited by these Conditions);
- (C) upon the reorganisation (whether by way of merger or accession) of the relevant Guarantor pursuant to which such Guarantor accedes to or is merged into the Issuer or another Guarantor;
- (D) if the Issuer designates any Restricted Subsidiary that is a Guarantor to be an Unrestricted Subsidiary in accordance with these Conditions;
- (E) with respect to Avdiivka Coke, upon it becoming an Affected Entity;
- (F) upon the payment in full of principal, interest and all other obligations on the Notes;
- (G) pursuant to an Extraordinary Resolution of the Noteholders;
- (H) as a result of a transaction permitted by Condition 4.8;
- (I) upon such Guarantor consolidating with, merging into or transferring all of its properties and assets to the Issuer or another Guarantor in accordance with the applicable provisions of the Trust Deed, and as a result of, or in connection with, such transaction such Guarantor winding down, dissolving or otherwise ceasing to exist;
- (J) with respect to the Guarantee of an Additional Guarantor, pursuant to Condition 4.15.1; or
- (K) with respect to the Guarantee of any Guarantor that was required to provide such Guarantee pursuant to Condition 4.15.2, upon such Guarantor being unconditionally released and discharged from its liability with respect to the Indebtedness giving rise to the requirement to provide such Guarantee so long as no Potential Event of Default or Event of Default would arise as a result and no other Indebtedness is at that time guaranteed by the relevant Guarantor that would result in the requirement that such Guarantor provide a Guarantee pursuant to Condition 4.15.2.

4.15.8 The Issuer will give written notice to the Trustee in accordance with the Trust Deed of any Guarantor becoming or ceasing to be a Guarantor and, so long as the Notes are listed on Euronext Dublin and/or any other stock exchange on which the Notes may be listed or quoted from time to time, shall comply with applicable rules of Euronext Dublin and/or such other exchange in relation to any Guarantor becoming or ceasing to be a Guarantor.

4.15.9 The Issuer shall maintain an updated list of Guarantors which shall be available for inspection at the registered offices of the Trustee upon request.

4.16 Designation of Restricted and Unrestricted Subsidiaries:

- 4.16.1** On the Issue Date, each of (i) Yenakiieve I&SW, (ii) Makiivka Steel, (iii) Metalen, (iv) Khartsyzsk Pipe, (v) Komsomolske Flux, (vi) Krasnodon Coal and (vii) Donetsk Coke shall be an Unrestricted Subsidiary.
- 4.16.2** The Board of Directors of the Issuer may designate any Restricted Subsidiary (including any newly acquired or newly formed Restricted Subsidiary) to be an Unrestricted Subsidiary if that designation would not cause a Potential Event of Default. If a Restricted Subsidiary is designated as an Unrestricted Subsidiary, the aggregate Fair Market Value of all outstanding Investments owned by the Issuer and its Restricted Subsidiaries in the Subsidiary designated as an Unrestricted Subsidiary will be deemed to be an Investment made as of the time of the designation and will reduce the amount available for Restricted Payments under Condition 4.3 or under one or more clauses of the definition of Permitted Investments, as determined by the Issuer. That designation will only be permitted if the Investment would be permitted at that time and if the Restricted Subsidiary otherwise meets the definition of an Unrestricted Subsidiary. The Issuer may redesignate any Unrestricted Subsidiary to be a Restricted Subsidiary if that redesignation would not cause a Potential Event of Default.
- 4.16.3** Any designation of a Subsidiary of the Issuer as an Unrestricted Subsidiary will be evidenced to the Trustee by delivering to the Trustee a copy of a resolution of the Board of Directors giving effect to such designation and an Officers' Certificate certifying that such designation complied with the preceding conditions and was permitted by Condition 4.3. The Trustee shall be entitled to rely on any such Officers' Certificate and resolution without further investigation and without liability to any person. If, at any time, any Unrestricted Subsidiary would fail to meet the requirements as an Unrestricted Subsidiary, it will thereafter cease to be an Unrestricted Subsidiary for purposes of these Conditions and any Indebtedness of such Subsidiary will be deemed to be Incurred by a Restricted Subsidiary as of such date and, if such Indebtedness is not permitted to be Incurred as of such date under Condition 4.2 the Issuer will be in default of such covenant. The Board of Directors of the Issuer may at any time designate any Unrestricted Subsidiary to be a Restricted Subsidiary; provided that such designation will be deemed to be an Incurrence of Indebtedness by a Restricted Subsidiary of any outstanding Indebtedness of such Unrestricted Subsidiary, and such designation will only be permitted if (A) such Indebtedness is permitted under Condition 4.2, calculated on a pro forma basis as if such designation had occurred at the beginning of the applicable reference period; and (B) no Potential Event of Default or Event of Default would be in existence following such designation.

4.17 Financial Information:

- 4.17.1** The Issuer shall deliver to the Trustee as soon as the same become available, but in any event within 150 days after the end of each of its financial years, the Issuer's consolidated financial statements for such financial year, audited by the Auditors and accompanied by a report thereon of the Auditors (including opinions of such Auditors with accompanying notes) and prepared in accordance with Accounting Standards consistently applied with the corresponding financial statements for the preceding period prepared in accordance with Accounting Standards.
- 4.17.2** The Issuer shall deliver to the Trustee as soon as the same become available, but in any event within 120 days after the end of the first half of each of its financial years, the Issuer's unaudited consolidated financial statements for such period, reviewed by the Auditors and accompanied by a review report thereon of the Auditors (with accompanying notes).

- 4.17.3** The Issuer will also make available copies of all reports required by Conditions 4.17.1 through 4.17.2 on the Issuer's website and, if and so long as the Notes are listed on Euronext Dublin and the rules of Euronext Dublin so require, at the specified office of the listing agent in Ireland.
- 4.17.4** The Issuer hereby undertakes that it will deliver to the Trustee, without undue delay, such additional information regarding the financial position or the business of the Issuer, the Guarantors and the Subsidiaries of the Issuer (or, so far as permitted by applicable law, any information, and in such form, as it requires for the purposes of the discharge of the duties and discretions vested in it under the Trust Deed or by operation of law) as the Trustee may reasonably request.
- 4.17.5** The Issuer shall deliver to the Trustee at the time of delivery of any financial statements pursuant to Condition 4.17.1 above and within 14 days of any request by the Trustee, an Officers' Certificate (A) stating whether or not to the best of the knowledge of the signatories thereof an Event of Default or Potential Event of Default has occurred and is continuing, and, if so, specifying all such Events of Default or Potential Events of Default, the nature and status thereof of which the signatories may have knowledge and what action the Issuer is taking or proposes to take with respect thereto, (B) stating whether or not to the best of the knowledge of the signatories thereof a Change of Control has occurred and (C) certifying which Restricted Subsidiaries are Material Subsidiaries. The Trustee may rely on such Officers' Certificate absolutely without liability to any person for so doing and without further enquiry.
- 4.17.6** The Issuer undertakes to furnish to the Trustee such information as Euronext Dublin (or any other or further stock exchange or stock exchanges or any relevant authority or authorities on which the Notes may, from time to time, be listed or admitted to trading) may require as necessary in connection with the listing or admission to trading on such stock exchange or relevant authority of such instruments at the same time as such information is provided to Euronext Dublin.
- 4.17.7** For so long as any Notes remain outstanding and during any period in which the Issuer is not subject to Section 13 or 15(d) of the Exchange Act nor exempt therefrom pursuant to Rule 12g3-2(b), the Issuer agrees that it will furnish to the holders of the Notes and to securities analysts and prospective investors, upon their request, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

4.18 Suspension of Conditions When Notes Rated Investment Grade:

4.18.1 If on any date following the Issue Date:

- (A) the Notes have achieved Investment Grade Status; and
- (B) no Potential Event of Default or Event of Default has occurred and be continuing on such date,

then, beginning on that day and continuing until such time, if any, at which the Notes cease to have Investment Grade Status (such period, the "**Suspension Period**"), the Conditions specifically listed under the following captions will no longer be applicable to the Notes and any related default provisions of the Conditions will cease to be effective and will not be applicable to the Issuer and its Restricted Subsidiaries:

- (1) Condition 4.5 (*Asset Sales*);
- (2) Condition 4.2 (Incurrence of Indebtedness);
- (3) Condition 4.3 (Limitation on Restricted Payments);

- (4) Condition 4.6 (Limitations on Restrictions on Distributions from Restricted Subsidiaries);
- (5) Condition 4.8.1(C) (Mergers and Similar Transactions);
- (6) Condition 4.4 (Transactions with Affiliates); and
- (7) Condition 4.16 (Designation of Restricted and Unrestricted Subsidiaries).

4.18.2 Such Conditions and any related default provisions will again apply according to their terms from the date the Notes cease to have Investment Grade Status. Such conditions will not, however, be of any effect with regard to the actions of the Issuer and the Restricted Subsidiaries properly taken during the continuance of the Suspension Period; provided that (A) with respect to the Restricted Payments made after any such reinstatement, the amount of Restricted Payments will be calculated as though Condition 4.3 had been in effect prior to, but not during the Suspension Period, and (B) all Indebtedness Incurred, or Disqualified Stock or Preferred Stock issued, during the Suspension Period will be classified to have been Incurred or issued pursuant to Condition 4.2.2(C). Upon the occurrence of a Suspension Period, the amount of Excess Proceeds shall be reset at zero.

4.18.3 The Issuer shall notify the Trustee in writing upon the occurrence and termination of a Suspension Period; provided that such notice will not be a precondition of the suspension of the Conditions described under this Condition 4.18.

5 Interest

5.1 Interest Rate:

The Notes bear interest on their outstanding principal amount from and including the Issue Date and for so long as any Notes remain outstanding at the rate of 7.750 per cent. per annum, payable in equal instalments semi-annually in arrear on 23 February and 23 August in each year (each, an “**Interest Payment Date**”), except that (A) the first payment of interest will be made on 23 August 2018 and will be in respect of the period of 120 days from and including the Issue Date to but excluding 23 August 2018 (the “**First Interest Period**”) and (B) the last payment of interest will be made on the Maturity Date and will be in respect of the period of 60 days from and including 23 February 2023 to but excluding the Maturity Date (the “**Final Interest Period**”). Each Note will cease to bear interest from and including the due date for redemption, unless, upon surrender of the Definitive Certificate representing such Note, payment of principal is improperly withheld or refused. In such event, it shall continue to bear interest at the rate of 7.750 per cent. per annum (both before and after judgment) until whichever is the earlier of (a) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (b) the day seven days after the Trustee or the Principal Paying Agent has notified the Noteholders of receipt of all sums due in respect of all the Notes up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions).

5.2 Calculation of Interest:

The amount of interest payable in respect of the First Interest Period, the Final Interest Period and any other period of less than a complete Interest Period shall be calculated on the basis of a 360-day year consisting of 12 months of 30 days each. The period beginning on (and including) the Issue Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date is called an “**Interest Period**”.

6 Redemption, Purchase and Options

6.1 Final Redemption:

Unless previously redeemed, purchased and cancelled as provided below, each Note shall be finally redeemed on the Maturity Date at its then outstanding principal amount.

6.2 Redemption at the Option of the Issuer

6.2.1 *Redemption at Make-Whole.* At any time prior to the Maturity Date (other than where Condition 6.2.2 applies), the Issuer may, at its option, on giving not less than 30 nor more than 60 days' notice to the Noteholders in accordance with Condition 17 and copied to the Trustee, redeem all or (subject to Condition 6.5) part of the Notes at a redemption price equal to 100 per cent. of the principal amount of the Notes redeemed, plus the Applicable Premium as of, and accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of redemption, subject to the rights of holders of the Notes on the relevant record date to receive interest due on the relevant interest payment date.

6.2.2 *Optional redemption at par.* At any time on or after the date falling three months prior to the Maturity Date, the Issuer may, on giving not less than 30 nor more than 60 days' notice to the Noteholders in accordance with Condition 17 and copied to the Trustee, (which notice shall be irrevocable and specify the date fixed for prepayment), redeem the Notes in whole or (subject to Condition 6.5) in part, at the principal amount thereof, plus accrued and unpaid interest and Additional Amounts, if any, on the Notes so redeemed to (but excluding) the date of redemption.

6.2.3 *Optional redemption from Equity Offering proceeds.* At any time prior to the date falling three months prior to the Maturity Date, the Issuer may on any one or more occasions, upon not less than 30 nor more than 60 days' notice to the Noteholders and to the Trustee, redeem up to 35 per cent. of the aggregate principal amount of the Notes originally issued under the Trust Deed at a redemption price equal to 107.750 per cent. of the principal amount of the Notes redeemed, plus accrued and unpaid interest and Additional Amounts, if any, to (but excluding) the date of redemption (subject to the rights of holders of the Notes on the relevant record date to receive interest on the relevant interest payment date), with the net cash proceeds of an Equity Offering; provided that:

- (A) at least 65 per cent. of the aggregate principal amount of the Notes originally issued under the Trust Deed (excluding the Notes held by the Issuer and its Subsidiaries) remains outstanding immediately after the occurrence of such redemption; and
- (B) the redemption occurs within 180 days of the date of the closing of such Equity Offering.

6.2.4 Unless the Issuer defaults in the payment of the redemption price, interest will cease to accrue on the Notes or portions thereof called for redemption on the applicable redemption date.

6.2.5 Any redemption or notice may, in the Issuer's discretion, be subject to the satisfaction of one or more conditions precedent.

6.3 Redemption at the Option of the Noteholders Upon a Change of Control:

6.3.1 Upon the occurrence of any of the following events (each a "**Change of Control**"), each Noteholder shall have the right to require that the Issuer repurchase all or any part of such Noteholder's Notes at a purchase price in cash equal to 101 per cent. of the aggregate principal amount of the Notes repurchased plus accrued and unpaid interest and Additional Amounts, if any,

to (but excluding) the date of purchase (subject to the right of holders of record on the relevant record date to receive interest due on the relevant Interest Payment Date):

- (A) any “person” or “group” (within the meaning of Sections 13(d) or 14(d) of the U.S. Exchange Act) other than Permitted Holders has become, directly or indirectly, the beneficial owner, by way of merger, consolidation or otherwise, of more than 50% of the voting power of the Voting Stock of the Issuer (measured by voting power rather than number of shares) on a fully diluted basis, after giving effect to the conversion and exercise of all outstanding warrants, options and other securities of the Issuer convertible into or exercisable for Voting Stock of the Issuer (whether or not such securities are then currently convertible or exercisable);
- (B) during any consecutive two-year period following the date the Permitted Holders cease to beneficially own, directly or indirectly, at least 50% of the voting power of the Voting Stock of the Issuer, the Continuing Directors cease to constitute a majority of the members of the supervisory board of the Issuer;
- (C) the adoption of a plan relating to the liquidation or dissolution of the Issuer; or
- (D) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger, consolidation or other business combination transaction), in one or a series of related transactions, of all or substantially all of the properties or assets of the Issuer and its Subsidiaries, taken as a whole, to any Person (including any “person” as defined above) other than one or more Permitted Holders.

6.3.2 Unless the Issuer has unconditionally exercised its right to redeem all the Notes pursuant to Condition 6.2 or all conditions to such redemption have been satisfied or waived, within 60 days following any Change of Control, the Issuer will give notice in accordance with Condition 17 (*Notices*) to the Noteholders with a copy to the Trustee (the “**Change of Control Offer**”) stating:

- (A) that a Change of Control has occurred and that the Noteholders have the right to require the Issuer to purchase their Notes at a purchase price in cash equal to 101 per cent. of the principal amount thereof on the date of purchase, plus accrued and unpaid interest, if any, to (but excluding) the date of purchase (subject to the right of Noteholders of record on the relevant record date to receive interest on the relevant interest payment date);
- (B) the circumstances and relevant facts regarding such Change of Control (including information with respect to pro forma historical income, cash flow and capitalisation, in each case after giving effect to such Change of Control);
- (C) the purchase date (which shall be no earlier than 30 days nor later than 60 days from the date such notice is mailed); and
- (D) the instructions, as determined by the Issuer, consistent with the covenant described hereunder, that a Noteholder must follow in order to have its Notes purchased.

6.3.3 The Issuer will not be required to make a Change of Control Offer following a Change of Control if (A) a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set out in the Trust Deed applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer or (B) a notice of redemption has been given pursuant to Condition 6.2, unless and until there is a default in payment of the applicable redemption price.

- 6.3.4** Notwithstanding anything to the contrary contained herein, a Change of Control Offer may be made by the Issuer in advance of a Change of Control, conditioned upon the consummation of such Change of Control, if a definitive agreement is in place for the Change of Control at the time the Change of Control Offer is made.
- 6.3.5** The Issuer will comply, to the extent applicable, with the requirements of Section 14(e) of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Notes as a result of a Change of Control. To the extent that the provisions of any securities laws or regulations conflict with the provisions of the covenant described hereunder, the Issuer will comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations under the covenant described hereunder by virtue of its compliance with such securities laws or regulations.

6.4 Redemption for Changes in Taxes:

- 6.4.1** The Issuer may redeem the Notes, in whole but not in part, at its discretion at any time upon giving not less than 30 nor more than 60 days' prior notice to the holders of the Notes (in accordance with Condition 17) and to the Trustee, at a redemption price equal to 100 per cent. of the aggregate principal amount thereof, together with accrued and unpaid interest, if any, to the date fixed by the Issuer for redemption (a "**Tax Redemption Date**") and all Additional Amounts (if any) then due and which will become due on the Tax Redemption Date as a result of the redemption or otherwise (subject to the right of holders of the Notes on the relevant record date to receive interest due on the relevant interest payment date and Additional Amounts (if any) in respect thereof), if on the next date on which any amount would be payable in respect of the Notes or any Guarantee, the Issuer under or with respect to the Notes or any of the Guarantors with respect to any Guarantee is or would be required to pay Additional Amounts (but, in the case of the relevant Guarantor, only if such amount cannot be paid by the Issuer or another Guarantor who can pay such amount without the obligation to pay Additional Amounts), and the Issuer or relevant Guarantor, as applicable, cannot avoid any such payment obligation by taking reasonable measures available (including making payment through a paying agent located in another jurisdiction) and the requirement arises as a result of:

- (A) any amendment to, or change in, the laws or any regulations or rulings promulgated thereunder of a relevant Tax Jurisdiction which change or amendment has not been publicly announced as formally proposed before and which becomes effective on or after the Issue Date (or, if the applicable Tax Jurisdiction became a Tax Jurisdiction on a date after the Issue Date, such later date); or
- (B) any amendment to, or change in, an official written interpretation or application of such laws, regulations or rulings (including by virtue of a holding, judgment, order by a court of competent jurisdiction or a change in published practice) which amendment or change has not been publicly announced as formally proposed before and which becomes effective on or after the Issue Date, (or, if the applicable Tax Jurisdiction became a Tax Jurisdiction on a date after the Issue Date, such later date),

(each of the foregoing paragraphs (A) and (B), a "**Change in Tax Law**").

- 6.4.2** The Issuer will not give any such notice of redemption earlier than 60 days prior to the earliest date on which the Issuer or the Guarantor, as applicable, would be obliged to make such payment or withholding if a payment in respect of the Notes were then due, and the obligation to pay Additional Amounts must be in effect (or be scheduled to come into effect on or prior to the next

date on which any amount would be payable under or in respect of the Notes or any Guarantee) at the time such notice is given. Prior to the publication or, where relevant, mailing of any notice of redemption of the Notes pursuant to the foregoing, the Issuer will deliver to the Trustee (a) an Officers' Certificate stating that obligation to pay such Additional Amounts cannot be avoided by the Issuer or the relevant Guarantor taking reasonable measures available to it (including in the case of a Guarantor, that such amount cannot be paid by the Issuer or another Guarantor who can pay such amount without the obligation to pay Additional Amounts); and (b) a written opinion of independent tax counsel of recognised standing qualified under the laws of the relevant Tax Jurisdiction and reasonably satisfactory to the Trustee to the effect that the Issuer or the relevant Guarantor has or will become obliged to pay such Additional Amounts as a result of the Change in Tax Law.

- 6.4.3** The Trustee will accept and shall be entitled to rely on such Officers' Certificate and Opinion of Counsel (without further enquiry and without liability to any person) as sufficient evidence of the existence and satisfaction of the conditions precedent as described above, in which event it will be conclusive and binding on the holders.
- 6.4.4** The foregoing provisions shall apply (a) to a Guarantor only on or after such time as such Guarantor is obliged to make at least one payment on the Notes; and (b) *mutatis mutandis* to any successor Person, after such successor Person becomes a party to the Trust Deed, with respect to a Change in Tax Law occurring after the time such successor Person becomes a party to the Trust Deed.

6.5 Selection and Notice:

In the case of a partial redemption, the Notes shall be selected for redemption either (a) in accordance with the procedures of the relevant clearing systems; or (b) if the Notes are not held in a clearing system, the Notes to be redeemed shall be selected by drawing of lots in such place and in such manner as is fair and reasonable in the circumstances taking account of prevailing market practices; or (c) if the relevant clearing systems prescribe no method of selection, the Notes shall be redeemed on a pro rata basis according to the holding of each Noteholder; subject, in each case, to compliance with any applicable laws and stock exchange or other relevant regulatory requirements. None of the applicable Paying Agent, the Trustee nor the Registrar will be liable for any selections made by it in accordance with this paragraph.

No notes of U.S.\$200,000 in principal amount or less shall be redeemed in part; provided that the Notes in excess of U.S.\$200,000 may be redeemed in part in integral multiples of U.S.\$1,000.

If any series of Notes is to be redeemed in part only, the notice of redemption that relates to that series of Notes shall state the portion of the principal amount thereof to be redeemed. In the case of a Note represented by Definitive Certificate, a new Definitive Certificate in a principal amount equal to the unredeemed portion of any Definitive Certificate redeemed in part will be issued in the name of the Noteholder thereof upon cancellation of the original Definitive Certificate. In the case of a Note represented by a Global Note Certificate, an appropriate notation will be made on such Global Note Certificate to decrease the principal amount thereof to an amount equal to the unredeemed portion thereof. Subject to the terms of the applicable redemption notice, Notes called for redemption become due on the date fixed for redemption. If such redemption is subject to the satisfaction of one or more conditions precedent, the related notice may, for the avoidance of doubt, state that, in the Issuer's discretion, the redemption date may be automatically delayed until such time as any or all such conditions shall be satisfied or waived (provided that in no event shall such date of redemption be delayed to a date later than 60 days after the date on which such notice was sent), or such redemption may not occur and such notice

may be rescinded if any or all such conditions shall not have been satisfied or waived by the redemption date, or by the redemption date so delayed.

6.6 Purchases:

The Issuer, the Guarantors or any of their respective Restricted Subsidiaries may at any time purchase Notes (in any manner and at any price). The Notes so purchased, while held by or on behalf of any of them, shall not entitle them to vote at any meetings of the Noteholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Noteholders or for the purposes of Conditions 10, 11 and 13.

6.7 Cancellation:

All Notes purchased by or on behalf of or otherwise transferred to the Issuer, the Guarantors or any of their respective Restricted Subsidiaries will forthwith be surrendered for cancellation to the Principal Paying Agent by surrendering the Certificate representing such Notes to the Registrar and, in each case shall, together with all Notes redeemed by the Issuer, be cancelled forthwith. Any Notes so surrendered for cancellation may not be reissued or resold and the obligations of the Issuer and the Guarantors in respect of any such Notes shall be discharged.

7 Payments

7.1 Method of Payment:

Payments of principal, premium, interest and fees shall be made by U.S. dollar cheque drawn on (or, upon application by a holder of a Note to the Specified Office of the Principal Paying Agent not later than the fifteenth day before the due date for any such payment, by transfer to a U.S. dollar account (or any account to which U.S. dollars may be credited or transferred) maintained by the payee with) a bank in New York City and, in the case of payments of principal and premium, if any, in respect of the Notes and accrued interest payable on a redemption of the Notes otherwise than on an Interest Payment Date, shall only be made upon surrender (or, in the case of part payment only, endorsement) of the relevant Definitive Certificates at the Specified Office of the Principal Paying Agent.

7.2 Payments subject to laws:

All payments in respect of the Notes are subject in all cases to any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 8 (*Taxation*). No commissions or expenses shall be charged to the Noteholders in respect of such payments.

7.3 Payments on business days:

Where payment is to be made by transfer to a U.S. dollar account, payment instructions (for value the due date, or, if the due date is not a business day, for value the next succeeding business day) will be initiated and, where payment is to be made by U.S. dollar cheque, the cheque will be mailed (i) (in the case of payments of principal (including any Instalment Amounts), premium, if any, and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Definitive Certificate is surrendered (or, in the case of part payment only, endorsed) at the Specified Office of the Principal Paying Agent and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A holder of a Note shall not be entitled to any interest or other payment in respect of any delay in payment resulting from (A) the due date for a payment not being a business day or (B) a cheque mailed in accordance with this Condition 7 (*Payments*) arriving after the due date for payment or being lost in the mail. In this paragraph, “**business day**” means any day on which banks are open for general business (including dealings in foreign currencies) in London and New York City and, in

the case of surrender (or, in the case of part payment only, endorsement) of a Definitive Certificate, in the place in which the Definitive Certificate is surrendered (or, as the case may be, endorsed).

So long as the Notes are represented by a Global Note Certificate, payments of principal and interest in respect of Notes represented by the Global Note Certificate shall be made to the person(s) shown as the Noteholder(s) in the Register at the close of business on the Clearing System Business Day before the due date for payment, where “**Clearing System Business Day**” means a day on which each clearing system for which the Global Note Certificate is being held is open for business, and shall be made against presentation for endorsement and if no further payment falls to be made in respect of the Notes, surrender of the Global Note Certificate.

7.4 Partial payments:

If a Paying Agent makes a partial payment in respect of any Note, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Definitive Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Definitive Certificate.

7.5 Record date:

Each payment in respect of a Note will be made to the Person shown as the holder in the Register at the close of business in the place of the Registrar’s Specified Office on the fifteenth day before the due date for such payment (the “**Record Date**”). Where payment in respect of a Note is to be made by cheque, the cheque will be mailed to the address shown as the address of the holder in the Register at the close of business on the relevant Record Date.

So long as the Notes are represented by the Global Note Certificate and the Global Note Certificate is held on behalf of Euroclear, Clearstream, Luxembourg or DTC, the Record Date shall instead be one Clearing System Business Day before the due date for such payment.

7.6 Agents:

The initial Agents and their initial specified offices are listed below. The Issuer and the Guarantors reserve the right at any time with the prior written approval of the Trustee to vary or terminate the appointment of any Agent and appoint additional or other Agents, provided that they will maintain (i) a Principal Paying Agent, (ii) a Registrar, (iii) Paying Agents and Transfer Agents having specified offices in at least one major European city and (iv) such other agents as may be required by Euronext Dublin or any other stock exchange on which the Notes may be listed (in the case of paragraphs (iii) and (iv) above, as approved in writing by the Trustee).

Notice of any change in the Agents or their specified offices will promptly be given to the Noteholders.

8 Taxation

All payments of the principal of, premium on, if any, and interest on the Notes or under the Guarantees shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or within the Netherlands or Ukraine or any political or governmental subdivision or authority thereof or therein having power to tax (“**Taxes**”), unless such withholding or deduction is required by law. In that event and in the event that any payment under the Guarantees is subject to any such Taxes, the Issuer (or, as the case may be, the Guarantors) shall pay such additional amounts as will result in receipt by the Noteholders of such amounts as would have been received by them had no such withholding or deduction been required

(“**Additional Amounts**”), except that no such Additional Amounts shall be payable with respect to any Note:

- 8.1.1 Other connection:** to, or to a third party on behalf of, a holder who is liable to such taxes, duties, assessments or governmental changes in respect of such Note by reason of his having some connection with the Netherlands or Ukraine other than the mere holding of the Note; or
- 8.1.2 Presentation more than 30 days after the Relevant Date:** in respect of which the Certificate representing it is presented for payment more than 30 days after the Relevant Date, except to the extent that the holder of it would have been entitled to Additional Amounts on presenting such Certificate for payment on the thirtieth day.

Any reference in these Conditions to principal, premium and/or interest shall be deemed to include, without duplication, any Additional Amounts in respect of principal, premium or interest (as the case may be) which may be payable under this Condition 8 (*Taxation*) or any undertaking given in addition to or substitution for it under the Trust Deed.

9 Prescription

Claims in respect of principal, premium and interest will become void, unless presentation for payment is made as required by Condition 7 (*Payments*) within a period of 10 years, in the case of principal and premium, and five years, in the case of interest, from the appropriate Relevant Date.

10 Events of Default

- 10.1** If any of the following events (“**Events of Default**”) occurs and is continuing, the Trustee at its discretion may, and if so requested by holders of at least one-fifth in principal amount of the Notes then outstanding or if so directed by an Extraordinary Resolution shall, subject in each case to the Trustee being indemnified and/or secured and/or prefunded to its satisfaction, give notice to the Issuer that the Notes are, and they shall immediately become, due and payable at their outstanding principal amount together with accrued interest:

- 10.1.1 Non-Payment:** the Issuer or the Guarantors fail to pay principal or interest on any of the Notes when due and, in the case of interest, such failure continues for a period of 30 days; or
- 10.1.2 Breach of Other Obligations:** the Issuer or any of the Guarantors does not perform or comply with any one or more of its other obligations under the Notes or the Notes Documents, which default is incapable of remedy or, if in the opinion of the Trustee capable of remedy, is not in the opinion of the Trustee remedied within 60 days after written notice of such default shall have been given to the Issuer or the relevant Guarantor(s) by the Trustee; or
- 10.1.3 Cross-Payment Default and Cross-Acceleration:** default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Issuer or any Restricted Subsidiary or the payment of which is guaranteed by the Issuer or any Restricted Subsidiary (in each case excluding under the Existing Judgments, the Acquired Default and, for purposes of clause (A) below only, any Intra-Group Debt), whether such Indebtedness or guarantee now exists, or is created after the Issue Date, which default:
 - (A) is caused by a failure to pay principal of such Indebtedness at maturity prior to the expiration of the grace period provided in such Indebtedness (“**payment default**”); or
 - (B) results in the acceleration of such Indebtedness prior to its maturity,

and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been such a payment default or the maturity of which has been so accelerated, aggregates U.S.\$50.0 million or more; or

10.1.4 Enforcement Proceedings: a distress, attachment, execution or other legal process (in each case excluding such events in connection with the Existing Judgments or a Protective Attachment) is levied, enforced or sued on or against, in the opinion of the Trustee, any material part of the property, assets or revenues of the Issuer or any Guarantor or any Material Subsidiary and is not discharged or stayed within 60 days (or, if later, prior to the end of the period of any deferral or suspension of enforcement granted for any such attachment or other legal process); or

10.1.5 Security Enforced: an encumbrancer takes possession of or sells or otherwise enforces, or any expropriation or sequestration is levied against (in each case, excluding such events in connection with the Existing Judgments), the whole or in the opinion of the Trustee any material part of, the property, undertaking, revenues or assets of the Issuer or any Guarantor or any Material Subsidiary (such expropriation, an “**Expropriation**”); or

10.1.6 Judgment Default: any one or more final, non-appealable judgments or orders (and, in the case of a Ukrainian judgment, no longer eligible to be the subject of a petition of cassation (in each case other than the Existing Judgments or in connection with the Acquired Default) is made against the Issuer or any Guarantor or any of their respective Restricted Subsidiaries involving an aggregate liability not paid or fully covered by insurance in respect of a matter (or a series of related matters) greater than U.S.\$50 million, unless all those judgments and orders are paid, vacated or discharged within 60 days of their being made (or, if later, prior to the end of the period of any deferral or suspension of enforcement granted for any such judgment or order); or

10.1.7 Insolvency:

- (A) (1) the Issuer, any Guarantor or any Material Subsidiary seeking, consenting or acquiescing in the introduction of proceedings for its liquidation or bankruptcy or the appointment to it of a liquidation commission or a similar officer; (2) the commencement of any proceedings in respect of the Issuer, any Guarantor or any Material Subsidiary in any court, arbitration court or before any agency for its bankruptcy, insolvency, dissolution or liquidation which, in the case of any proceedings that are commenced pursuant to a petition presented or filed by a Person other than the Issuer, such Guarantor or such Material Subsidiary, as the case may be, is not dismissed within 60 days; (3) the institution of supervision, external management or bankruptcy management to the Issuer, any Guarantor or any Material Subsidiary; (4) the convening of a meeting of creditors generally of the Issuer, any Guarantor or any Material Subsidiary for the purposes of considering an amicable settlement with its creditors generally; and/or (5) any extra-judicial liquidation or analogous act in respect of the Issuer, any Guarantor or any Material Subsidiary by any applicable governmental agency, in each case, other than in connection with, or as a result of, a Permanent Cessation of Business or Winding-Up which would not constitute an Event of Default under Condition 10.1.8;
- (B) the Issuer, any Guarantor or any Material Subsidiary: (1) fails or is unable to pay its debts generally as they become due; (2) consents by answer or otherwise to the commencement against it of an involuntary case in bankruptcy or to the appointment of a custodian of it or of (in the opinion of the Trustee) a substantial part of its property; or
- (C) the shareholders of the Issuer approve any plan for the liquidation or dissolution of the Issuer; or

- 10.1.8 Winding-up:** (A) an order is made or an effective resolution passed for the winding-up or dissolution of the Issuer or any Guarantor or any Material Subsidiary; or (B) the Issuer or any of the Guarantors or any Material Subsidiary ceases or threatens to cease to carry on all or, in the opinion of the Trustee, substantially all of its business or operations, in each case (1) except as a result of a disposal permitted under Condition 4.5 and (2) except for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation (x) on terms approved by the Trustee or by an Extraordinary Resolution of the Noteholders, or (y) in the case of a Material Subsidiary, whereby the undertaking and assets of the relevant Material Subsidiary are transferred to or otherwise vested in the Issuer, any Guarantors or any of their respective Restricted Subsidiaries; or
- 10.1.9 Nationalisation:** all or, in the opinion of the Trustee, a material part of the assets of the Issuer or any Guarantor or all or, in the opinion of the Trustee, a material part of the Issuer and its Restricted Subsidiaries' assets, taken as a whole, held by any of the respective Restricted Subsidiaries of the Issuer or the Guarantors are seized or nationalised by or on behalf of any governmental, regulatory or other authority recognised by the United Nations (such seizure or nationalisation, a “**Nationalisation**”) or Expropriated by any person; or
- 10.1.10 Authorisation and Consents:** any action, condition or thing (including the obtaining or effecting of any necessary consent, approval, authorisation, exemption, filing, licence, order, recording or registration) at any time required to be taken, fulfilled or done in order (A) to enable the Issuer and the Guarantors lawfully to enter into, exercise their respective rights and perform and comply with their respective obligations under the Notes and the Notes Documents, (B) to ensure that those obligations are legally binding and enforceable and (C) to make the Notes and the Notes Documents admissible in evidence in the courts of Ukraine, the Netherlands, the jurisdiction of incorporation of any Guarantor or England is not taken, fulfilled or done; or
- 10.1.11 Illegality:** it is or will become unlawful for the Issuer or any of the Guarantors to perform or comply with any one or more of its obligations under any of the Notes or the Notes Documents, as applicable; or
- 10.1.12 Guarantees:** the Guarantees are not (or are claimed by any Guarantor not to be) in full force and effect (except Guarantees released in accordance with Condition 4.15.7); or
- 10.1.13 Actions Undermining Guarantees:** the Issuer or any Restricted Subsidiary takes any action or omits to take any action (acting reasonably and in good faith in the circumstances and to the extent within its reasonable control) where that action or omission would undermine the legality, enforceability or priority of any of the Guarantees granted by the Guarantors; or
- 10.1.14 Analogous Events:** any event occurs which under the laws of any relevant jurisdiction has an **analogous** effect to any of the events referred to in any of the foregoing paragraphs of this Condition 10.1.
- 10.2** Notwithstanding the foregoing and for the avoidance of doubt:
- 10.2.1** any event described in Condition 10.1 (other than 10.1.2) that occurs or arises in respect of an Affected Entity shall be deemed not to be an Event of Default or Potential Event of Default; and
- 10.2.2** any event described in Condition 10.1.2 that occurs or arises in respect of an Affected Entity shall be deemed not to be an Event of Default or Potential Event of Default to the extent such event occurs or arises in connection with, or as a result of, actions or omissions by persons that have expropriated, nationalised or otherwise seized the assets of such Affected Entity.

- 10.3** The holders of a majority in aggregate principal amount of the Notes then outstanding (a) may by notice to the Issuer and the Trustee in writing waive any existing Potential Event of Default or Event of Default and its consequences under the Trust Deed (other than a continuing Event of Default specified in Condition 10.1.1, which may only be waived by an Extraordinary Resolution passed in accordance with Condition 11.1.1 or Condition 11.1.2) and (b) after any acceleration pursuant to Condition 10.1, but before a judgment or decree based on acceleration has been issued, may by notice to the Issuer and the Trustee in writing rescind and annul an Acceleration Notice (as defined in the Trust Deed) (or instruct the Trustee to do so) if all Events of Default, other than the non-payment of accelerated principal, interest and other amounts due, have been cured or waived. Upon the receipt of any such notice, the Issuer shall procure that notice thereof is given to Noteholders in accordance with Condition 17 (*Notices*).
- 10.4** In the event of a declaration of acceleration of the Notes because an Event of Default described in Condition 10.1.3 has occurred and is continuing, the declaration of acceleration of the Notes shall be automatically annulled if the event of default or payment default triggering such Event of Default pursuant to Condition 10.1.3 shall be remedied or cured by the Issuer or a Restricted Subsidiary or waived by the holders of the relevant Indebtedness within 10 Business Days after the declaration of acceleration with respect thereto and if (A) the annulment of the acceleration of the Notes would not conflict with any judgment or decree of a court of competent jurisdiction and (B) all existing Events of Default, except non-payment of principal, premium or interest on the Notes that became due solely because of the acceleration of the Notes, have been cured or waived.

11 Meetings of Noteholders, Modification, Waiver and Substitution

11.1 Meetings of Noteholders:

- 11.1.1** The Trust Deed contains provisions for convening meetings of Noteholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of any of these Conditions or any provisions of the Trust Deed or other Notes Document. Such a meeting may be convened by the Issuer, any Guarantor or the Trustee at any time and shall be convened by the Issuer if requested by Noteholders holding not less than 10 per cent. in principal amount of the Notes for the time being outstanding. The quorum for any meeting convened to consider an Extraordinary Resolution (other than an Extraordinary Resolution for a modification of a Core Term) shall be one or more Persons holding or representing a clear majority in principal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more Persons being or representing Noteholders whatever the principal amount of the Notes held or represented. If the business of such meeting includes consideration of proposals, *inter alia*, (i) to amend the dates of maturity or redemption of the Notes or any date for payment of interest on the Notes, (ii) to modify the circumstances in which the Issuer or Noteholders are entitled to redeem the Notes pursuant to Condition 6 (*Redemption, Purchase and Options*) (other than the provisions in Condition 6.3), (iii) to modify or cancel the Guarantees except in accordance with the Conditions and the Surety Agreement, (iv) to reduce or cancel the principal amount of, or any premium payable on redemption of, or interest on, the Notes, (v) to reduce the rate or rates of interest in respect of the Notes or to vary the method or basis of calculating the rate or rates or amount of interest, (vi) to change the currency or currencies of payment or denomination of the Notes, (vii) to modify the provisions concerning the quorum required at any meeting of Noteholders or the majority required to pass an Extraordinary Resolution or sign a resolution in writing or (viii) to waive an Event of Default specified in Condition 10.1.1 (each of paragraphs (i) to (viii) above, a “**Core Term**”), the necessary quorum shall be one or more Persons holding or representing not less than 75 per cent., or at any adjourned meeting not less than 25 per cent., in

principal amount of the Notes for the time being outstanding. Any Extraordinary Resolution duly passed shall be binding on Noteholders (whether or not they were present at the meeting at which such resolution was passed).

- 11.1.2** The Trust Deed provides that a resolution in writing signed, or an approval given by way of electronic consents communicated through the electronic communications systems of the relevant clearing system(s), in each case, by or on behalf of holders of not less than 75 per cent. of the aggregate outstanding principal amount of Notes shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of Noteholders duly convened and held. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders.

11.2 Modification and Waiver:

- 11.2.1** Notwithstanding Condition 11.1, without the consent of the Noteholders, the Issuer and the Trustee may amend or supplement any Notes Document:

- (A) to provide for the assumption of the Issuer's or a Guarantor's obligations under the Notes and the Guarantees in the case of a merger or consolidation or sale of all or substantially all of the Issuer's or such Guarantor's assets, as applicable;
- (B) to make any change that would provide any additional rights or benefits to the Noteholders;
- (C) to allow (1) any Restricted Subsidiary to execute and deliver to the Trustee a Surety Agreement (and, thus, become a Guarantor) with respect to the Notes or (2) any Guarantor to release Guarantees in accordance with the terms of these Conditions, the Trust Deed and the Surety Agreement;
- (D) to secure the Notes and the Guarantees;
- (E) to evidence and provide for the acceptance and appointment under the Trust Deed of a successor trustee or under the Agency Agreement of a successor agent in any role;
- (F) to add additional parties to the Agency Agreement to the extent permitted by the Trust Deed; or
- (G) to provide for the issuance of Additional Notes in accordance with the limitations set forth in these Conditions.

- 11.2.2** The Trustee may agree, without the consent of the Noteholders, to (A) any modification of any of the provisions of the Notes Documents which is in its opinion of a formal, minor or technical nature or is made to correct any ambiguity, defect or inconsistency or a manifest error or an error which in the opinion of the Trustee is proven and (B) any other modification (except as mentioned in the Trust Deed), and, without prejudice to its rights in respect of any subsequent breach, from time to time and at any time, any waiver or authorisation of any breach or proposed breach, of any of the provisions of the Notes Documents or determine that an Event of Default or Potential Event of Default shall not be treated as such if, in the opinion of the Trustee, the interests of the Noteholders will not be materially prejudiced hereby, provided that the Trustee shall not do so in contravention of an express direction given by an Extraordinary Resolution or a request made pursuant to Condition 10 (*Events of Default*). No such direction or request shall affect a previous waiver, authorisation or determination.

11.2.3 Any such modification, authorisation or waiver shall be binding on the Noteholders and, if the Trustee so requires, such modification shall be notified to the Noteholders by the Issuer as soon as practicable and in accordance with Condition 17 (*Notices*), but such power does not extend to any such modification to the extent such modification constitutes a Core Term.

11.3 Substitution:

Subject to the terms of the Trust Deed, the Trustee may, without the consent of the Noteholders, agree to the substitution of the Issuer's successor in business or any Restricted Subsidiary of the Issuer (or its successor in business) or any of the Guarantors (or its/their successor(s) in business) or any of the Restricted Subsidiaries of the Guarantors (or its/their successor(s) in business) in place of the Issuer (or of any previous substitute under this Condition 11.3) as the principal debtor under the Trust Deed and the Notes and the Trustee may, without the consent of the Noteholders, agree to the substitution of any Guarantor's successor in business or any Restricted Subsidiary of the Issuer or any Restricted Subsidiary of the Guarantors or any of their respective successors in business in place of such Guarantor (or any previous substitute under this Condition 11.3) as a Guarantor under the Trust Deed, the Surety Agreement, the Notes and the Guarantees.

11.4 Entitlement of the Trustee:

In connection with the exercise of its functions (including but not limited to those referred to in this Condition 11 (*Meetings of Noteholders, Modification, Waiver and Substitution*)), the Trustee shall have regard to the interests of the Noteholders as a class and shall not have regard to the consequences of such exercise for individual Noteholders and the Trustee shall not be entitled to require, nor shall any Noteholder be entitled to claim, from the Issuer or the Guarantors any indemnification or payment in respect of any tax consequence of any such exercise upon individual Noteholders.

12 Trustee Reliance

The Trustee shall be entitled to rely on any certificate delivered to it pursuant to these Conditions and shall not be obliged to monitor independently compliance by the Issuer or the Guarantors with the covenants set forth in Condition 4 (*Covenants*), nor shall it be liable to any person for not so doing and the Trustee need not enquire further as regards to circumstances existing on the date of such certificate.

13 Enforcement

At any time after the Notes become due and payable, the Trustee may, at its discretion and without further notice, institute such steps, actions or proceedings against the Issuer or the Guarantors as it may think fit to enforce the terms of the Notes Documents and the Notes, but it need not take any such steps, actions or proceedings, unless (a) it shall have been so directed by an Extraordinary Resolution or so requested in writing by Noteholders holding at least one-fifth in principal amount of the Notes outstanding and (b) the Trustee shall have been indemnified and/or secured and/or prefunded to its satisfaction. The Trustee is not liable to any Noteholder or other person for its acts or omission under this Condition 13 (*Enforcement*) except to the extent that the act or omission amounts to fraud, negligence or wilful misconduct. No Noteholder may proceed directly against the Issuer or the Guarantors unless the Trustee, having become bound so to proceed, fails to do so within 45 days and such failure is continuing.

14 Indemnification of the Trustee

The Trust Deed contains provisions for the indemnification of the Trustee and for its relief from responsibility. The Trustee is entitled to enter into business transactions with the Issuer, the Guarantors and any entity related to the Issuer or the Guarantors without accounting for any profit.

The Trustee may rely without further enquiry and without liability to Noteholders on any report, confirmation or certificate or any advice of any accountants, financial advisers, financial institution or any other expert, whether or not addressed to the Trustee and whether or not liability in relation thereto is limited (by its terms or by any engagement letter relating thereto entered into by the Trustee or in any other manner) by reference to monetary cap, methodology or otherwise.

15 Replacement of Notes

If any Definitive Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Registrar, subject to all applicable laws and stock exchange requirements, upon payment by the claimant of the fees and costs incurred in connection therewith and on such terms as to evidence, security and indemnity (which may provide, *inter alia*, that if the allegedly lost, stolen or destroyed Definitive Certificate is subsequently presented for payment there shall be paid to the Issuer on demand the amount payable by the Issuer in respect of such Definitive Certificate) and otherwise as the Issuer and the Registrar may require. Mutilated or defaced Definitive Certificates must be surrendered before replacements will be issued.

16 Further Issues

The Issuer may from time to time without the consent of the Noteholders, but subject always to compliance with the provisions of the Notes Documents, create and issue further securities either having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest on them) and so that such further issue shall be consolidated and form a single series with the outstanding Notes or upon such terms as the Issuer may determine at the time of their issue. References in these Conditions to the Notes include (unless the context requires otherwise) any other securities issued pursuant to this Condition 16 (*Further Issues*) and forming a single series with the Notes. Any further securities forming a single series with the Notes constituted by the Trust Deed or any deed supplemental to it shall, and any other securities may (with the consent of the Trustee), be constituted by a deed supplemental to the Trust Deed. The Trust Deed contains provisions for convening a single meeting of the Noteholders and the holders of securities of other series where the Trustee so decides.

17 Notices

Notices to the Noteholders will be sent to them by first-class mail (or its equivalent) or (if posted to an overseas address) by airmail at their respective addresses in the Register. Any such notice shall be deemed to have been given on the fourth weekday (being a day other than Saturday or Sunday) after the date of mailing. In addition, notices to Noteholders will (so long as the Notes are admitted to trading on the Global Exchange Market of Euronext Dublin and the rules of Euronext Dublin so require) be published either on the website of Euronext Dublin or in a leading newspaper having general circulation in Dublin. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once or on different dates, on the first date on which publication is made.

So long as the Notes are represented by the Global Note Certificate and the Global Note Certificate is held on behalf of Euroclear, Clearstream, Luxembourg or DTC, notices to Noteholders may be given by

delivery of the relevant notice to Euroclear or Clearstream, Luxembourg for communication by it to entitled accountholders in substitution for mailing as required by the foregoing.

18 Contracts (Rights of Third Parties) Act 1999

No Person shall have any right to enforce any term or condition of the Notes under the Contracts (Rights of Third Parties) Act 1999.

19 Governing Law and Jurisdiction

19.1 Governing Law:

The Trust Deed, the Notes, the Surety Agreement and the Guarantees, and any non-contractual obligations arising out of or in connection with them, are governed by, and shall be construed in accordance with, English law.

19.2 Arbitration:

Subject to Condition 19.3, any dispute arising out of or in connection with the Trust Deed, the Notes, the Surety Agreement or the Guarantees shall be referred to and finally resolved by arbitration under the Arbitration Rules of the London Court of International Arbitration (the “**LCIA Rules**”). The arbitral tribunal shall consist of three arbitrators. The seat of arbitration shall be London, England and the language of the arbitration shall be English.

19.3 Jurisdiction:

Before the Trustee has filed a Request for Arbitration or Response as defined in the LCIA Rules (as the case may be), the Trustee may, by notice in writing to all other parties, require that any dispute or disputes be heard by a court of law. If the Trustee gives such notice, any such dispute to which such notice refers shall be determined as follows: (i) the courts of England shall have exclusive jurisdiction in respect of all such disputes and (ii) each of the Issuer, the Guarantors and the Trustee, in the Trust Deed and/or the Surety Agreement, as applicable, has agreed that the courts of England are the most appropriate and convenient courts to settle such disputes and accordingly no party will argue to the contrary. These submissions are for the benefit of the Trustee and the Noteholders only and shall not limit the right of any of them to take concurrent proceedings in any number of jurisdictions.

19.4 Agent for Service of Process:

Each of the Issuer and the Guarantors has irrevocably appointed an agent in England to receive service of process in any proceedings in England based on any of the Trust Deed, the Notes, the Surety Agreement and the Guarantees.

20 Definitions

In these Conditions, the following terms have the meanings given to them in this Condition 20.

“**2021 Notes**” means 7.500 per cent. senior notes due 2021 issued by the Issuer, constituted by the amended and restated trust deed dated on or about the Issue Date.

“**2026 Notes**” means 8.500 per cent. senior notes due 2026 issued by the Issuer on the Issue Date.

“**Accounting Standards**” means IFRS or any other internationally recognised set of accounting standards deemed equivalent to IFRS by the Committee of European Securities Regulators from time to time; provided however, that where such term is used with respect to the financial statements of the Restricted

Subsidiaries of the Issuer, it shall, where financial statements prepared in accordance with IFRS are not available, be deemed to include U.S. GAAP, Ukrainian GAAP or any other generally accepted accounting standards of the jurisdiction of incorporation of the relevant Restricted Subsidiary of the Issuer from time to time.

“Acquired Default” means any of the events described in Condition 10.1.3 in respect of Indebtedness for money borrowed owed by UNISTEEL LLC as of the date of its acquisition by Metinvest-SMC LLC as described in “Business Description” of the Offering Memorandum.

“Additional Amounts” has the meaning given to it in Condition 8 (*Taxation*).

“Additional Assets” means:

- (a) any assets (other than Capital Stock, cash or Cash Equivalents) that are used or useful in a Core or Related Business;
- (b) the Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by the Issuer or a Restricted Subsidiary of the Issuer; or
- (c) Capital Stock constituting a minority interest in any Person that at such time is a Restricted Subsidiary;

provided, however, that, in the case of paragraphs (b) and (c) above, such Restricted Subsidiary is engaged in a Core or Related Business.

“Additional Guarantors” means Persons who become guarantors pursuant to Condition 4.15.

“Adjusted EBITDA” means the consolidated adjusted earnings before interest, tax, depreciation and amortisation of Metinvest excluding the share in the earnings before interest, tax, depreciation and amortisation of any joint ventures, all as shown in the consolidated financial statements of Metinvest prepared in accordance with Accounting Standards, consistently applied.

“Affected Entity” means either (i) Avdiivka Coke, or (ii) any of the Seized Subsidiaries, to the extent such Seized Subsidiary is re-designated as a Restricted Subsidiary, and, in each case, to the extent such entity is or has been subject to an Expropriation, Nationalisation, Permanent Cessation of Business or Winding-Up or a cessation of business in connection with, directly or indirectly, armed hostilities or acts of war where the cessation continues for no longer than 12 months.

“Affiliate” of any specified Person means any other Person, directly or indirectly controlling, controlled by, or under direct or indirect common control with, such specified Person. For the purposes of this definition, **“control”** (including, with correlative meanings, the terms **“controlling”**, **“controlled by”** and **“under common control with”**), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise, provided that ownership of 30 per cent. or more of the voting securities of any Person shall be deemed to be control.

“Agency” means any agency, authority, central bank, department, committee, government, legislature, minister, ministry, official or public or statutory person (whether autonomous or not).

“Applicable Premium” means, with respect to any Note on any redemption date, the greater of:

- (a) the amount equal to 1.0 per cent. of the principal amount of such Note; and

- (b) the excess of:
 - (i) the present value of the remaining scheduled payments of principal and interest due on such Note to and including the Maturity Date (excluding accrued but unpaid interest to the redemption date), computed using a discount rate equal to the Treasury Rate as of such redemption date plus 50 basis points; over
 - (ii) the outstanding aggregate principal amount of the Note at the date of redemption.

“Approved Jurisdiction” means any member state of the European Union as of 1 January 2004 (including Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom), Norway, Switzerland, the United Kingdom, the United States of America, any state thereof, the District of Columbia, Russia and Ukraine.

“Asset Acquisition” means (i) an investment by the Issuer or any Restricted Subsidiary of the Issuer in any other Person pursuant to which such Person shall become a Restricted Subsidiary of the Issuer or shall be consolidated or merged with the Issuer or any Restricted Subsidiary of the Issuer or (ii) the acquisition by the Issuer or any Restricted Subsidiary of the Issuer of assets of any Person which constitute all or substantially all of the assets of such Person or which comprise a division or line of business of such Person.

“Asset Sale” means any lease, sale, sale and lease-back, transfer or other disposition either in one transaction or in a series of related transactions, by the Issuer or any of its Restricted Subsidiaries to a Person that is not the Issuer or a Restricted Subsidiary of the Issuer, including any disposition by means of a merger, consolidation or similar transaction, of any of its assets (including any shares of Capital Stock of a Restricted Subsidiary of the Issuer (other than directors’ qualifying shares or shares required by applicable law to be held by a Person other than the Issuer or a Restricted Subsidiary of the Issuer)) or properties, other than:

- (a) the sale, lease, transfer or other disposition of any asset or property having a value which (together with the value of all other assets or properties sold, leased, transferred or otherwise disposed of pursuant to this paragraph (a) within the last 12-month period) does not exceed the greater of U.S.\$100 million or 2% of Total Production Assets;
- (b) a disposition of all or substantially all the assets of the Issuer in accordance with Condition 4.8;
- (c) the creation of a Lien (but not the sale or other disposition of the property subject to such Lien) in compliance with Condition 4.1;
- (d) the licensing or sublicensing of rights to software, intellectual property or other intangibles in the ordinary course of business;
- (e) the abandonment, sale, lease or other disposition of obsolete, redundant, written-off (in accordance with Accounting Standards), damaged, worn out, negligible, surplus or outdated plant, equipment or machinery or raw materials, inventory or other assets, in each case which is no longer used or useful in the conduct of the business of the Issuer and its Restricted Subsidiaries;
- (f) (i) the disposition of non-core assets to be acquired in the future or in the ordinary course of business or consistent with past practice; and (ii) the exchange of non-core assets for assets of comparable or greater market value;
- (g) the lease, assignment or sublease of any property in the ordinary course of business (including any operating lease);

- (h) sales or other dispositions of assets or property received by the Issuer or any Restricted Subsidiary of the Issuer upon the foreclosure on a Lien granted in favour of the Issuer or any Restricted Subsidiary of the Issuer or any other transfer of title with respect to any ordinary course secured investment in default;
- (i) the foreclosure, condemnation or any similar action with respect to any property or other assets or the surrender or waiver of contract rights or the settlement, release, or surrender of contract, tort or other claims, in the ordinary course of business;
- (j) sales, leases, transfers and other dispositions of (a) trading stock, inventory, receivables and other current assets in the ordinary course of business or (b) Securitisation Assets and related assets in connection with any Qualified Securitisation Financing;
- (k) sales and dispositions of cash and Cash Equivalents;
- (l) a Restricted Payment that does not violate Condition 4.3 or a Permitted Investment;
- (m) any exchange of assets (including a combination of assets, cash and Cash Equivalents) for assets related to a Core or Related Business of comparable or greater market value or usefulness to the business of the Issuer and its Restricted Subsidiaries as a whole, as determined in good faith by the Issuer;
- (n) any sale, transfer or other disposition of receivables in any factoring or forfaiting transaction;
- (o) the disposition of receivables in connection with the compromise, settlement or collection thereof in the ordinary course of business or in bankruptcy or similar proceedings and exclusive of factoring or similar arrangements;
- (p) the disposition of securities acquired in connection with a settlement of VAT (or other tax reimbursement) receivables from the government of Ukraine;
- (q) the disposition of property, plant and/or equipment in the ordinary course of business;
- (r) any sale or other disposition of Capital Stock in, or Indebtedness or other securities of, an Unrestricted Subsidiary, for so long as such entities are Unrestricted Subsidiaries; and
- (s) any disposition of Capital Stock of a Restricted Subsidiary pursuant to an agreement or other obligation with or to a Person (other than the Issuer or a Restricted Subsidiary) from whom such Restricted Subsidiary was acquired or from whom such Restricted Subsidiary acquired its business and assets (having been newly formed in connection with such acquisition), made as part of such acquisition and, in each case, comprising all or a portion of the consideration in respect of such sale or acquisition.

“**Auditors**” means any of any of PricewaterhouseCoopers LLC, KPMG LLC, Deloitte & Touche LLP, Ernst & Young LLP as the auditors for the time being of the Issuer, Guarantors or, if they are unable or unwilling to carry out any action requested of them under the Trust Deed, any other firm of chartered accountants of internationally recognised standing appointed by the Issuer.

“**Avdiivka Coke**” means Private Joint Stock Company “Avdiivka Coke Plant”, a company organised and existing under the laws of Ukraine, identification code 00191075, whose registered office is at 1 Industrialniy Proizd, Avdiivka, Donetsk Region, 86065 Ukraine.

“**Azovstal**” means Private Joint Stock Company “Azovstal Iron & Steel Works”, a company organised and existing under the laws of Ukraine, identification code 00191158, whose registered office is at 1 Leporskyi Street, Mariupol, Donetsk Region, 87500 Ukraine.

“Board of Directors” means, as to any Person, the board of directors, supervisory board or other equivalent executive body of such Person (including, without limitation, a general director) or any duly authorised committee thereof.

“Business Day” means a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in Kyiv, Amsterdam, London, Hong Kong and New York City.

“Capital Stock” means, with respect to any Person, any and all shares, interests (including partnership interests), rights to purchase, warrants, options, participations or other equivalents (however designated, whether voting or non-voting) of such Person’s equity, including any Preferred Stock of such Person, whether now outstanding or issued after the Issue Date, including without limitation, all series and classes of such Capital Stock but excluding any debt securities convertible into or exchangeable for such Capital Stock.

“Cash Equivalents” means:

- (a) (i) securities or marketable direct obligations issued by or directly and fully guaranteed or insured by the government of an Approved Jurisdiction (other than Ukraine), or any agency or instrumentality of such government having an equivalent credit rating, having maturities of not more than 12 months from the date of acquisition or (ii) up to U.S.\$100 million of securities or marketable direct obligations issued by or directly and fully guaranteed or insured by the government of Ukraine at any time outstanding, having maturities of not more than 12 months from the date of acquisition (excluding, for the purposes of this paragraph (ii) limit, securities described under paragraph (m) of “Permitted Investments”;
- (b) certificates of deposit and time deposits (and similar instruments) with maturities of 12 months or less from the date of acquisition, bankers’ acceptances with maturities not exceeding 12 months and overnight bank deposits, in each case, with any bank or financial institution (i) which has a rating for its long-term unsecured and non-credit-enhanced debt obligations of at least “BBB-” or the equivalent thereof by Standard & Poor’s, at least “Baa3” or the equivalent thereof by Moody’s or at least “BBB-” or the equivalent thereof by Fitch (or if at the time none of them is issuing comparable ratings, then a comparable rating of another Nationally Recognised Statistical Rating Organisation) and is located in an Approved Jurisdiction (other than Italy, Ukraine and the United Kingdom), (ii) located in Italy or the United Kingdom if such bank or financial institution has a rating that is no more than two notches below the highest rating obtainable for a private bank or financial institution in Italy or the United Kingdom, as the case may be (or if at the time no internationally recognised rating is available, any bank or financial institution located in Italy or the United Kingdom as the case may be), (iii) located in Bulgaria if such bank or financial institution has a rating that is equivalent to the highest rating obtainable for a private bank or financial institution in Bulgaria (or if at the time no internationally recognised rating is available, any bank or financial institution located in Bulgaria) or (iv) which is a Pre-Approved Bank;
- (c) certificates of deposit, time deposits, bankers’ acceptances and overnight bank deposits (and similar instruments) and amounts held in current accounts (i) with maturities of 90 days or less, in each case, with any bank or financial institution located in Ukraine and (ii) with maturities greater than 90 days up to 12 months, in each case, with any bank or financial institution located in Ukraine with a rating that is equivalent to one of the two highest ratings obtainable for a private bank or financial institution in Ukraine (or if at the time no internationally recognised rating is available, any bank or financial institution located in Ukraine);

- (d) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in paragraphs (a), (b) and (c) above entered into with any financial institution meeting the qualifications specified in paragraph (b) or (c) above;
- (e) commercial paper rated at the time of acquisition thereof at least “A-2” or the equivalent thereof by Standard & Poor’s, “P-2” or the equivalent thereof by Moody’s or “F-2” or the equivalent by Fitch, or carrying an equivalent rating by a Nationally Recognised Statistical Rating Organisation, if the above named rating agencies cease publishing ratings of investments or, if no rating is available in respect of the commercial paper, the issuer of which has an equivalent rating in respect of its long-term unsecured and non-credit enhanced debt, and in any case maturing within one year after the date of acquisition thereof;
- (f) in the case of any Restricted Subsidiary located outside an Approved Jurisdiction, any substantially similar Investment to those described in paragraphs (b), (c), (d) and (e) of this definition obtained in the ordinary course of business and with the highest rating obtainable in the relevant jurisdiction for a private bank or financial institution (to the extent an internationally recognised rating is available); and/or
- (g) interests in money market funds at least 95 per cent of the assets of which constitute Cash Equivalents of the type referred to in paragraphs (a) through (f) above,

For purposes of this definition of “Cash Equivalents”, a Subsidiary of an international bank or financial institution will be attributed the same rating as its parent.

“**Central GOK**” means Private Joint Stock Company “Central Iron Ore Enrichment Works”, a company organised and existing under the laws of Ukraine, identification code 00190977, whose registered office is at Kryvyi Rig, Dnipropetrovsk Region, 50066 Ukraine.

“**Change in Tax Law**” has the meaning set out in Condition 6.4.1.

“**Change of Control**” has the meaning set out in in Condition 6.3.1.

“**Change of Control Offer**” has the meaning set out in in Condition 6.3.2.

“**Clearstream, Luxembourg**” has the meaning set out in Condition 1.1.

“**Consolidated Net Income**” means, for any period, the consolidated net profit/(loss) of Metinvest as shown in its financial statements prepared in accordance with Accounting Standards, in each case, for such period; provided that if all net assets of any Seized Subsidiaries are derecognised, the Consolidated Net Income will not be (i) reduced as a result of the reclassification of up to U.S.\$601 million of accumulated net negative currency translation reserve from “Other comprehensive income/(loss)” to Consolidated Income Statement of Metinvest as described in note 4 of Metinvest’s summary IFRS consolidated financial statements for the year ended 31 December 2017 or (ii) increased as a result of any gain (whether offsetting the effects described in subclause (i) above or otherwise) arising from any sale, assignment, transfer, disposition, liquidation or bankruptcy proceedings of such Seized Subsidiary reflected in the Consolidated Income Statement of Metinvest following the derecognition of such Seized Subsidiary.

“**Consolidated Net Leverage Ratio**” as of any date of determination means the ratio of (x) Net Debt at such date to (y) Adjusted EBITDA for the Relevant Period, after giving effect on a pro forma basis to, if applicable:

- (a) the Incurrence of any Indebtedness the permissibility of which is then being measured, the Incurrence, repayment or discharge of any other Indebtedness during the Relevant Period or subsequent to the Relevant Period and on or prior to the relevant date of determination and, in

each case, the receipt and application of the proceeds therefrom (but not giving effect to (i) any Indebtedness Incurred on the relevant date of determination pursuant to Condition 4.2.2 or (ii) the repayment or other discharge of any Indebtedness on the relevant date of determination, to the extent that such repayment or other discharge is made with the proceeds of Indebtedness Incurred pursuant to Condition 4.2.2), as if the same had occurred on the first day of the Relevant Period;

- (b) the exclusion of EBITDA associated with any Asset Sale or the inclusion of earnings before interest, tax, depreciation and amortisation of the Person subject to any Asset Acquisition (“**Acquired EBITDA**”) (including, without limitation, any Asset Acquisition giving rise to the need to make such calculation as a result of the incurrence or assumption of Indebtedness) made during the Relevant Period or subsequent to the Relevant Period and on or prior to the relevant date of determination, as if the same had occurred on the first day of the Relevant Period; provided, however, that any such pro forma Acquired EBITDA in respect of an Asset Acquisition may only be so included if such pro forma Acquired EBITDA shall have been derived from (i) financial statements of, or relating to or including, such acquired entity, that have been prepared in accordance with Accounting Standards or (ii) such other financial statements or financial reports of the acquired entity that the chief financial officer of the Issuer believes in good faith to present fairly the financial position and results of operations of the acquired entity so as to permit such a pro forma Acquired EBITDA to be prepared on the basis of reasonable assumptions and estimates;
- (c) any Person that is a Restricted Subsidiary on the relevant date of determination will be deemed to have been a Restricted Subsidiary at all times during the Relevant Period; and
- (d) any Person that is not a Restricted Subsidiary on the relevant date of determination will be deemed not to have been a Restricted Subsidiary at any time during the Relevant Period.

For the avoidance of doubt, in determining the Consolidated Net Leverage Ratio, no cash or cash equivalents shall be included that are the proceeds of Indebtedness in respect of the Incurrence of which the calculation of Consolidated Net Leverage Ratio is to be made.

“**Contingent Obligations**” means, with respect to any Person, any obligation of such Person guaranteeing in any manner, whether directly or indirectly, any operating lease, dividend or other obligation that, in each case, does not constitute Indebtedness (“*primary obligations*”) of any other Person (the “*primary obligor*”), including any obligation of such Person, whether or not contingent:

- (a) to purchase any such primary obligations or any property constituting direct or indirect security therefor;
- (b) to advance or supply funds:
 - (i) for the purchase or payment of any such primary obligation; or
 - (ii) to maintain the working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the primary obligor; or
- (c) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligations of the ability of the primary obligor to make payment of such primary obligations against loss in respect thereof.

“**Continuing Director**” means, for any period, any member of the supervisory board of the Issuer:

- (a) who was a member of such supervisory board at the beginning of such period; or

- (b) whose nomination for appointment or appointment to such supervisory board was approved by a necessary majority of the Permitted Holders.

“Core or Related Business” means any and all principal and ancillary activities of the Issuer and its Restricted Subsidiaries in the metals and mining industry, including, but not limited to, all areas of business in which the Issuer and its Restricted Subsidiaries are engaged on the Issue Date and the following activities: (a) iron ore mining and processing; (b) full cycle pig iron and steel production, including semi-finished and finished steel products; (c) the production of ferroalloys; (d) scrap iron collection and processing; (e) transportation and shipping services; (f) mining of fluxes and other minerals necessary for metals production; (g) coal mining and processing; and (h) any and all ancillary and support activities.

“Currency Agreement” means any foreign exchange contract, currency swap agreement or other similar agreement with respect to currency values.

“DB Borrowing Base Facility Agreement” means the amended and restated facility agreement, originally dated 1 February 2011, among United Coal Company LLC, as borrower, the Issuer as guarantor, and the other parties from time to time party thereto as guarantors, Deutsche Bank AG, New York Branch, as sole mandated lead arranger and sole bookrunner, and as issuing bank and account bank, Deutsche Bank AG, Amsterdam Branch, as agent and security agent, and the lenders from time to time party thereto, as such agreement was amended and restated on 30 October 2014 and amended on 31 July 2015, and as it may be further amended, amended and restated, refinanced, or otherwise modified from time to time.

“Definitive Certificate” has the meaning set out in Condition 1.1.

“Designated Non-Cash Consideration” means the Fair Market Value of non-cash consideration received by the Issuer or one of its Restricted Subsidiaries in connection with an Asset Sale that is so designated as “Designated Non-Cash Consideration” pursuant to an Officers’ Certificate, setting forth the basis of such valuation, less the amount of cash or Cash Equivalents received in connection with a subsequent sale of such Designated Non-Cash Consideration.

“Disinterested Director” means, with respect to any Affiliate Transaction or Asset Sale, a member of the Board of Directors of the Issuer or the relevant Restricted Subsidiary having no material direct or indirect financial interest in or with respect to such Affiliate Transaction or Asset Sale and who is not an officer or director of the Affiliate that is the counterparty to the Affiliate Transaction or Asset Sale. For the avoidance of doubt, the members of the Board of Directors will not be deemed to have such a financial interest solely by virtue of having been appointed to such position by a Permitted Holder or by reason of such member’s holding Capital Stock of the Issuer or a Restricted Subsidiary of the Issuer or any options, warrants or other rights in respect of such Capital Stock.

“Disposal Proceeds” means the aggregate cash proceeds received by the Issuer or any of its Restricted Subsidiaries in respect of any Asset Sale (including, without limitation, any cash received upon the sale, conversion or other disposition of any Designated Non-Cash Consideration or other consideration received in non-cash form or Cash Equivalents substantially concurrently received in any Asset Sale), net of the direct costs relating to such Asset Sale and the sale of such Designated Non-Cash Consideration or other consideration received in non-cash form, including, without limitation:

- (a) brokerage or sales commissions and other fees and expenses (including fees and expenses of accounting and/or legal advisers and/or investment bankers), title and recording tax expenses, commissions and other fees and expenses relating to such Asset Sale;
- (b) provision for all taxes required to be paid or payable, or required to be accrued as a liability determined in conformity with Accounting Standards as a result of such Asset Sale;

- (c) payments made to repay Indebtedness or any other obligation outstanding at the time of such Asset Sale that either is secured by a Lien on the property or assets sold, or is required to be paid as a result of such sale;
- (d) all distribution and other payments required to be made to minority interest holders in Restricted Subsidiaries of the Issuer as a result of such Asset Sale;
- (e) any relocation expenses incurred as a result of the Asset Sale;
- (f) any portion of the purchase price from an Asset Sale placed in escrow, whether as a reserve for adjustment of the purchase price, for satisfaction of indemnities in respect of such Asset Sale or otherwise in connection with that Asset Sale; provided, however, that upon the termination of that escrow, Disposal Proceeds will be increased by any portion of funds in the escrow that are released to the Issuer or any Restricted Subsidiary of the Issuer; and
- (g) appropriate amounts to be provided by the Issuer or any of its Restricted Subsidiaries as a reserve against any liabilities associated with such Asset Sale, including, without limitation, pension and other post-employment benefit liabilities, liabilities related to environmental matters and liabilities under any indemnification obligation associated with such Asset Sale, all as determined in conformity with Accounting Standards.

“Disqualified Stock” means, with respect to any Person, any Capital Stock which by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable at the option of the holder) or upon the happening of any event:

- (a) matures or is mandatorily redeemable (other than redeemable only for Capital Stock of such Person which is not itself Disqualified Stock) pursuant to a sinking fund obligation or otherwise;
- (b) is convertible or exchangeable at the option of the holder for Indebtedness or Disqualified Stock; or
- (c) is mandatorily redeemable or must be purchased upon the occurrence of certain events or otherwise, in whole or in part;

in each case on or prior to the date that is six months after the final maturity of the Notes; provided, however, that any Capital Stock that would not constitute Disqualified Stock but for provisions thereof giving holders thereof the right to require such Person to purchase or redeem such Capital Stock upon the occurrence of an “asset sale” or “change of control” occurring prior to the six-month anniversary of the final maturity of the Notes shall not constitute Disqualified Stock if the terms of such Capital Stock provide that the issuer thereof may not repurchase or redeem any such Capital Stock pursuant to such provisions unless such repurchase or redemption complies with Condition 4.3.

The amount of any Disqualified Stock that does not have a fixed redemption, repayment or repurchase price will be calculated in accordance with the terms of such Disqualified Stock as if such Disqualified Stock were redeemed, repaid or repurchased on any date on which the amount of such Disqualified Stock is to be determined pursuant to the Trust Deed; provided, however, that if such Disqualified Stock could not be required to be redeemed, repaid or repurchased at the time of such determination, the redemption, repayment or repurchase price will be the book value of such Disqualified Stock as reflected in the most recent financial statements of such Person.

“Donetsk Coke” means Private Joint Stock Company “Donetsk Coke Plant”, a company organised and existing under the law of Ukraine, identification code 00191112, whose registered office is at Pr. Nakhimova, building 116A, Mariupol, Donetsk Region, 87534 Ukraine.

“**DTEK**” means DTEK B.V. a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) existing under the laws of The Netherlands, having its registered address (*statutaire zetel*) in Amsterdam, The Netherlands and its principal place of business (*feitelijk adres*) at Strawinskylaan 1531, Tower B, Level 15, grid TB-15-046/089, 1077XX Amsterdam, The Netherlands under No. 59950293.

“**Dutch Banking Association**” means the *Nederlandse Vereniging van Banken* of the Netherlands.

“**Dutch Civil Code**” means the *Burgerlijk Wetboek* of the Netherlands.

“**EBITDA**” means the earnings before interest, tax, depreciation and amortisation of the relevant Restricted Subsidiary of the Issuer after allocation of the Issuer’s consolidation adjustments, prepared in accordance with Accounting Standards, consistently applied.

“**Environment**” means living organisms including the ecological systems of which they form part and the following media:

- (a) air (including air within natural or man-made structures, whether above or below ground);
- (b) water (including territorial, coastal and inland waters, water under or within land and water in drains and sewers); and/or
- (c) land (including land under water).

“**Environmental Laws**” means all laws and regulations of any relevant jurisdiction which:

- (a) have as a purpose or effect the protection of, and/or prevention of harm or damage to, the Environment;
- (b) provide remedies or compensation for harm or damage to the Environment; and
- (c) relate to hazardous substances or health or safety matters.

“**Environmental Licences**” means any authorisation, consent, approval, resolution, licence, exemption, filing or registration required at any time under Environmental Law for the operation of the business of the Issuer and its Material Subsidiaries conducted on or from the properties owned or used by the Issuer and its Material Subsidiaries.

“**Equity Offering**” means a public or private offering and sale of either (a) Capital Stock of the Issuer by the Issuer (other than Disqualified Stock and other than to a Restricted Subsidiary of the Issuer) or (b) Capital Stock of a direct or indirect parent entity of the Issuer (other than to the Issuer or a Restricted Subsidiary of the Issuer) to the extent that the net proceeds therefrom are contributed to the common equity capital (other than through the issuance of Disqualified Stock) of the Issuer.

“**Escrowed Property**” means the proceeds from the offering of any debt securities or other Indebtedness paid into segregated escrow accounts with an independent escrow agent on the date of the applicable offering or Incurrence pursuant to escrow arrangements that permit the release of amounts on deposit in such escrow account upon satisfaction of certain conditions or the occurrence of certain events. The term “Escrowed Property” shall include any interest earned on the amounts held in escrow.

“**Event of Default**” has the meaning set out in Condition 10 (*Events of Default*).

“**Euroclear**” has the meaning set out in Condition 1.1.

“**Exchange Act**” means the U.S. Securities Exchange Act of 1934, as amended.

“Existing Judgments” means:

- (a) a judgment in the amount of approximately UAH276 million in favour of KRIOW against Yenakiieve I&SW for recovery of debt under an agency agreement and enforcement proceedings in relation to an unpaid enforcement fee amounting to approximately UAH28 million;
- (b) an amicable settlement agreement (*myrova ugoda*) approved by the creditors’ committee in Krasnodon Coal’s insolvency proceedings;
- (c) a claim in the amount of approximately UAH222 million submitted by State Enterprise “Regional Electricity Networks” (Luhansk Branch) against Krasnodon Coal to the Luhansk Region Commercial Court, and any judgment arising from any proceedings and/or appeals in respect thereof; and
- (d) a judgment in the amount of approximately UAH204 million in favour of Limited Liability Company “Mako-Trading” against Limited Liability Company “Metinvest Holding” for recovery of debt for supplied raw materials, and any judgment arising from any subsequent proceedings and/or appeals in respect thereof (collectively, the **“Metinvest Holding Judgment”**).

“Expropriation” has the meaning set out in Condition 10.1.5

“Extraordinary Resolution” means a resolution passed (a) at a meeting duly convened and held in accordance with this Trust Deed by a majority of at least 75 per cent. of the votes cast, (b) by a Written Resolution (as defined in the Trust Deed) or (c) by an Electronic Consent (as defined in the Trust Deed).

“Fair Market Value” means the price that would be paid in an arm’s length transaction between an informed and willing seller under no compulsion to sell and an informed and willing buyer under no compulsion to buy, as determined in good faith by the competent management body of the Issuer or the relevant Restricted Subsidiary of the Issuer.

“Finance Lease” means any lease or hire purchase contract which would, in accordance with the Accounting Standards, be treated as a balance sheet liability (other than any liability in respect of a lease or hire purchase contract which would, in accordance with the Accounting Standards in force as at 31 December 2017, have been treated as an operating lease).

“Finance Lease Obligation” means, at the time any determination is to be made, the amount of the liability in respect of a Finance Lease that would at that time be required to be capitalised on a balance sheet (excluding the notes thereto) prepared in accordance with the Accounting Standards (as in effect on 31 December 2017 for purposes of determining whether a lease is a Finance Lease), and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be prepaid by the lessee without payment of a penalty.

“Fitch” means Fitch Ratings Ltd. and any successor to its rating agency business.

“FUIB” means Public Joint Stock Company “First Ukrainian International Bank”, a company organised and existing under the laws of Ukraine, identification code 14282829, whose registered office is at 4 Andriivska Street, Kyiv, 04070 Ukraine.

“Global Note Certificate” has the meaning set out in Condition 1.1.

“Guarantees” means the suretyships or guarantees of the Guarantors under the Surety Agreement.

“Guarantors” means Avdiivka Coke, Central GOK, Ilyich Steel, Ingulets GOK, Northern GOK and Azovstal, together with the Additional Guarantors, and **“Guarantor”** means any of them, but which

expressions exclude any entity released for the time being from being a Guarantor pursuant to these Conditions.

“**Hedging Obligations**” of any Person means the obligations of such Person pursuant to any Interest Rate Agreement or Currency Agreement or any other derivative transaction entered into in connection with protection against or benefit from fluctuation in any rate or price (including but not limited to fluctuations with respect to any index or the price of any commodity), with the amount of obligations in respect of any such derivative transaction determined with reference to the marked to market value thereof (or, if any actual amount is due as a result of the termination or close-out of that derivative transaction, that amount), without set off for any cash collateral in respect of such obligations.

“**holder**” has the meaning set out in Condition 1.2.

“**IFRS**” means International Financial Reporting Standards.

“**Ilyich Steel**” means Private Joint Stock Company “Ilyich Iron And Steel Works Of Mariupol”, a company organised and existing under the laws of Ukraine, identification code 00191129, whose registered office is at 1 Levchenko Street, Mariupol, Donetsk Region, 87504 Ukraine.

“**Incur**” means, with respect to any Indebtedness or other obligation of any Person, to create, issue, incur (including by conversion or exchange, but for the avoidance of doubt, excluding extensions of maturity), assume, guarantee or otherwise become liable in respect of such Indebtedness or other obligation of such Person (and “**Incurrence**”, “**Incurred**” and “**Incurrence**” shall have meanings correlative to the preceding). Indebtedness of any acquired Person or any of its Restricted Subsidiaries existing at the time such acquired Person becomes a Restricted Subsidiary of the Issuer (or is merged into or consolidated with the Issuer or any Restricted Subsidiary of the Issuer), whether or not such Indebtedness was Incurred in connection with, as a result of, or in contemplation of, such acquired Person becoming a Restricted Subsidiary of the Issuer (or being merged into or consolidated with the Issuer or any Restricted Subsidiary of the Issuer), shall be deemed Incurred at the time any such acquired Person becomes a Restricted Subsidiary of the Issuer (or merges into or consolidates with the Issuer or any Restricted Subsidiary of the Issuer). Notwithstanding the foregoing, the following will not be deemed to be an Incurrence:

- (a) the accrual of interest or preferred stock dividends or the accretion or amortisation of original issue discount;
- (b) the amortisation of debt discount or the accretion of principal with respect to a non-interest bearing or other discount security;
- (c) the payment of interest in the form of additional Indebtedness or the payment of dividends on Capital Stock in the form of additional Capital Stock of the same class and with the same terms;
- (d) the reclassification of preferred stock as Indebtedness due to a change in accounting principles; and
- (e) the obligation to pay a premium in respect of Indebtedness arising in connection with the issuance of the notice of redemption or the making of a mandatory offer to purchase such Indebtedness.

“**Indebtedness**” means, with respect to any Person at any date of determination (without duplication):

- (a) indebtedness for, or in respect of, moneys borrowed;
- (b) any amount raised by acceptance under any acceptance credit facility;

- (c) any amount raised pursuant to any note purchase facility or issue of bonds, notes, debentures, loan stock or other similar instruments, including, in each case, any premium on such indebtedness to the extent such premium has become due and payable;
- (d) any amounts raised pursuant to any issue of shares which are expressed to be redeemable, including any Disqualified Stock (for the avoidance of doubt, excluding any issue of Preferred Stock of the Issuer);
- (e) representing Finance Lease Obligations;
- (f) the amount of any liability in respect of any advance or deferred purchase agreement if the primary reason for entering into such agreement is to raise finance;
- (g) all conditional sale obligations of such Person and all obligations of such Person under any title retention agreement, if one of the primary reasons for entering into such obligations is to raise finance (but excluding any accounts payable or other liability to trade creditors arising in the ordinary course of business);
- (h) all obligations of such Person in respect of letters of credit or similar instruments (other than obligations with respect to documentary facilities, including without limitation, letters of credit, performance guarantees, documentary credits and advance payment bonds, provided by or at the request of such Person, in the ordinary course of business of such Person to the extent such documentary facilities, letters of credit, performance guarantees, documentary credits and advance payment bonds are not drawn upon or, if and to the extent drawn upon, such drawing is reimbursed no later than the 30 days following receipt by such Person of a demand for reimbursement following payment on such documentary facilities, letters of credit, performance guarantees, documentary credits and advance payment bonds)
- (i) all obligations of the type referred to in paragraphs (a) through (h) above and (j) through (l) below of other Persons secured by any Lien on any property or asset of such Person (whether or not such obligation is assumed by such Person), the amount of such outstanding obligation being deemed to be the lesser of the Fair Market Value of such property or assets at the date of determination and the amount of the obligation so secured;
- (j) to the extent not otherwise included in this definition, Hedging Obligations of such Person;
- (k) any amount raised under any other transaction (including any forward sale or purchase agreement) having the commercial effect of a borrowing; and
- (l) the amount of any liability in respect of any guarantee, suretyship or indemnity for any of the items referred to in paragraphs (a) to (k) above (other than the Guarantees).

if and to the extent any of the preceding items (other than Hedging Obligations and the items specified in paragraphs (h), (i) and (l) above) would appear as a liability upon a balance sheet (excluding the notes thereto) of the specified Person prepared in accordance with the Accounting Standards. The amount of Indebtedness of any Person at any date shall be the outstanding balance at such date of all unconditional obligations as described above and, with respect to contingent obligations as described above, the liability upon the occurrence of the contingency giving rise to the obligation.

The term “**Indebtedness**” shall not include:

- (a) Subordinated Shareholder Funding;
- (b) obligations in connection with a Qualified Securitisation Financing;

- (c) any lease or hire purchase contracts which would be considered an operating lease under the Accounting Standards (as in effect on 31 December 2017) and any guarantee given by the Issuer or a Restricted Subsidiary in the ordinary course of business solely in connection with, and in respect of, the obligations of the Issuer or a Restricted Subsidiary under any operating lease;
- (d) Contingent Obligations in the ordinary course of business; and
- (e) (i) trade payables and accrued expenses and (ii) deferred or prepaid revenues including prepayments or deposits received from clients or customers, in each case, in the ordinary course of business.

“Independent Financial Adviser” means any investment banking, accountancy, appraisal or financial advisory firm, in each case of international standing, appointed, at the expense of the Issuer, by the competent management body of the Issuer or the relevant Restricted Subsidiary of the Issuer, provided it is not an Affiliate of the Issuer or any Restricted Subsidiary of the Issuer; provided further that if the Issuer fails to make such appointment and such failure continues for a reasonable period (as determined by the Trustee in its sole discretion) and the Trustee has been indemnified and/or secured and/or prefunded to its satisfaction in connection with such appointment, such firm may be appointed by the Trustee (at the cost of the Issuer without liability for so doing), and notified to the Issuer.

“Ingulets GOK” means Private Joint Stock Company “Ingulets Iron Ore Enrichment Works”, a company organised and existing under the laws of Ukraine, identification code 00190905, whose registered office is at 47 Rudna Street, Kryvyi Rig, Dnipropetrovsk Region, 50064 Ukraine.

“Interest Payment Date” has the meaning set out in Condition 5.1.

“Interest Period” has the meaning set out in Condition 5.2.

“Interest Rate Agreement” means any interest rate swap agreement, interest rate cap agreement or other financial agreement or arrangement with respect to exposure to interest rates.

“Intra-Group Debt” means any Indebtedness for money borrowed owed to, or advanced by, or the payment of which is guaranteed by the Issuer or any Restricted Subsidiary to (i) the Issuer or another Restricted Subsidiary, as applicable, or (ii) a Seized Subsidiary.

“Investment Grade Rating” means a rating equal to or higher than Baa3 (or the equivalent) by Moody’s and BBB- (or the equivalent) by Fitch or Standard & Poor’s.

“Investment Grade Status” shall occur when the Notes have an Investment Grade Rating from at least two of Moody’s, Fitch or Standard & Poor’s (or, if any such entity ceases to rate the Notes, the equivalent investment grade credit rating from any other Nationally Recognised Statistical Rating Organisation).

“Investments” means, with respect to any Person, all direct or indirect investments by such Person in other Persons (including Affiliates) in the form of any direct or indirect advance, loan or other extension of credit (excluding advances or extensions of credit to customers, suppliers, directors, officers or employees of any Person made in the ordinary course of business and rent deposits), or capital contribution to (including by means of any transfer of cash or other property to others, but excluding commission, travel and similar advances to officers and employees made in the ordinary course of business and further excluding any capital expenditure), or the incurrence of any guarantee of any obligation of, or any purchase or other acquisition of Capital Stock, Indebtedness or other securities issued by, such other Persons, together with all items that are or would be classified as investments on a balance sheet (excluding the footnotes) prepared in accordance with Accounting Standards. If the Issuer or any Restricted Subsidiary of the Issuer sells or otherwise disposes of any Capital Stock of any direct or indirect Restricted Subsidiary of the Issuer such that, after giving effect to any such sale or disposition, such Person

is no longer a Restricted Subsidiary of the Issuer, the Issuer shall be deemed to have made an Investment on the date of any such sale or disposition equal to the Fair Market Value of the Issuer's Investments in such Restricted Subsidiary that were not sold or disposed of. The acquisition by the Issuer or any Restricted Subsidiary of the Issuer of a Person that holds an Investment in a third Person shall be deemed to be an Investment by the Issuer or such Restricted Subsidiary in such third Person in an amount equal to the Fair Market Value of the Investment held by the acquired Person in such third Person. The amount of any Investment outstanding at any time shall be the original cost of such Investment, reduced (at the Issuer's option) by any dividend, distribution, interest payment, return of capital, repayment or other amount or value received in respect of such Investment.

"Issue Date" means 23 April 2018.

"Issuer" means the party named as such above until a successor replaces it in accordance with Condition 11.3 and thereafter means such successor.

"Joint Venture" means any joint venture entity, whether a company, unincorporated firm, undertaking, association, joint venture or partnership or any other entity.

"Khartsyzsk Pipe" means Private Joint Stock Company "Khartsyzsk Pipe Plant", a company organised and existing under the laws of Ukraine, identification code 00191135, whose registered office is at 54 Illich Avenue, Building 4, Mariupol, Donetsk Region, 87504 Ukraine.

"Komsomolske Flux" means Private Joint Stock Company "Komsomolske Flux Plant", a company organised and existing under the law of Ukraine, identification code 00191827, whose registered office is at Pr. Nakhimova, building 116A, Mariupol, Donetsk Region, 87534 Ukraine.

"Krasnodon Coal" means Private Joint Stock Company "Krasnodon Coal Company", a company organised and existing under the laws of Ukraine, identification code 32363486, whose registered office is at 54 Energetykyiv Street, Severodonetsk Luhansk Region, 93404 Ukraine.

"KRIOW" means Public Joint Stock Company "Kryvyi Rig Iron Ore Works", a company organised and existing under the laws of Ukraine, identification code 00191307, whose registered office is at 1A Simbirtseva Street, Kryvyi Rig, Dnipropetrovsk Region, 50029 Ukraine.

"Lien" means any mortgage, pledge, security interest, encumbrance, lien or charge of any kind (including, without limitation, any conditional sale or other title retention agreement or lease in the nature thereof, any sale with recourse against the seller or any Affiliate of the seller, or any agreement to give any security interest) securing any obligation of any Person.

"Makiivka Steel" means Private Joint Stock Company "Makiivka Iron and Steel Works", a company organised and existing under the law of Ukraine, identification code 33185989, whose registered office is at Pr. Nakhimova, building 116A, Mariupol, Donetsk Region, 87534 Ukraine.

"Management Advances" means loans or advances made to, or guarantees with respect to loans or advances made to, directors, officers, employees or consultants of the Issuer or any Restricted Subsidiary:

- (a) in respect of travel, entertainment or moving-related expenses incurred in the ordinary course of business of the Issuer or any of its Restricted Subsidiaries;
- (b) in respect of moving-related expenses incurred in connection with any closing or consolidation of any facility or office of the Issuer or any of its Restricted Subsidiaries; or

- (c) any other such loans, advances or guarantees provided that they are made in the ordinary course of business of the Issuer or any of its Restricted Subsidiaries and do not exceed U.S.\$25 million in the aggregate outstanding at any time.

“**Material Adverse Effect**” means a material adverse effect on:

- (a) the business, results of operations, property, assets, condition (financial or otherwise) or prospects of the Issuer or any of its Material Subsidiaries; or
- (b) the Issuer’s ability to perform its obligations under the Trust Deed to which the Issuer is party; or
- (c) any Guarantor’s ability to perform its obligations under the Surety Agreement, to which any such Guarantor is party; or
- (d) the validity, legality or enforceability of the Trust Deed or the rights or remedies of the Noteholders or the Trustee under the Trust Deed or the validity, legality or enforceability of the Surety Agreement or the rights or remedies of the Noteholders or the Trustee under the Surety Agreement.

“**Material Subsidiary**” means at any relevant time a Restricted Subsidiary of the Issuer:

- (a) whose PPE represent not less than 10 per cent. of the Total Production Assets of Metinvest or whose EBITDA represents not less than 10 per cent. of the Adjusted EBITDA of Metinvest (determined by reference to the most recent publicly available annual or semi-annual consolidated financial statements of Metinvest prepared in accordance with Accounting Standards and the latest annual or semi-annual financial statements of the Restricted Subsidiary of the Issuer prepared in accordance with Accounting Standards);
- (b) to which is transferred all or substantially all the assets and undertakings of a Restricted Subsidiary (the “**Original Material Subsidiary**”) of the Issuer which immediately prior to such transfer is a Material Subsidiary provided that (i) the transferee (the “**New Material Subsidiary**”) shall cease to be a Material Subsidiary if upon delivery of any of the financial statements referred to in paragraph (a) above it no longer constitutes a Material Subsidiary under paragraph (a) above and (ii) the Original Material Subsidiary shall cease to be a Material Subsidiary on the date of such transfer until such time as it may constitute a Material Subsidiary again under paragraph (a) above; or
- (c) that is a Guarantor,

provided that an Affected Entity shall be deemed not to be a Material Subsidiary.

“**Maturity Date**” means 23 April 2023.

“**Metalen**” means Ukraine-Switzerland Joint Venture Limited Liability Company “Metalen”, a company organised and existing under the laws of Ukraine, identification code 30615347, whose registered office is at Pr. Nakhimova, building 116A, Mariupol, Donetsk Region, 87534 Ukraine.

“**Metinvest**” means the Issuer and its Subsidiaries.

“**Moody’s**” means Moody’s Investors Service, Inc. and any successor to its rating agency business.

“**Nationalisation**” has the meaning set out in Condition 10.1.9.

“**Nationally Recognised Statistical Rating Organisation**” means a nationally recognised statistical rating organisation within the meaning of Rule 15c3-1(c)(2)(vi)(F) under the Exchange Act.

“Net Cash Proceeds”, with respect to any issuance or sale of Capital Stock or Indebtedness, means the cash proceeds of such issuance or sale net of legal fees, accountants’ fees, underwriters’ or placement agents’ fees, discounts or commissions and brokerage, consultant and other fees actually incurred in connection with such issuance or sale and net of taxes paid or payable as a result thereof.

“Net Debt” means total debt less cash and cash equivalents of Metinvest on a consolidated basis determined in accordance with Accounting Standards (and excluding any Subordinated Shareholder Funding).

“Non-Guarantor Subsidiary” means any Restricted Subsidiary of the Issuer that is not a Guarantor.

“Non-Recourse Debt” means Indebtedness as to which neither the Issuer nor any of its Restricted Subsidiaries (a) provides credit support of any kind (including any undertaking, agreement or instrument that would constitute Indebtedness), except as permitted under paragraph (dd) of the definition of Permitted Liens or (b) is directly or indirectly liable as a guarantor or otherwise.

“Northern GOK” means Private Joint Stock Company “Northern Iron Ore Enrichment Works”, a company organised and existing under the law of Ukraine, identification code 00191023, whose registered office is at Kryvyi Rig, Dnipropetrovsk Region, 50079 Ukraine.

“Noteholder” has the meaning set out in Condition 1.2.

“Notes Documents” means the Trust Deed, the Surety Agreement and the Agency Agreement.

“Offering Memorandum” means the offering memorandum dated on or about 19 April 2018 for the listing of the Notes on the Global Exchange Market of Euronext Dublin.

“Officers’ Certificate” means a certificate signed by such number of managing directors (*bestuurders*) of the Issuer who are authorised to represent it in relation to the subject matter thereof.

“Opinion of Counsel” means a written opinion from legal counsel of international standing which is acceptable to the Trustee.

“outstanding principal amount” means, in respect of each Note, its nominal amount as reduced from time to time pursuant to Condition 6 (*Redemption, Purchase and Options*).

“Parent” means any holding company or companies controlled directly or indirectly by Mr Rinat Akhmetov for the purpose of holding investments in the Issuer, being, as of the Issue Date, SCM (System Capital Management) Limited (Cyprus) and Clarendale Limited (Cyprus).

“Permanent Cessation of Business or Winding-Up” of a Person means the cessation of business for 12 months or longer or winding-up, liquidation or dissolution of such Person in connection with, directly or indirectly, an Expropriation or Nationalisation.

“Permitted Debt” has the meaning set out in Condition 4.2.2.

“Permitted Energy Supplier Guarantee” has the meaning set out in Condition 4.2.2(N).

“Permitted Holders” means any and all of (i) Mr. Rinat Akhmetov, (ii) Mr. Vadym Novynskyi; (iii) the legal representatives of any of the foregoing and the trustees of bona fide trusts of which the foregoing are the only beneficiaries and (iv) the Related Parties. Any Person whose acquisition of beneficial ownership constitutes a Change of Control in respect of which a Change of Control Offer is made in accordance with the requirements of the Trust Deed will thereafter, together with its Affiliates, constitute an additional Permitted Holder.

“Permitted Investments” means:

- (a) any Investment in the Issuer or any Restricted Subsidiary of the Issuer;
- (b) any Investment in cash or Cash Equivalents;
- (c) any Investment by the Issuer or a Restricted Subsidiary of the Issuer in a Person, if as a result of such Investment: (i) such Person becomes a Restricted Subsidiary of the Issuer; or (ii) such Person is merged, consolidated or amalgamated with or into, or transfers or conveys all or substantially all of its assets to, or is liquidated into, the Issuer or a Restricted Subsidiary of the Issuer;
- (d) any Investment made as a result of the receipt of non-cash consideration from a sale or other disposition of property or assets, including an Asset Sale, in each case, that was made pursuant to and in compliance with Condition 4.5;
- (e) any Investment to the extent made using Capital Stock of the Issuer (other than Disqualified Stock), Subordinated Shareholder Funding or Capital Stock of any parent entity as consideration;
- (f) any Investments received in settlement of debts created in the ordinary course of business or in compromise or resolution of (x) obligations of trade creditors or customers that were incurred in the ordinary course of business of the Issuer or any Restricted Subsidiary of the Issuer, including pursuant to any plan of reorganisation or similar arrangement upon the bankruptcy or insolvency of any trade creditor or customer; or (y) litigation, arbitration or other disputes;
- (g) Investments in receivables owing to the Issuer or any Restricted Subsidiary of the Issuer if created or acquired in the ordinary course of business;
- (h) Investments represented by Hedging Obligations, which obligations are permitted by Condition 4.2.2(F);
- (i) pledges or deposits (x) with respect to leases or utilities provided to third parties in the ordinary course of business or (y) otherwise described in the definition of “Permitted Liens” or made in connection with Liens permitted under Condition 4.1;
- (j) (i) guarantees of Indebtedness not prohibited by Condition 4.2 hereof and (ii) (other than with respect to Indebtedness) guarantees, keepwells and similar arrangements in the ordinary course of business (for the avoidance of doubt, including the Permitted Energy Supplier Guarantee);
- (k) (x) Investments in the Senior Notes; (y) any Investments pursuant to any loan or other instrument contributing the proceeds of the Senior Notes and (z) any Investments in any other Indebtedness of the Issuer or any Restricted Subsidiary;
- (l) any Investment existing on, or made pursuant to legally binding commitments in existence on, the Issue Date and any extension, modification or renewal of any such Investment; provided that the amount of the Investment may be increased (i) as required by the terms of the Investment or (ii) as otherwise permitted under the Trust Deed;
- (m) Investments consisting of (i) securities acquired in connection with a settlement of VAT (or other tax reimbursement) receivables from the government of Ukraine and (ii) any credit extended to the Ukrainian government as a result of the acquisition of securities referred to in the foregoing paragraph (i) and (iii) trade and other receivables and other Indebtedness or obligations owed by the Seized Subsidiaries to the Issuer or any of its Restricted Subsidiaries in connection with the assumption, payment, settlement or other discharge by the Issuer or any Restricted Subsidiary of trade and other payables of such Seized Subsidiaries in an aggregate amount outstanding not to

exceed U.S.\$260 million, plus any amounts relating to penalties or the effects of the exchange rates of currencies;

- (n) Investments acquired after the Issue Date as a result of the acquisition by the Issuer or any Restricted Subsidiary of another Person, including by way of a merger, amalgamation or consolidation with or into the Issuer or any of its Restricted Subsidiaries in a transaction that is not prohibited by Condition 4.8 after the Issue Date to the extent that such Investments were not made in contemplation of such acquisition, merger, amalgamation or consolidation and were in existence on the date of such acquisition, merger, amalgamation or consolidation;
- (o) Management Advances;
- (p) any Investment made in connection with a Qualified Securitisation Financing, including Investments of funds held in accounts permitted or required by the arrangements governing such Qualified Securitisation Financing or any related indebtedness;
- (q) the endorsement of negotiable instruments in the ordinary course of business;
- (r) any performance, bid, completion, surety or appeal bonds or similar instruments, guarantees or obligations entered into in the ordinary course of business;
- (s) any guarantee given in respect of the netting or set-off arrangements permitted pursuant to paragraph (o) of the definition of “Permitted Liens”;
- (t) any liability in respect of the Issuer or any of its Restricted Subsidiaries incorporated in the Netherlands arising under a declaration of joint and several liability (*hoofdelijke aansprakelijkheid*) as referred to in Article 2:403 of the Dutch Civil Code;
- (u) any liability arising as a result of a fiscal unity (*fiscale eenheid*) solely between or among the Issuer and its Restricted Subsidiaries incorporated in the Netherlands;
- (v) investments in joint ventures and similar entities and Unrestricted Subsidiaries having an aggregate Fair Market Value (measured on the date each such Investment was made and without giving effect to subsequent changes in value), when taken together with all other Investments made pursuant to this paragraph (v) that are at the time outstanding, not to exceed 5 per cent. of Total Assets; provided that if an Investment is made pursuant to this clause in a Person that is not a Restricted Subsidiary and such Person subsequently becomes a Restricted Subsidiary or is subsequently designated a Restricted Subsidiary pursuant Conditions 4.3 and 4.16, such Investment shall thereafter be deemed to have been made pursuant to paragraph (a) or (c) above and not this paragraph (v); and
- (w) other Investments in any Person having an aggregate Fair Market Value (measured on the date each such Investment was made and without giving effect to subsequent changes in value), when taken together with all other Investments made pursuant to this paragraph (w) that are at the time outstanding do not exceed 7.5 per cent. of Total Assets; provided that if an Investment is made pursuant to this paragraph (w) in a Person that is not a Restricted Subsidiary at the date of the making of such Investment and such Person subsequently becomes a Restricted Subsidiary or is subsequently designated a Restricted Subsidiary pursuant to Condition 4.3, such Investment shall thereafter be deemed to have been made pursuant to paragraph (a) or (c) above and not this paragraph (w).

“**Permitted Liens**” means:

- (a) Liens in favour of the Issuer or any of its Restricted Subsidiaries;

- (b) any Lien existing on the Issue Date;
- (c) (i) Liens on current assets, including inventory, to secure trade finance facilities permitted under Condition 4.2 and (ii) Liens securing pre-export financings over the types of assets permitted to secure the PXF Facility Agreement pursuant to the PXF Facility Agreement as in effect on the Issue Date;
- (d) Liens imposed by law or by agreement having the same effect, including but without limitation, Liens of landlords and carriers, warehousemen, mechanics, suppliers, material men, repairmen or other similar Liens arising in the ordinary course of business;
- (e) Liens on property or shares of Capital Stock of another Person at the time such other Person becomes a Restricted Subsidiary of or is merged or consolidated with or into the Issuer or any of its Restricted Subsidiaries; provided, however, that the Liens may not extend to any other property owned by the Issuer or any of its Restricted Subsidiaries (other than assets and property affixed or appurtenant thereto);
- (f) Liens on property at the time the Issuer or any of its Restricted Subsidiaries acquires the property, including any acquisition by means of a merger or consolidation with or into the Issuer or such Restricted Subsidiary; provided, however, that the Liens may not extend to any other property owned by the Issuer or any of its Restricted Subsidiaries (other than assets and property affixed or appurtenant thereto);
- (g) any Lien securing the Senior Notes and the Senior Guarantees;
- (h) any Lien incurred, or pledges or deposits in connection with workers' compensation, unemployment insurance and other social security benefits and other obligations of like nature in the ordinary course of business;
- (i) Liens (including deposits) (i) to secure the performance of bids, trade contracts, government contracts, leases, statutory obligations, customs duties, guarantees, completion, surety and appeal bonds, performance or return-of-money bonds or liabilities to insurance carriers under insurance or self-insurance arrangements and other obligations of like nature, in each case so long as such Liens do not secure obligations constituting Indebtedness for money borrowed and are incurred in the ordinary course of business or (ii) in connection with a Permitted Energy Supplier Guarantee in the ordinary course of business, including in the case of paragraphs (i) and (ii), including Liens to secure letters of credit or other documentary facilities issued to assure payment of such obligations;
- (j) survey exceptions, easements, rights of way, restrictions (including zoning restrictions), reservations, permits, servitudes, defects or irregularities in title and other similar charges and encumbrances, and Liens arising under leases or subleases granted to others, in each case not interfering in any material respect with the business of the Issuer or any of its Restricted Subsidiaries and existing, arising or incurred in the ordinary course of business incidental to the conduct of the business of such Person or to the ownership of its properties which were not Incurred in connection with Indebtedness and which do not individually or in the aggregate materially adversely affect the value of said properties or materially impair their use in the operation of the business of such Person;
- (k) any Lien securing reimbursement obligations of the Issuer or any of its Restricted Subsidiaries with respect to letters of credit or bank guarantees encumbering only documents and other property relating to such letters of credit or bank guarantees and the products or proceeds thereof

in the ordinary course of business; provided that such letters of credit or bank guarantees do not constitute Indebtedness;

- (l) any Lien upon any steel, iron ore, coal or coke export contracts (including contracts for sale, transportation or exchange), and any related inventory and products, and proceeds thereof which contracts are entered into in the ordinary course of business of the Issuer and its Restricted Subsidiaries in a form that is customary in the steel, iron ore mining, coal mining and coke production industry, as applicable;
- (m) any Lien securing Purchase Money Indebtedness permitted to be Incurred under Condition 4.2; provided, however, that the Lien may not extend to any property or assets owned by such Person or any of its Restricted Subsidiaries at the time the Lien comes into existence (other than the property or assets acquired with or financed by such Purchase Money Indebtedness and current assets and sales contracts of the Issuer and its Restricted Subsidiaries);
- (n) Liens securing Hedging Obligations permitted to be Incurred under Condition 4.2.2(F));
- (o) (i) a right of set-off, right to combine accounts or any analogous right which any bank or other financial institution may have relating to any credit balance of the Issuer or any of its Restricted Subsidiaries; provided, however, that (x) such deposit account is not a dedicated cash collateral account and is not subject to restrictions against access by the Issuer or any of its Restricted Subsidiaries and (y) such deposit account is not intended by the Issuer or any Restricted Subsidiary of the Issuer to provide collateral to the depository institution and (ii) any Lien arising in the ordinary course of banking transactions, provided that the Lien is limited to the assets which are the subject of the relevant transaction;
- (p) any Lien for taxes, assessments, customs or other governmental charges and similar charges or claims, including VAT, which either are not delinquent or are being contested in good faith by appropriate proceedings for which the Issuer or relevant Restricted Subsidiary of the Issuer has set aside in its accounts reserves to the extent required by Accounting Standards;
- (q) Liens encumbering cash deposits in bank accounts established to provide cash collateral in respect of letters of credit, guarantees and similar instruments that were issued prior to the Issue Date;
- (r) Liens (including a right of set-off) granted by the Issuer on its right to receive dividends from a Non-Guarantor Subsidiary in favour of a Non-Guarantor Subsidiary;
- (s) Liens to secure any Refinancing Indebtedness (excluding Liens to secure Refinancing Indebtedness initially secured pursuant to paragraph (m) or (q) above) permitted to be Incurred under these Conditions; provided, however, that:
 - (i) the new Lien is limited to all or part of the same property and assets that secured or, under the written agreements pursuant to which the original Lien arose, could secure the original Lien (plus improvements and accessions to such property or proceeds or distributions thereof); and
 - (ii) the Indebtedness secured by the new Lien is not increased to any amount greater than the sum of (A) the outstanding principal amount, or, if greater, committed amount, of the Indebtedness Refinanced with such Refinancing Indebtedness and (B) an amount necessary to pay any fees and expenses, including premiums, related to such Refinancing;
- (t) any Liens arising under any retention of title, hire purchase, consignment or conditional sale arrangement or arrangements having similar effect in respect of goods supplied to the Issuer or any of its Restricted Subsidiaries in the ordinary course of business and on the supplier's standard

or usual terms and not arising as a result of any default or omission by the Issuer or any of its Restricted Subsidiaries;

- (u) in respect of the Issuer or any of its Restricted Subsidiaries, any Lien arising under clause 24 or 25 of the general banking conditions (*algemene bankvoorwaarden*) of any member of the Dutch Banking Association;
- (v) Liens to secure any guarantee that is permitted by Condition 4.2.2(M), to the extent such guarantee is in respect of Indebtedness otherwise permitted to be secured by Permitted Liens pursuant to this definition of Permitted Liens;
- (w) Liens arising out of judgments or awards not constituting an Event of Default and notices of *lis pendens* and associated rights related to litigation being contested in good faith by appropriate proceedings or for which adequate reserves have been made;
- (x) Liens on insurance policies and proceeds thereof, or other deposits, to secure insurance premium financings;
- (y) Liens on cash, Cash Equivalents or other property arising in connection with the defeasance, discharge or redemption of Indebtedness;
- (z) Liens on specific items of inventory or other goods (and the proceeds thereof) of any Person securing such Person's obligations in respect of bankers' acceptances issued or created in the ordinary course of business for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;
- (aa) leases (including operating leases), licenses, subleases and sublicenses of assets in the ordinary course of business;
- (bb) (a) mortgages, liens, security interests, restrictions, encumbrances or any other matters of record that have been placed by any developer, landlord or other third party on property over which the Issuer or any Restricted Subsidiary has easement rights or on any real property leased by the Issuer or any Restricted Subsidiary and subordination or similar agreements relating thereto and (b) any condemnation or eminent domain proceedings or compulsory purchase order affecting real property
- (cc) Liens on property or assets under construction (and related rights) in favour of a contractor or developer or arising from progress or partial payments by a third party relating to such property or assets;
- (dd) (a) Liens (including put and call arrangements) on Capital Stock or other securities of any Unrestricted Subsidiary that secure Indebtedness of such Unrestricted Subsidiary and (b) Liens on assets of a Seized Subsidiary arising in connection with, or as a result of, any seizure of its assets;
- (ee) limited recourse Liens in respect of the ownership interests in, or assets owned by, any joint ventures which are not Restricted Subsidiaries securing obligations of such joint ventures;
- (ff) Liens on any proceeds loan made by the Issuer, any Subsidiary of the Issuer or a special purpose financing entity to an Issuer or a Restricted Subsidiary in connection with, and in the amount not exceeding the proceeds of, any future Incurrence of Indebtedness and securing that Indebtedness, provided that the Incurrence of such Indebtedness and the Incurrence of such proceeds loan are permitted by these Conditions;
- (gg) any interest or title of a lessor under any operating lease;

- (hh) Liens (a) on Escrowed Property for the benefit of the related holders of debt securities or other Indebtedness (or the underwriters or arrangers thereof) or (b) on cash set aside at the time of the Incurrence of any Indebtedness or government securities purchased with such cash, in the case of this paragraph (b) to the extent such cash or government securities prefund the payment of interest on such Indebtedness and are held in an escrow account or similar arrangement to be applied for such purpose;
- (ii) Liens Incurred in connection with a cash management program established in the ordinary course of business;
- (jj) Liens over cash paid into an escrow account pursuant to any purchase price retention arrangement as part of any disposal by the Issuer or a Restricted Subsidiary permitted by these Conditions, *provided* that the cash paid into such escrow account in relation to a disposal does not represent more than 15% of the net cash proceeds of such disposal;
- (kk) pledges of goods, the related document of title and/or other related documents arising or created in the ordinary course of the Issuer's or any Restricted Subsidiary's business or operations as Liens only for Indebtedness to a bank or financial institution directly relating to the goods or documents on or over which the pledge exist;
- (ll) Liens on assets or property of a Non-Guarantor Subsidiary securing Indebtedness of such Non-Guarantor Subsidiary or another Non-Guarantor Subsidiary;
- (mm) other Liens incurred with respect to Indebtedness if, after giving pro forma effect to the Incurrence of Indebtedness secured by such Lien, the aggregate principal amount of outstanding Indebtedness (1) secured by Liens pursuant to this paragraph (mm), (2) Incurred by Non-Guarantor Subsidiaries under Condition 4.2.1(B) (including any Refinancing Indebtedness in respect thereof) and (3) Incurred by Non-Guarantor Subsidiaries under Condition 4.2.2(O) (without double-counting), does not exceed 20 per cent. of Total Assets;
- (nn) any extension, renewal or replacement, in whole or in part, of any Lien described in the foregoing clauses (a) through (mm); provided that any such extension, renewal or replacement shall not extend to any additional property or assets; and
- (oo) Liens on Securitisation Assets and related assets Incurred in connection with any Qualified Securitisation Financing (including Liens encumbering cash deposits in bank accounts established in connection with a Qualified Securitisation Financing and Liens encumbering cash and Cash Equivalents collected from receivables that are part of or subject to a Qualified Securitisation Financing).

“Person” means any individual, corporation, partnership, joint venture, bank, financial institution, trust, unincorporated organisation or government or any Agency or political subdivision thereof or other entity.

“Potential Event of Default” means any condition, event or act which, with the lapse of time and/or the issue, making or giving of any notice, certification, declaration, demand, determination and/or request and/or the taking of any similar action, would constitute an Event of Default.

“PPE” means property, plant and equipment of the relevant Restricted Subsidiary of the Issuer, prepared in accordance with Accounting Standards.

“Pre-Approved Bank” means (i) any bank or financial institution listed in Schedule 1, (ii) any bank or financial institution to which the Issuer or any of its Restricted Subsidiaries owes any obligations under any letters of credit, guarantees or other Indebtedness, where the aggregate amount of any certificates of deposit, time deposits, money market deposits, bankers' acceptances and overnight bank deposits (each, as

described in the definition of “Cash Equivalents”) held with such bank or financial institution by the Issuer or any of its Restricted Subsidiaries does not exceed the aggregate amount of such obligations owed by the Issuer or any of its Restricted Subsidiaries to such bank or financial institution and (iii) any Affiliate of such bank or financial institution described in the foregoing paragraph (ii), provided that such Affiliate is also a bank or financial institution.

“**Preferred Stock**”, as applied to the Capital Stock of any Person, means Capital Stock of any class or classes (however designated) which is preferred as to the payment of dividends or distributions, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of such Person, over shares of Capital Stock of any other class of such Person.

“**Protective Attachment**” means any attachment obtained by the Issuer or any of its Restricted Subsidiaries from a court for the purpose of protecting its assets.

“**Purchase Money Indebtedness**” means (i) Finance Lease Obligations, mortgage financings, purchase money obligations or other Indebtedness Incurred to finance the acquisition, construction, rental payments, cost of design, installation, improvement or lease of any property or other assets (including Capital Stock in any Person), provided that such Indebtedness is incurred within 365 days after the acquisition, construction, design, installation, improvement or lease of such property or other asset or (ii) Indebtedness consisting of financings backed by export credit agencies, including, in each case, any Refinancing of such Indebtedness.

“**PXF Facility Agreement**” means the PXF facility agreement amended and restated pursuant to an amendment and restatement agreement dated on or around 19 March 2018 and effective as of the Issue Date, between, among others, the Issuer, Deutsche Bank AG, Amsterdam Branch, ING Bank N.V., Natixis and Unicredit S.p.A. as the coordinating mandated lead arrangers and Deutsche Bank AG, Amsterdam Branch as the agent, as amended, varied or supplemented from time to time.

“**Qualified Securitisation Financing**” means any financing pursuant to which the Issuer or any of its Restricted Subsidiaries may sell, convey or otherwise transfer to any other Person (including a Receivables Subsidiary) or grant a security interest in, any Securitisation Assets (and related assets) in any aggregate principal amount equivalent to the Fair Market Value of such Securitisation Assets (and related assets) of the Issuer or any of its Restricted Subsidiaries; provided that (a) the covenants, events of default and other provisions applicable to such financing shall be on market terms at the time such financing is entered into and may include Standard Securitisation Undertakings, (b) the interest rate applicable to such financing shall be a market interest rate at the time such financing is entered into and (c) such financing shall be non-recourse to the Issuer or any of its Restricted Subsidiaries (other than a Receivables Subsidiary) except to a limited extent customary for such transactions, including any Standard Securitisation Undertakings (all determinations under this definition as determined in good faith by the Issuer).

“**Receivables Subsidiary**” means a wholly-owned Subsidiary of the Issuer (or another Person formed for the purposes of engaging in a Qualified Securitisation Financing with the Issuer in which the Issuer or any Subsidiary of the Issuer makes an Investment and to which the Issuer or any Subsidiary of the Issuer transfers Securitisation Assets) which engages in no activities other than in connection with the financing of Securitisation Assets, and any business of activities incidental or related to such business, and which is designated by the Board of Directors of the Issuer (as provided below) as a Receivables Subsidiary and:

- (a) no portion of the Indebtedness or any other obligations (contingent or otherwise) of such Receivables Subsidiary (i) is guaranteed by the Issuer or any other Restricted Subsidiary of the Issuer (excluding guarantees of obligations (other than the principal of, and interest on, Indebtedness) pursuant to Standard Securitisation Undertakings), (ii) is subject to terms that are substantially equivalent in effect to a guarantee of any losses on securitized or sold receivables by

the Issuer or any other Restricted Subsidiary of the Issuer, (iii) is recourse to or obligates the Issuer or any other Restricted Subsidiary of the Issuer in any way other than pursuant to Standard Securitisation Undertakings, or (iv) subjects any property or asset of the Issuer or any other Restricted Subsidiary of the Issuer, directly or indirectly, contingently or otherwise, to the satisfaction thereof, other than pursuant to Standard Securitisation Undertakings;

- (b) with which neither the Issuer nor any other Restricted Subsidiary of the Issuer has any contract, agreement, arrangement or understanding other than on terms which the Issuer reasonably believes to be no less favourable to the Issuer or such Restricted Subsidiary than those that might be obtained at the time from Persons that are not Affiliates of the Issuer; and
- (c) to which neither the Issuer nor any other Restricted Subsidiary of the Issuer has any obligation to maintain or preserve such entity's financial condition or cause such entity to achieve certain levels of operating results.

Any such designation by the Board of Directors of the Issuer shall be evidenced to the Trustee by delivery to the Trustee of a copy of the resolution of the Board of Directors of the Issuer giving effect to such designation and an Officers' Certificate certifying that such designation complied with the foregoing conditions. The Trustee may rely on such resolution and Officer's Certificate absolutely without liability to any person for so doing and without further enquiry.

"Refinance" means, in respect of any security or Indebtedness, to refinance, extend, renew, refund, repay, prepay, redeem, defease, discharge or retire, or to issue a security or Indebtedness in exchange or replacement for, such security or Indebtedness in whole or in part. **"Refinanced"** and **"Refinancing"** shall have correlative meanings.

"Refinancing Indebtedness" means Indebtedness of the Issuer or any of its Restricted Subsidiaries that Refinances any Indebtedness of the Issuer or any Restricted Subsidiary of the Issuer existing on the Issue Date or Incurred in compliance with the Trust Deed, including Indebtedness that Refinances Refinancing Indebtedness; provided, however, that:

- (a) such Refinancing Indebtedness has a final maturity date that is either (i) no earlier than the final maturity date of the Indebtedness being Refinanced or (ii) after the final maturity date of the Notes;
- (b) such Refinancing Indebtedness has a Weighted Average Life to Maturity at the time such Refinancing Indebtedness is Incurred that is equal to or greater than the Weighted Average Life to Maturity of the Indebtedness being Refinanced;
- (c) such Refinancing Indebtedness has an aggregate principal amount (or if Incurred with original issue discount, an aggregate issue price) that is equal to or less than the aggregate principal amount (or if Incurred with original issue discount, the aggregate accreted value) then outstanding (plus accrued interest, fees and expenses, including any premium and defeasance costs) under the Indebtedness being Refinanced;
- (d) if the Indebtedness being Refinanced is contractually subordinated in right of payment to the Notes or any Guarantee, such Refinancing Indebtedness is subordinated in right of payment to the Notes and such Guarantee at least to the same extent as the Indebtedness being Refinanced; and
- (e) if the Issuer or any Guarantor was the obligor on the Indebtedness being Refinanced, such Indebtedness is Incurred either by the Issuer or by a Guarantor.

Refinancing Indebtedness in respect of any credit facility, pre-export financing or any other Indebtedness may be Incurred from time to time after the termination, discharge or repayment of any such credit facility,

pre-export financing or other Indebtedness; provided that it is used to refinance amounts thereunder or other Indebtedness within six months of the relevant termination, disclosure or repayment date.

“Register” has the meaning set out in Condition 1.2.

“Regulation S” means Regulation S under the Securities Act.

“Regulation S Definitive Certificates” has the meaning set out in Condition 1.1.

“Regulation S Global Note Certificate” has the meaning set out in Condition 1.1.

“Regulation S Notes” mean the Notes initially issued to persons outside the United States in reliance on Regulation S.

“Related Parties” means any or all of (i) Parent, (ii) SMART or (iii) the legal representatives of any of the foregoing and the trustees of bona fide trusts of which the foregoing are the only beneficiaries.

“Relevant Date” in respect of any Note means the date on which payment in respect of it first becomes due or (if any amount of the money payable is improperly withheld or refused) the date on which payment in full of the amount outstanding is made or (if earlier) the date seven days after that on which notice is duly given to the Noteholders that, upon further presentation of the Note (or related Certificate), being made in accordance with the Conditions, such payment will be made, provided that payment is in fact made upon such presentation.

“Relevant Period” means (i) the most recently ended two semi-annual periods for which Metinvest’s financial statements are prepared in accordance with Accounting Standards and are delivered or deliverable to the Trustee pursuant to Conditions 4.17.1 and Conditions 4.17.2 or (ii) in the case of the four-quarter period ending on the last day of the first or third quarter of any financial year, financial statements which are internally available, in each case immediately preceding the relevant date of determination (except that for purposes of the calculations under Condition 4.3.1(B) and Condition 4.3.2(M), “Relevant Period” shall refer to paragraph (i) only).

“Restricted Investment” means an Investment other than a Permitted Investment.

“Restricted Payment” with respect to any Person means:

- (a) the declaration or payment of any dividends or any other distributions in respect of its Capital Stock (including any payment in connection with any merger or consolidation involving such Person) to the direct or indirect holders of its Capital Stock (other than (A) dividends or distributions payable solely in its Capital Stock (other than Disqualified Stock) or in options, warrants or other rights to purchase such stock or in Subordinated Shareholder Funding and (B) dividends or distributions payable solely to the Issuer or a Restricted Subsidiary of the Issuer);
- (b) the purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of any Capital Stock of the Issuer held by any Person (other than by a Restricted Subsidiary of the Issuer), including in connection with any merger or consolidation and including the exercise of any option to exchange any Capital Stock (other than into Capital Stock of the Issuer that is not Disqualified Stock);
- (c) the purchase, repurchase, redemption, defeasance or other acquisition or retirement for value, prior to scheduled maturity, scheduled repayment or scheduled sinking fund payment of any Subordinated Obligations of the Issuer or any Guarantor (other than (A) any intercompany Indebtedness between or among the Issuer and any Restricted Subsidiary of the Issuer or (B) the purchase, repurchase, redemption, defeasance or other acquisition or retirement of Subordinated

Obligations purchased in anticipation of satisfying a sinking fund obligation, principal instalment or final maturity, in each case due within one year of the date of such purchase, repurchase, redemption, defeasance or other acquisition or retirement);

- (d) the making of any payment (whether in respect of interest or principal), or the purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Subordinated Shareholder Funding (other than any payment of interest thereon in the form of additional Subordinated Shareholder Funding); or
- (e) the making of any Restricted Investment.

“Restricted Subsidiary” means any Subsidiary of the Issuer that is not an Unrestricted Subsidiary.

“Rule 144A Definitive Certificates” has the meaning set out in Condition 1.1.

“Rule 144A Global Note Certificate” has the meaning set out in Condition 1.1.

“Rule 144A Notes” means the Notes initially issued to persons located in the United States.

“Securities Act” has the meaning set out in Condition 2.1

“Securitisation Assets” means any receivables (whether now existing or arising in the future) of the Issuer or any of its Restricted Subsidiaries, and any assets related thereto including, without limitation, all contracts and all guarantees or other obligations in respect of such accounts receivable, the proceeds of such receivables, and the bank accounts the sole purpose of which is to deposit the proceeds of such receivables that are collected, in each case, subject to a Qualified Securitisation Financing.

“Securitisation Fees” means distributions or payments made directly or by means of discounts with respect to any participation interest issued or sold in connection with, and other fees paid to a Person that is not the Issuer or any of its Restricted Subsidiaries in connection with, any Qualified Securitisation Financing.

“Securitisation Repurchase Obligation” means any obligation of a seller of Securitisation Assets in a Qualified Securitisation Financing to repurchase Securitisation Assets arising as a result of a breach of a representation, warranty or covenant or otherwise, including as a result of a receivable or portion thereof becoming subject to any asserted defense, dispute, off-set or counterclaim of any kind as a result of any action taken by, any failure to take action by or any other event relating to the seller.

“Seized Subsidiaries” means Yenakieve I&SW, Makiivka Steel, Metalen, Khartsyzsk Pipe, Komsomolske Flux, Krasnodon Coal and Donetsk Coke.

“Senior Indebtedness” means, whether outstanding on the Issue Date or thereafter incurred, all amounts payable by, under or in respect of all other Indebtedness of the Issuer or any Restricted Subsidiary including premiums and accrued and unpaid interest (including interest accruing on or after the filing of any petition in bankruptcy or for reorganisation relating to the Issuer or such Restricted Subsidiary at the rate specified in the documentation with respect thereto whether or not a claim for post filing interest is allowed in such proceeding) and fees relating thereto; provided, however, that Senior Indebtedness will not include:

- (a) any obligation of the Issuer or any Restricted Subsidiary to the Issuer or any Restricted Subsidiary of the Issuer;
- (b) any liability for taxes owed or owing by the Issuer or any Restricted Subsidiary of the Issuer;

- (c) any Indebtedness of the Issuer or any Restricted Subsidiary in respect of Subordinated Obligations or Disqualified Stock;
- (d) any accounts payable or other liability to trade creditors arising in the ordinary course of business (including guarantees thereof or instruments evidencing such liabilities); and
- (e) that portion of any Indebtedness which at the time of Incurrence is Incurred in violation of these Conditions.

“Senior Notes” means the Notes, the 2021 Notes and the 2026 Notes.

“Senior Notes Documents” means the trust deeds, the surety agreements and the agency agreements in respect of the Senior Notes.

“Senior Notes Guarantees” means the suretyships or the guarantees of the guarantors in respect of the Senior Notes.

“Shareholder Loan Subordination Agreement” means (i) the subordination deed, dated on or about the Issue Date, entered into by the Issuer, Rainwell Limited, Eltrano Investments Limited and the Trustee; and (ii) any other subordination arrangement by written agreement entered into by the Issuer, any Restricted Subsidiary of the Issuer, any direct or indirect parent of the Issuer, any Permitted Holder or any Affiliate of any Permitted Holder (as applicable) and the Trustee.

“SMART” means any holding company or companies controlled directly or indirectly by Mr. Vadym Novynskyi for the purpose of holding investments in the Issuer, being, as of the Issue Date, Majorone Trading Limited (Cyprus), Adeona Holdings Limited (Cyprus), Celebrom Investments Limited (Cyprus).

“Southern GOK” means Public Joint Stock Company “Yuzhniy GOK” (Ukraine), otherwise known as PJSC “Yuzhniy GOK”.

“Standard & Poor’s” means Standard & Poor’s, a division of The McGraw-Hill Companies, Inc., and any successor to its rating agency business.

“Standard Securitisation Undertakings” means representations, warranties, covenants, indemnities and guarantees of performance entered into by the Issuer or any Subsidiary of the Issuer which the Issuer has determined in good faith to be customary in a financing pursuant to which the Issuer or any of its Restricted Subsidiaries may sell, convey or otherwise transfer to any other Person or grant a security interest in any Securitisation Assets (and related assets), including those relating to the servicing of the assets of a Receivables Subsidiary, it being understood that any Securitisation Repurchase Obligation shall be deemed to be a Standard Securitisation Undertaking.

“Stated Maturity” means:

- (a) with respect to any Indebtedness, the date specified in such Indebtedness as the fixed date on which the final instalment of principal of such Indebtedness is due and payable; and
- (b) with respect to any scheduled instalment of principal of or interest on any Indebtedness, the date specified in such Indebtedness as the fixed date on which such instalment is due and payable.

“Subordinated Obligation” means, with respect to a Person, any Indebtedness of such Person (whether outstanding on the Issue Date or thereafter Incurred) which is subordinate or junior in right of payment to the Notes or a Guarantee, pursuant to a written agreement to that effect.

“Subordinated Shareholder Funding” means, collectively, any funds provided to the Issuer or any Restricted Subsidiary by any direct or indirect parent of the Issuer or any Permitted Holder or any Affiliate

of any Permitted Holder (other than (i) the Issuer and its Restricted Subsidiaries and (ii) FUIB in respect of any Indebtedness Incurred by the Issuer or any of its Restricted Subsidiaries permitted under Condition 4.2 and in compliance with Condition 4.4) (whether outstanding on the Issue Date or thereafter Incurred) in exchange for or pursuant to any security, instrument or agreement other than Capital Stock, in each case, issued to and held by any of the foregoing Persons, provided that such Subordinated Shareholder Funding:

- (a) does not mature or require any amortisation, redemption or other repayment of principal or any sinking fund payment prior to the first anniversary of the final maturity of the Notes (other than through conversion or exchange of such funding into Capital Stock (other than Disqualified Stock) of the Issuer or any funding meeting the requirements of this definition);
- (b) does not require, prior to the first anniversary of the final maturity of the Notes, payment of cash interest, cash withholding amounts or other cash gross-ups, or any similar cash amounts;
- (c) contains no change of control or similar provisions and does not accelerate and has no right to declare a default or event of default or take any enforcement action or otherwise require any cash payment, in each case, prior to the first anniversary of the Stated Maturity of the Notes;
- (d) does not provide for or require any security interest or encumbrance over any property or asset of the Issuer or any of its Restricted Subsidiaries; and
- (e) is made to the Issuer or any Restricted Subsidiary and pursuant to its terms is fully subordinated and junior in right of payment to the Notes pursuant to a Shareholder Loan Subordination Agreement.

“**Subsidiary**” of any Person means (a) any corporation, association or other business entity more than 50 per cent. of the outstanding voting power of the Capital Stock of which is owned or controlled, directly or indirectly, by such Person or by one or more other Restricted Subsidiaries of such Person, or by such Person and one or more other Restricted Subsidiaries thereof, (b) any limited partnership of which such Person or any Subsidiary of such Person is a general partner, (c) any other Person in which such Person, or one or more other Restricted Subsidiaries of such Person, or such Person and one or more other Restricted Subsidiaries, directly or indirectly, has more than 50 per cent. of the outstanding partnership or similar interests or has the power, by contract or otherwise, to direct or cause the direction of the policies, management and affairs thereof or (d) any Person whose financial statements are required by Accounting Standards to be consolidated into the consolidated financial statements of the relevant Person.

“**Surety Agreement**” means (i) the surety agreement dated as of the Issue Date between each of the Guarantors and the Trustee and (ii) any surety agreement or guarantee agreement between any Additional Guarantor and the Trustee executed and delivered by such Additional Guarantor in accordance with Condition 3.2, in each case, as amended, varied or supplemented from time to time, and “**Surety Agreement**” shall be construed accordingly.

“**Taxes**” has the meaning set out in Condition 8 (*Taxation*).

“**Tax Jurisdiction**” means The Netherlands (in the case of a payment by the Issuer) or Ukraine (in the case of a payment by any Guarantor).

“**Tax Proceedings**” means:

- (a) proceedings brought by Italian tax authorities in the years 2014 to 2017 pursuant to which they claimed that Metinvest Trameal is not fully compliant with the laws with respect to corporate income tax for the financial years 2009, 2010, 2011 and 2012;

- (b) proceedings brought by the Ukrainian tax authorities in August 2016 pursuant to which they claimed that Ingulets GOK is not fully compliant with the laws with respect to corporate income tax and VAT and issued and delivered to Ingulets GOK tax assessments indicating aggregate amount of approximately UAH1.5 billion payables and approximately UAH3.5 billion of improperly calculated losses;
- (c) proceedings brought by the Ukrainian tax authorities in June 2017 pursuant to which they claimed that Northern GOK is not fully compliant with the laws with respect to corporate income tax, VAT, withholding tax and rent payments for use of radio-frequency resources, special water use, use of subsurface resources etc., and issued and delivered to Northern GOK tax assessments indicating aggregate amount of approximately UAH1.4 billion payables;
- (d) proceedings brought by the Ukrainian tax authorities in September 2017 pursuant to which they claimed that Azovstal is not fully in compliance with the law with respect to corporate income tax, excise tax and VAT and issued and delivered to Azovstal tax decisions indicating aggregate amount of approximately UAH216 million payables and approximately UAH614 million of improperly calculated losses;
- (e) proceedings brought by the Ukrainian tax authorities in December 2017 pursuant to which they claimed that Central GOK is not fully compliant with the laws with respect to corporate income tax, VAT, real estate tax and rent payments for use of subsurface resources and issued and delivered to Central GOK tax assessments indicating aggregate amount payable of approximately UAH1.2 billion; and
- (f) proceedings brought by Ukrainian tax authorities in February 2018 pursuant to which they claimed that Metinvest-Resource is not fully compliant with the laws with respect to corporate income tax and issued and delivered to Metinvest-Resource a tax decision indicating an aggregate amount payable of approximately UAH871 million and approximately UAH10 million of improperly calculated losses.

“Total Assets” means the consolidated assets of Metinvest as shown in the latest consolidated financial statements of Metinvest which are internally available and prepared in accordance with Accounting Standards.

“Total Production Assets” means property, plant and equipment of Metinvest, unless otherwise specified, as shown in the latest consolidated financial statements of Metinvest which are internally available and prepared in accordance with Accounting Standards.

“Treasury Rate” means, as of any redemption date, the yield to maturity as of such redemption date of United States Treasury securities with a constant maturity (as compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) that has become publicly available at least two Business Days prior to such redemption date (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from such redemption date to Maturity Date; provided, however, that if the period from such redemption date to Maturity Date, is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year will be used.

“Trust Deed” means the trust deed to constitute the Notes for the equal and rateable benefit of the Noteholders to be dated the Issue Date between the Issuer, in its capacity as issuer, and the Trustee, among others, as amended, varied or supplemented from time to time.

“Trustee” means Madison Pacific Trust Limited, a trust company with company registration number 1619851 registered under section 78(1) of the Hong Kong Trustee Ordinance (Cap. 29) having its

registered office at Suite 1720, 17/F, Tower 1, Admiralty Centre, 18 Harcourt Road Admiralty, Hong Kong, in its capacity as trustee under the Trust Deed and any successor thereto as provided thereunder.

“**UAH**” means the Ukrainian Hryvnia.

“**Ukrainian GAAP**” means generally accepted accounting principles, standards and practices in Ukraine.

“**Uncontrolled Territory**” means those parts of the territory of Donetsk, Luhansk and Kharkiv regions of Ukraine which are not effectively controlled by the Ukrainian government and where, according to the applicable Ukrainian legislation, the anti-terrorist operation has been conducted, provided that if the territories where the anti-terrorist operation has been conducted are not defined by the applicable Ukrainian legislation, those parts of the territory of Donetsk and Luhansk regions of Ukraine which are defined as temporarily occupied territories according to the applicable Ukrainian legislation from time to time.

“**Unrestricted Subsidiary**” means any Subsidiary of the Issuer that is designated by the Board of Directors of the Issuer as an Unrestricted Subsidiary pursuant to a resolution of the Board of Directors but only to the extent that such Subsidiary:

- (a) has no Indebtedness other than Non-Recourse Debt;
- (b) except as permitted by Condition 4.4, is not party to any agreement, contract, arrangement or understanding with the Issuer or any Restricted Subsidiary unless the terms of any such agreement, contract, arrangement or understanding are no less favorable to the Issuer or such Restricted Subsidiary than those that might be obtained at the time from Persons who are not Affiliates of the Issuer; and
- (c) is a Person with respect to which neither the Issuer nor any Restricted Subsidiary has any direct or indirect obligation to maintain or preserve such Person’s financial condition or to cause such Person to achieve any specified levels of operating results.

“**U.S. Dollar Equivalent**” means with respect to any amount denominated in a currency other than U.S. dollars, at any time for the determination thereof, the amount of U.S. dollars obtained by converting such other currency involved into U.S. dollars at the spot rate for the purchase of U.S. dollars with the applicable foreign currency as quoted by Reuters at approximately 11:00 am (New York time) on the date not more than two Business Days prior to the date of determination.

“**U.S. GAAP**” means generally accepted accounting principles, standards and practices in the United States of America.

“**VAT**” means:

- (a) any tax imposed in compliance with the Council Directive of 28 November 2006 on the common system of value added tax (EC Directive 2006/112); and
- (b) any other tax of a similar nature, whether imposed in a member state of the European Union in substitution for, or levied in addition to, such tax referred to in paragraph (a) above, or imposed elsewhere.

“**Voting Stock**” of a Person means all classes of Capital Stock of such Person then outstanding and normally entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof.

“Weighted Average Life to Maturity” means, when applied to any Indebtedness at any date, the number of years obtained by dividing:

- (a) the sum of the products obtained by multiplying:
 - (i) the amount of each then remaining instalment, sinking fund, serial maturity or other required payment of principal or liquidation preference, as the case may be, including payment at final maturity, in respect thereof (provided that any payments of principal, the making of which is subject to any conditions, including availability of cash of an obligor, shall be not treated as “required” for the purposes of this paragraph (i)), by
 - (ii) the number of years (calculated to the nearest one-twelfth) which will elapse between such date and the making of such payment, by
- (b) the then outstanding aggregate principal amount or liquidation preference, as the case may be, of such Indebtedness.

“Yenakiieve I&SW” means Private Joint Stock Company “Yenakiieve Iron and Steel Works”, a company organised and existing under the law of Ukraine, identification code 00191193, whose registered office is at 54 Illich Avenue, Building 4, Mariupol, Donetsk Region, 87504 Ukraine.

“Zaporizhstal” means Public Joint Stock Company “Integrated Iron and Steel Works “Zaporizhstal”, otherwise known as PJSC “Zaporizhstal” and Zaporizhstal Iron and Steel Works.

Schedule 1

Pre-Approved Banks

- 1** Ablv Bank, AS
- 2** Allianz Bank
- 3** Arab Bank (Switzerland) Ltd
- 4** Arab Tunisian Bank
- 5** Banca Carige Spa - Cassa di risparmio di Genova e Imperia
- 6** Banca Dello Stato Del Cantone Ticino
- 7** Banca Monte dei Paschi di Siena S.p.A. (MPS)
- 8** Banca Nazionale del Lavoro Spa (BNL)
- 9** Banca popolare dell'Emilia Romagna Soc. coop (BPER)
- 10** Banca Popolare di Milano Società Cooperativa a r.l.
- 11** Banca Popolare di Vicenza S.p.A.
- 12** Banca Valsabbina S.C.p.A.
- 13** Banco Popolare di Lodi
- 14** Bank Of America Merrill Lynch
- 15** Bank of China Beijing Jingguang Center
- 16** Banque Cantonale de Geneve
- 17** Banque Cantonale Vaudoise
- 18** Banque de Commerce et de Placements
- 19** Barclays Bank Plc
- 20** BNP Paribas
- 21** BSI SA
- 22** Caterpillar Financial Services Corporation
- 23** Coöperatieve Rabobank U.A.
- 24** Credit Europe Bank N.V.
- 25** Credit Libanais S.A.L.
- 26** Credit Suisse AG
- 27** Deutsche Bank AG
- 28** Dragon Capital (Cyprus) Ltd
- 29** East West United Bank SA

30	Eastal Holdings Limited
31	Emirates Lebanon Bank SAL
32	Emirates NBD Bank PJSC
33	Erste Abwicklungsanstalt
34	Eurobank Bulgaria AD / Postbank
35	First Tennessee (Wellmore Coal Company LLC for Ismel Looney Heirs)
36	FUIB
37	Galena Commodity Trade Finance Master Fund Limited
38	GazpromBank (Switzerland) Ltd
39	Gml International Limited
40	Ice Global Credit Master Fund Designated Activity Company
41	Ice Oryx Alpha Master Fund Designated Activity Company
42	ING Bank Bulgaria
43	ING Bank N.V.
44	International Asset bank AD
45	Intesa Sanpaolo Spa
46	Joint Stock Company “The State Export-Import Bank of Ukraine”
47	JSC Gazprombank
48	National Bank of Fujairah
49	Natixis
50	Public Joint Stock Commercial Bank “Pravex-Bank”
51	Public Joint Stock Company “UkrSibbank”
52	Public Joint Stock Company “Alfa-Bank”
53	Public Joint Stock Company “Citibank Ukraine”
54	Public Joint Stock Company “Credit Agricole Bank”
55	Public Joint Stock Company “Deutsche Bank DBU”
56	Public Joint Stock Company “ING Bank Ukraine”
57	Public Joint Stock Company “Kredobank”
58	Public Joint Stock Company “OTP Bank”
59	Public Joint Stock Company “ProCredit Bank”
60	Public Joint Stock Company “Raiffeisen Bank Aval”

- 61** Public Joint Stock Company “Sberbank”
- 62** Public Joint Stock Company “State Savings Bank of Ukraine”
- 63** Public Joint Stock Company “Ukrsotsbank”
- 64** Public Joint Stock Company “VTB Bank”
- 65** Public Joint Stock Company Joint Stock Bank “Ukrgasbank”
- 66** Rabobank International, FFM
- 67** Raiffeisen Bank Int. AG
- 68** Senagat Bank JSCB
- 69** Societe Generale
- 70** Swedbank AS
- 71** UBS Switzerland AG
- 72** UniCredit SPA
- 73** Veneto Banca S.p.A.
- 74** VTB Bank (Public Joint-Stock Company)
- 75** Wells Fargo Bank, N.A.

TERMS AND CONDITIONS OF THE 2026 NOTES

The Terms and Conditions of the 2026 Notes shall be in the same form as the Terms and Conditions of the 2023 Notes above, save for the following:

- Condition 5 shall be as follows:

"5. Interest

5.1 Interest Rate:

The Notes bear interest on their outstanding principal amount from and including the Issue Date and for so long as any Notes remain outstanding at the rate of 8.500 per cent. per annum, payable in equal instalments semi-annually in arrear on 23 April and 23 October in each year (each, an "**Interest Payment Date**"), commencing on 23 October 2018. Each Note will cease to bear interest from and including the due date for redemption, unless, upon surrender of the Definitive Certificate representing such Note, payment of principal is improperly withheld or refused. In such event, it shall continue to bear interest at the rate of 8.500 per cent. per annum (both before and after judgment) until whichever is the earlier of (a) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (b) the day seven days after the Trustee or the Principal Paying Agent has notified the Noteholders of receipt of all sums due in respect of all the Notes up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions).

5.2 Calculation of Interest:

The amount of interest payable in respect of any period of less than a complete Interest Period shall be calculated on the basis of a 360-day year consisting of 12 months of 30 days each. The period beginning on (and including) the Issue Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date is called an "**Interest Period**".;

- The redemption price in Condition 6.2.3 shall be 108.500 per cent.;
- The definition of "2026 Notes" shall be replaced with the definition of "2023 Notes" as follows:

"**2023 Notes**" means 7.750 per cent. senior notes due 2023 issued by the Issuer on the Issue date;

- The definitions of "Notes", "Maturity Date" and "Senior Notes" shall be as follows:

"The U.S.\$647,661,000 8.500 per cent. senior notes due 23 April 2026 (the "**Notes**)";

"**Maturity Date**" means 23 April 2026; and

"**Senior Notes**" means the Notes, the 2021 Notes and the 2023 Notes.

BOOK-ENTRY, DELIVERY AND FORM

The Global Note Certificates

The Regulation S Notes for each series of Notes will be evidenced on issue by the relevant Regulation S Global Note Certificate registered in the name of a nominee for, and deposited with a common depository on behalf of, Euroclear and Clearstream, Luxembourg. Beneficial interests in the Regulation S Global Note Certificates may be held only through Euroclear or Clearstream, Luxembourg at any time. See "*—Book-entry Procedures for the Global Note Certificates*". By acquisition of a beneficial interest in the Regulation S Global Note Certificates, the purchaser thereof will be deemed to represent, among other things, that it is not a U.S. person, that it is located outside the United States, and that, if it determines to transfer such beneficial interest prior to the expiration of the "distribution compliance period" (as such term is defined Rule 902 of Regulation S), it will transfer such interest only (a) to a non-U.S. person that is located outside the United States or (b) in accordance with Rule 144A, to a person that it and any person acting on its behalf reasonably believe is a QIB purchasing for its own account or the account of a QIB, in each case in accordance with any applicable securities law of any state of the United States. See "*Transfer Restrictions*".

The Rule 144A Notes for each series of Notes will be evidenced on issue by the relevant Rule 144A Global Note Certificate(s) deposited with a custodian for, and registered in the name of a nominee of, DTC. Beneficial interests in the Rule 144A Global Note Certificates may only be held through DTC at any time. See "*—Book-entry Procedures for the Global Note Certificates*". By acquisition of a beneficial interest in the Rule 144A Global Note Certificates, the purchaser thereof will be deemed to represent, among other things, that it is a QIB and that, if in the future it determines to transfer such beneficial interest, it will transfer such interest in accordance with the procedures and restrictions contained in the Trust Deeds. See "*Transfer Restrictions*".

Beneficial interests in the Global Note Certificates will be subject to certain restrictions on transfer set forth therein and in the Trust Deeds, and the Global Note Certificates will bear the applicable legends regarding the restrictions set forth under "*Transfer Restrictions*". A beneficial interest in a Regulation S Global Note Certificate may be transferred to a person who takes delivery in the form of an interest in a Rule 144A Global Note Certificate only in denominations greater than or equal to the minimum denominations applicable to interests in the Rule 144A Global Note Certificates and only upon receipt by the Registrar of a written certification (in the form provided in the relevant Agency Agreement relating to the relevant series of the Notes (each, an "**Agency Agreement**" and together, the "**Agency Agreements**")) to the effect that the transferor reasonably believes that the transferee is a QIB and that such transaction is in accordance with any applicable securities laws of any state of the United States or any other jurisdiction. Beneficial interests in a Rule 144A Global Note Certificate may be transferred to a person who takes delivery in the form of an interest in a Regulation S Global Note Certificate only upon receipt by the Registrar of a written certification (in the form provided in the relevant Agency Agreement in respect of the relevant series of the Notes) from the transferor to the effect that the transfer is being made in an offshore transaction in accordance with Regulation S.

Any beneficial interest in the Regulation S Global Note Certificates that is transferred to a person who takes delivery in the form of an interest in a Rule 144A Global Note Certificate will, upon transfer, cease to be an interest in the Regulation S Global Note Certificate and become an interest in the Rule 144A Global Note Certificate, and, accordingly, will thereafter be subject to all transfer restrictions and other procedures applicable to beneficial interests in the Rule 144A Global Note Certificate for as long as it remains such an interest. Any beneficial interest in the Rule 144A Global Note Certificates that is transferred to a person who takes delivery in the form of an interest in a Regulation S Global Note Certificate will, upon transfer, cease to be an interest in the Rule 144A Global Note Certificate and become an interest in the Regulation S Global Note Certificate and, accordingly, will thereafter be subject to all transfer restrictions and other procedures applicable to beneficial interests in the Regulation S Global Note Certificate for so long as it remains such an interest. No service charge will be made for

any registration of transfer or exchange of Notes, but the Registrar may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith.

Except in the limited circumstances described below, owners of beneficial interests in Global Note Certificates will not be entitled to receive physical delivery of Definitive Certificates. The Notes are not issuable in bearer form.

In addition, each Global Note Certificate will contain a provision that modifies the relevant Conditions as they apply to the relevant Notes evidenced by such Global Note Certificate.

Exchange and Registration of Title

Owners of interests in the Notes of a series in respect of which a Global Note Certificate is issued will only be entitled to have title to the relevant Notes registered in their names and to receive individual definitive Notes of such series if the relevant Global Note Certificate is held by or on behalf of (A) DTC, and DTC notifies the Issuer that it is no longer willing or able to properly discharge its responsibilities as depositary with respect to such Global Note Certificate or ceases to be a "clearing agency" registered under the Exchange Act, or if at any time it is no longer eligible to act as such, and the Issuer is unable to locate a qualified successor within 90 days of receiving notice or becoming aware of such ineligibility on the part of DTC; or (B) Euroclear or Clearstream, Luxembourg (or any other clearing system as shall have been designated by the Issuer and approved by the Trustee on behalf of which the relevant Notes evidenced by such Global Note Certificate may be held), as the case may be, is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so.

In such circumstances, the Issuer will cause sufficient individual definitive Notes of the relevant series to be executed and delivered to the Registrar for completion, authentication and dispatch to the relevant Noteholders. A person with an interest in the relevant Notes in respect of which a Global Note Certificate is issued must provide the Registrar with a written order containing instructions and such other information as the Issuer and the Registrar may require to complete, execute and deliver such individual definitive Notes of the relevant series.

If, in respect of each series of Notes, only one of the Global Note Certificates (the "**Exchanged Global Note Certificate**") becomes exchangeable for Definitive Certificates in accordance with the above paragraphs, transfers of Notes of the relevant series may not take place between, on the one hand, persons holding Definitive Certificates issued in exchange for beneficial interests in the Exchanged Global Note Certificate and, on the other hand, persons wishing to purchase beneficial interests in the other Global Note Certificate.

Legends

The holder of a Definitive Certificate may transfer the Notes of the relevant series evidenced thereby in whole or in part in the applicable minimum denomination by surrendering it at the specified office of the Registrar or any Transfer Agent, together with the completed form of transfer thereon. Upon the transfer, exchange or replacement of a Rule 144A Definitive Certificate bearing the legend referred to under "*Transfer Restrictions*", or upon specific request for removal of the legend on a Rule 144A Definitive Certificate, the Issuer will deliver only Rule 144A Definitive Certificates that bear such legend, or will refuse to remove such legend, as the case may be, unless there is delivered to the Issuer and the Registrar such satisfactory evidence, which may include an opinion of counsel, as may reasonably be required by the Issuer that neither the legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

Book-entry Procedures for the Global Note Certificates

Euroclear, Clearstream, Luxembourg and DTC

Custodial and depository links have been established between Euroclear, Clearstream, Luxembourg and DTC to facilitate the initial issue of the Notes of each series and cross-market transfers of the Notes of each series associated with secondary market trading. See "*—Book-entry Ownership—Settlement and Transfer of Notes*".

Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg each hold securities for their customers and facilitate the clearance and settlement of securities transactions through electronic book-entry transfer between their respective accountholders. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions that clear through or maintain a custodial relationship with an accountholder of either system. Euroclear and Clearstream, Luxembourg provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems, across which their respective customers may settle trades with each other. Their customers are worldwide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Investors may hold their interests in the relevant Global Note Certificates directly through Euroclear or Clearstream, Luxembourg if they are accountholders ("**Direct Participants**") or indirectly ("**Indirect Participants**" and, together with Direct Participants, "**Participants**") through organisations which are accountholders therein.

DTC

DTC has advised the Issuer as follows: DTC is a limited-purpose trust company organised under the laws of the State of New York, a "banking organisation" under the laws of the State of New York, a member of the U.S. Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities for its participants ("**DTC Participants**") and facilitate the clearance and settlement of securities transactions between DTC Participants through electronic computerised book-entry changes in accounts of its DTC Participants, thereby eliminating the need for physical movement of certificates. DTC Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organisations. Indirect access to DTC is available to others, such as banks, securities brokers, dealers and trust companies, that clear through or maintain a custodial relationship with a DTC Participant, either directly or indirectly.

Investors may hold their interests in the Rule 144A Global Note Certificates directly through DTC if they are DTC Participants in the DTC system, or indirectly through organisations that are DTC Participants in such system.

DTC has advised the Issuer that it will take any action permitted to be taken by a holder of Notes only at the direction of one or more DTC Participants and only in respect of such portion of the aggregate principal amount of the relevant Rule 144A Global Note Certificates as to which such DTC Participant or DTC Participants has or have given such direction. However, in the circumstances described under "*—Exchange and Registration of Title*", DTC will surrender the relevant Rule 144A Global Note Certificates for exchange for individual Rule 144A Definitive Certificates (which will bear the legend applicable to transfers pursuant to Rule 144A).

Book-entry Ownership

Euroclear and Clearstream, Luxembourg

The Regulation S Global Note Certificates will have an ISIN and a Common Code and will be registered in the name of a nominee for, and deposited with a common depository on behalf of, Euroclear and Clearstream, Luxembourg.

The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium, and the address of Clearstream, Luxembourg is 42 Avenue J.F. Kennedy, L-1855, Luxembourg.

DTC

The Rule 144A Global Note Certificates will have a CUSIP number and will be deposited with a custodian (the "**Custodian**") for, and registered in the name of a nominee of, DTC. The Custodian and DTC will electronically record the principal amount of the Notes of each series held within the DTC system. The address of DTC is 55 Water Street, New York, New York 10041, the United States of America.

Relationship of Participants with Clearing Systems

Each of the persons shown in the records of Euroclear, Clearstream, Luxembourg or DTC as the holder of a Note evidenced by a Global Note Certificate must look solely to Euroclear, Clearstream, Luxembourg or DTC (as the case may be) for its share of each payment made by the Issuer to the holder of such Global Note Certificate and in relation to all other rights arising under the Global Note Certificate, subject to and in accordance with the respective rules and procedures of Euroclear, Clearstream, Luxembourg or DTC (as the case may be). The Issuer expects that, upon receipt of any payment in respect of the relevant Notes evidenced by a Global Note Certificate, the common depository by whom such Note is held, or nominee in whose name it is registered, will immediately credit the relevant participants' or accountholders' accounts in the relevant clearing system with payments in amounts proportionate to their respective beneficial interests in the principal amount of the relevant Global Note Certificate as shown on the records of the relevant clearing system or its nominee. The Issuer also expects that payments by Direct Participants or DTC Participants, as the case may be, in any clearing system to owners of beneficial interests in any Global Note Certificate held through such Direct Participants or DTC Participants, as the case may be, in any clearing system will be governed by standing instructions and customary practices. Save as aforesaid, such persons shall have no claim directly against the Issuer in respect of payments due on the relevant Notes for so long as such Notes are evidenced by the relevant Global Note Certificate and the obligations of the Issuer will be discharged by payment to the registered holder, as the case may be, of such Global Note Certificate in respect of each amount so paid. None of the Issuer, the Guarantors, the Trustee or any Agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of ownership interests in any Global Note Certificate or for maintaining, supervising or reviewing any records relating to such ownership interests.

Settlement and Transfer of Notes

Subject to the rules and procedures of each applicable clearing system, purchases of Notes held within a clearing system must be made by or through Direct Participants or DTC Participants, as the case may be, which will receive a credit for such Notes on the clearing system's records. The ownership interest of each actual purchaser of each such Note (the "**Beneficial Owner**") will in turn be recorded on the Direct Participants' or DTC Participants', as the case may be, records. Beneficial Owners will not receive written confirmation from any clearing system of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct Participant or DTC Participants, as the case may be, through which such Beneficial Owner entered into the transaction. Transfers of ownership interests in Notes held within the clearing system will be affected by entries made on the books of Direct Participants or DTC

Participants, as the case may be, acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in such Notes, unless and until interests in any Global Note Certificate held within a clearing system are exchanged for Definitive Certificates.

No clearing system has knowledge of the actual Beneficial Owners of the Notes held within such clearing system and their records will reflect only the identity of the Direct Participants or DTC Participants, as the case may be, to whose accounts such Notes are credited, which may or may not be the Beneficial Owners. The Direct Participants or DTC Participants, as the case may be, will remain responsible for keeping account of their holdings on behalf of their customers. Conveyance of notices and other communications by the clearing systems to Direct Participants or DTC Participants, as the case may be, by Direct Participants to Indirect Participants, and by Direct Participants, Indirect Participants or DTC Participants, as the case may be, to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

The laws of some jurisdictions may require that certain persons take physical delivery in definitive form of securities. Consequently, the ability to transfer interests in a Global Note Certificate to such persons may be limited. Because DTC can only act on behalf of DTC Participants, the ability of a person having an interest in the Rule 144A Global Note Certificates to pledge such interest to persons or entities that do not participate in DTC, or otherwise take actions in respect of such interest, may be affected by the lack of a physical certificate in respect of such interest.

Trading between Euroclear and/or Clearstream, Luxembourg Participants

Secondary market sales of book-entry interests in Notes held through Euroclear or Clearstream, Luxembourg to purchasers of book-entry interests in Notes held through Euroclear or Clearstream, Luxembourg will be conducted in accordance with the normal rules and operating procedures of Euroclear and Clearstream, Luxembourg and will be settled using the procedures applicable to conventional Eurobonds.

Trading between DTC Participants

Secondary market sales of book-entry interests in Notes between DTC Participants will occur in the ordinary way in accordance with DTC rules and will be settled using the procedures applicable to U.S. corporate debt obligations in DTC's Same-Day Funds Settlement ("**SDFS**") system in same-day funds, if payment is effected in U.S. dollars or, free of payment, if payment is not effected in U.S. dollars. Where payment is not effected in U.S. dollars, separate payment arrangements outside DTC are required to be made between DTC Participants.

Trading between DTC Sellers and Euroclear/Clearstream, Luxembourg Purchasers

When book-entry interests in Notes are to be transferred from the account of a DTC Participant holding a beneficial interest in the relevant Rule 144A Global Note Certificate to the account of a Euroclear or Clearstream, Luxembourg accountholder wishing to purchase a beneficial interest in the relevant Regulation S Global Note Certificate (subject to the certification procedures provided in the relevant Agency Agreement in respect of the relevant Notes), the DTC Participant will deliver instructions for delivery to the relevant Euroclear or Clearstream, Luxembourg accountholder to DTC by 12:00 pm, New York time, on the settlement date. Separate payment arrangements are required to be made between the DTC Participant and the relevant Euroclear or Clearstream, Luxembourg Participant. On the settlement date, the custodian of the relevant Rule 144A Global Note Certificate will instruct the Registrar to (i) decrease the amount of Notes of the relevant series registered in the name of Cede & Co. and evidenced by the relevant Rule 144A Global Note Certificate and (ii) increase the amount of Notes of the relevant series registered in the name of the nominee of the common depositary for Euroclear and Clearstream, Luxembourg and evidenced by the relevant Regulation S Global Note Certificate. Book-entry interests will be delivered free of payment to Euroclear or Clearstream, Luxembourg, as the case may be, for credit to the relevant accountholder on the first business day following the settlement date.

Trading between Euroclear/Clearstream, Luxembourg Seller and DTC Purchaser

When book-entry interests in Notes are to be transferred from the account of a Euroclear or Clearstream, Luxembourg accountholder to the account of a DTC Participant wishing to purchase a beneficial interest in the relevant Rule 144A Global Note Certificate (subject to the certification procedures provided in the relevant Agency Agreement in respect of the relevant Notes), the Euroclear or Clearstream, Luxembourg Participant must send to Euroclear or Clearstream, Luxembourg delivery free of payment instructions by 7:45 pm, Brussels or Luxembourg time, one business day prior to the settlement date. Euroclear or Clearstream, Luxembourg, as the case may be, will in turn transmit appropriate instructions to the common depositary for Euroclear and Clearstream, Luxembourg and the Registrar to arrange delivery to the DTC Participant on the settlement date. Separate payment arrangements are required to be made between the DTC Participant and the relevant Euroclear or Clearstream, Luxembourg accountholder, as the case may be. On the settlement date, the common depositary for Euroclear and Clearstream, Luxembourg will (a) transmit appropriate instructions to the custodian of the relevant Rule 144A Global Note Certificate who will in turn deliver such book-entry interests in the relevant Notes free of payment to the relevant account of the DTC Participant, and (b) instruct the Registrar to (i) decrease the amount of Notes of the relevant series registered in the name of the nominee of the common depositary for Euroclear and Clearstream, Luxembourg and evidenced by the relevant Regulation S Global Note Certificate and (ii) increase the amount of Notes of the relevant series registered in the name of Cede & Co. and evidenced by the relevant Rule 144A Global Note Certificate.

Although Euroclear, Clearstream, Luxembourg and DTC have agreed to the foregoing procedures in order to facilitate transfers of beneficial interest in Global Note Certificates among participants and accountholders of Euroclear, Clearstream, Luxembourg and DTC, they are under no obligation to perform or continue to perform such procedure, and such procedures may be discontinued at any time. None of the Issuer, the Guarantors, the Trustee or any Agent will have the responsibility for the performance by Euroclear, Clearstream, Luxembourg or DTC or their respective Direct Participants, Indirect Participants or DTC Participants, as the case may be, of their respective obligations under the rules and procedures governing their operations.

Settlement of Pre-issue Trades

It is expected that delivery of the Notes of each series will be made against payment therefor on the Issue Date, which will be more than two business days following the date of pricing. Under Rule 15c6-1 under the Exchange Act, trades in the United States secondary market generally are required to settle within two business days ("T+2"), unless the parties to any such trade expressly agree otherwise.

Accordingly, purchasers who wish to trade Notes in the United States on the date of pricing or the next succeeding days until two business days prior to the Issue Date will be required, by virtue of the fact the Notes initially will settle beyond T+2, to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement.

Settlement procedures in other countries will vary. Purchasers of Notes may be affected by such local settlement practices, and purchasers of Notes between the relevant date of pricing and the Issue Date should consult their own advisers.

SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

The Trust Deeds and the Global Note Certificates contain provisions that apply to the Notes in respect of which the Global Note Certificates are issued, some of which modify the effect of the Terms and Conditions of the Notes of each series set out in this Offering Memorandum. Terms defined in the Terms and Conditions of the Notes of each series have the same meaning in the paragraphs below. The following is a summary of those provisions:

Payments

Payments of principal and interest in respect of the Notes of each series evidenced by the relevant Global Note Certificates will be made to the person who appears at the relevant time on the relevant register of Noteholders against presentation for endorsement by the Principal Paying Agent and, if no further payment falls to be made in respect of the relevant Notes, surrender of such Global Note Certificates to or to the order of the Principal Paying Agent or such other Paying Agent as shall have been notified to the relevant Noteholders for such purpose. A record of each payment so made will be endorsed in the appropriate schedule to the relevant Global Note Certificate, which endorsement will be prima facie evidence that such payment has been made in respect of the relevant Notes.

Notices

Notwithstanding Condition 17, so long as the Global Note Certificates are held on behalf of Euroclear, Clearstream, Luxembourg and/or DTC, notices to Noteholders may be given by delivery of the relevant notice to Euroclear, Clearstream, Luxembourg and/or DTC (as the case may be) for communication by it to entitled accountholders in substitution for delivery thereof as required by the relevant Conditions of such Notes.

Record Date

Each payment will be made to, or to the order of, the person whose name is entered on the Register in respect of the relevant series of Notes at the close of business on the record date, which shall be on the Clearing System Business Day immediately prior to the date for payment, where "**Clearing System Business Day**" means Monday to Friday (inclusive), except 25 December and 1 January.

Meetings

The holder of a Global Note Certificate will be treated, in any meeting of holders of Notes of the relevant series, as having one vote in respect of each U.S.\$1,000 in principal amount of Notes of such series for which such Global Note Certificate is exchangeable.

Trustee's Powers

In considering the interests of the Noteholders while the relevant Global Note Certificate is held on behalf of a clearing system, the Trustee may, to the extent it considers it appropriate to do so in the circumstances, have regard to any information provided to it by such clearing system or its operator as to the identity (either individually or by category) of its accountholders with entitlements to such Global Note Certificate and consider such interests as if such accountholders were the holders of such Global Note Certificate.

Issuer's Option

So long as the Notes of the relevant series are evidenced by a Global Note Certificate and such Global Note Certificate is held by or on behalf of a clearing system, any option of the Issuer provided for in the relevant Conditions shall be exercised by the Issuer giving notice to the Noteholders within the time limits set out in, and

containing the information required by, the relevant Conditions, except that the notice shall not be required to contain the serial numbers of the Notes of the relevant series drawn in the case of a partial exercise of an option and accordingly no drawing of Notes of the relevant series, shall be required. In the event that any option of the Issuer is exercised in respect of some but not all of the Notes of the relevant series the rights of accountholders with a clearing system in respect of such Notes will be governed by the standard procedures of Euroclear, Clearstream, Luxembourg, DTC or any other clearing system (as the case may be).

Noteholder's Option

So long as the Notes of the relevant series are evidenced by a Global Note Certificate and such Global Note Certificate is held by or on behalf of a clearing system, any option of the Noteholders provided for in the relevant Conditions may be exercised by the holder of the relevant Global Note Certificate giving notice to the Principal Paying Agent, within the time limits relating to the deposit of Notes of the relevant series with the Principal Paying Agent set out in the relevant Conditions, substantially in the form of the notice available from the Principal Paying Agent, except that the notice shall not be required to contain the serial numbers of the Notes in respect of which the option has been exercised, and stating the nominal amount of the Notes in respect of which the option is exercised and at the same time presenting the relevant Global Note Certificate to the Principal Paying Agent for notation.

Electronic Consent and Written Resolution

Where the terms of the resolution proposed by the Issuer, a Guarantor or the Trustee (as the case may be) have been notified to the holders of Notes of the relevant series through the relevant clearing systems, each of the Issuer, the Guarantors and the Trustee shall be entitled to rely upon approval of such resolution given by way of electronic consents communicated through the electronic communications systems of the relevant clearing systems to the Principal Paying Agent or another specified Agent and/or the Trustee in accordance with their operating rules and procedures by or on behalf of the holders of not less than 75 per cent. in nominal amount of the Notes outstanding (the "**Required Proportion**") ("**Electronic Consent**"). Any resolution passed in such manner shall be binding on all holders of Notes of the relevant series even if the relevant consent or instruction proves to be defective. None of the Issuer, the Guarantors or the Trustee shall be liable or responsible to anyone for such reliance.

Where Electronic Consent is not being sought, for the purpose of determining whether a Written Resolution has been validly passed, the Issuer, the Guarantors and the Trustee shall be entitled to rely on consent or instructions given in writing directly to the Issuer, the relevant Guarantor and/or the Trustee, as the case may be (a) by accountholders in the clearing system with entitlements to the relevant Global Note Certificate, and/or (b) where the accountholders hold any such entitlement on behalf of another person, on written consent from or written instruction by the person identified by that accountholder as the person for whom such entitlement is held. For the purpose of establishing the entitlement to give any such consent or instruction, the Issuer, the Guarantors and the Trustee shall be entitled to rely on any certificate or other document issued by, in the case of (a) above, Euroclear or Clearstream, Luxembourg or any other relevant alternative clearing system (the "**relevant clearing system**") and, in the case of (b) above, the relevant clearing system and the accountholder identified by the relevant clearing system for the purposes of (b) above. Any resolution passed in such manner shall be binding on all holders of Notes of the relevant series, even if the relevant consent or instruction proves to be defective. Any such certificate or other document shall be conclusive and binding for all purposes. Any such certificate or other document shall, in the absence of manifest error, be conclusive and binding for all purposes. Any such certificate or other document may comprise any form of statement or printout of electronic records provided by the relevant clearing system (including Euroclear's EUCLID or Clearstream, Luxembourg's CreationOnline system) in accordance with its usual procedures and in which the accountholder of a particular principal or nominal amount of the Notes is clearly identified together with the amount of such holding. None of the Issuer, the Guarantors or the Trustee shall be liable to any person by reason of having accepted as valid or not having rejected any certificate or other document to such effect purporting to be issued by any such person and subsequently found to be forged or not authentic.

TAXATION

The following summary does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to purchase, own or dispose of the Notes and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as dealers in securities and commodities) may be subject to special rules.

Prospective investors in the Notes are advised to consult their own tax advisers as to the tax consequences, under the tax laws of The Netherlands and Ukraine and each country of which they are residents, of a purchase of Notes including, without limitation, the consequences of receipt of interest and sale or redemption of the Notes or any interest therein.

United States Federal Income Taxation

The following discussion is a summary of certain U.S. federal income tax considerations relevant to the acquisition, ownership and disposition of the Notes. This discussion addresses only U.S. Holders and Non-U.S. Holders (each as defined below) who acquire the Notes at their initial issuance at their issue price (generally, the first price at which a substantial amount of such Notes included in the issue of which the Note is a part is sold to persons other than bondhouses, brokers, or similar persons or organisations acting in the capacity of underwriters, placement agents or wholesalers) that will hold the Notes as capital assets (generally, property held for investment).

This summary is based on the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), final, temporary and proposed U.S. Treasury regulations, administrative and judicial interpretations, all of which are subject to change, possibly with retroactive effect.

This summary does not address aspects of U.S. federal income taxation that may be applicable to holders that are subject to special tax rules under U.S. federal income tax law, such as U.S. expatriates, "dual resident" companies, banks, thrifts, financial institutions, insurance companies, real estate investment trusts, regulated investment companies, grantor trusts, individual retirement accounts and other tax-deferred accounts, tax-exempt organisations or investors, dealers or traders in securities, commodities or currencies, holders that will hold a Note as part of a position in a "straddle" or as part of a "synthetic security" or as part of a "hedging", "conversion", "integrated" or constructive sale transaction for U.S. federal income tax purposes or U.S. Holders that have a "functional currency" other than the U.S. dollar.

This discussion is not a complete description of all U.S. federal tax considerations relating to the Notes and does not address state, local, foreign or other tax laws. Moreover, this summary does not address the U.S. federal estate tax, the 3.8 per cent. Medicare contribution tax applicable to net investment income of certain non-corporate U.S. Holders, special rules for the taxable year of inclusion for accrual basis taxpayers under Section 451(b) of the Code, or gift or alternative minimum tax consequences of the acquisition, ownership, retirement or other disposition of Notes.

For purposes of this summary, a "**U.S. Holder**" is a beneficial owner of Notes that is, for U.S. federal income tax purposes:

- (i) a citizen or an individual resident of the United States;
- (ii) a corporation organised in or under the laws of the United States or any state thereof (including the District of Columbia);
- (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

- (iv) a trust (1) that validly elects to be treated as a United States person within the meaning of section 7701(a)(30) of the Code for U.S. federal income tax purposes or (2) (a) over the administration of which a U.S. court can exercise primary supervision and (b) all of the substantial decisions of which one or more United States persons have the authority to control.

A "**Non-U.S. Holder**" is a beneficial owner of Notes that is neither a U.S. Holder nor an entity or arrangement treated as a partnership for U.S. federal income tax purposes.

If a partnership (or any other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds Notes, the U.S. federal income tax treatment of the partnership and a partner in such partnership will generally depend on the status of the partner and the activities of the partnership. Such a partner or partnership should consult its own tax advisor as to the U.S. federal income tax consequences of acquiring, holding, retiring or other disposition of Notes.

THE SUMMARY OF U.S. FEDERAL INCOME TAX CONSEQUENCES SET OUT BELOW IS FOR GENERAL INFORMATION ONLY. ALL U.S. HOLDERS SHOULD CONSULT THEIR TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCE TO THEM OF OWNING THE NOTES, INCLUDING THE APPLICABILITY AND EFFECT OF STATE, LOCAL, FOREIGN AND OTHER TAX LAWS AND POSSIBLE CHANGES IN TAX LAW.

Payments of Interest

Interest on a Note generally will be taxable to a U.S. Holder as ordinary income at the time it is received or accrued, depending on the holder's method of accounting for tax purposes. Interest paid by the Issuer on the Notes generally will constitute income from sources outside the United States. U.S. Holders should consult their tax advisors concerning the applicability of the foreign tax credit and source of income rules to income attributable to the Notes.

Disposition

Upon the sale, exchange, retirement, or other taxable disposition of a Note, a U.S. Holder generally will recognise gain or loss equal to the difference between the amount realised upon the sale, exchange, retirement, or other taxable disposition (less any accrued but unpaid interest not previously included in income, which will be taxable as such) and the U.S. Holder's adjusted tax basis of the Note. A U.S. Holder's adjusted tax basis in a Note will, in general, be the cost of the Note to such U.S. Holder.

Any gain or loss upon a taxable disposition of a Note generally will be treated as U.S. source capital gain or loss. Capital gains of non-corporate U.S. Holders derived in respect of capital assets held for more than one year are generally eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations. U.S. Holders should discuss the treatment of any gain or loss resulting from a sale or other disposition of a Note with their tax advisor.

Non-U.S. Holders

Subject to the backup withholding rules described below, a Non-U.S. Holder generally should not be subject to U.S. federal income or withholding tax on any payments on the Notes and gain from the sale, exchange, retirement or other taxable disposition of the Notes unless: (i) that payment and/or gain is effectively connected with the conduct by that Non-U.S. Holder of a trade or business in the U.S.; (ii) in the case of any gain realised on the sale, exchange, retirement or other taxable disposition of a Note by an individual Non-U.S. Holder, that Holder is present in the U.S. for 183 days or more in the taxable year of the sale, exchange, retirement or other taxable disposition and certain other conditions are met; or (iii) the Non-U.S. Holder is subject to tax pursuant to provisions of the Code applicable to certain expatriates.

Information Reporting and Backup Withholding

Payments of interest and proceeds from the sale, redemption, retirement or other disposition of a Note by a U.S. paying agent that are made within the United States or through certain U.S.-related financial intermediaries may be reported to the U.S. Internal Revenue Service ("**IRS**") unless the holder establishes a basis for exemption. U.S. backup withholding tax may apply to amounts subject to reporting if the holder fails to provide an accurate taxpayer identification number or certification of exempt status or otherwise comply with the applicable withholding requirements. Non-U.S. Holders may be required to comply with applicable certification procedures to establish that they are not U.S. Holders in order to avoid the application of such information reporting requirements and backup withholding. Backup withholding is not an additional tax. A holder can claim a credit against its U.S. federal income tax liability for amounts withheld under the backup withholding rules, and it can claim a refund of amounts in excess of its liability by timely providing required information to the IRS.

Foreign Financial Asset Reporting

Certain U.S. Holders that own "specified foreign financial assets" that meet certain U.S. dollar value thresholds generally are required to file an information report with respect to such assets with their tax returns. The Notes generally will constitute specified foreign financial assets subject to these reporting requirements, unless the Notes are held in an account at certain financial institutions. U.S. Holders are urged to consult their tax advisors regarding the application of these disclosure requirements to their ownership of the Notes.

The Netherlands

The comments below are of a general nature based on taxation law and practice in The Netherlands as at the date of this Offering Memorandum and are subject to any changes therein, without prejudice to any amendment introduced at a later date and implemented with or without retroactive effect. The summary relates only to the position of persons who are absolute beneficial owners of the Notes and does not purport to describe all possible tax considerations or consequences that may be relevant to a holder or prospective holder of Notes and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as holders that are subject to taxation in Bonaire, St. Eustatius and Saba or trusts or similar arrangements) may be subject to special rules. The following is a general description of certain tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes and so should be treated with appropriate caution. In particular, it does not take into consideration any tax implications that may arise on a substitution of the Issuer. Prospective investors should consult their own professional advisors concerning the possible tax consequences of purchasing, holding and/or selling Notes and receiving payments of interest, principal and/or other amounts under the Notes under the applicable laws of their country of citizenship, residence or domicile.

Investors should note that with respect to paragraph (b) below, the summary does not describe The Netherlands tax consequences for holders of Notes if such holders, and in the case of individuals, a partner or certain relatives by blood or marriage in the direct line (including foster children), have a substantial interest or are deemed to have a substantial interest in the Issuer under The Netherlands Income Tax Act 2001 (*Wet Inkomstenbelasting 2001*). Generally speaking, a holder of securities in a company is considered to hold a substantial interest in such company if such holder alone or, in the case of individuals, together with its partner (as defined in The Netherlands Income Tax Act 2001), directly or indirectly, holds (i) an interest of 5 per cent. or more of the total issued and outstanding capital of that company or of five per cent. or more of the issued and outstanding capital of a certain class of shares of that company; (ii) holds rights to acquire, directly or indirectly, such interest; or (iii) holds certain profit sharing rights in that company that relate to 5 per cent. or more of the company's annual profits and/or 5 per cent. or more of the company's liquidation proceeds. A deemed substantial interest arises if a substantial interest (or part thereof) in a company has been disposed of, or is deemed to have been disposed of, on a non-recognition basis.

Under the existing laws of The Netherlands:

- (a) all payments of interest and principal by the Issuer under the Notes can be made free of withholding or deduction for any taxes of whatsoever nature imposed, levied, withheld, or assessed by The Netherlands or any political subdivision or taxing authority thereof or therein;
- (b) a holder of a Note who is not a resident of The Netherlands and who derives income from a Note or who realises a gain on the disposal or redemption of a Note will not be subject to Dutch taxation on such income or capital gain, unless:
 - (i) the holder is deemed to be resident in The Netherlands;
 - (ii) such income or gain is attributable to an enterprise or part thereof which is either effectively managed in The Netherlands or carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in The Netherlands; or
 - (iii) the holder is an individual and such income or gain qualifies as income from activities that exceed normal active portfolio management in The Netherlands, or the individual acquired the Notes under such circumstances that the Notes can be constituted to aim to reward the individual for its activities;
- (c) Dutch gift, estate or inheritance taxes will not be levied on the occasion of the transfer of a Note by way of gift by, or on the death of, a holder unless:
 - (i) the holder is, or is deemed to be, resident in The Netherlands for the purpose of the relevant provisions; or
 - (ii) the transfer is construed as an inheritance or as a gift made by or on behalf of a person who, at the time of the gift or death, is, or is deemed to be, resident in The Netherlands for the purpose of the relevant provisions;
- (d) there is no Dutch registration tax, stamp duty or any other similar tax or duty payable in The Netherlands in respect of or in connection with the execution, delivery and/or enforcement by legal proceedings (including any foreign judgment in the courts of The Netherlands) of the Notes or the performance of the Issuer's obligations under the Notes;
- (e) there is no Dutch value-added tax payable in respect of payments in consideration for the issue of the Notes or in respect of the payment of interest or principal under the Notes or the transfer of a Note, provided that Dutch value-added tax may, however, be payable in respect of fees charged for certain services rendered to the Issuer, if for Dutch value-added tax purposes such services are rendered, or are deemed to be rendered, in The Netherlands and an exemption from Dutch value-added tax does not apply with respect to such services; and
- (f) a holder of a Note will not be treated as a resident of The Netherlands by reason only of the holding of a Note or the execution, performance, delivery and/or enforcement of the Notes.

Ukraine

General

The following summary is included for general information only. Potential investors in the Notes and the Noteholders should consult their own tax adviser as to the tax consequences under the laws of Ukraine of the

acquisition, ownership and disposition of the Notes. This summary is based upon the Ukrainian tax laws and regulations as in effect on the date of this Offering Memorandum. Such laws and regulations are subject to change or varying interpretations, possibly with retroactive effect. As with other areas of Ukrainian legislation, tax law and practice in Ukraine is not as clearly established as that of more developed jurisdictions. It is possible, therefore, that the current interpretation of the law or understanding of the practice may change or that the law may be amended with retroactive effect. Accordingly, it is possible that payments to be made to the Noteholders could become subject to taxation or that rates currently in effect with respect to such payments could be increased in ways that cannot be anticipated as at the date of this Offering Memorandum.

Tax residency and tax basis

Individuals

An individual is considered to be a tax resident of Ukraine if:

- (a) It has a place of abode in Ukraine. Where an individual has a place of abode in another country as well, such individual is deemed to be a tax resident of Ukraine if it has a permanent place of abode (domicile) in Ukraine.
- (b) If an individual has a domicile in another country as well, it is deemed to be a tax resident of Ukraine if it has a centre of vital interests in Ukraine. A sufficient, but not exclusive, ground for determining the country of an individual's centre of vital interest is the place of permanent abode of the individual's family members or the place of its registration as an individual entrepreneur.
- (c) In the event that an individual's centre of vital interests cannot be determined or the individual has no domicile in any country, it is deemed to be a tax resident of Ukraine if it stays in Ukraine at least 183 days during the tax year (calendar year).
- (d) If residency status cannot be determined based on the above rules, an individual shall be deemed to be a tax resident of Ukraine if it is a citizen of Ukraine.

An individual may also elect voluntarily that its main place of abode (and therefore tax residence) is in Ukraine. The law does not define the procedure for how this election should be made. However, based on procedures established by the tax authorities, a foreign national may apply in writing to the local tax office where it has a place of abode asking to be considered a tax resident of Ukraine. Registration of an individual as a self-employed person is considered sufficient grounds for such person to be deemed a tax resident of Ukraine.

Non-residents for tax purposes are individuals who do not qualify as tax residents of Ukraine.

Companies

Legal entities and business entities not having the status of a legal entity (branches, representative offices, etc.) set up and operating in accordance with Ukrainian legislation are considered to be tax residents of Ukraine.

Non-resident companies may be subject to tax in Ukraine if they derive Ukrainian-sourced income or have a permanent establishment in Ukraine.

A non-resident company is regarded as having a "permanent establishment" in Ukraine if it has a permanent place of business through which the business activity of the company in Ukraine is wholly or partly carried out. A permanent establishment includes, *inter alia*, a place of management, branch, office, plant, etc. Where a resident of Ukraine, other than an independent agent, is acting on behalf of only one non-resident company and has authority

to conclude contracts on behalf of such non-resident company, such non-resident company shall be deemed to have a permanent establishment in Ukraine.

Tax basis

Ukrainian tax residents are taxed on their worldwide income. Non-Ukrainian tax residents are taxed on income derived from sources in Ukraine or from a business activity that is carried out through a permanent establishment in Ukraine.

Payments under the Surety Agreements

If the Guarantors make any payments in respect of interest on the Notes (or other amounts due in respect of the Notes), such payments (or a part thereof corresponding to the interest under the Notes) are likely to be viewed as a Ukrainian source income of the recipient of such payments (such as the Trustee or any Noteholder) and, therefore, may be subject to withholding tax at a rate of 15 per cent. (if payments are made to a non-resident legal entity) or 19.5 per cent. (if payments are made to a non-resident individual).

Ukrainian tax legislation does not specifically list payments made under the Surety Agreements as Ukrainian source income of the beneficiary of such payments. However, Article 141.4 of the Tax Code contains a catch-all clause, which considers "any other income" of a foreign resident received from carrying out business in Ukraine as Ukrainian source income. It remains uncertain whether the "Ukrainian source income" concept should be applied to the whole amount of payments under the Surety Agreements or only to that amount which corresponds to the unpaid interest under the Notes. The latter interpretation seems to be fair but has not been confirmed by the Ukrainian tax authorities.

If any payments under the Surety Agreements are determined to be Ukrainian source income and, thereby, subject to withholding tax, the foreign recipient of such payments may, nevertheless, be exempt from, or enjoy a reduced rate of, withholding tax, provided the recipient of such income is (i) a tax resident of a jurisdiction which has a tax treaty with Ukraine, (ii) entitled to the benefits of such tax treaty, (iii) deemed not to carry on business in Ukraine through its permanent establishment and (iv) the beneficial owner of such income. In order to benefit from the tax treaty regime, confirmation of the current tax residency status of the foreign recipient must be available on or prior to the date of payment of Ukrainian source income.

Ukraine does not have an effective tax treaty with Hong Kong, which is the jurisdiction of the Trustee's tax residency. Therefore, payments in respect of interest on the Notes (or other amounts due in respect of the Notes) made by the Guarantors to the Trustee under the Surety Agreements would be subject to Ukrainian withholding tax.

The Noteholders may benefit from a reduced withholding tax rate or exemption from withholding tax if there is an effective double tax treaty between their residence jurisdiction and Ukraine and all conditions for the application of such treaty relief are met. In particular, in order to benefit from the provision of such double tax treaty, a Noteholder must (a) qualify as the beneficial owner of the relevant payment and (b) provide the Guarantors with a tax residency certificate issued by the competent authorities of the state of their residency before the payment is made by the Guarantors under the Surety Agreements. If the relevant Noteholder fails to qualify as the beneficial owner of the relevant payment or to provide the Guarantors with the applicable residency certificate, no benefits of the double tax treaty will be available in the course of the payment and payment to such Noteholder may be subject to withholding tax in Ukraine.

Gross-up provisions

If any payments (including payments of premium and interest) under the Surety Agreements are subject to any withholding tax, the Guarantors may, in certain circumstances specified in the Surety Agreements and subject to certain exceptions, become obliged to pay such additional amounts as may be necessary so that the net payments

received by the Noteholders or the Trustee, as the case may be, will not be less than the amount the Noteholders or the Trustee, as the case may be, would have received in the absence of such withholding. Notwithstanding the foregoing, the Ukrainian tax laws prohibit contractual provisions under which residents undertake to pay taxes for non-residents on their income received from sources in Ukraine. In May 2012, the State Tax Service of Ukraine issued a letter expressing the view that clauses in agreements between Ukrainian residents and their foreign counterparties providing for the payment of an amount compensating a foreign counterparty for the withholding of tax in Ukraine contradict certain provisions of Ukrainian legislation that prohibit a Ukrainian resident from assuming a foreign counterparty's tax payment obligation. If interpreted broadly, such restriction would also apply to gross-up provisions of the Surety Agreements and obligations of the Ukrainians Guarantors to pay additional amounts thereunder. As a result, the gross-up provisions could be found null and void and, therefore, unenforceable in Ukraine.

Taxation of interest under the Notes paid by the Issuer

Non-residents

Interest received by individuals and companies who are not tax residents of Ukraine and do not have a permanent establishment in Ukraine (in the case of companies) is not subject to taxes in Ukraine, provided that such interest income is derived from sources outside of Ukraine.

Resident individuals

Interest income derived from the Notes, which is received by individuals who are tax residents of Ukraine, is subject to 18 per cent. personal income tax and 1.5 per cent. military duty in Ukraine.

Resident companies/permanent establishments

Any interest income received by resident companies or permanent establishments of non-resident companies is subject to 18 per cent. corporate profit tax.

Transfers of the Notes by non-Ukrainian investors to Ukrainian investors

Ukrainian-sourced capital gains derived from trading securities are generally subject to Ukrainian withholding tax at 15 per cent. in the case of non-resident companies and personal income tax at the rate of 18 per cent. and military duty at the rate of 1.5 per cent., in the case of non-resident individuals.

Non-resident Noteholders are, therefore, likely to be subject to Ukrainian taxes on any capital gain on the disposal of the Notes where the proceeds of such disposal are received from a source within Ukraine that is when Ukrainian investors (residents of Ukraine or permanent establishments of non-residents in Ukraine) pay for the Notes from Ukraine. Non-resident Noteholders may be exempt from Ukrainian taxes on their capital gains from the sale of the Notes under an applicable tax treaty, provided that they comply with specific requirements set forth therein and the Tax Code.

Other Taxes and Duties

No Ukrainian stamp duty, transfer or any other similar tax will be payable by a Noteholder in respect of the subscription, issue, delivery or transfer of the Notes.

TRANSFER RESTRICTIONS

Rule 144A Notes

Each purchaser of Rule 144A Notes within the United States, by accepting delivery of this Offering Memorandum, will be deemed to have represented, agreed and acknowledged that:

- (1) It is (a) a qualified institutional buyer within the meaning of Rule 144A (a "**QIB**"), (b) acquiring such Securities for its own account, or for the account of another QIB, and (c) aware, and each beneficial owner of such Securities has been advised, that the sale of such Securities to it is being made in reliance on Rule 144A.
- (2) It understands that such Securities have not been and will not be registered under the Securities Act and may not be offered, sold, pledged or otherwise transferred except (a) in accordance with Rule 144A to a person that it and any person acting on its behalf reasonably believe is a QIB purchasing for its own account or for the account of a QIB, (b) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S, or (c) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder (if available), in each case in accordance with any applicable securities laws of any State of the United States.
- (3) It understands that such Securities, unless otherwise agreed between the Issuer and the Trustee in accordance with applicable law, will bear a legend (the "**Rule 144A Legend**") to the following effect:

THIS NOTE AND THE GUARANTEES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED ("**THE SECURITIES ACT**") OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (1) IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") TO A PERSON THAT THE HOLDER AND ANY PERSON ACTING ON ITS BEHALF REASONABLY BELIEVE IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A (A "**QIB**") PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QIB, (2) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, OR (3) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER (IF AVAILABLE), IN EACH CASE IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. NO REPRESENTATION CAN BE MADE AS TO THE AVAILABILITY OF THE EXEMPTION PROVIDED BY RULE 144 FOR REALES OF THE NOTES.

- (4) It understands that the Issuer, the Guarantors, the Registrar, the Joint Lead Managers and their respective affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements. If it is acquiring any Securities for the account of one or more QIBs, it represents that it has sole investment discretion with respect to each of those accounts and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.
- (5) It understands that the Securities offered in reliance on Rule 144A will be represented by Rule 144A Global Note Certificates. Before any interest in the Rule 144A Global Note Certificates may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in the Regulation S Global Note Certificate it will be required to provide a Transfer Agent with a written

certification (in the form provided in the relevant Agency Agreement in respect of the relevant Securities) as to compliance with applicable securities laws.

- (6) Either: (i) it is not and for so long as it holds such Securities will not be (and is not acquiring the Securities directly or indirectly with the assets of a person who is or while the Securities are held will be) a Benefit Plan Investor or a governmental, church or non-US plan which is subject to Similar Law, and no part of the assets used by it to purchase or hold such Securities or a beneficial interest therein constitutes the assets of any such Benefit Plan Investor or any such governmental, church or non-US plan, or (ii) its acquisition, holding and disposition of the Securities (or interests therein) will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code (or, in the case of such a governmental, church or non-US plan, any Similar Law). Additionally, if it is a Benefit Plan Investor, on each day from the date on which it acquires such Securities or interests therein through and including the date on which it disposes of such Securities or interests therein, and at any time when regulation 29 C.F.R. Section 2510.3-21, as modified in 2016, is applicable, that (a) the fiduciary making the decision to invest in such Securities on its behalf (the "**Independent Fiduciary**") is a bank, insurance carrier, registered investment adviser, broker-dealer or other person with financial expertise, in each case as described in 29 C.F.R. Section 2510.3- 21(c)(1)(i); (b) the Independent Fiduciary is an independent plan fiduciary within the meaning of 29 C.F.R. Section 2510.3-21(c); (c) the Independent Fiduciary is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies; (d) the Independent Fiduciary is responsible for exercising independent judgment in evaluating the acquisition, holding and disposition of such Securities; and (e) neither the Benefit Plan Investor nor the Independent Fiduciary is paying or has paid any fee or other compensation to any of the Issuer, the Guarantors, the Registrar or the Joint Lead Managers for investment advice (as opposed to other services) in connection with its acquisition or holding of such Securities. In addition, the Independent Fiduciary (x) has been informed that none of the Issuer, the Guarantors, the Registrar, the Joint Lead Managers, or other persons that provide marketing services, nor any of their affiliates, has provided, and none of them will provide, impartial investment advice and they are not giving any advice in a fiduciary capacity, in connection with the purchaser or transferee's acquisition or holding of such Securities and (y) has received and understands the disclosure of the existence and nature of the financial interests contained in the Offering Memorandum and related materials.

Prospective investors are hereby notified that sellers of the Securities may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A.

Regulation S Notes

Each purchaser of Regulation S Notes outside the United States and each subsequent purchaser of such Regulation S Notes in resales prior to the expiration of the distribution compliance period, by accepting delivery of this Offering Memorandum and Regulation S Notes, will be deemed to have represented, agreed and acknowledged that:

- (1) It is, or at the time the Securities are purchased will be, the beneficial owner of such Securities and (a) it is not a U.S. person and it is located outside the United States (within the meaning of Regulation S) and (b) it is not an affiliate of the Issuer or a person acting on behalf of such an affiliate.
- (2) It understands that such Securities have not been and will not be registered under the Securities Act and that, prior to the expiration of the distribution compliance period, it will not offer, sell, pledge or otherwise transfer such Securities except (a) in accordance with Rule 144A under the Securities Act to a person that it and any person acting on its behalf reasonably believe is a QIB purchasing for its own account or the account of a QIB, or (b) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S, in each case in accordance with any applicable securities laws of any State of the United States.

- (3) It understands that the Issuer, the Guarantors, the Registrar, the Joint Lead Managers and their respective affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements.
- (4) It understands that the Securities offered in reliance on Regulation S will be represented by the Regulation S Global Note Certificate. Prior to the expiration of the distribution compliance period, before any interest in the Regulation S Global Note Certificate may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in the Regulation S Global Note Certificate, it will be required to provide a Transfer Agent with a written certification (in the form provided in the relevant Agency Agreement in respect of the relevant Securities) as to compliance with applicable securities laws.
- (5) Either: (i) it is not and for so long as it holds such Securities will not be (and is not acquiring the Securities directly or indirectly with the assets of a person who is or while the Securities are held will be) a Benefit Plan Investor or a governmental, church or non-US plan which is subject to Similar Law, and no part of the assets used by it to purchase or hold such Securities or a beneficial interest therein constitutes the assets of any such Benefit Plan Investor or any such governmental, church or non-US plan, or (ii) its acquisition, holding and disposition of the Securities (or interests therein) will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code (or, in the case of such a governmental, church or non-US plan, any Similar Law). Additionally, if it is a Benefit Plan Investor, on each day from the date on which it acquires such Securities or interests therein through and including the date on which it disposes of such Securities or interests therein, and at any time when regulation 29 C.F.R. Section 2510.3-21, as modified in 2016, is applicable, that (a) the fiduciary making the decision to invest in such Securities on its behalf (the "**Independent Fiduciary**") is a bank, insurance carrier, registered investment adviser, broker-dealer or other person with financial expertise, in each case as described in 29 C.F.R. Section 2510.3-21(c)(1)(i); (b) the Independent Fiduciary is an independent plan fiduciary within the meaning of 29 C.F.R. Section 2510.3-21(c); (c) the Independent Fiduciary is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies; (d) the Independent Fiduciary is responsible for exercising independent judgment in evaluating the acquisition, holding and disposition of such Securities; and (e) neither the Benefit Plan Investor nor the Independent Fiduciary is paying or has paid any fee or other compensation to any of the Issuer, the Guarantors, the Registrar or the Joint Lead Managers for investment advice (as opposed to other services) in connection with its acquisition or holding of such Securities. In addition, the Independent Fiduciary (x) has been informed that none of the Issuer, the Guarantors, the Registrar, the Joint Lead Managers, or other persons that provide marketing services, nor any of their affiliates, has provided, and none of them will provide, impartial investment advice and they are not giving any advice in a fiduciary capacity, in connection with the purchaser or transferee's acquisition or holding of such Securities and (y) has received and understands the disclosure of the existence and nature of the financial interests contained in the Offering Memorandum and related materials.

SUBSCRIPTION AND SALE

Deutsche Bank AG, London Branch and ING Bank N.V., London Branch acting as the joint global coordinators, joint bookrunners and joint lead managers (the "**Joint Global Coordinators**") and Natixis and UniCredit Bank AG as the joint bookrunners and joint lead managers (together with the Joint Global Coordinators, the "**Joint Lead Managers**"), have, pursuant to a subscription agreement dated 19 April 2018 (the "**Subscription Agreement**"), severally and not jointly agreed with the Issuer and the Guarantors, subject to the satisfaction of certain conditions, to subscribe for the 2023 Notes and the 2026 Notes at the purchase price of 99.014 per cent. and 98.583 per cent., respectively, of their principal amount.

The Issuer (failing whom the Guarantors) has agreed to pay the Joint Lead Managers a customary fee and will reimburse the Joint Lead Managers for certain expenses related to the Offering. The Subscription Agreement entitles the Joint Lead Managers to terminate it in certain circumstances prior to payment being made to the Issuer.

The Joint Lead Managers will make offers and sales into the United States through their U.S. registered broker dealer affiliates.

The Joint Lead Managers have advised the Issuer that they presently intend to make a market in the Notes as permitted by applicable laws and regulations. The Joint Lead Managers are not obligated, however, to make a market in the Notes and any such market making may be discontinued at any time at the sole discretion of the Joint Lead Managers. Accordingly, no assurance can be given as to the liquidity of, or trading markets for, the Notes. See "*Risk Factors—Risks Relating to the Notes and the Guarantees—The Notes may not have an active trading market, which may have an adverse impact on the value of the Notes*".

The Notes will initially be offered at the price indicated on the cover page hereof. After the initial offering of the Notes, the offering price and other selling terms of the Notes may from time to time be varied by the Joint Lead Managers without notice.

The Joint Lead Managers or their respective affiliates have provided in the past and may provide in the future investment banking, commercial lending, consulting and financial advisory services to Metinvest and its affiliates (including its shareholders) in the ordinary course of business for which the Joint Lead Managers may receive customary advisory and transaction fees and expense reimbursement. All of the Joint Lead Managers are lenders under the PXF Facility Agreement.

The Joint Lead Managers or their respective affiliates may enter into derivative and/or structured transactions with their customers in connection with the Notes and the Joint Lead Managers or their respective affiliates may also purchase some of the Notes to hedge their risk exposure in connection with such transactions. Also, the Joint Lead Managers or their respective affiliates may acquire for their own account the Notes offered hereby. Such acquisitions may have an effect on the demand and the price of the Notes. In connection with the offering, the Joint Lead Managers may purchase and sell the Notes in the open market. These transactions may include short sales and purchases on the open market to cover positions created by short sales. Short sales involve the sale by the Joint Lead Managers of a greater principal amount of Notes than they are required to purchase in the offering. The Joint Lead Managers must close out any short position by purchasing Notes in the open market. A short position is more likely to be created if the Joint Lead Managers are concerned that there may be downward pressure on the price of the Notes in the open market after pricing that could adversely affect investors who purchase in the offering. Similar to other purchase transactions, the Joint Lead Managers' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of the Notes or preventing or retarding a decline in the market price of the Notes.

As a result, the price of the Notes may be higher than the price that might otherwise exist in the open market. Neither Metinvest nor any of the Joint Lead Managers make any representation or prediction as to the direction or

magnitude of any effect that the transactions described above may have on the price of the Notes. In addition, neither Metinvest nor any of the Joint Lead Managers make any representation that we will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Selling Restrictions

United States

The Notes and the Guarantees have not been and will not be registered under the Securities Act, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.

Each Manager has agreed that, except as permitted by the Subscription Agreement, it will not offer or sell the Securities (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the Issue Date, within the United States or to, or for the account or benefit of, U.S. persons, and it will have sent to each dealer to which it sells Securities (other than a sale pursuant to Rule 144A) during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Securities within the United States or to, or for the account or benefit of, U.S. persons. Terms used in this paragraph have the meanings given to them by Regulation S.

The Securities are being offered and sold outside of the United States to non-U.S. persons in reliance on Regulation S. The Subscription Agreement provides that the Joint Lead Managers may directly or through their respective U.S. broker-dealer affiliates arrange for the offer and resale of Securities within the United States only to qualified institutional buyers in reliance on Rule 144A.

In addition, until 40 days after the commencement of the offering of the Securities, an offer or sale of Securities within the United States by a dealer that is not participating in the offering may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

United Kingdom

Each of the Joint Lead Managers has represented, warranted and agreed that:

1. it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the "**FSMA**")) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer or any Guarantor; and
2. it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Prohibition of Sales to EEA Retail Investors:

Each of the Joint Lead Managers has represented, warranted and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail investor in the European Economic Area. For the purposes of this provision the expression "**retail investor**" means a person who is one (or more) of the following:

- (a) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

- (b) a customer within the meaning of Directive 2002/92/EC, as amended, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Ukraine

Each of the Joint Lead Managers has represented, warranted and agreed that the Notes shall not be offered by it for circulation, distribution, placement, sale, purchase or other transfer in the territory of Ukraine.

Accordingly, nothing in this Offering Memorandum or any other documents, information or communications related to the Notes shall be interpreted as containing any offer or invitation to, or solicitation of, any such circulation, distribution, placement, sale, purchase or other transfer in the territory of Ukraine.

The Netherlands

Each of the Joint Lead Managers has represented, warranted and agreed that the Notes are not, and may not be, offered to the public in the Netherlands other than to persons or entities which are qualified investors as defined in the Dutch Financial Supervision Act (*Wet op het financieel toezicht*).

General

No action has been or will be taken in any jurisdiction by any Manager, the Issuer or the Guarantors that would permit a public offering of the Notes and the Guarantees, or possession, circulation or distribution of this Offering Memorandum (in preliminary, proof or final form) or any other offering or publicity material relating to the Notes, in any country or jurisdiction where action for that purpose is required. Each Manager will comply to the best of its knowledge and belief in all material respects with all applicable laws and regulations in each jurisdiction in which it acquires, offers, sells or delivers Notes or has in its possession or distributes this Offering Memorandum (in preliminary, proof or final form) or any such other material, in all cases at its own expense. No Manager is authorised to make any representation or use any information in connection with the issue, subscription and sale of the Notes other than as contained in this Offering Memorandum (in final form) or any amendment or supplement to it.

LISTING AND GENERAL INFORMATION

1. The Issuer was incorporated as a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid* or B.V.) under the laws of The Netherlands on 21 May 2001 for an unlimited duration. The Issuer is registered with the Dutch Trade Register of the Chamber of Commerce under number 24321697. The registered office of the Issuer is at Nassaulaan 2A, 2514 JS 's-Gravenhage, The Netherlands, its corporate seat is at Rotterdam, the Netherlands and its telephone number is +31 70 363 5800. The Issuer has been established as a private company with limited liability for the purpose of, among others, incorporating, participating in and financing companies and enterprises; rendering advice and other services to companies or other enterprises with which the Issuer forms a group and to third parties; lending and raising funds; providing collateral for obligations of the Issuer or affiliated companies and enterprises or those of third parties; acquiring, exploiting and managing property; developing industrial and intellectual property rights; as well as performing all that is connected to the above or which could be conducive thereto, in the broadest sense of the words. The address of the Issuer's Management Board and senior management is the same as the address of the Issuer's registered office.
2. Application has been made for this Offering Memorandum to be approved by Euronext Dublin as Listing Particulars. Application has also been made to Euronext Dublin for the Notes to be admitted to the Official List and to trading on the Global Exchange Market of Euronext Dublin. The Global Exchange Market is not a regulated market for the purposes of Directive 2014/65/EU (as amended, "**MiFID II**").
3. The admission of each series of the Notes to the Global Exchange Market of Euronext Dublin is expected to be granted on or about the Issue Date.
4. The Issuer will maintain a listing agent in Ireland for as long as any of the series of Notes are listed on Euronext Dublin. The Issuer reserves the right to vary such appointment and it will provide notice of such change of appointment to holders of the relevant Notes and Euronext Dublin.
5. The Irish Listing Agent is Arthur Cox Listing Services Limited and the address of its registered office is Ten Earlsfort Terrace, Dublin 2, Ireland.
6. SCM Cyprus owns 71.24 per cent. of the issued share capital of the Issuer. SCM Cyprus is a member of the SCM Group. Mr Rinat Akhmetov is the ultimate beneficial owner of the SCM Group. Adeona Holdings Limited, Majorone Trading Limited and Celebrom Investments Limited, all part of the SMART Group own 23.76 per cent. of the issued share capital of the Issuer. The SMART Group is beneficially owned by Mr. Vadym Novynskyi. Clarendale Ltd. owns 5.00 per cent. of the issued share capital of the Issuer. This ownership stake has been acquired by SCM Holdings, which is a member of the SCM Group, for the benefit of the SCM Group and the SMART Group.
7. The Issuer's subsidiaries are listed in Note 1 of the 2017 Financial Statements.

8. The Issuer has obtained all necessary consents, approvals and authorisations in connection with the issuance of the Notes, and the issue of the Notes was authorised by resolutions of the Supervisory Board and the general meeting of shareholders of the Issuer, both passed on March 9 2018. Each of the Guarantors has obtained all necessary consents, approvals and authorisations in connection with the giving of the relevant Guarantee and the entry into the relevant Surety Agreement, as the case may be: (i) with respect to Ingulets GOK, Central GOK and Northern GOK, resolutions of the relevant general meeting of shareholders were passed on 14 March 2018, 15 March 2018 and 16 March 2018, respectively and (ii) with respect to Avdiivka Coke, Azovstal and Ilyich Steel, resolutions of the relevant general meeting of shareholders were passed on 19 March 2018, 19 March 2018 and 20 March 2018, respectively.
9. There has been no significant change in the financial or trading position of the Issuer or the Guarantors since 31 December 2017 and no material adverse change in the prospects of the Issuer or the Guarantors since 31 December 2017.
10. Other than as disclosed in "Taxation", "Business Description—Legal Proceedings" and "*Risk Factors—Risks Relating to Taxation—Metinvest operates in many jurisdictions with highly complex and variable tax regimes, and changes in tax rules and the outcome of tax assessments and audits and limitations on the ability to deduct interest expenses could have a material effect on Metinvest's financial results*" and "*Risk Factors—Risks Relating to Taxation—The interpretation and application of Ukrainian tax laws and regulations are not fully developed and are subject to frequent change and interpretation, which may increase the risk of operating and investing in Ukraine*", none of the Issuer or the Guarantors has been involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer, the Guarantors or any member of Metinvest is aware) during the 12 months preceding the date of this Offering Memorandum which may have or has had in the recent past a significant effect on the financial position or profitability of the Issuer or the Guarantors.
11. The Regulation S Global Note Certificates in relation to each series of Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg under the following reference number:

	<u>ISIN</u>	<u>Common Code</u>
Regulation S 2023 Global Note Certificate in relation to the 2023 Notes.....	XS1806400534	180640053
Regulation S 2026 Global Note Certificate in relation to the 2026 Notes.....	XS1806400708	180640070

The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium and the address of Clearstream, Luxembourg is 42 Avenue J.F. Kennedy L-1855 Luxembourg.

12. The Rule 144A Global Note Certificates in relation to each series of Notes have been accepted for clearance through the facilities of DTC under the following reference numbers:

	<u>ISIN</u>	<u>CUSIP</u>
Rule 144A 2023 Global Note Certificate in relation to the 2023 Notes.....	US591555AD93	591555 AD9

Rule 144A 2026 Global Note Certificate in relation to
the 2026 Notes..... US591555AE76 591555 AE7

The address of DTC is 55 Water Street, New York, New York 10041-0099, the United States of America.

13. For so long as the Notes are listed on the Official List and admitted to trading on the Global Exchange Market, copies (and English translations where the documents in question are not in English) of the following documents will be available, during usual business hours on any weekday (Saturdays and public holidays excepted), for physical inspection at the office of the Principal Paying Agent:
 - (a) the Trust Deeds in respect of each series of the Notes (which include the forms of the Global Note Certificates and the definitive Notes);
 - (b) the Surety Agreements;
 - (c) the Agency Agreements in respect of each series of the Notes;
 - (d) the Articles of Association of the Issuer and each of the Guarantors;
 - (e) a copy of this Offering Memorandum; and
 - (f) the Financial Statements.
14. Except as described in "*Description of Indebtedness*" and "*Subscription and Sale*", there is no other material contract, other than entered into in the ordinary course of business, to which the Issuer is a party, for the three years immediately preceding publication of this Offering Memorandum, or any other contracts, other than contracts entered into in the ordinary course of business, entered into by the Issuer which contain any provisions under which the Issuer has any obligation or entitlement material to it at the date of this Offering Memorandum.
15. The Financial Statements presented in this Offering Memorandum have been prepared in accordance with IFRS as adopted by the European Union and contain information on consolidated subsidiaries of the Group, including all of the Guarantors. The Financial Statements have been prepared by the Issuer. The Financial Statements were audited by independent auditors, PricewaterhouseCoopers Accountants N.V., located at Thomas R. Malthusstraat 5, 1066 JR Amsterdam, P.O. Box 90357, The Netherlands. The partners of PricewaterhouseCoopers Accountants N.V. who signed the auditors' reports were/are members of The Netherlands Institute of Chartered Accountants (*Nederlandse Beroepsorganisatie van Accountants*). In their respective audit reports, PricewaterhouseCoopers Accountants N.V. have expressed an unqualified opinion on the Financial Statements. The audit reports on the Financial Statements for the year ended 31 December 2016 contain an emphasis of matter relating to economic and political uncertainties in Ukraine. The audit reports on the Financial Statements for the year ended 31 December 2015 contain an emphasis of matter relating to there being a material uncertainty with respect to going concern and an emphasis of matter relating to economic and political uncertainties in Ukraine.
16. **Information Relating to the Guarantors**

Information concerning the incorporation, status and the directors of each Guarantor is listed directly below.

Private Joint Stock Company "Avdiivka Coke Plant" (Avdiivka Coke)

Incorporation and Status

Avdiivka Coke was incorporated as an open joint stock company under the Companies Law of Ukraine 1991 on 30 December 1993. The registration number of Avdiivka Coke is 00191075 and its registered address is at 1 Industrialnyi Proizd, Avdiivka, Donetsk Region, 86065 Ukraine. Avdiivka Coke's principal activity is production of coke. The Issuer holds a 94.72 per cent. effective interest in Avdiivka Coke.

Director

Management powers in Avdiivka Coke are vested in its sole executive body, the General Director. Musa Serhoievykh Mahomedov is the current General Director of Avdiivka Coke. The supervisory board of Avdiivka Coke consists of five members, including four representatives of the Issuer and one independent director. The supervisory board of Avdiivka Coke does not have a secretary.

Private Joint Stock Company "Azovstal Iron & Steel Works" (Azovstal)

Incorporation and Status

Azovstal was incorporated as an open joint stock company under the Companies Law of Ukraine 1991 on 1 October 1996. The registration number of Azovstal is 00191158 and its registered address is 1 Leporskyi Street, Mariupol, Donetsk Region, 87500 Ukraine. Azovstal's principal activity is the production of steel products. The Issuer holds a 96.74 per cent. effective interest in Azovstal.

Director

Management powers in Azovstal are vested in its sole executive body, the General Director. Enver Omarevykh Tskitishvili is the current General Director of Azovstal. The supervisory board of Azovstal consists of five members, including four representatives of the Issuer and one independent director. The supervisory board of Azovstal does not have a secretary.

Private Joint Stock Company "Central Iron Ore Enrichment Works" (Central GOK)

Incorporation and Status

Central GOK was incorporated as an open joint stock company under the Companies Law of Ukraine 1991 on 17 January 1997. The registration number of Central GOK is 00190977 and its registered address is Kryvyi Rig, Dnipropetrovsk Region, 50066 Ukraine. Central GOK's principal activity is the production of iron ore. The Issuer holds a 99.75 per cent. effective interest in Central GOK.

Director

Management powers in Central GOK are vested in its sole executive body, the General Director. Dmytro Volodymyrovych Shevchyk is the current General Director of Central GOK. The supervisory board of Central GOK consists of five members, including four representatives of the Issuer and one independent director. The supervisory board of Central GOK does not have a secretary.

Private Joint Stock Company "Ingulets Iron Ore Enrichment Works" (Ingulets GOK)

Incorporation and Status

Ingulets GOK was incorporated as an open joint stock company under the Companies Law of Ukraine 1991 on 17 January 1997. The registration number of Ingulets GOK is 00190905 and its registered

address is at 47 Rudna Street, Kryvyi Rig, Dnipropetrovsk Region, 50064 Ukraine. Ingulets GOK's principal activity is production of iron ore. The Issuer holds a 99.77 per cent. effective interest in Ingulets GOK.

Director

Management powers in Ingulets GOK are vested in its sole executive body, the General Director. Oleksandr Mykolaiovych Herasymchuk is the current General Director of Ingulets GOK. The supervisory board of Ingulets GOK consists of five members, including four representatives of the Issuer and one independent director. The supervisory board of Ingulets GOK does not have a secretary.

Private Joint Stock Company "Northern Iron Ore Enrichment Works" (Northern GOK)

Incorporation and Status

Northern GOK was incorporated as an open joint stock company under the Companies Law of Ukraine 1991 on 28 October 1996. The registration number of Northern GOK is 00191023 and its registered address is at Kryvyi Rig, Dnipropetrovsk Region, 50079 Ukraine. Northern GOK's principal activity is the production of iron ore. The Issuer holds a 96.42 per cent. effective interest in Northern GOK.

Director

Management powers in Northern GOK are vested in its sole executive body, the General Director. Hryhorii Anatoliiovych Koldunov is the current General Director of Northern GOK. The supervisory board of Northern GOK consists of five members, including four representatives of the Issuer and one independent director. The supervisory board of Northern GOK does not have a secretary.

Private Joint Stock Company "Ilyich Iron and Steel Works of Mariupol" (Ilyich Steel)

Incorporation and Status

Ilyich Steel was incorporated as a closed joint stock company under the Companies Law of Ukraine 1991 on 30 December 1996. The registration number of Ilyich Steel is 00191129 and its registered address is the 1 Levchenko Street, Mariupol, Donetsk Region, 87504 Ukraine. Ilyich Steel's principal activity is the production of steel products. The Issuer holds an approximately 99.32 per cent. effective interest in Ilyich Steel.

Director

Management powers in Ilyich Steel are vested in its sole executive body, the General Director. Taras Hryhorovych Shevchenko is the current General Director of Ilyich Steel. The supervisory board of Ilyich Steel consists of five members, including four representatives of the Issuer and one independent director. The supervisory board of Ilyich Steel does not have a secretary.

APPENDIX I: GLOSSARY OF SELECTED TERMS

Air separation unit	A unit that separates atmospheric air into its component elements, including oxygen and nitrogen. In the steelmaking process, the unit provides the large volumes of oxygen needed to ignite carbon dissolved in steel and remove unwanted chemical elements.
Alloy steel	Steel alloyed with other elements, usually molybdenum, manganese, chromium, vanadium, silicon, boron or nickel, in amounts greater than 10 per cent. by weight.
Angle	Angle shaped section used in construction.
Bars	Long steel products that are rolled from billets. Merchant bar and reinforcing bar, or rebar, are two common categories of bars, where merchants include rounds, flats, angles, squares and channels that are used by fabricators to manufacture a wide variety of products such as furniture, stair railings and farm equipment. Rebar is used to strengthen concrete structures.
Basic oxygen furnace	A pear-shaped furnace lined with refractory bricks that refines molten iron from the blast furnace and scrap into steel.
Batteries	Coke ovens are constructed in batteries of 10 to 100 ovens.
Beneficiation	The treatment of mined material to make it more concentrated or richer. Uses the process of crushing, grinding, and often froth flotation to remove waste rock from ore. The metal content is increased as the waste is removed.
Billet	A semi-finished steel product with a square cross section up to 150mm x 150mm. This product is either rolled or continuously cast and is further processed by rolling to produce finished long products. Semi-finished products above 150mm x 150mm are called blooms.
Blast furnace	A furnace used in the integrated metallurgical process in which iron ore in the form of sinter is melted down under a hot air flow (enriched with oxygen), using coal in the form of coke as a heating and reducing agent in the chemical process. As a result, a liquid hot metal is produced, also called pig iron.
Bloom	See "Billet".
Carbon steel	Steel in which the only main alloying constituent is carbon; the other elements present are in quantities too small to affect the properties.
CFR	A shipping term meaning that the seller must pay the costs and freight necessary to bring the goods to the named port of destination but the risk of loss of or damage to the goods, as well as any additional costs due to events occurring after the time the goods have been delivered on board the vessel is transferred from the seller to the buyer when the goods pass the ship's rail in the port of shipment.

Charge	A given weight of metal introduced into the furnace.
Coils	Steel that has been wound.
Coke	A fuel obtained by the pyrolysis of coal in coke ovens and used as a reducing agent for iron ore in the blast furnace.
Coke breeze	A lightweight aggregate stone formed by a refractory process.
Coking coal	Coal used for making coke, used to make steel.
Coke oven	A set of ovens that process coal into coke.
Cold rolling	Cold rolling occurs with the metal below its re-crystallisation temperature (usually at room temperature), which increases the strength via strain hardening up to 20 per cent. It also improves the surface finish and supports tighter tolerances. Commonly cold rolled products include sheets, coils and strips.
Concentrate	Concentrate is similar to fines but the material has undergone beneficiation to increase the iron content. Beneficiation may involve washing, flotation, or in the case of magnetite, magnetic separation.
Continuous casting	The process pursuant to which molten steel is cooled into semi-finished products such as billets, blooms and slabs. The molten steel is poured at a steady rate from a ladle into a bottomless mould. As the molten steel enters the water-cooled mould, it starts to cool into a pliable solid that can then be cut into required lengths.
Continuous Improvement (CI)	An aspect of lean production, CI encompasses various changes in business processes that aim to improve operational results by taking a systematic approach to analysing problems and finding solutions throughout an organisation.
CPT	A shipping term meaning that the seller pays for the freight of the goods to a designated destination while the buyer pays for the insurance. The passing of risk occurs when the goods have been delivered into the custody of the first carrier. This term can be used for all modes of transport, including multimodal transport.
Crude steel	Steel in the first solid grade after melting, suitable for further processing
Delivered at Frontier, or DAF	A shipping term meaning that the seller has the responsibility to supply the goods at his or her own risk and expense to a designated location (usually a border location) by a specified time. The buyer is then responsible for the importation of the goods into the adjoining country.
Delivered at Place, or DAP	A shipping term meaning that the seller delivers when the goods are placed at the disposal of the buyer on the arriving means of transport ready for unloading at the named place of destination. Under DAP terms, the risk passes from seller to buyer from the point of destination mentioned in the

	contract of delivery.
Direct Reduced Iron (DRI)	Produced from direct reduction of iron ore (in form of lumps, pellets or fines) by a reducing gas produced from natural gas or coal. The reducing gas is a mixture, the majority of which is Hydrogen (H ₂) and Carbon Monoxide (CO) which acts as reducing agent.
Dolomite	A sedimentary carbonate rock consisting mainly of the mineral dolomite.
Electric arc furnace	A furnace which refines molten pig iron from the blast furnace and scrap into steel. In this process, the proportion of scrap used can be increased to 100 per cent. of the metal charge. Once the furnace is charged and covered, graphite electrodes are lowered through holes in the roof. The electric arc travelling between the electrodes and the metallic charge creates intense heat, which melts the charge. Alloying elements can be added during the process.
Ferroalloy	A metal product commonly used as a raw materials feed in steelmaking, usually containing iron and other metals that improve the physical and chemical properties of the final steel product.
Fines	Fines are naturally occurring iron ore with a smaller particle size that can be shipped to the customer. Most fines need to be agglomerated prior to charging into the blast furnace; this is achieved through sintering. Such sintering reduces fines loss and greatly increases the productivity of the blast furnace. Fines are the most commonly traded iron ore product and the quality can vary considerably.
Finished products	Products obtained through the hot-rolling or forging of semi-finished steel (blooms/billets/slabs). These cover two broad categories of products, namely long and flat products.
Flat products	Flat products that are produced by rolls with smooth surfaces and ranges of dimension, varying in thickness and width. The major flat steel product categories are (i) thin flat products (up to 4mm in thickness), (ii) thick flat products (between 4mm and 50mm in thickness); and (iii) plates (over 50mm in thickness). Flat products are used in the automotive and white-goods industries, for production of large welded pipes, shipbuilding, construction, major works and boilers. They include hot- and cold-rolled sheet, plates and coils.
Flotation	A process in which a prepared mixture of minerals is conditioned with reagents and subjected to agitation and aeration to cause those minerals rendered hydrophobic to float and the other minerals to sink.
Flux	A substance applied to a surface to be joined by welding, soldering, or brazing to facilitate the flowing of solder and prevent formation of oxides.
Free Carrier, or FCA	A shipping term meaning that the cost, risk and responsibility for the goods shift from the seller to the buyer when the goods are turned over to the custody of a carrier at a designated location.
Free On Board, or FOB	A term meaning that the seller delivers the goods on board the vessel

	nominated by the buyer at the named port of shipment or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel, and the buyer bears all costs from that moment onwards.
Heavy plate	Steel sheet with a width of up to five metres and a thickness of at least five millimetres. It is mainly used for construction, heavy machinery, shipbuilding or large diameter pipes.
Hot Briquetted Iron (HBI)	Hot Briquetted Iron (HBI) is a form of Direct Reduced Iron (DRI) that has been compacted at a temperature greater than 650°C at the time of compaction and has a density greater than 5.0 grams per cubic centimetre (5.0 g/cm ³).
Hot rolled	Product that is sold in its "as produced" state off the hot-rolling mill with no further reduction or processing steps, aside from being pickled and oiled (if specified).
Hot rolling mill	A rolling mill that reduces hot slab into a coil of specified thickness; the whole processing is done at a relatively high temperature (when the steel is still red).
Ingot	An intermediate product made by pouring molten steel into moulds of given dimensions. In further processing steps carried out in a cogging mill, the ingots are transformed first to simple shape semi-finished products like blooms or slabs and then fed to hot-rolling mills. Ingot casting is now largely replaced by continuous casting.
Iron ore	Mineral containing enough iron to be a commercially viable source of the element for use in steelmaking.
Iron ore concentrate	Iron ore containing the valuable minerals of an ore from which most waste material has been removed by undergoing treatment.
JORC Code	The 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.
Ladle furnace	A furnace used for refining hot metal between the converter or electric arc furnaces and casting.
Limestone	A sedimentary rock composed largely of the mineral calcite (calcium carbonate or CaCO ₃). It is used in the blast furnace to form slags, which are then used in construction and other applications.
Long products	Long products are used in all industrial sectors, particularly in the construction and engineering industries. They include all types of bars, wire rod and a wide range of cold-formed profiles like closed profile, S-shape profile, E-shape profile, trough-shape profile, angle profile and others. They also include pipes with circular, oblong and semi-oblong, square and rectangular cross sections of a wide range of sizes.
Lost Time Incident Frequency	An internationally recognised safety indicator, the LTIFR is the ratio of lost

Rate (LTIFR)	time injuries per million hours worked. It is calculated using the total number of incidents leading to the loss of one day/shift or more from work.
Lump	Non-beneficiated, naturally occurring pellets or clumps of iron ore with a typical particle size greater than 6 millimetres and less than 40 millimetres. Lump is charged directly into the blast furnace; however its availability is falling. In terms of blast furnace productivity, lump is second only to pellets.
Lurgi machine	The Lurgi process is an above-ground coal liquefaction and oil shale extraction technology. It is classified as a hot recycled solids technology.
Magnetic separation	Magnetic separation is a process in which magnetically susceptible material is extracted from a mixture using a magnetic force.
Magnetite	A ferromagnetic mineral with chemical formula Fe_3O_4 , one of several iron oxides and a member of the spinel group. The chemical IUPAC name is iron (II, III) oxide and the common chemical name ferrous-ferric oxide.
Metallurgical lime	Quick lime used in metallurgical process to form slag and protect lining.
Merchant iron ore concentrate	A term used to designate various types of iron ore concentrate, which are sold to external customers for further processing or for direct use/consumption.
Mineral	A natural, inorganic, homogenous material that can be expressed by a chemical formula.
OHSAS	Management system standards, developed in order to facilitate the integration of quality and occupational health and safety management systems by organisations.
Open-hearth furnace	A broad, shallow hearth to refine pig iron and scrap into steel (also known as a " Martin furnace "). Heat is supplied from a large flame over the surface and the refining takes 7-9 hours.
Open pit	Surface mining in which the ore is extracted from a pit or quarry.
Open-pit mining	Open-pit mining refers to a method of extracting rock or minerals from the earth by their removal from an open pit. The term is used to differentiate this form of mining from extractive methods that require tunnelling into the earth.
Overburden	Used in mining to describe material that lies above the area of economic interest, e.g., the rock and soil that lies above the iron ore body. Overburden is removed during surface mining, but is typically not contaminated with toxic components and may be used to restore a mining site to a semblance of its appearance before mining began.
Pellets	Pellets are the most desirable form of iron ore as they make a major contribution to blast furnace productivity. Fine-grained concentrate or naturally occurring hematite fines are agglomerated through mixing with bentonite or another binder. These are then indurated (hardened) by heat. The

	final pellets are typically 8-20 millimetres in diameter and may also contain fluxes to aid smelting.
Pig iron	Pig iron is the intermediate product of smelting iron ore with coke and resin. Pig iron has a very high carbon content, which makes it very brittle and not useful directly as a material except for limited applications. It is used to produce steel, typically with an electric arc furnace or basic oxygen furnace, by burning off the excess carbon in a controlled fashion and adjusting the alloy composition.
Pulverised coal injection (PCI)	Pulverised coal injection (PCI) technology involves injecting pulverised coal directly into a blast furnace through tuyeres (instead of using cokes) which reduces the consumption of coke and increases furnace productivity.
Rails	A steel bar laid on the ground, forming a railway track.
Rail fasteners	Metal devices used to link rails on railway lines.
Rebar/Debar (reinforcing bar/deformed bar)	A commodity grade steel used to strengthen concrete in highway and building construction.
Refining	A stage in the process of making crude steel, during which most residual impurities are removed from the crude steel and additions of other metals may be made before it is cast (see also " Ladle furnace ").
Rolled steel (products)	Steel produced to a desired thickness by being passed through a set of rollers.
Rolling mill	A facility in which metal stock is passed through a pair of rolls, a process known as rolling. Rolling is classified according to the temperature of the metal rolled.
Scrap	Iron containing material (mainly industrial or household waste) that generally is remelted and recast into new steel. The scrap could be used as part of a metal charge together with pig iron loaded into steel-melting furnaces.
Sections	Blooms or billets that are hot-rolled in a rolling mill to form, among other shapes, "L", "U", "T" or "I" shapes. Sections can also be produced by welding together pieces of flat products. Sections can be used for a wide variety of purposes in the construction, machinery and transport industries.
Semi-finished products	Steel products such as billet, blooms and slabs. These products can be made by direct continuous casting of hot steel or by pouring the liquid steel into ingots, which are then hot-rolled into semi-finished products.
Shapes	Steel shapes in a variety of shapes such as beams, longs, bars, etc.
Sinter	Particles in roughly one-inch chunks produced by mixing and baking iron ore concentrate and limestone flux prior to loading it into the blast furnaces for reduction into pig iron.
Slab	A semi-finished steel product obtained by rolling ingots on a rolling mill or

	processed through a continuous caster and cut into various lengths. The slab has a rectangular cross section and is used as a starting material in the production process of flat products.
Slag	A by-product, containing inert materials, produced during the blast-furnace smelting process and other steel-making operations.
Slimes	Fine particulate material that can interfere with flotation due to excessive reagent consumption, excessive frothing, or slimes coating. Frequently, the fine gangue material is removed from iron ore by washing and size classification.
Steam Coal	A term used to describe coal that is used primarily to generate heat. It is defined as all other hard coal not classified as coking coal. Also included in this category are recovered slurries, middlings and other low-grade coal products not further classified by type. Coal of this quality is also commonly known as thermal coal.
Strip	Flat steel products used for production of pipes. Strips with widths of less than 600mm are used for large pipes with a spiral welded seam and smaller pipes with a straight-line welded seam. Large diameter pipes (of up to 1,420mm diameter) with a straight-line welded seam require strips up to 4,600mm wide and 30mm thick.
Tailings	Waste material produced from ore after economically recoverable metals or minerals have been extracted. Changes in metal prices and improvements in technology can sometimes make the tailings economic to process at a later date.
Turbine air blower	A device that compresses and blows air into a blast furnace at high pressure.
Vacuum degasser	An advanced steel refining facility that removes oxygen, hydrogen and nitrogen under low pressures (in a vacuum) to produce ultralow carbon steel for demanding electrical and automotive applications. Normally performed in the ladle, the removal of dissolved gases results in cleaner, higher-quality, more pure steel.
Wharf coke	Moist wharf coke, a finished coke product containing 6.0 per cent. moisture which was discharged from a coking battery and normalized to shipping temperature (quenched with water and processed with inert gas) and was not screened.
Wire	A broad range of products produced by cold and hot reducing, or drawing, wire rod through a series of dies to reduce the diameter, improve surface finish, dimensional accuracy, and physical properties. Typical applications include nets, screws, rivets, upholstery springs, furniture wire, concrete wire, electrical conductors, rope wire and structural cables.

APPENDIX II: CLASSIFICATION OF RESERVES AND RESOURCES

International Reporting Methodologies

Several codes exist for reporting reserves in the international mining industry. The technical differences between these codes are minor, and results are generally comparable regardless of which methodology is employed in assessing a particular deposit. The principal reporting codes in current use are: United States Securities and Exchange Commission Industry Guide 7 ("**SEC**") (United States); Canadian National Instrument 43-101 (Canada); Australasian Joint Ore Reserves Committee ("**JORC**") Code (Australia); Institute of Materials, Minerals and Mining Reporting Code (United Kingdom and Ireland); and South African Institute of Mining and Metallurgy Reporting Code (South Africa).

Each of these codes recognises the difference between mineral resources and ore reserves. Conversion from a mineral resource to an ore reserve requires the application of "modifying factors", including mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. A "resource" is geologically defined; it becomes a "reserve" when the modifying factors, especially technical and economic factors, are taken into account. Each of these codes also includes strict guidelines for data quality and reporting in mining commodities.

Mineral resources

A mineral resource is a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust (a "**deposit**") in such a form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are subdivided, in order of increasing geological confidence, into inferred, indicated and measured categories. Portions of a deposit that do not have reasonable prospects for eventual economic extraction are not included as mineral resources.

Inferred mineral resource

An inferred mineral resource is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity, and based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which is limited or of uncertain quality and/or reliability.

Indicated mineral resource

An indicated mineral resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes. The locations are too widely or inappropriately spaced to confirm geological continuity and/or grade continuity but are spaced closely enough for continuity to be assumed.

Measured mineral resource

A measured mineral resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes. The locations are spaced closely enough to confirm geological and/or grade continuity.

Ore reserves

All data relating to Metinvest's iron ore reserves and resources were reported in accordance with the terms and definitions of the JORC Code and based on the Reserves Report prepared by SRK.

Ore reserves are the economically mineable parts of an indicated or measured mineral resource. Ore reserves take account of diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out on the deposit and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments establish that at the time of reporting extraction is reasonably justified.

Proved ore reserve

A proved ore reserve is the economically mineable part of a measured mineral resource.

Probable ore reserve

A probable ore reserve is the economically mineable part of an indicated and, in some circumstances, a measured mineral resource.

Coal reserves

All data relating to Metinvest's coal reserves and resources located in the United States were prepared in accordance with SEC Industry Guide 7 and based on the Reserves Report prepared by Cardno.

Coal reserves are estimated based on industry-accepted guidelines for total coal/seam thickness, coal quality, coal recoverability, product yield, and other practical permitting and mining limitations. The industry standard methodology providing reasonable assurance that the coal reserves are recoverable considering geologic, technical, economic and legal limitations at the time of the reserve evaluation has been used.

Proved coal reserve

A proved coal reserve is a reserve for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings, or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspections, sampling, and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth, and mineral are well established. Proved coal reserves lie within one fourth of a mile arc around a coal measurement site.

Probable coal reserve

A probable coal reserve is a reserve for which quantity and grade and/or quality are computed from information similar to that used for proved reserves, but the sites for inspection, sampling, and measurement are farther apart or are less adequately spaced. The degree of assurance, although lower than that for proved reserves, is high enough to assume continuity between points of observation. Probable reserves lie within more than one fourths of a mile, but less than three fourth of a mile from a coal measurement site.

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Metinvest B.V.

IFRS Consolidated Summary Financial Statements

31 December 2017

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Independent auditor's report

To: the board of directors of Metinvest B.V.

Report on the consolidated summary financial statements 2017

Our opinion

In our opinion the accompanying consolidated summary financial statements 2017 of Metinvest B.V. ('The Company'), are consistent, in all material respects, with the audited statutory financial statements, in accordance with the basis described in note 1.

The consolidated summary financial statements

The Company's consolidated summary financial statements, derived from the audited statutory financial statements for the year ended 31 December 2017, comprise:

- the consolidated summary statement of financial position as at 31 December 2017;
- the consolidated summary statement of comprehensive income for the year then ended;
- the consolidated summary statement of changes in equity for the year then ended;
- the consolidated summary statement of cash flows for the year then ended; and
- the related notes to the consolidated summary financial statements.

The consolidated summary financial statements do not contain all of the disclosures required by International Financial Reporting Standards as adopted by the European Union and with Part 9 of Book 2 of the Dutch Civil Code. Reading the summary financial statements and the auditor's report there on, therefore, is not a substitute for reading the audited statutory financial statements of Metinvest B.V. and the auditor's report thereon.

The audited statutory financial statements and the summary financial statements do not reflect the events that occurred subsequent to the date of our report on the audited statutory financial statements.

Ref.: e0402898

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The audited statutory financial statements and our auditor's report thereon

We expressed an unmodified audit opinion on the audited statutory financial statements in our report dated 23 February 2018. The report also includes:

- The communication of key audit matters. Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the statutory financial statements of the current period.

Responsibilities of management for the consolidated summary financial statements

Management is responsible for the preparation of the consolidated summary financial statements in accordance with the basis described in note 1.

Auditor's responsibility

Our responsibility is to express an opinion on whether the consolidated summary financial statements are consistent, in all material respects, with the audited statutory financial statements based on our procedures, which we conducted in accordance with Dutch Law, including the Dutch Standard 810 'Engagements to report on summary financial statements'.

Amsterdam, 23 February 2018
PricewaterhouseCoopers Accountants N.V.

Original has been signed by A.G.J. Gerritsen RA



Independent auditor's report

To: the board of directors of Metinvest B.V.

Report on the consolidated summary financial statements 2017

Our opinion

In our opinion the accompanying consolidated summary financial statements 2017 of Metinvest B.V. ('The Company'), are consistent, in all material respects, with the audited statutory financial statements, in accordance with the basis described in note 1.

The consolidated summary financial statements

The Company's consolidated summary financial statements, derived from the audited statutory financial statements for the year ended 31 December 2017, comprise:

- the consolidated summary statement of financial position as at 31 December 2017;
- the consolidated summary statement of comprehensive income for the year then ended;
- the consolidated summary statement of changes in equity for the year then ended;
- the consolidated summary statement of cash flows for the year then ended; and
- the related notes to the consolidated summary financial statements.

The consolidated summary financial statements do not contain all of the disclosures required by International Financial Reporting Standards as adopted by the European Union and with Part 9 of Book 2 of the Dutch Civil Code. Reading the summary financial statements and the auditor's report there on, therefore, is not a substitute for reading the audited statutory financial statements of Metinvest B.V. and the auditor's report thereon.

The audited statutory financial statements and the summary financial statements do not reflect the events that occurred subsequent to the date of our report on the audited statutory financial statements.

Ref.: e0402898

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Amsterdam, 23 February 2018
PricewaterhouseCoopers Accountants N.V.

Original has been signed by A.G.J. Gerritsen RA

Metinvest B.V.
Consolidated Summary Balance Sheet
All amounts in millions of US dollars

	Note	31 December 2017	31 December 2016
ASSETS			
Non-current assets			
Goodwill	8	603	543
Other intangible assets	9	120	125
Property, plant and equipment	10	4,132	4,724
Investments in associates and joint ventures	11	1,085	908
Deferred tax asset	28	109	96
Income tax prepaid	12	8	25
Trade and other receivables	14	181	137
Total non-current assets		6,238	6,558
Current assets			
Inventories	13	1,235	949
Income tax prepaid	12	9	18
Trade and other receivables	14	2,342	1,580
Cash and cash equivalents	15	259	226
Total current assets		3,845	2,773
TOTAL ASSETS		10,083	9,331
EQUITY			
Share capital	16	0	0
Share premium	16	6,225	6,225
Other reserves	17	(8,934)	(8,442)
Retained earnings		6,894	6,107
Equity attributable to the owners of the Company		4,185	3,890
Non-controlling interest	18	123	138
TOTAL EQUITY		4,308	4,028
LIABILITIES			
Non-current liabilities			
Loans and borrowings	19	2,739	-
Retirement benefit obligations	21	369	326
Deferred tax liability	28	300	368
Other non-current liabilities	22	80	92
Total non-current liabilities		3,488	786
Current liabilities			
Loans and borrowings	19	271	2,879
Seller's notes	20	7	90
Income tax payable		78	18
Trade and other payables	23	1,931	1,530
Total current liabilities		2,287	4,517
TOTAL LIABILITIES		5,775	5,303
TOTAL LIABILITIES AND EQUITY		10,083	9,331

Signed and authorised for release on behalf of Metinvest B.V. on 23 February 2018:

Originally signed by Managing Director A, Yuriy Ryzhenkov

Originally signed by Managing Director B, ITPS (Netherlands) B.V.

Metinvest B.V.
Consolidated Summary Income Statement
All amounts in millions of US Dollars

	Note	Year ended 31 December 2017	Year ended 31 December 2016
Revenue		8,931	6,223
Cost of sales	24	(6,756)	(4,833)
Gross profit		2,175	1,390
Distribution costs	24	(721)	(660)
General and administrative expenses	24	(193)	(183)
Other operating income / (expenses), net	25	39	(222)
Operating profit		1,300	325
Results of the loss of control over the assets located on temporarily non-controlled territory	7	(329)	-
Finance income	26	29	26
Finance costs	27	(350)	(397)
Share of result of associates and joint ventures	11	191	205
Profit / (loss) before income tax		841	159
Income tax (expense) / benefit	28	(224)	(41)
Profit for the year		617	118
Profit is attributable to:			
Owners of the Company		603	106
Non-controlling interests		14	12
Profit for the year		617	118

Consolidated Summary Statement of Comprehensive Income
All amounts in millions of US dollars

	Note	Year ended 31 December 2017	Year ended 31 December 2016
Profit for the year		617	118
Other comprehensive income / (loss)			
<i>Items that will not be reclassified to profit or loss:</i>			
Remeasurement of retirement benefit obligation	21	(102)	(6)
Revaluation decreases that offset previous increases in the carrying amount of property, plant and equipment	7,10	(228)	-
Revaluation and impairment of property, plant and equipment	10	-	629
Share in other comprehensive income of joint ventures		39	35
Income tax relating to items that will not be reclassified subsequently to profit or loss	28	56	(105)
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Currency translation differences		(82)	(666)
Total other comprehensive income / (loss)		(317)	(113)
Total comprehensive income / (loss) for the period		300	5
Total comprehensive income / (loss) attributable to:			
Owners of the Company		295	(3)
Non-controlling interest		5	8
Total comprehensive income / (loss) for the period		300	5

Metinvest B.V.
Consolidated Summary Statement of Cash Flows
All amounts in millions of US Dollars

	Note	Year ended 31 December 2017	Year ended 31 December 2016
Cash flows from operating activities			
Profit before income tax		841	159
<i>Adjustments for:</i>			
Depreciation of property, plant and equipment and amortisation of intangible assets	24	525	529
Impairment of property, plant and equipment and intangible assets	7, 24	284	34
Impairment of associates and joint ventures		7	-
Gain on disposal of property, plant and equipment	25	(7)	(3)
Finance income	26	(29)	(26)
Finance costs	27	350	397
Unrealised operating foreign exchange differences		(66)	(18)
Net change in retirement benefit obligations, except for interest costs and remeasurements		(90)	(21)
Impairment of trade and other accounts receivable	25	7	227
Share of result of associates and joint ventures	11	(191)	(205)
Inventory write down / (reversal of write-down), net	13	96	(45)
Other non-cash operating gains		7	(2)
Operating cash flows before working capital changes		1,734	1,026
Increase in inventories		(358)	(195)
Increase in trade and other accounts receivable		(830)	(442)
Increase in trade and other accounts payable		338	199
Cash generated from operations		884	588
Income taxes received / (paid)		(154)	35
Interest paid		(135)	(133)
Net cash from operating activities		595	490
Cash flows from investing activities			
Purchase of property, plant and equipment and intangible assets		(465)	(358)
Proceeds from sale of property, plant and equipment		1	3
Proceeds from sale of Black Iron (Cyprus) Limited		-	6
Interest received		15	18
Net cash used in investing activities		(449)	(331)
Cash flows from financing activities			
Repayment of seller's notes	19	(85)	-
Payments for loans commission		(36)	-
Proceeds from loans and borrowings	19	6	-
Repayment of loans and borrowings	19	(90)	(10)
Net trade financing proceeds / (repayment)	19	117	(67)
Purchase of non-controlling interest		(1)	(1)
Other finance costs		(21)	(27)
Net cash used in financing activities		(110)	(105)
Effect of exchange rate changes on cash and cash equivalents		(3)	(8)
Net increase in cash and cash equivalents		33	46
Cash and cash equivalents at the beginning of the year		226	180
Cash and cash equivalents at the end of the year	15	259	226

Metinvest B.V.
Consolidated Summary Statement of Changes in Equity
All amounts in millions of US Dollars

	Attributable to owners of the Company					Non-controlling interest (NCI)	Total equity
	Share capital	Share premium	Other reserves	Retained earnings	Total		
Balance at 1 January 2016	0	6,225	(8,013)	5,674	3,886	138	4,024
Revaluation and impairment of property, plant and equipment (Note 10, 24)	-	-	618	-	618	11	629
Share in other comprehensive income of joint venture (Note 11)	-	-	36	(1)	35	-	35
Remeasurement of retirement benefit obligation	-	-	-	(7)	(7)	1	(6)
Income tax relating to components of other comprehensive income (Note 28)	-	-	(104)	1	(103)	(2)	(105)
Currency translation differences	-	-	(652)	-	(652)	(14)	(666)
Other comprehensive loss for the period	-	-	(102)	(7)	(109)	(4)	(113)
Profit for the period	-	-	-	106	106	12	118
Total comprehensive loss for the period	-	-	(102)	99	(3)	8	5
Realised revaluation reserve, net of tax	-	-	(327)	327	-	-	-
Acquisition of non-controlling interest in subsidiaries	-	-	-	7	7	(8)	(1)
Balance at 31 December 2016	0	6,225	(8,442)	6,107	3,890	138	4,028
Revaluation decreases that offset previous increases in the carrying amount of property, plant and equipment	-	-	(217)	-	(217)	(11)	(228)
Share in other comprehensive income of joint venture (Note 11)	-	-	56	(17)	39	-	39
Remeasurement of retirement benefit obligation (Note 21)	-	-	-	(99)	(99)	(3)	(102)
Income tax relating to components of other comprehensive income (Note 28)	-	-	36	17	53	3	56
Currency translation differences	-	-	(84)	-	(84)	2	(82)
Other comprehensive loss for the period	-	-	(209)	(99)	(308)	(9)	(317)
Profit for the period	-	-	-	603	603	14	617
Total comprehensive income / (loss) for the period	-	-	(209)	504	295	5	300
Realised revaluation reserve, net of tax	-	-	(283)	283	-	-	-
Dividends declared by non-wholly-owned subsidiaries	-	-	-	-	-	(20)	(20)
Balance at 31 December 2017	0	6,225	(8,934)	6,894	4,185	123	4,308

1 Metinvest B.V. and its operations

Metinvest B.V. (the “Company” or “Metinvest”), is a private limited liability company registered in the Netherlands. The Company is beneficially owned by Mr. Rinat Akhmetov, through various entities commonly referred to as System Capital Management (“SCM”), and Mr. Vadim Novinsky, through various entities commonly referred to as “SMART” or “Smart Group”.

The Company and its subsidiaries (together referred to as the “Group” or “Metinvest Group”) are an integrated steel producer, owning assets in each link of the production chain – from iron ore mining, coking coal mining and coke production, through to semi-finished and finished steel production. The steel products, iron ore and coke and coal are sold on both the Ukrainian and export markets.

As of 31 December 2017 and throughout the periods presented in these consolidated financial statements, Metinvest B.V. is owned 71.24% by SCM Cyprus and 23.76% by companies of the Smart Group. The remaining 5% interest in the Company in the form of Class C shares has been acquired from the previous owners of Ilyich Group for the benefit of SCM and SMART. It is the intention of SCM and SMART to dispose of the said 5% interest in due course (after receipt of respective governmental approvals, if such will be necessary), and in such manner that the ultimate interest of SCM in the Company shall be 75% minus 1 share, and the ultimate interest of SMART in the Company shall be 25% plus 1 share, thus SCM remaining as the controlling shareholder.

The principal subsidiaries of Metinvest B.V. are presented below:

Name	Effective % interest as at 31 December		Segment	Country of incorporation
	2017	2016		
Metinvest Holding LLC	100.0%	100.0%	Corporate	Ukraine
Metinvest Management B.V.	100.0%	100.0%	Corporate	Netherlands
PrJSC Azovstal Iron and Steel Works	96.7%	96.7%	Metallurgical	Ukraine
PrJSC Yenakiieve Iron and Steel Works	92.2%	92.2%	Metallurgical	Ukraine
JV Metalen LLC	100.0%	100.0%	Metallurgical	Ukraine
PrJSC Khartsyzsk Pipe Plant	98.5%	98.5%	Metallurgical	Ukraine
Ferriera Valsider S.p.A.	70.0%	70.0%	Metallurgical	Italy
Metinvest Trametel S.p.A.	100.0%	100.0%	Metallurgical	Italy
Spartan UK Limited	100.0%	100.0%	Metallurgical	UK
Metinvest International SA	100.0%	100.0%	Metallurgical	Switzerland
Metinvest Eurasia LLC	100.0%	100.0%	Metallurgical	Russia
Metinvest Service Metal Centres LLC	100.0%	100.0%	Metallurgical	Ukraine
JSC Promet Steel	100.0%	100.0%	Metallurgical	Bulgaria
PrJSC Makiivka Iron and Steel Works	90.2%	90.2%	Metallurgical	Ukraine
PrJSC Ilyich Iron and Steel Works	99.3%	99.3%	Metallurgical	Ukraine
PrJSC Avdiivka Coke Plant	94.7%	94.6%	Metallurgical	Ukraine
PrJSC Zaporozhkoks	52.4%	52.2%	Metallurgical	Ukraine
PrJSC Donetskcoke	93.8%	93.7%	Metallurgical	Ukraine
PrJSC Northern Iron Ore Enrichment Works	96.4%	96.4%	Mining	Ukraine
PrJSC Central Iron Ore Enrichment Works	99.8%	99.8%	Mining	Ukraine
PrJSC Ingulets Iron Ore Enrichment Works	99.8%	99.8%	Mining	Ukraine
PrJSC Komsomolske Flux Plant	99.7%	99.7%	Mining	Ukraine
United Coal Company LLC (“UCC”)	100.0%	100.0%	Mining	USA
PrJSC Krasnodon Coal Company	94.7%	92.9%	Mining	Ukraine

As at 31 December 2017, the Group employed approximately 66 thousand people (31 December 2016: 85 thousand). The decrease is primarily driven by the loss of control over operations of entities located on the temporarily non-controlled territory (Note 7).

The Company’s registered address is Nassaulaan 2A, 2514 JS, The Hague. The company is registered with the commercial trade register under the number 24321697. The principal places of production facilities of the Group are in Ukraine, Italy, UK and the USA.

The consolidated financial statements of Metinvest B.V. for the year ended 31 December 2017 were authorised for issue in accordance with a resolution of the Board of Directors on 23 February 2018.

For better understanding of Metinvest’s financial position and the results of operations, these summary financial statements should be read in conjunction with the Metinvest’s audited financial statements as of and for the year ended 31 December 2017, which include all disclosures required by International Financial Reporting Standards as adopted by European Union and the statutory provisions of Part 9, Book 2, of the Dutch Civil Code.

2 Operating environment of the Group

The Ukrainian economy suffered a deep slump in 2014-2016 due to the political instability, the escalation of the conflict in the Donetsk and Luhansk regions and unfavorable global markets for key export-oriented sectors. Since 2017 the Ukrainian economy has demonstrated slight recovery amid overall macroeconomics stabilisation supported by a rise in domestic investment, revival in household consumption, increase in agricultural and industrial production, construction activity and improved environment on external markets. Ukraine returned to international debt capital markets, having issued a record USD 3 billion 15-year Eurobond at 7.375% in September 2017, which has smoothed external debt maturity profile of Ukraine.

In addition there was further progress in monetary policy. The National Bank of Ukraine ("NBU") conducts interest rate policy consistent with inflation targets and keeps the hryvnia floating. As of the date of this report the official NBU exchange rate of Hryvnia against US dollar was UAH 27.07 per USD 1, compared to UAH 28.07 per USD 1 as at 31 December 2017 and UAH 27.19 per USD 1 as at 31 December 2016.

In 2016 and 2017, the National Bank of Ukraine ("NBU") has made certain steps to ease the currency control restrictions introduced in 2014-2015. In particular, the required share of foreign currency proceeds subject to mandatory sale on the interbank market was decreased from 75% to 65% starting from 9 June 2016 and further to 50% starting from 5 April 2017. The current restriction is effective until 13 June 2018. Additionally, the settlement period for export-import transactions in foreign currency was increased from 90 to 120 days starting from 28 July 2016 and further to 180 days starting from 26 May 2017. Also starting from 13 June 2016, the NBU allowed Ukrainian companies to pay dividends to non-residents with a limit of USD 5 million per month. As of 31 December 2017, the amount of undistributed retained earnings of the Group's Ukrainian subsidiaries was approximately USD 1,918 million.

The IMF continued to support the Ukrainian government under the four-year Extended Fund Facility ("EFF") Programme, which was approved in March 2015, providing the third and the fourth tranches of approximately USD 1 billion in September 2016 and April 2017, respectively. Further disbursements of IMF tranches depend on the continued implementation of Ukrainian government reforms, and other economic, legal and political factors. The banking system remains fragile due to its: weak level of capital; its weakening asset quality caused by the economic situation; currency depreciation; and other factors.

On 1 January 2016, the agreement on the free trade area between Ukraine and the EU came into force. Just after that the Russian government implemented a trading embargo on many key Ukrainian export products. In response, the Ukrainian government implemented similar measures against Russian products. This had some but not a significant impact on Group's trading. On 1 September 2017, the Association Agreement between the European Union and Ukraine finally came fully into force that will enhance liberalisation of trade, improvement of quality standards and integration of Ukrainian economy with the European Union.

The conflict in Eastern Ukraine had impacted the Group's steel, coke and coal operations since 2014. Two of the Group's largest steel plants, PrJSC Ilyich Iron and Steel Works and PrJSC Azovstal Iron and Steel Works, are located near the conflict area in the Donetsk region. Iron ore production assets are located in the central part of Ukraine and have not been affected by the conflict. The conflict started in spring of 2014 and has not been resolved to date.

In February-March 2017, there was an escalation of the military confrontation near Avdiivka (where PrJSC Avdiivka Coke Plant is located), which led to temporary suspension of the production amid power supplied cuts. Since May 2017, Avdiivka Coke Plant has resumed operations using all coke batteries following the installation of a new electricity transmission line on the controlled territory. Production on PrJSC Yenakiieve Iron and Steel Works (which includes two facilities located in Yenakiieve and Makiivka) and PrJCS Krasnodon Coal Company was disrupted in February 2017 by a blockade of railway transportation between Ukraine and the temporarily non-controlled territory.

In March of 2017, the Group determined that it had lost control over the operations of entities located on the temporarily non-controlled territory. The effect of loss of control on the Group financial statements is disclosed in Note 7.

Since March 2017, all of the Metinvest Group's assets are operating without physical disruption. The Metinvest Group does not operate any assets on the temporarily non-controlled territory.

During 2017, crude steel production at the Group's Mariupol steelmakers increased. As compared to 2016 PrJSC Azovstal Iron and Steel Works output increased by 15%, and output at PrJSC Ilyich Iron and Steel Works increased by 13%. Although, in total for the Group total crude steel output declined by 9% as compared to 2016 due to loss of control described in Note 7.

During 2017 (as compared to 2016), iron ore concentrate production decreased by 7%, while coking coal concentrate output declined by 15%.

The prices of steel, coking coal and iron ore experienced both volatility and an overall decline during 2014-2015 and reached the decade-lowest levels in the fourth quarter of 2015 and January-February 2016. Since March 2016, there was a notable increase in price levels. During 2017, the prices for steel continued to grow amid strong demand in all regions, supply reforms in China and other factors. Despite persisting oversupply, growth in steel production kept iron ore price at relatively high levels. The benchmark price for hot-rolled coil (Metal Expert HRC CIS export FOB Black Sea) increased to USD 508 in 2017 which is 31% higher compared to 2016 when the average price was USD 387. Benchmark iron ore price (Bloomberg 62% Fe CFR China) increased from USD 58 per dry tonne in 2016 to USD 71 per dry tonne in 2017. Average contract coking coal prices (HCC LV, FOB Australia) increased from USD 114 per tonne in 2016 to USD 210 per tonne in 2017. These price dynamics had a positive impact on the Group's gross margins and overall financial results in 2017 as compared to 2016.

2 Operating environment of the Group (continued)

As of 31 December 2017, the Group had significant balances receivable from and prepayments made to the State of Ukraine mainly including VAT recoverable. Significant progress was made towards recovering the corporate tax prepayments of Ukrainian subsidiaries with the prospects of their full utilisation except for subsidiaries operations of which are located on the temporarily non-controlled territory. During 2017 and January 2018, the Group's Ukrainian subsidiaries have timely received regular VAT refunds due from the State amounting to USD 601 million. VAT assets of USD 46 million for subsidiaries whose operations are located on the temporarily non-controlled territory experience certain delays with the refund – the Group is enforcing its legal right to refund through the courts.

3 Basis of preparation and significant accounting policies

Basis of preparation and statement of compliance. These consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by European Union and the statutory provisions of Part 9, Book 2, of the Dutch Civil Code. The consolidated financial statements have been prepared under the historical cost convention unless stated otherwise. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated. New and revised standards and interpretations adopted by the Group are disclosed in Note 5.

Management has assessed the validity of the going concern assumption. The company has restructured the Bonds and the PXF loans in 2017, which are now reported as non-current liabilities. This supports the ability of Metinvest to continue as a going concern. There are no material uncertainties.

These consolidated financial statements are presented in millions of US dollars and all values are rounded off to the nearest million except where otherwise indicated.

Critical accounting estimates and judgements in applying accounting policies. The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and the reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily available from other sources. Although these estimates are based on management's best knowledge of current events and actions, actual results ultimately may differ from these estimates. The areas involving a high degree of judgement or complexity, or areas where assumptions and estimates are significant to the IFRS consolidated financial statements are disclosed in Note 4.

Principles of consolidation. Subsidiaries are all entities over which the group has control. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

The purchase method of accounting is used to account for the acquisition of subsidiaries. The cost of an acquisition is measured at the fair value of the assets given up, equity instruments issued and liabilities incurred or assumed at the date of exchange. The date of exchange is the acquisition date where a business combination is achieved in a single transaction. Where a business combination is achieved in stages, the previously held interest in an acquired business is included into the cost of business combination at fair value as of the acquisition date with resulting gains recognised in consolidated income statement.

Costs directly related to acquisition of subsidiaries are recognised in the consolidated income statement in the period in which they incurred and the services are received.

Goodwill is measured by deducting the net assets of the acquiree from the aggregate of the consideration transferred for the acquiree, the amount of non-controlling interest in the acquiree and fair value of an interest in the acquiree held immediately before the acquisition date. Any negative amount ("negative goodwill") is recognised in profit or loss, after management reassesses whether it identified all the assets acquired and all liabilities and contingent liabilities assumed and reviews appropriateness of their measurement.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated; unrealised losses are also eliminated unless the cost cannot be recovered. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies of the Group.

Non-controlling interest ("NCI") is that part of the net results and of the net assets of a subsidiary, including the fair value adjustments, which is attributable to interests which are not owned, directly or indirectly, by the Company. Non-controlling interest forms a separate component of equity.

3 Basis of preparation and significant accounting policies (continued)

Purchases of subsidiaries from parties under common control and merger reserve in equity. Purchases of subsidiaries from parties under common control are accounted under the predecessor values method. Under this method the financial statements of the entity are presented as if the businesses had been consolidated from the beginning of the earliest period presented (or the date that the entities were first under common control, if later). The assets and liabilities of the subsidiary transferred under common control are at the predecessor entity's book values. The difference between the consideration given and the aggregate book value of the assets and liabilities (as of the date of the transaction) of the acquired entity is recorded as an adjustment to equity. This is recorded as a merger reserve. No additional goodwill is created by such purchases.

Transactions with non-controlling interests. The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity. Non-controlling interest is measured on proportionate basis of net assets.

Investments in associates and joint ventures. Associates are entities over which the Group has significant influence, but not control, generally accompanying a shareholding of between 20 and 50 percent of the voting rights.

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Those parties are called joint ventures.

Investments in associates and joint ventures are accounted for by the equity method of accounting and are initially recognised at cost. The carrying amount of associates and joint ventures includes goodwill identified on acquisition, and is reduced for accumulated impairment losses, if any. The Group's share of the post-acquisition profits or losses of associates and joint ventures is recorded in the consolidated income statement, and its share of post-acquisition movements in reserves is recognised in other comprehensive income. When the Group's share of losses in an associate or joint venture equals or exceeds its interest in the associate, including any other unsecured accounts receivable, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and their associates and joint ventures are eliminated to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Segment reporting. Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the General Director of the Group that makes strategic decisions.

Company reports separately information about an operating segment that meets any of the following quantitative thresholds unless aggregation criteria are met:

- (a) Its reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.
- (b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.
- (c) Its assets are 10 per cent or more of the combined assets of all operating segments.

Foreign currency translation. The functional currency of each of consolidated entities is the currency of the primary economic environment in which the entity operates. The functional currency for the majority of the consolidated entities is either Ukrainian hryvnia ("UAH") or US dollar ("USD").

Transactions denominated in currencies other than the relevant functional currency are translated into the functional currency using the exchange rate prevailing at the date of the transaction. Foreign exchange gains and losses resulting from the settlement of the transactions and from the translation of monetary assets and liabilities into each entity's functional currency at year-end official exchange rates are recognised in the consolidated income statement.

The principal rate of exchange used for translating foreign currency balances is as follows:

	31 December 2017	31 December 2016
USD/UAH	28.07	27.19
EUR/UAH	33.50	28.42

Monetary assets and liabilities are translated into functional currency at the official exchange rate at the respective balance sheet dates. Translation at year end does not apply to non-monetary items.

3 Basis of preparation and significant accounting policies (continued)

Translation from functional to presentation currency. The Group has selected the US dollar ("USD") as the presentation currency. The USD has been selected as the presentation currency for the Group as: (a) management of the Group manages business risks and exposures, and measures the performance of its businesses in the USD; (b) the USD is widely used as a presentation currency of companies engaged primarily in metallurgy; and (c) the USD is the most convenient presentation currency for non-Ukrainian users of these IFRS consolidated financial statements.

The results and financial position of each consolidated entity are translated into the presentation currency as follows:

- (i) assets and liabilities for each balance sheet are translated at the closing rate at the date of that balance sheet;
- (ii) income and expenses for each income statement are translated at monthly average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- (iii) all resulting exchange differences are recognised through comprehensive income and they accumulate as a separate component of equity. All the components of consolidated equity at each balance sheet date are translated at the historical rate. The balancing figure goes to cumulative currency translation reserve in other reserves in equity. All the elements within equity are presented at the rates prevailing at the dates of such movements (or an average rate for the period when this approximates the transaction date exchange rate).

As follows from policy on transaction from functional to presentation currency revaluation results and reclassification from revaluation reserve to retained earnings are translated into USD using the exchange rates prevailing at the dates of transaction. Because of lower strength of UAH as compared to USD (and consequent depreciation against USD since the last revaluations dates), the revaluation reserve in presentation currency is carried at rates lower than the closing UAH/USD rate, thus, differs from the revaluation balances recognised in the Group's property, plant and equipment. Upon disposal, sale or liquidation of assets or liabilities related to these equity components these differences are reclassified to retained earnings.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and at each balance sheet date are translated at the closing rate. When a subsidiary is disposed of through sale, liquidation, repayment of share capital or abandonment of all, or part of, that entity, the currency translation differences deferred in equity are reclassified to the consolidated income statement.

Current exchange restrictions in Ukraine are explained in Note 2. At present, the UAH is not a freely convertible currency outside of Ukraine.

Property, plant and equipment. Property, plant and equipment are stated using the revaluation model. Fair values are based on valuations by external independent valuers. The frequency of revaluation depends upon the movements in the fair values of the assets being revalued. Initial acquisitions and subsequent additions to property, plant and equipment are recognised at cost. Cost includes expenditure directly attributable to acquisition of the items. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads.

Increases in the carrying amount arising on revaluation are credited to other comprehensive income and accumulate in the other reserves in equity. When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. Decreases that offset previous increases in the carrying amount of the same asset decrease the previously recognised revaluation reserve through other comprehensive income; all other decreases are charged to the income statement. The revaluation reserve in equity is transferred directly to retained earnings when the surplus is realised either on the retirement or disposal of the asset or as the asset is used by the Group; in the latter case, the amount of the surplus realised is the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost.

Upon recognition, items of property, plant and equipment are divided into components, which represent items with a significant value that have different useful lives.

Expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately, is capitalised with the carrying amount of the replaced component being written off. Other subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the item of property, plant and equipment. All other expenditure is recognised in the consolidated income statement as an expense when incurred.

Property, plant and equipment are derecognised upon disposal or when no future economic benefits are expected from the continued use of the asset. Gains and losses on disposals determined by comparing proceeds with carrying amount of property, plant and equipment are recognised in the consolidated income statement.

Depreciation is charged to the consolidated income statement on a straight-line basis to allocate costs or revalued amounts of individual assets to their residual value over the estimated remaining useful lives. Depreciation commences at the moment when assets are ready for use. The estimated useful lives are as follows:

	Useful lives in years
Buildings and structures	from 2 to 60
Plant and machinery	from 2 to 35
Furniture, fittings and equipment	from 2 to 10

3 Basis of preparation and significant accounting policies (continued)

Estimates of remaining useful lives are made on a regular basis for all buildings, plant and machinery, with annual reassessments. Changes in estimates are accounted for prospectively.

The residual value of an asset is the estimated amount that the Group would currently obtain from disposal of the asset less the estimated costs of disposal, if the assets were already of the age and in the condition expected at the end of its useful life. The residual value of an asset is nil if the Group expects to use the asset until the end of its physical life. The assets' residual values and useful lives are reviewed, and adjusted, if appropriate, at each balance sheet date.

Construction in progress represents prepayments for property, plant and equipment, and the cost of property, plant and equipment, construction of which has not yet been completed. No depreciation is charged on such assets until they are ready for use.

The Company capitalises borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset.

Asset retirement obligations. According to the Code on Mineral Resources, Land Code of Ukraine, Mining Law, Law on Protection of Land and other legislative documents of Ukraine and the US, the Group is responsible for site restoration and soil rehabilitation upon abandoning its mines. Estimated costs of dismantling and removing an item of property, plant and equipment are added to the cost of an item of property, plant and equipment when the item is acquired. Changes in the measurement of an existing asset retirement obligation that result from changes in the estimated timing or amount of the outflows, or from changes in the discount rate are recognised as an adjustment to the cost of the respective asset through the income statement or other reserves in equity to the extent of any revaluation balance existence in respect of the related asset. Provisions in respect of abandonment and site restoration are evaluated and re-estimated annually, and are included in these consolidated financial statements at each balance sheet date at their expected net present value, using discount rates which reflect the economic environment in which the Group operates and are specific to a liability.

Goodwill. Goodwill on acquisitions of subsidiaries is presented separately in the consolidated balance sheet. It is carried at cost less accumulated impairment losses, if any. Gains and losses on the disposal of an entity or business unit include the carrying amount of goodwill relating to the entity or business unit disposed of.

Goodwill is allocated to cash generating units for the purposes of impairment testing. The allocation is made to those cash generating units or groups of cash generating units that are expected to benefit from the synergies of the business combination.

Other intangible assets. All of the Group's other intangible assets have definite useful lives and primarily include capitalised computer software and licences, mining licences, mining permits and coal reserves. Acquired computer software and other licences are capitalised on the basis of the costs incurred to acquire and bring them to use.

Other intangible assets are carried at cost less accumulated amortisation and impairment losses, if any. If impaired, the carrying amount of intangible assets is written down to the higher of value in use and fair value less costs of disposal. Cost of SAP ERP system is amortised on a straight-line basis over estimated useful life of 10 years. Licences and coal reserves are amortised using the units-of-production method over all estimated proven and probable reserve assigned to the mines. Proven and probable reserves exclude non-recoverable coal and ore reserves and estimated processing losses. Amortisation rates are updated when revisions to coal reserve estimates are made.

Impairment of non-financial assets. Goodwill is tested annually for impairment. Assets that are subject to depreciation are reviewed for impairment whenever events and changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the assets carrying amount exceeds its recoverable amount. The recoverable amount is the higher of fair value less cost to sell and value in use. For purposes of assessing impairment, assets are grouped to the lowest levels for which there are separately identifiable cash flows (cash generating unit). Non-financial assets, other than goodwill, that have suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Classification of financial assets. All the Group's financial assets are loans and receivables.

Loans and receivables are financial receivables created by the Group by providing money, goods or services directly to a debtor, other than those receivables which are created with the intention to be sold immediately or in the short term or which are quoted in an active market. Loans and receivables comprise primarily loans, trade and other accounts receivable including purchased loans and promissory notes. They are included in current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as non-current assets.

Initial recognition of financial instruments. The Group's principal financial instruments comprise loans and borrowings, cash and cash equivalents and short-term deposits. The Group has various other financial instruments, such as trade debtors and trade creditors, which arise directly from its operations.

The Group's financial assets and liabilities are initially recognised at fair value plus transaction costs. Fair value at initial recognition is best evidenced by the transaction price. A gain or loss on initial recognition is only recorded if there is a difference between fair value and transaction price which can be evidenced by other observable current market transactions in the same instrument or by a valuation technique whose inputs include only data from observable markets.

3 Basis of preparation and significant accounting policies (continued)

All purchases and sales of financial instruments that require delivery within the time frame established by regulation or market convention ("regular way" purchases and sales) are recorded at trade date, which is the date that the Group commits to deliver a financial instrument. All other purchases and sales are recognised on the settlement date with the change in value between the commitment date and settlement date not recognised for assets carried at cost or amortised cost.

Subsequent measurement of financial instruments. Subsequent to initial recognition, the Group's financial liabilities and loans and receivables are measured at amortised cost. Amortised cost is calculated using the effective interest rate method and, for financial assets, it is determined net of any impairment losses. Premiums and discounts, including initial transaction costs, are included in the carrying amount of the related instrument and amortised based on the effective interest rate of the instrument.

The face values of financial assets and liabilities with a maturity of less than one year, less any estimated credit adjustments, are assumed to approximate their fair values. The fair value of financial liabilities is estimated by discounting the future contractual cash flows at the current market interest rate available to the Group for similar financial instruments.

Derecognition of financial assets. The Group derecognises financial assets when (i) the assets are redeemed or the rights to cash flows from the assets have otherwise expired or (ii) the Group has transferred substantially all the risks and rewards of ownership of the assets or (iii) the Group has neither transferred nor retained substantially all risks and rewards of ownership but has not retained control. Control is retained if the counterparty does not have the practical ability to sell the asset in its entirety to an unrelated third party without needing to impose additional restrictions on the sale.

The Group enters into transactions in the normal course of business by which it transfers financial assets to third parties. Depending on the circumstances, these transfers may either result in these financial assets being derecognised or continuing to be recognised.

Full derecognition occurs when the Group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, and transfers substantially all the risks and rewards of ownership. The risks include credit, interest rate, foreign currency, prepayment and other price risks.

Derecognition does not occur when the Group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, but either:

- retains substantially all of the risks and rewards of ownership of the transferred asset; or
- neither retains nor transfers substantially all of the risks and rewards of ownership but has retained control of the financial asset. In this situation, the financial assets are recognised on the balance sheet to the extent of Group's continuing involvement.

Income taxes. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities. The income tax charge is recognised in the consolidated income statement except if it is recognised in other comprehensive income or directly in equity because it relates to transactions that are also recognised, in the same or a different period, in other comprehensive income or directly in equity.

Current tax is the amount expected to be paid to or recovered from the taxation authorities in respect of taxable profits or losses for the current and prior periods.

Deferred income tax is provided using the balance sheet liability method for tax loss carry forwards and temporary differences arising between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. In accordance with the initial recognition exemption, deferred taxes are not recorded for temporary differences on initial recognition of an asset or a liability in a transaction other than a business combination if the transaction, when initially recorded, affects neither accounting nor taxable profit. Deferred tax liabilities are not recorded for temporary differences on initial recognition of goodwill and subsequently for goodwill which is not deductible for tax purposes. Deferred tax balances are measured at tax rates enacted or substantively enacted at the balance sheet date which are expected to apply to the period when the temporary differences will reverse or the tax loss carry forwards will be utilised. Deferred tax assets and liabilities are netted only within the individual companies of the Group. Deferred tax assets for deductible temporary differences and tax loss carry forwards are recorded only to the extent that it is probable that future taxable profit will be available against which the deductions can be utilised.

Deferred income tax is provided on post-acquisition retained earnings and other post-acquisition movements in reserves of subsidiaries, except where the Group controls the subsidiary's dividend policy and it is probable that the difference will not reverse through dividends or otherwise in the foreseeable future.

Inventories. Inventories are recorded at the lower of cost and net realisable value. Cost of inventory is determined on the weighted average principle. The cost of finished goods and work in progress comprises raw material, direct labour, other direct costs and related production overheads based on normal operating capacity but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the cost of completion and selling expenses.

3 Basis of preparation and significant accounting policies (continued)

Trade and other financial receivables. Trade and other financial receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered to be indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the consolidated income statement against other operating expenses. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited in the consolidated income statement against other operating expenses.

If the terms of an impaired financial asset held at amortised cost are renegotiated or otherwise modified because of financial difficulties of the counterparty, impairment is measured using the original effective interest rate before the modification of terms. The renegotiated asset is then derecognised and a new asset is recognised at its fair value only if the risks and rewards of the asset substantially changed. This is normally evidenced by a substantial difference between the present values of the original cash flows and the new expected cash flows.

Prepayments. Prepayments are carried at cost less provision for impairment. A prepayment is classified as non-current when the goods or services relating to the prepayment are expected to be obtained after one year, or when the prepayment relates to an asset which will itself be classified as non-current upon initial recognition. Prepayments to acquire assets are transferred to the carrying amount of the asset once the Group has obtained control of the asset and it is probable that future economic benefits associated with the asset will flow to the Group. Other prepayments are charged to the income statement when the goods or services relating to the prepayments are received. If there is an indication that the assets, goods or services relating to a prepayment will not be received, the carrying value of the prepayment is written down accordingly and a corresponding impairment loss is recognised in the income statement.

Cash and cash equivalents. Cash and cash equivalents include cash in hand, deposits held at call with banks, and other short-term highly liquid investments with original maturities of three months or less. Restricted balances are excluded from cash and cash equivalents for the purposes of the cash flow statement. Balances restricted from being exchanged or used to settle a liability for at least twelve months after the balance sheet date are included in other non-current assets. Cash and cash equivalents are carried at amortised cost using effective interest rate method.

Share capital. Ordinary shares issued are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds. Any excess of the fair value of consideration received over the par value of shares issued is presented in the notes as a share premium.

Dividends. Dividends are recognised as a liability and deducted from equity at the balance sheet date only if they are declared before or on the balance sheet date. Dividends are disclosed when they are proposed before the balance sheet date or proposed or declared after the balance sheet date but before the financial statements are authorised for issue. If settlement of a dividend liability exceeds twelve months from the balance sheet date it is included within long-term liabilities and measured at the present value of the future cash flows required to settle the liability using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation.

Loans and borrowings. Loans and borrowings are recognised initially at fair value, net of transaction costs incurred and subsequently carried at amortised cost using the effective interest method.

Cash flows related to receipt and repayment of trade finance borrowings are presented within the statement of cash flows on a net basis.

Transaction fees paid related to debt restructuring (such as legal and consulting expenses) are presented within the financing activities of the consolidated statement of cash flows.

Trade and other financial payables. Trade payables are accrued when the counterparty performs its obligations under the contract and are recognised initially at fair value and subsequently carried at amortised cost using the effective interest method. Amortised cost is calculated by taking into account any transaction costs and any discount or premium on settlement.

Derecognition of financial liabilities. A substantial modification of the terms of an existing financial liability or a part of it is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10 per cent different from the discounted present value of the remaining cash flows of the original financial liability. The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, are recognised in profit or loss. If the exchange or modification of financial liability is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

Prepayments received. Prepayments are carried at amounts originally received, net of VAT.

3 Basis of preparation and significant accounting policies (continued)

Provisions for liabilities and charges. Provisions for liabilities and charges are non-financial liabilities recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Where the Group expects a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

Contingent assets and liabilities. A contingent asset is not recognised in the financial statements but disclosed when an inflow of economic benefits is probable. When the realisation of income is virtually certain, then the related asset is not a contingent asset and the Group recognises such assets.

Contingent liabilities are not recognised in the financial statements unless it is probable that an outflow of economic resources will be required to settle the obligation and it can be reasonably estimated. Contingent liabilities are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote.

Employee benefits. Defined benefit plan. Certain Ukrainian entities within the Group participate in a mandatory State defined retirement benefit plan, which provides for early pension benefits for employees working in certain workplaces with hazardous and unhealthy working conditions. Certain Ukrainian entities also provide lump sum benefits upon retirement subject to certain conditions, as well as some other long-term employee benefits. The liability recognised in the balance sheet in respect of the defined benefit pension plan is the present value of the defined benefit obligation at the balance sheet date. The defined benefit obligation is calculated annually by professional actuaries using the Projected Unit Credit Method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds (if there is no deep market for high quality corporate bonds) that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income. Past service costs are recognised immediately in profit or loss.

Revenue recognition. Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value-added tax and discounts and after eliminating sales within the Group.

The Group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met for each of the Group's activities as described below. The amount of revenue is not considered to be reliably measurable until all contingencies relating to the sale have been resolved. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(a) Sale of goods, by-products and merchandise

The Group manufactures and sells a range of steel products to large, medium and small size customers. By-products and merchandise are sold to the same range of customers. Revenues from sales of goods, by-products and merchandise are recognised at the point of transfer of risks and rewards of ownership of the goods, normally when the goods are shipped. The Group normally uses standardised Incoterms such as cost-and-freight (CFR), free-carrier (FCA), cost-insurance-freight (CIF), free-on-board (FOB) and ex-works (EXW) which define the point of risks and rewards transfer. Revenue is recorded on an accrual basis as earned.

Sales are recorded based on the price indicated in the specifications to the sales contracts. The sales price is established separately for each specification.

The Group also engages in sale and purchase transactions the objective of which is to manage cash flows and/or to sell the products of its joint ventures through the Group's sales channels and where the Group acts as an agent. Such transactions are not revenue generating to the Group and accordingly such sales and purchases are presented on a net basis with any gain or loss presented in other operating income / (expenses). Accounts receivable and payable from such transactions are presented gross.

(b) Interest income

Interest income is recognised on a time-proportion basis using the effective interest method. When a receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at original effective interest rate of the instrument, and continues unwinding the discount as interest income.

3 Basis of preparation and significant accounting policies (continued)

(c) Sale of services

Sales of services are recognised in the accounting period in which the services are rendered, by reference to stage of completion of the specific transaction assessed on the basis of the actual service provided as a proportion of the total services to be provided.

(d) Dividend income

Dividend income is recognised when the right to receive payment is established.

(e) Commission income

The Group acts as an agent for sales transactions on behalf of the third parties. The commission income received by the Group as a fee for facilitating such transactions is recognised at the point of transfer of risks and rewards of ownership of the goods to the customers of the third parties. Such income is reported as part of other operating income.

Value added tax. VAT in Ukraine where the majority of the Group operations are concentrated is levied at two rates: 20% on domestic sales and imports of goods, works and services and 0% on export of goods. Export of services is exempt from VAT. A taxpayer's VAT liability equals the total amount of VAT collected within a reporting period, and for domestic operations arises on the earlier of the date of shipping goods to a customer or the date of receiving payment from the customer; for export operations arises on the date of customs clearance of exported goods. A VAT credit is the amount that a taxpayer is entitled to offset against his VAT liability in a reporting period. For domestic and export operations rights to VAT credit arise when a VAT invoice is received, which is issued on the earlier of the date of payment to the supplier or the date goods are received. Where provision has been made for impairment of receivables, the impairment loss is recorded for the gross amount of the debtor, including VAT. VAT assets recoverable in cash from the State are included into Group's assets. All other VAT assets and liabilities are netted only within the individual companies of the Group.

Recognition of expenses. Expenses are accounted for on an accrual basis. Cost of goods sold comprises the purchase price, transportation costs, commissions relating to supply agreements and other related expenses.

Finance income and costs. Finance income and costs comprise interest expense on borrowings, pension obligations, losses on early repayment of loans, interest income on funds invested, income on origination of financial instruments and foreign exchange gains and losses.

Changes in presentation. Where necessary, corresponding figures have been adjusted to conform to changes in the presentation in the current year.

4 Critical accounting estimates and judgements in applying accounting policies

The Group makes estimates and assumptions that affect the reported amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. Judgements that have the most significant effect on the amounts recognised in the IFRS consolidated financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next financial year include:

Impairment of property, plant and equipment, goodwill and other intangible assets. The Group assesses whether goodwill is impaired based on the IAS 36 *Impairment of assets* requirements. The most recent detailed calculations for Metallurgical and Mining segments were performed as of 30 November 2016, as disclosed in Note 8. Management has carried forward these calculations in 2017, having considered that since then:

(a) the assets and liabilities making up these segments have not changed significantly. As disclosed in Note 7, the assets of Metallurgical segment located on the temporarily non-controlled territory were fully impaired in 2017; however, as concluded by management, this had no significant impact on the segment's recoverable amount as of 31 December 2017;

(b) the recoverable amount calculations performed last year resulted in the amounts that exceeded the carrying amounts of both segments by substantial margins; and

(c) the likelihood that a current recoverable amount determination as of 31 December 2017 would be less than the current carrying amount of the unit is remote, based on the management's analysis of events that have occurred and circumstances that have changed, including:

- the decrease in discount rates in 2017 compared to 2016 due to decrease in country risk which offsets certain increases in Group's cost of debt;

- increased gross margins in 2017 as compared to the estimates made in 2016 impairment test, mainly due to increase in steel and iron ore prices, as disclosed in Note 2, based on which the expected gross margins for 2018 and further periods have improved from the estimates made in impairment test for 2016.

4 Critical accounting estimates and judgements in applying accounting policies (continued)

Revaluation of property, plant and equipment. On an annual basis management of the Group carries out an analysis to assess whether carrying amounts of items of property, plant and equipment differ materially from that which would be determined using fair value at the end of the reporting period. The analysis is based on price indices, developments in technology, movements in exchange rates since the date of latest revaluation, profitability of underlying businesses and other relevant factors. Where the analysis indicates that the fair values of items of property plant and equipment differ materially from the carrying amounts, further revaluation is performed involving independent valuers.

As most of the Group's property, plant and equipment is of specialised nature, its fair value is determined using depreciated replacement cost (Level 3) or, where it is available, the market value (Level 2). For some assets the fair values as of reporting date were obtained using indexation of their carrying amounts for relevant cumulative price indices since the last revaluation date impacting the replacement cost used in measurement of depreciated replacement cost (Level 3).

The majority of the structures, plant and machinery are specialised in nature and are rarely sold in the open market in Ukraine other than as part of a continuing business. The market for similar property, plant and equipment is not active in Ukraine and does not provide a sufficient number of sales of comparable assets to allow for using a market-based approach for determining fair value. Consequently, the fair value of structures, plant and machinery was primarily determined using depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical, functional or economic depreciation, and obsolescence. The depreciated replacement cost was estimated based on internal sources and analysis of Ukrainian and international markets for similar property, plant and equipment. Various market data was collected from published information, catalogues, statistical data etc., and industry experts and suppliers.

When performing valuation using these methods, the key estimates and judgments applied by the independent valuers, in discussion with the Group's internal valuation team and technicians, are as follows:

- choice of information sources for construction costs analysis (actual costs recently incurred by the Group, specialised reference materials and handbooks, estimates for cost of construction of various equipment etc.);
- determination of similar items for replacement cost of certain equipment, as well as corresponding adjustments required to take into account differences in technical characteristics and condition of new and existing equipment;
- selection of market data when determining market value where it is available as well as corresponding adjustments required to take into account differences in technical characteristics and the condition of new and existing equipment;
- determination of applicable cumulative price indices which would most reliably reflect the change in fair value of assets revalued using indexation of carrying amounts;
- use of directories of per-unit replacement cost for buildings and constructions, assuming that all buildings and constructions of similar type and nature within industry have similar replacement costs; and
- liquidation value for items, which are expected to be realised, less cost to sell.

The fair values obtained using depreciated replacement cost and indexation of carrying amounts are validated using discounted cash flow models (income approach, Level 3), and are adjusted if the values obtained using income approach are lower than those obtained using depreciated replacement cost or indexation of carrying amounts (i.e. there is economic obsolescence). Key inputs into discounted cash flow models are consistent with the assumptions used for goodwill impairment testing (Note 8), except for discount rates which are specific to each of the Group's subsidiaries and are pre-tax.

Changes in the above estimates and judgments could have a material effect on the fair value of property, plant and equipment, which, however, is impracticable to quantify due to wide variety of assumptions and assets being valued.

Remaining useful lives of property, plant and equipment. The Group's management determines the estimated useful lives and related depreciation charges for its property, plant and equipment. This estimate is based on the technical characteristics, physical conditions, management's expectations on use of the respective assets and other factors. This affects depreciation charge and revaluation results.

Remaining useful lives for iron ore mining licences and coal reserves (Note 9) are estimated by management based on reserves' studies performed by independent experts. Results of such studies depend, inter alia, on expert's assessment of geological conditions and feasibility of extraction of mineral resources which is dependent on future levels of prices for iron ore and coking coal and costs of such extraction.

Impairment of trade and other accounts receivable. Management estimates the likelihood of the collection of trade and other accounts receivable based on an analysis of individual accounts. IAS 39 requires to estimate the impairment loss which is computed as the difference between the carrying value of a receivable and the present value of the future cash flows discounted at the receivables effective interest rate.

4 Critical accounting estimates and judgements in applying accounting policies (continued)

During 2015 and 2016, the Group recognised full impairment of trade receivables from some of its key customers in the total amount of USD 534 million. Factors taken into consideration by management when estimating the future cash flow included an ageing analysis of trade and other accounts receivable, and the financial position and performance of and collection history with the customer. In the current environment there is significant judgement in estimating whether the impaired trade and other receivables and any related penalty interest will be collected. During 2017 the Group commenced sales of iron ore, coke and coal products for the use by one of these customers. All the metal produce of this customer is purchased by the Group and resold externally. All the transactions are performed at an arms-lengths basis. These are not linked to the existing old impaired debt due to the Group thus impairment was not reversed.

Additionally, the estimates used to assess the impairment of trade and other accounts receivable from certain Ukrainian customers are impacted by the uncertainty caused by events in Eastern Ukraine (see discussion of operating environment in Note 2).

Related party transactions. In the normal course of business the Group enters into transactions with related parties. Judgement is applied in determining if transactions are priced at market or non-market terms, where there is no active market for such transactions, and also in estimating the timing of settlement of the balances due from related parties, where there is a history of prolongations. Financial instruments are recorded at origination at fair value using the effective interest method. The Group's accounting policy is to record gains and losses on related party transactions, other than business combination or equity investments, in the income statement. The basis for judgement is pricing for similar types of transactions with unrelated parties and an effective interest rate analysis.

Further, estimation of timing of settlement and recoverability of balances due from related parties requires judgement. Ability of shareholders and parties under their control to repay the amounts due to the Group is dependent to large extent on cash flows from the Group. Such cash flows in the current circumstances may be limited (Note 19). Herewith, the Group is in net payable position with major groups of its related parties (Note 29). No impairment was recognised in respect of balances due from related parties in these consolidated financial statements.

Deferred income tax asset recognition. The recognised deferred tax asset represents income taxes recoverable through future deductions from taxable profits and is recorded in the consolidated balance sheet. Deferred income tax assets are recorded to the extent that realisation of the related tax benefit is probable. The future taxable profits and the amount of tax benefits that are probable in the future are based on the long term strategy and plans prepared by management. The strategy is based on management's expectations that are believed to be reasonable under the circumstances and are disclosed in Note 8. In addition, a number of feasible tax planning opportunities are available to the Group to recover the deferred tax asset recognised.

Further, management exercised significant judgement in their assessment whether deferred tax asset related to impaired trade receivables from certain key customers (Note 14) can be recognised as at 31 December 2017 and 31 December 2016. Management estimated that it is not probable that the Group's subsidiaries will be able to realise the tax benefit of the respective deductible temporary differences to the full extent. As a result, as of 31 December 2017 and 2016 deferred tax asset of USD 26 million was recognised while deferred tax asset of USD 17 million was not recoverable. Recognition of deferred tax asset is supported by proper tax planning performed by management which conforms to the Ukrainian tax legislation. Changes in the estimates and judgements made could have a material effect on these consolidated financial statements.

Post-employment and other long-term employee benefits obligations. Management assesses post-employment and other long-term employee benefit obligations using the Projected Unit Credit Method based on actuarial assumptions which represent management's best estimates of the variables that will determine the ultimate cost of providing post-employment and other employee benefits. Since the plan is administered by the State of Ukraine, the Group may not have full access to information and therefore assumptions regarding when, or if, an employee takes early retirement, whether the Group would need to fund pensions for ex-employees depending on whether that ex-employee continues working in hazardous conditions, the likelihood of employees transferring from State funded pension employment to Group funded pension employment could all have a significant impact on the pension obligation.

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The major assumptions used in determining the net cost (income) for pensions include the discount rate and future salary and benefits increase rate. Any changes in these assumptions will impact the carrying amount of pension obligations as disclosed in sensitivity analysis in Note 21.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability. Other key assumptions for pension obligations are based in part on the current market conditions. Additional information is disclosed in Note 21.

4 Critical accounting estimates and judgements in applying accounting policies (continued)

Tax legislation. Ukrainian tax, currency and customs legislation continues to evolve. Conflicting regulations are subject to varying interpretations. Management believes its interpretations are appropriate and sustainable, but no guarantee can be provided against a challenge from the tax authorities (Note 28).

Functional currency. Judgement was applied in determining the functional currency of Metinvest B.V., which is a holding company for operations of the Group in Ukraine, Italy, the United States of America and other countries. The functional currency of Metinvest B.V. was determined on the basis that (i) in management's opinion Metinvest B.V. is not an extension of and is not integral to the Ukrainian operations; (ii) the primary economic exposures are to a number of countries; and (iii) Metinvest B.V. retains cash and obtains financing in US Dollars. Management therefore determined the US Dollar as the functional currency of Metinvest B.V. Amount of net payables of Metinvest B.V. totalled USD 628 million as at 31 December 2017 (31 December 2016: USD 2,111 million) where potential foreign exchange gains/losses could arise should a different functional currency (UAH) be determined.

Loss of control over the assets located on the temporarily non-controlled territory

As explained in Note 7, the Group lost control over the assets located on the temporarily non-controlled territory. The Group accounted for this event as impairment of related property, plant, and equipment and inventories, and, accordingly, recognised the impairment through Other Comprehensive Income to the extent of existing revaluation reserve and recognised further impairment loss through the profit and loss. Also, the Group has determined that the operations located on the temporarily non-controlled territories over which control was lost do not represent a disposal of foreign operations as defined in IAS 21.

Operations of the entities located on the temporarily non-controlled territory are not a major line of business and not a separate geographical segment therefore, the management believes that these activities do not represent discontinued operations.

(I) Control over the legal entities whose operations on the temporarily non-controlled territory were lost. The Group retains a legal ownership over the entities whose physical assets and production activities are located on the temporarily non-controlled territories. Management determined that it retains control over these entities as these entities are registered on the controlled territory of Ukraine and the Group continues to perform transactions in accordance with Ukrainian legislation. Thus, the Group continues to consolidate the remaining assets (largely trade and other receivables) and liabilities of those entities and accounted for the loss of control of tangible assets as their impairment.

Would the position be adopted that control over the legal entities is lost as at 15 March 2017, the net assets of the entities in the amount of USD 13 million (before the impairment disclosed in Note 7) would be deconsolidated and the fair value of accounts payable due to the entities and accounts receivable due from the entities would be recognised. Additionally, a reclassification of USD 601 million of accumulated net negative Currency Translation Reserve ("CTR") from Other Comprehensive Income to profit and loss in the Income Statement would have been required. If the legal entities are disposed of or abandoned in the future, the full amount of CTR as of that date would need to be reclassified from Other Comprehensive Income to the profit and loss.

(ii) Currency translation reserve related to entities located on the temporarily non-controlled territory. The lost operations have not been consolidated directly but only together with the remaining operations of each of the legal entity, which continue to exist and be controlled by the Group. Operations and management were structured in such a way that each legal entity in its entirety was considered to be one entity and, therefore, the lost part of an entity does not represent a branch or a business. Thus the management determined that these operations do not represent a disposal of foreign operations as defined in IAS 21 The Effects of Changes in Foreign Exchange Rates and therefore no accumulated CTR on those entities is reclassified to profit and loss. Would it be determined that operations lost represent a disposal of foreign operations, the accumulated CTR relating to those operations would need to be reclassified from Other Comprehensive Income to the profit and loss, resulting in negative charge to Income Statement and no impact on total Comprehensive Income for the period.

If all the net assets of the entities located on the temporarily non-controlled territory were derecognised, the negative charge of CTR in income statement would have been USD 601 million, as stated above; the exact amount of the charge would depend on whether only part or all the assets and liabilities of these entities were derecognised. Thus this charge would be significantly larger if only assets and (or) some liabilities of these entities were derecognised.

(iii) Impairment of property, plant and equipment located on the temporarily non-controlled territory. Management has determined that the loss of control over the physical assets does not require the derecognition of these assets as the Group still holds the legal title over these assets as their seizure is illegal and might be temporary. Moreover, the Group may still be able to claim some compensation for the assets through international courts.

As such, management of the Group has performed a revaluation of respective property, plant and equipment and determined that the value of these assets is zero, thus recognising USD 205 million as decrease of previously recognised revaluation in Other Comprehensive Income and USD 228 million as impairment charge in profit and loss. Would the judgement is made that the assets are derecognised, the whole amount of USD 433 million of decrease of carrying value of property, plant and equipment would need to be charged as impairment in profit and loss (Note 7). Additionally, the remaining revaluation reserve related to these assets in the amount of USD 330 million (remained upon translation to presentation currency and raised on difference in exchange rates prevailing at revaluation date and average rates at which its annual utilisation was translated in subsequent years) would need to be transferred to retained earnings.

5 Adoption of new or revised standards and interpretations

The following standards and interpretations apply for the first time to financial reporting periods commencing on or after 1 January 2017:

- **Amendments to IAS 7: Disclosure Initiative** The amended IAS 7 requires disclosure of a reconciliation of movements in liabilities arising from financing activities, see Note 19.
- **Amendments to IAS 12: Recognition of Deferred Tax Assets for Unrealised Losses** The amendment has clarified the requirements on recognition of deferred tax assets for unrealised losses on debt instruments. The entity will have to recognise deferred tax asset for unrealised losses that arise as a result of discounting cash flows of debt instruments at market interest rates, even if it expects to hold the instrument to maturity and no tax will be payable upon collecting the principal amount. The economic benefit embodied in the deferred tax asset arises from the ability of the holder of the debt instrument to achieve future gains (unwinding of the effects of discounting) without paying taxes on those gains. The above amendment did not have any significant impact on the Group's financial statements.

The following new standards, which are relevant to the Group's financial statements, have been issued, but have not been endorsed by the European Union:

- **Annual Improvements to IFRS Standards 2015-2017 Cycle – amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23** (issued on 12 December 2017 and effective for annual periods beginning on or after 1 January 2019);
- **Annual Improvements to IFRS Standards 2014-2016 Cycle** (issued on 8 December 2016 and effective for annual periods beginning on or after 1 January 2018);
- **IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration** (issued on 8 December 2016 and effective for annual periods beginning on or after 1 January 2018);
- **IFRIC 23 Uncertainty over Income Tax Treatments** (issued on 7 June 2017 and effective for annual periods beginning on or after 1 January 2019).

The following new standards which are relevant to the Group's consolidated financial statements, have been issued and endorsed by the European Union, but have not been effective for financial periods beginning on or after 1 January 2017:

- **IFRS 16 Leases** (issued on 13 January 2016 and effective for annual periods beginning on or after 1 January 2019). All leases result in the lessee obtaining the right to use an asset at the start of the lease and, if lease payments are made over time, also obtaining financing. Accordingly, IFRS 16 eliminates the classification of leases as either operating leases or finance leases as is required by IAS 17 and, instead, introduces a single lessee accounting model. Lessees will be required to recognise: (a) assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value; and (b) depreciation of lease assets separately from interest on lease liabilities in the income statement. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

IFRS 16 will require the Group to recognise in the balance sheet assets taken in an operating lease and the related lease liabilities. Management has initiated an exercise to calculate the impact of this new standard. Based on preliminary calculation the Group will recognise Right-of-use assets and respective Lease liability approximating to USD 20 million as at 1 January 2019. Management intends to apply the simplified transition approach and will not restate comparative amounts for the year prior to the adoption.

- **IFRS 9, Financial Instruments** (effective for annual periods beginning on or after 1 January 2018). Key features of the new standard are:

Financial assets are required to be classified into three measurement categories: those to be measured subsequently at amortised cost, those to be measured subsequently at fair value through other comprehensive income (FVOCI) and those to be measured subsequently at fair value through profit or loss (FVPL).

Classification for debt instruments is driven by the entity's business model for managing the financial assets and whether the contractual cash flows represent solely payments of principal and interest (SPPI). If a debt instrument is held to collect, it may be carried at amortised cost if it also meets the SPPI requirement. Debt instruments that meet the SPPI requirement that are held in a portfolio where an entity both holds to collect assets' cash flows and sells assets may be classified as FVOCI. Financial assets that do not contain cash flows that are SPPI must be measured at FVPL (for example, derivatives). Embedded derivatives are no longer separated from financial assets but will be included in assessing the SPPI condition.

Investments in equity instruments are always measured at fair value. However, management can make an irrevocable election to present changes in fair value in other comprehensive income, provided the instrument is not held for trading. If the equity instrument is held for trading, changes in fair value are presented in profit or loss.

When the standard is effective, the Group will debit the amortised amount of the USD 56 million of previously capitalised effect of modification of borrowings in March 2017 to retained earnings as of 1 January 2018.

5 Adoption of new or revised standards and interpretations (continued)

Management is implementing a new impairment model that requires the recognition of impairment provisions based on expected credit losses (ECL) rather than only incurred credit losses as is the case under IAS 39. Based on the assessments undertaken to date, the Group expects some increase in the loss allowance for its financial assets, though this is not expected to be significant to the Group.

The new standard also introduces expanded disclosure requirements and changes in presentation. These are expected to change the nature and extent of the group's disclosures about its financial instruments particularly in the year of the adoption of the new standard.

The Group will apply the new rules retrospectively from 1 January 2018, with the practical expedients permitted under the standard, and account the impact within retained earnings as of 1 January 2018. Comparatives for 2017 will not be restated.

- **IFRS 15, Revenue from Contracts with Customers** (effective for the periods beginning on or after 1 January 2018). The new standard introduces the core principle that revenue must be recognised when the goods or services are transferred to the customer, at the transaction price. Any bundled goods or services that are distinct must be separately recognised, and any discounts or rebates on the contract price must generally be allocated to the separate elements. When the consideration varies for any reason, minimum amounts must be recognised if they are not at significant risk of reversal. Costs incurred to secure contracts with customers have to be capitalised and amortised over the period when the benefits of the contract are consumed.

The Group has analysed the requirements of the standard and has assessed the change in timing of satisfaction of performance obligations. The Group provides freight services to the customers as part of standard products sales contract. Management considers that according to IFRS 15 freight services should be treated as separate performance obligations and should be recognised over the transportation period. Based on preliminary calculation, the effect of this change would lead to recognition of the contract asset and liability as at 1 January 2018, with revenue and related distribution costs in amount not exceeding USD 7 million being deferred to 2018. Thus, this change will not have a significant impact on net assets, profit and loss or adjusted EBITDA. Also management is considering the agent versus principal relationships indicators on provision of transportation services provided by the Group to external customers. Although the analysis is not finalised yet, it is not expected that the change will have a major impact on the amount of the Group revenues.

Management intends to adopt the standard using the modified retrospective approach which means that the cumulative impact of the adoption will be recognised in retained earnings as of 1 January 2018 and that comparatives will not be restated.

- **Clarifications to IFRS 15 Revenue from Contracts with Customers** (issued on 12 April 2016 and effective for annual periods beginning on or after 1 January 2018).

Other new or revised standards or interpretations that will become effective for annual periods starting on or after 1 January 2018 will likely have no material impact to the Group.

6 Segment information

The Group's business is organised on the basis of the following main reportable segments:

- Metallurgical – comprising the production and sale of coke, semi-finished and finished steel products;
- Mining – comprising the production, enrichment and sale of iron ore and coal by the Group's Ukrainian operations and UCC, the Group's US coal operations. Output of the Group's mining business covers iron ore and coking coal needs of the Group's steelmaking business with surplus sold to third parties. While management reviews financial information of UCC separately from other mining operations, UCC operating segment has been aggregated with the Group's Ukrainian mining operations into the Mining reportable segment. The two operating segments were aggregated into one reportable segment as they have similar nature of products (mineral commodities used in metallurgy) and production processes (underground and open-pit mining with further enrichment), and sell products to customers in metallurgical industry and commodity traders. Prices for their products depend on global benchmark prices for hard coking coal and iron ore; as such their margins and growth rates show comparable dynamics over longer term.

As the Group entities are present in various jurisdictions, there are some differences in regulatory environment; however, they have no significant impact on segments' operating and financing activities. Segmentation presented in these consolidated financial statements is consistent with the structure of financial information regularly reviewed by the Group's management, including Chief Operating Decision Maker (CODM).

Operating segments' performance is assessed based on a measure of adjusted EBITDA. This measurement basis excludes dividend income, impairment of goodwill, other intangible assets and property, plant and equipment, the effects of non-recurring expenditures from the operating segments and foreign exchange gains / losses. Revenues and expenses for internal reporting purposes have been accounted for using IFRS principles. Certain adjustments are applied by management to contractual prices for intersegment sales.

Segment information for the year ended 31 December 2017 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2017					
Sales – external	7,411	1,520	-	-	8,931
Sales to other segments	53	1,940	-	(1,993)	-
Total of the reportable segments' revenue	7,464	3,460	-	(1,993)	8,931
Adjusted EBITDA	673	1,190	(79)	(65)	1,719
Share in EBITDA of joint ventures	135	190	-	-	325
Adjusted EBITDA including share in EBITDA of joint ventures	808	1,380	(79)	(65)	2,044
<i>Reconciling items:</i>					
Depreciation and amortisation	(285)	(226)	(14)	-	(525)
Impairment of PPE and other intangible assets	(226)	(58)	-	-	(284)
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					(134)
Finance income					29
Finance costs					(350)
Foreign exchange gains less losses, net					66
Impairment of associate					(7)
Other					2
Profit before income tax					841
	Metallurgical	Mining	Corporate		Total
Capital expenditure	275	258	9		542
Significant non-cash items included into adjusted EBITDA:					
- Impairment of inventories recognised as a result of loss of control over the assets located on the temporarily non-controlled territory	81	11	-		92

6 Segment information (continued)

Segment information for the year ended 31 December 2016 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2016					
Sales – external	5,027	1,196	-	-	6,223
Sales to other segments	77	1,071	-	(1,148)	-
Total of the reportable segments' revenue	5,104	2,267	-	(1,148)	6,223
Adjusted EBITDA	572	428	(76)	(56)	868
Share in EBITDA of joint ventures	165	120	-	-	285
Adjusted EBITDA including share in EBITDA of joint ventures	737	548	(76)	(56)	1,153
<i>Reconciling items:</i>					
Depreciation and amortisation	(294)	(222)	(13)	-	(529)
Impairment and revaluation of PPE and other intangible assets	(25)	(9)	-	-	(34)
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					(80)
Finance income					26
Finance costs					(397)
Foreign exchange gains less losses, net					18
Other					2
Profit before income tax					159

	Metallurgical	Mining	Corporate	Total
Capital expenditure	196	174	4	374
Significant non-cash items included into adjusted EBITDA:				
- impairment of trade and other receivables	(70)	(157)	-	(227)

Analysis of revenue by category:

	Metallurgical	Mining	Total
2017			
Sales of own products	5,028	1,367	6,395
- Steel products	4,433	-	4,433
- Iron ore products	-	1,264	1,264
- Coal and coke	445	96	541
- Other	150	7	157
Resale of purchased goods	2,383	153	2,536
- Steel products	2,076	-	2,076
- Coal and coke	125	119	244
- Other	182	34	216
Total	7,411	1,520	8,931

6 Segment information (continued)

Analysis of revenue by category:

	Metallurgical	Mining	Total
2016			
Sales of own products	3,816	1,118	4,934
- Steel products	3,480	-	3,480
- Iron ore products	-	978	978
- Coal and coke	218	136	354
- Other	118	4	122
Resale of purchased goods	1,211	78	1,289
- Steel products	1,066	-	1,066
- Coal and coke	41	38	79
- Other	104	40	144
Total	5,027	1,196	6,223

The Group's two business segments operate in six main geographical areas. Revenue by location of customers is presented below:

2017	Metallurgical	Mining	Total
Ukraine	1,889	578	2,467
Rest of Europe	2,605	614	3,219
Middle East and Northern Africa	1,469	-	1,469
South Eastern Asia	197	308	505
Commonwealth of Independent States ("CIS")	775	-	775
North America	416	20	436
Other countries	60	-	60
Total	7,411	1,520	8,931

2016	Metallurgical	Mining	Total
Ukraine	1,129	477	1,606
Rest of Europe	1,989	278	2,267
Middle East and Northern Africa	948	1	949
South Eastern Asia	76	337	413
Commonwealth of Independent States ("CIS")	591	-	591
North America	217	103	320
Other countries	77	-	77
Total	5,027	1,196	6,223

As at 31 December 2017 and 31 December 2016, 92% of the Group's non-current assets, other than financial instruments and deferred tax assets, were located in Ukraine.

7 Loss of control over the assets located on the temporarily non-controlled territory

In February 2017, the self-proclaimed authorities on the temporarily non-controlled territory announced their intention to seize businesses located on the temporarily non-controlled territory and to require them to comply with local fiscal, regulatory and other requirements, which contradict Ukrainian legislation. On 15 March 2017, the Group determined that it had lost control over the operations of entities located on the temporarily non-controlled territory, including: PrJSC Yenakieve Iron and Steel Works; JV Metalen LLC; PrJSC Makiivka Iron and Steel Works; PrJCS Krasnodon Coal Company; PrJSC Khartsyzsk Pipe Plant; PrJSC Komsomolske Flux Plant; and PrJSC Donetskcoke.

Combined Income Statement and Statement of Comprehensive Income of these subsidiaries is presented below:

	2017	2016
Revenue	137	702
Cost of sales	(122)	(661)
Gross profit	15	41
Distribution costs	(7)	(37)
General and administrative expenses	(4)	(17)
Other operating income/ (expenses), net	13	(12)
Operating profit / (loss)	17	(25)
Results of the loss of control over the assets located on temporarily non-controlled territory	(293)	-
Finance income	-	40
Finance costs	(49)	(58)
Loss before income tax	(325)	(43)
Income tax (expense) / credit	(27)	8
Loss for the period	(352)	(35)
Loss attributable to:		
Owners of the Company	(327)	(33)
Non-controlling interests	(25)	(2)
Loss for the period	(352)	(35)
Other comprehensive income / (loss):		
<i>Items that may be reclassified subsequently to profit or loss:</i>		
Currency translation differences	8	(35)
<i>Items that will not be reclassified to profit or loss:</i>		
Revaluation decreases that offset previous increases in the carrying amount of property, plant and equipment	(205)	-
Remeasurement of retirement benefit obligations	4	26
Income tax related to items that will not be reclassified subsequently to profit or loss	35	(5)
Total other comprehensive loss	(158)	(14)
Total comprehensive loss for the period	(510)	(49)
Total comprehensive loss attributable to:		
Owners of the Company	(479)	(49)
Non-controlling interest	(31)	-
Total comprehensive loss for the period	(510)	(49)

With respect to figures included within the disclosure above, trading operations presented until 15 March 2017, the moment when control was lost, and administrative expenses incurred during the entire 2017.

As of 15 March 2017, these subsidiaries' aggregate consolidated tangible assets located on the temporarily non-controlled territory amounted to USD 515 million (5% of the Group's total consolidated assets). Due to losing control over the assets located on the temporarily non-controlled territory in March 2017, management of the Group performed a revaluation of property, plant and equipment and determined that the value of these assets is zero. Also, other assets (inventories and certain intangible assets) of these subsidiaries were fully impaired. This resulted in the recognition of Property, Plant and Equipment impairment amounting to USD 433 million and impairment of inventory and replaceable equipment amounting to USD 82 million.

7 Loss of control over the assets located on the temporarily non-controlled territory (continued)

Management derecognises financial liabilities from the balance sheet when, and only when, the obligation specified in the contract is discharged or cancelled or expires. The amounts below derecognised represent management's assessment based on its analysis and evidence obtained to date. This accounting estimate may change in the future.

As a consequence of the loss of control over the operations of entities located on the temporarily non-controlled territory and the resultant dismissal of employees of these subsidiaries, management remeasured the retirement benefit obligation. The decrease in the obligation was primarily a result of applying an assumption that employees dismissed during 2015-2017 continue to work on the temporarily non-controlled territory and thus are unable to gain required experience to be entitled for preferential retirement under Ukrainian legislation. In addition, it was assumed that only a part of pensioners eligible for early pension will register on Ukrainian territory and claim for their pensions. The resulting USD 18 million gain from the change of the above assumptions were recorded in other comprehensive income.

Further, the obligations under collective bargaining agreements were decreased to reflect the loss of control over the operations producing such coal/domestic fuel for settlement of these.

Due to uncertainty of these entities' future taxable income, the Group reassessed the realisability of deferred tax assets attributable to reporting period losses as well as tax losses carry forward as at 31 December 2016. Thus, the Group did not recognise deferred tax asset of USD 63 million relating to 2017 losses and wrote-down deferred tax arisen on accumulated tax losses of prior periods in the amount of USD 20 million.

The above events have also affected subsidiaries whose operations are physically located on the controlled territory. As such, the Group charged impairment provision on tangible assets located on the temporarily non-controlled territory, but belonging to the subsidiaries whose operations are physically located on the controlled territory, as a result of the inability to access such assets. This resulted in recognition of an additional Property, plant and equipment impairment of USD 19 million and impairment of inventory and replaceable equipment of USD 10 million.

Total result of loss of control over the operations of these subsidiaries charged to the Consolidated Statement of Comprehensive Income of the Group is as follows:

	Recognised in profit and loss	Recognised in Other comprehensive income	Total
Result of loss of control over the assets of subsidiaries whose operations are located on the temporarily non-controlled territory:			
Property plant and equipment (Notes 4 and 10)	228	205	433
Inventory	82	-	82
Intangible assets	2	-	2
Retirement benefit obligations	(15)	(18)	(33)
Other non-current liabilities	(4)	-	(4)
Total loss attributable to the assets of subsidiaries located on the temporarily non-controlled territory:	293	187	480
Result of loss of control over certain assets of subsidiaries whose operations are located on the controlled territory, but certain assets were temporarily located on the temporarily non-controlled territory:			
Property plant and equipment	19	-	19
Inventory	10	-	10
Investment in associate	7	-	7
Total loss attributable to the assets of subsidiaries located on the controlled territory:	36	-	36
Total loss	329	187	516

The Group also recognised impairment of JSC Yenakievskiy Koksohimprom of USD 7 million as operations of this associate are also located on the temporarily non-controlled territory.

Management have sought to actively manage and limit the impact of these events on the Group's operations by adopting a number of contingency arrangements.

8 Goodwill

The movements of goodwill were as follows:

	2017	2016
As at 1 January		
Original amount	1,222	1,303
Accumulated impairment	(679)	(702)
Net carrying amount	543	601
Currency translation differences	60	(58)
As at 31 December		
Original amount	1,315	1,222
Accumulated impairment	(712)	(679)
Net carrying amount	603	543

Management allocates and monitors goodwill at the following groups of cash generating units ("CGUs") which represent operating segments:

	31 December 2017	31 December 2016
Metallurgical	556	493
Mining	47	50
Total	603	543

As described in Note 4, management has analysed the events that have occurred and circumstances that have changed since the last year goodwill impairment testing performed, including the areas of discount rate, gross margins earned and lost assets as disclosed in Note 7, and concluded that the likelihood that a current recoverable amount determination as of 31 December 2017 would be less than the current carrying amount of the unit is remote. As such, the relevant goodwill impairment testing details has been carried forward from the preceding period.

The recoverable amount has been determined based on fair value less cost to sell estimations.

To ensure that the impairment testing model fully reflects the anticipated long-term changes in cash flows, for the impairment test the Group used cash flow projections for 10 years which are consistent with the Group's strategy approved by senior management; the first year of forecast is based on the Group's approved business plan for the year.

The valuation method used for determination of each CGU fair value is mostly based on unobservable market data, which is within Level 3 of the fair value hierarchy.

The following table and further paragraphs summarise key assumptions on which management has based its cash flow projections to undertake the impairment testing of goodwill:

	2016
Metallurgical	
Post-tax discount rate (USD)	11.67%
EBITDA margins (based on FCA prices)	2017: 15%, 2018: 20%, further – from 14% to 20%
Growth rate in perpetual period	3%
Mining	
Post-tax discount rate (USD)	12.07%
EBITDA margins (based on FCA prices)	2017: 37%, 2018: 20%, further – from 27% to 35%
Growth rate in perpetual period	3%

The values assigned to the key assumptions represent management's assessment of future trends in the business and are based on both external and internal sources.

8 Goodwill (continued)

Discount rate reflects the current market assessment of the time value of money and risks specific to the Group. The discount rate has been determined using the Capital Asset Pricing Model based on observable inputs, inputs from third party financial analysts and Group-specific inputs.

Forecasted benchmark iron ore prices for Fe 62% fines (CFR North China) are USD 60 per tonne in 2017, USD 48 per tonne in 2018 and recover at 4% p.a. to USD 64 per tonne in 2026. Forecasted prices for other iron ore products and prices at other markets were determined based on respective discounts or premiums for Fe content, pelletizing premiums, applicable transportation costs and historic discounts or premiums usual for those markets.

Forecasted coal prices used in the impairment test for all CGUs for low volatile hard coking coal (FOB Queensland) start from USD 161 per tonne in 2017, USD 124 per tonne in 2018 and grow at 2.25% p.a. on average thereafter. Forecasted prices for other types of coal and prices at other markets were determined based on respective historic discounts for differences in quality of each particular coal type and estimated transportation costs.

Forecasted prices for hot-rolled coils at Ukrainian ports used in the impairment test were estimated based on the benchmark (Metal Expert HRC CIS export FOB Black Sea). Forecasted prices are expected to reach USD 476 per tonne in 2026 from year-end levels. Forecasted prices for other steel products are based on historic discounts or premiums to prices for hot-rolled coils.

Forecasts from industry experts and other external reputable sources, as well as internal analysis were used by management to determine price levels used in the impairment test.

An exchange rate of 27 UAH for 1 USD in 2017 with gradual increase to 31.7 UAH for 1 USD in 2026 was used in the impairment test for all CGUs as of 31 December 2016.

Metallurgical segment. As at 31 December 2016, the Metallurgical segment's recoverable amount is USD 5,283 million and exceeds its total carrying amount by USD 1,096 million. The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of goodwill (and subsequently to property, plant and equipment and intangible assets) related to the Metallurgical segment:

	31 December 2016
Volumes of production/sales	
Decrease in all the periods by 5.2%	-
Decrease in all the periods by 7.4%	Recoverable amount equals carrying amount
Decrease in all the periods by 9.0%	Impairment of USD 229 million required
Steel prices	
Decrease in all the periods by 1.4%	-
Decrease in all the periods by 1.8%	Recoverable amount equals carrying amount
Decrease in all the periods by 2.6%	Impairment of USD 462 million required
Decrease in all the periods by 4.0%	Impairment of USD 1,302 million required
Iron ore prices	
Increase in all the periods by 7.5%	-
Increase in all the periods by 10.0%	-
Increase in all the periods by 14.6%	Recoverable amount equals carrying amount
Increase in all the periods by 17.0%	Impairment of USD 183 million required
Coal prices	
Increase in all the periods by 9.0%	-
Increase in all the periods by 11.1%	Recoverable amount equals carrying amount
Increase in all the periods by 15.0%	Impairment of USD 382 million required

8 Goodwill (continued)

31 December 2016

UAH/USD exchange rates

Increase in all the periods by UAH 1

Recoverable amount increases
by USD 423 million

Discount rates

Increase in all the periods by 2.1 pp

-

Increase in all the periods by 2.3 pp

-

Increase in all the periods by 5.3 pp

Recoverable amount equals
carrying amount

Increase in all the periods by 7.0 pp

Impairment of USD 308 million
required

Growth rate in perpetual period

No reasonable changes would
lead to impairment

Mining segment. As at 31 December 2016, the recoverable amount of the Mining segment is USD 2,036 million and exceeds its total carrying amount by USD 453 million. The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of goodwill related to this group of CGUs:

31 December 2016

Iron ore prices

Decrease in all the periods by 0.8%

-

Decrease in all the periods by 3.3%

Recoverable amount equals
carrying amount

Decrease in all the periods by 5.0%

Impairment of USD 231 million
required

Decrease in all the periods by 10.0%

Impairment of USD 915 million
required

UAH/USD exchange rates

Increase in all the periods by UAH 1

Recoverable amount increases
by USD 129 million

Discount rates

Increase in all the periods by 0.5 pp

-

Increase in all the periods by 1.7 pp

-

Increase in all the periods by 2.2 pp

Recoverable amount equals
carrying amount

Increase in all the periods by 5.0 pp

Impairment of USD 291 million
required

Growth rate in perpetual period

No reasonable changes would
lead to impairment

UCC. The table summarising the impact of changes in main assumptions to the impairment of property, plant and equipment of UCC group of CGUs is disclosed in note 10.

9 Other intangible assets

The movements of other intangible assets were as follows:

	Coal reserves	Licenses and mining permits	Other intangible assets	Total
As at 1 January 2016				
Cost	418	241	209	868
Accumulated amortisation and impairment	(411)	(122)	(171)	(704)
Net carrying amount	7	119	38	164
Additions	-	-	5	5
Impairment (Note 8)	(7)	-	-	(7)
Currency translation differences	-	(13)	(4)	(17)
Amortisation	-	(13)	(7)	(20)
As at 31 December 2016				
Cost	418	213	208	839
Accumulated amortisation and impairment	(418)	(120)	(176)	(714)
Net carrying amount	-	93	32	125
Impairment (Note 8)	-	(4)	(2)	(6)
Additions	-	14	9	23
Currency translation differences	-	(3)	-	(3)
Amortisation	-	(12)	(7)	(19)
As at 31 December 2017				
Cost	418	220	215	853
Accumulated amortisation and impairment	(418)	(132)	(183)	(733)
Net carrying amount	-	88	32	120

The iron ore license is being amortised using the units-of-production method over its remaining useful life of approximately 8 years.

The coal reserves were acquired as part of the acquisition of UCC in 2009. The coal reserves are being amortised using the units-of-production method over their useful lives of approximately 6-30 years. As at 31 December 2017 and 31 December 2016, these reserves were fully impaired.

10 Property, plant and equipment

The movements of property, plant and equipment were as follows:

	Land	Buildings and structures	Plant and machinery	Furniture, fittings and equipment	Construction in progress	Total
Cost or valuation						
As at 1 January 2016	50	1,882	3,383	67	447	5,829
Additions	-	-	-	-	369	369
Transfers	-	72	134	3	(209)	-
Disposals	-	(12)	(36)	(11)	(2)	(61)
Reclassification to inventory	-	-	-	-	(11)	(11)
Elimination against gross carrying amount upon revaluation	-	(135)	(452)	(2)	-	(589)
Revaluation	-	336	615	-	40	991
Revaluation decreases that offset previous increases	-	(159)	(201)	-	(4)	(364)
Currency translation differences	(2)	(201)	(351)	(6)	(61)	(621)
As at 31 December 2016	48	1,783	3,092	51	569	5,543
Additions	-	-	-	-	519	519
Transfers	1	104	299	12	(416)	-
Disposals	-	(4)	(18)	(2)	(1)	(25)
Reclassification to inventory	-	-	-	-	(6)	(6)
Currency translation differences	6	(46)	(71)	(1)	(17)	(129)
As at 31 December 2017	55	1,837	3,302	60	648	5,902
Accumulated depreciation and impairment						
As at 1 January 2016	-	(270)	(679)	(31)	(27)	(1,007)
Charge for the year	-	(132)	(371)	(9)	-	(512)
Disposals	-	9	34	8	-	51
Transfers	-	-	(1)	1	-	-
Elimination against gross carrying amount upon revaluation	-	135	452	2	-	589
Impairment	-	(10)	(5)	-	(10)	(25)
Currency translation differences	-	31	48	3	3	85
As at 31 December 2016	-	(237)	(522)	(26)	(34)	(819)
Charge for the year	-	(131)	(373)	(7)	-	(511)
Disposals	-	4	17	-	1	22
Transfers	-	-	-	-	-	-
Elimination against gross carrying amount upon revaluation	-	-	-	-	-	-
Impairment	-	(218)	(196)	(8)	(84)	(506)
Currency translation differences	-	17	20	1	6	44
As at 31 December 2017	-	(565)	(1,054)	(40)	(111)	(1,770)
Net book value as at						
31 December 2016	48	1,546	2,570	25	535	4,724
31 December 2017	55	1,272	2,248	20	537	4,132

10 Property, plant and equipment (continued)

As at 31 December 2017 and 2016, construction in progress balance includes prepayments and letters of credit for property, plant and equipment of USD 79 million and USD 77 million, respectively.

During 2017 and 2016, management performed assessments of whether the carrying amounts of items of property, plant and equipment are materially different from their fair values. Where the material differences were identified as probable, the Group determined the fair value of its property, plant and equipment through a combination of independent appraisers and internal assessments. The Group aims to revalue a class of property, plant and equipment simultaneously; in case of revaluing a class on a rolling basis, the Group completes the revaluation within a short period, and keeps revaluations up to date. Substantially all the property, plant and equipment balance was either revalued or tested for impairment (whenever impairment indicators existed) during both 2017 and 2016.

UCC. As at 31 December 2017, the recoverable amount of UCC is USD 140 million (31 December 2016: USD 160 million). The recoverable amount has been determined based on fair value less cost to sell estimations.

In 2016, the Group recognised impairment of USD 7 million of coal reserves of one of the mines due to significant uncertainty in respect of its future development.

As at 31 December 2017, management performed assessment of the UCC impairment as a result of which additional impairment of two mines in the amount of USD 51 million and reversal of impairment of the third mine in the amount of USD 20 million were recognised. Out of the aggregate impairment of USD 31 million, USD 27 million were recorded against property, plant and equipment and USD 4 million against mining permits (Note 9). The impairment losses of two mines mainly resulted from the increased cash costs due to poor geology of some sites. Additionally, the reversal of the impairment for the third mine mainly relates to decided seizure of operations of high cost site and development of the new site with better geology and cash costs.

The discount rate used for the impairment testing of UCC was 10% (31 December 2016: 10%).

The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of property, plant and equipment of UCC:

	31 December 2017	31 December 2016
Coal prices		
Decrease in all the periods by 5.0%	Impairment of USD 128 million required	Impairment of USD 158 million required
Cash costs		
Increase in all the periods by UAH 5.0%	Impairment of USD 128 million required	Impairment of USD 123 million required
Discount rates		
Increase in all the periods by 1 pp	Impairment of USD 7 million required	Change in recoverable amount by USD 5 million

The impairment as at and for the year ended 31 December 2017 is recorded as follows:

	Recognised in profit and loss	Recognised in Other comprehensive income	Total
Property plant and equipment due to loss of control over the assets of subsidiaries located on the temporarily non-controlled territory (Note 7)	228	205	433
Property plant and equipment due to loss of control over the assets of subsidiaries located on the controlled territory (Note 7)	19	-	19
UCC property plant and equipment	27	-	27
Property, plant and equipment due to physical impairment during the period	4	23	27
Total property, plant and equipment	278	228	506

During 2017, USD 22 million of borrowing costs were capitalised as part of property, plant and equipment, capitalisation rate was 10% (2016: USD 27 million, capitalisation rate was 8%).

As at 31 December 2017 USD 543 million of property, plant and equipment were pledged as collateral for loans and borrowings (as at 31 December 2016 no property, plant and equipment were pledged).

11 Investments in associates and joint ventures

The Group's investment in joint ventures and associates were as follows as at 31 December 2017 and 2016:

Name	Type of relationship	Segment	% of ownership	2017	% of ownership	2016
				Carrying value		Carrying value
Zaporozhstal Group	Joint venture	Metallurgical	49.9%	569	49.9%	491
PJSC Southern Iron Ore Enrichment Works	Joint venture	Mining	45.9%	503	45.9%	394
PrJSC Yenakievskiy Koksohimprom	Associate	Metallurgical	50.0%	-	50.0%	10
PrJSC Zaporozhogneupor	Associate	Metallurgical	45.4%	2	45.4%	2
IMU	Associate	Metallurgical	49.9%	11	49.9%	11
Other	Associate	Mining	n/a	0	n/a	0
Total				1,085		908

All Group's associates and joint ventures are accounted for using the equity method.

None of the joint ventures and associates are traded on active markets and there are no reliable market prices available.

PJSC Southern Iron Ore Enrichment Works

PJSC Southern Iron Ore Enrichment Works is a large Ukrainian iron ore mining plant which produces iron ore concentrate and sinter. Its products are used by the Group's integrated steel plants and are also sold to the third parties (mostly in China, Ukraine and Europe) primarily through the Group's trading companies.

Zaporozhstal Group

The investment in the Zaporozhstal Group is represented by the number of interests in the steel and mining businesses, the most significant being:

- 49.9% effective interest in JSC Zaporozhstal Integrated Iron & Steel Works ("Zaporozhstal"), a large Ukrainian integrated steel plant which sources majority of its iron ore and coke consumption from the Group and sells majority of its finished products through the Group's trading companies;
- 24% effective interest in PrJSC Zaporizhya Iron Ore Plant, large iron ore mining enterprise in Ukraine which sells part of its iron ore output to Zaporozhstal; and
- 42.8% effective interest in PrJSC Zaporozhkoks and a 49.2% effective interest in PrJSC Zaporozhogneupor which are Group's subsidiary and associate respectively.

As at 31 December 2017 and 2016, Metinvest's investments in Zaporozhstal Group and PJSC Southern Iron Ore Enrichment Works were classified as joint ventures due to the fact that decisions on the key relevant activities require participation of and unanimous consents both from Metinvest and from the other shareholders of the Zaporozhstal Group and PJSC Southern Iron Ore Enrichment Works.

11 Investments in associates and joint ventures (continued)

Movements in the carrying amount of the Group investments in associates and joint venture are presented below:

	2017	2016
Carrying amount at 1 January	908	779
Share of after tax results of joint ventures and associates	191	205
Share of other comprehensive income of joint ventures and associates	39	35
Impairment of PrJSC Yenakievskiy Koksohimprom (Note 7)	(7)	-
Sale of share in Black Iron (Cyprus) Limited	-	(6)
Dividends declared	(6)	-
Currency translation difference	(40)	(105)
Carrying amount at 31 December	1,085	908

As of 31 December 2017, Zaporozhstal engaged independent appraiser to perform a revaluation of its property, plant and equipment as the assets' fair value was expected to be higher than their carrying amounts. The revaluation result of property, plant and equipment of USD 56 million is included within the 'Share of other comprehensive income of joint ventures' line above. The valuation approach, key estimates and judgements applied are substantially in line with those applied by the Group as part of the revaluation of property, plant and equipment as of 31 December 2016 which are described in Note 4 and Note 10.

The nature of the activities of the Group's associates, the Group's relationships with its associates and their key financial information is as follows:

- PrJSC Yenakievskiy Koksohimprom, Ukrainian producer of coke which sources majority of its coal consumption from the Group and sells majority of its coke output to the Group's steel plants; PrJSC Yenakievskiy Koksohimprom had revenues of USD 18 million and net loss of USD 7 million in 2017 (2016: USD 75 and net profit of USD 7, respectively) and total assets of USD 47 million as at 31 December 2017 (31 December 2016: USD 92 million). Operations and assets of this entity are located on temporarily non-controlled territory. Due to events described in Note 7, the Group recognised impairment of this investment amounting to USD 7 million in 2017.
- PrJSC Zaporozhogneupor, Ukrainian producer of refractories, with revenue of USD 63 million and net profit of USD 2 million in 2017 (2016: revenue of USD 49 million and net profit of USD 1 million, respectively) and total assets of USD 35 million as at 31 December 2017 (31 December 2016: USD 24 million);
- Industrial-Metallurgical Union ("IMU"), entity which owns 4.5% interest in ArcelorMittal Kryvyi Rih, the largest integrated steel plant in Ukraine.

11 Investments in associates and joint ventures (continued)

The summarised financial information of the Group's joint ventures is as follows:

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2017	31 December 2016	31 December 2017	31 December 2016
Balance sheet:				
Non-current assets	933	796	357	363
Cash and cash equivalents	18	39	176	8
Other current assets	1,311	733	684	560
Total current assets	1,329	772	860	568
Trade and other payables and provisions	103	84	-	-
Other non-current financial liabilities	25	31	42	30
Total non-current liabilities	128	115	42	30
Trade and other payables and provisions	1,055	532	76	41
Other current financial liabilities	108	110	-	1
Total current liabilities	1,163	642	76	42
Net assets	971	811	1,099	859
	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2017	31 December 2016	31 December 2017	31 December 2016
Profit or loss for the year ended (selected items):				
Revenue	1,775	1,321	749	569
Depreciation and amortisation	(73)	(71)	(24)	(29)
Interest income	1	1	1	1
Interest expense	(16)	(17)	(4)	(4)
Income tax expense	(29)	(37)	(80)	(50)
Profit or loss	170	201	325	228
Statement of comprehensive income for the year ended:				
Other comprehensive income	106	(8)	(18)	74
Total comprehensive income	276	193	307	302
Dividends received by the Group during the year ended	-	-	6	-

The information above reflects the amounts presented in the financial statements of the joint ventures and associates and the impact of fair value adjustments made on acquisition of these joint ventures and associates, if any.

As at 31 December 2017, Zaporozhstal had a contingent liability with potential maximum outflow of USD 30 million (31 December 2016: USD 22 million). This contingent liability represents default interest on a loan taken by then a Zaporozhstal's subsidiary (deconsolidated by Zaporozhstal in 2015) which defaulted on this loan. The loan is guaranteed by Zaporozhstal. The financial guarantee was recognised in full by Zaporozhstal, but the default interest has not been accrued as there is uncertainty as to this amount.

11 Investments in associates and joint ventures (continued)

The reconciliation of the net assets of the Group's joint ventures presented above to the carrying amounts of the respective investments is presented below:

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2017	31 December 2016	31 December 2017	31 December 2016
Net assets	971	811	1,099	859
Group's ownership, %	49.9%	49.9%	45.9%	45.9%
Group's interest in net assets	485	404	503	394
Goodwill	84	87	-	-
Carrying value	569	491	503	394

12 Income tax prepaid

	31 December 2017	31 December 2016
Non-current portion	8	25
Current portion	9	18
Total income tax prepaid	17	43

Group's income tax prepayments originated mainly on principal Ukrainian production subsidiaries due to legislative requirement of advance payment of corporate profit tax which was in force in previous periods. Starting from 1 January 2016 changes to the Ukrainian Tax Code were enforced, including the cancellation of required advance payments of corporate profit tax.

The classification of prepayments as of 31 December 2017 is based on Group management's assessment of taxable profits of subsidiaries and amounts of expected cash refunds from the State during 2018.

13 Inventories

	31 December 2017	31 December 2016
Finished goods and work in progress	563	475
Raw materials	460	329
Ancillary materials, spare parts and consumables	120	113
Goods for resale	92	32
Total inventories	1,235	949

In 2017, the Group recognised impairment of inventories which were located on the temporarily non-controlled territory amounting to USD 92 million (Note 7). In 2017, write-downs of inventories to net realisable value amounted to USD 4 million (2016: the Group had net reversal of an inventory write-down of USD 45 million due to sale of respective inventories, increase of steel prices and recovery of gross margins).

As at 31 December 2017, inventories totalling USD 35 million (31 December 2016: USD 50 million) have been pledged as collateral for borrowings (Note 19).

14 Trade and other receivables

	31 December 2017	31 December 2016
Non-current assets		
Trade receivables	35	-
Loans issued to SCM (USD denominated, 7% effective interest rate)	41	36
Loans issued to SMART (USD denominated, 9% effective interest rate)	87	82
Other non-current financial assets	5	6
Other non-current non-financial assets	13	13
Total non-current assets	181	137
Current financial assets		
Trade receivables and receivables on commission sales	1,728	907
Loans issued to joint venture (USD denominated, 11% effective interest rate, mature in 2018, renegotiated in 2017)	98	98
Other receivables	57	69
Total current financial assets	1,883	1,074
Current non-financial assets		
Recoverable value added tax	261	200
Prepayments made	107	177
Covered letters of credit related to inventory purchases	19	74
Prepaid expenses and other non-financial receivables	72	55
Total current non-financial assets	459	506
Total current assets	2,342	1,580
Total trade and other receivables (including non-current assets)	2,523	1,717

Recoverable VAT mainly relates to Ukrainian subsidiaries of the Group. During 2017, VAT refunds of USD 547 million were received by the Group (2016: USD 361 million). Although there are certain delays with the refund of part of this balance amounting to USD 46 million related to the subsidiaries located on the temporarily non-controlled territory, the Group has a proved right for the refund of this amount and considers this balance as fully recoverable.

The Group has legal right to request settlement of the current loans issued to related parties within a twelve month period after the reporting date. The decision on whether to call for repayment or extend the term of the loan is subject to future developments and yet to be done.

In addition, the Group has extended the settlement dates for some of its customers for the period less than one year with no material losses recognised on the renegotiated terms.

During 2017, trade accounts receivable in the amount of USD 1,054 million have been sold to a third party (2016: USD 707 million). As at 31 December 2017 amount of such receivables which were still unsettled to a third party was USD 138 million (31 December 2016: USD 115 million). The carrying amount of the assets and liabilities that represent the entity's continuing involvement in the derecognised assets is USD 3 million (31 December 2016: USD 2 million). The fair value of the assets and liabilities that represent the entity's continuing involvement in the derecognised assets approximates the carrying value. The maximum exposure to loss from such receivables relates to customer default only and is pre-agreed with the third party purchasing the receivables as the percentage of their nominal amount sold. Such percentage is determined with reference to the historical loss ratio and the statistical model of the respective markets of the Group.

14 Trade and other receivables (continued)

Movements in the impairment provision for trade and other receivables are as follows:

	31 December 2017		31 December 2016	
	Trade receivables	Other financial receivables	Trade receivables	Other financial receivables
Provision for impairment at 1 January	549	45	329	49
Net impairment during the year	7	-	227	-
Currency translation differences	(4)	(5)	(7)	(4)
Provision for impairment at 31 December	552	40	549	45

Analysis by credit quality of financial trade and other receivables is as follows:

	31 December 2017		31 December 2016	
	Trade receivables and receivables on commission sales	Other financial receivables	Trade receivables and receivables on commission sales	Other financial receivables
Key customers	72	-	47	-
SCM and other related companies, including associates and joint ventures	81	118	56	117
Balances covered by bank letters of credit	201	-	85	-
Balances insured	202	-	159	-
Balances factored	36	2	52	3
Existing and new counterparties with no history of default	138	23	82	32
Balances renegotiated with SCM and other related companies, including associates and joint ventures	729	43	185	24
Balances renegotiated with key customers	112	-	34	-
Total fully performing (not past due)	1,571	186	700	176
<i>Past due:</i>				
- less than 30 days overdue	110	1	80	-
- 30 to 90 days overdue	43	3	58	1
- 90 to 180 days overdue	10	7	18	16
- 180 to 360 days overdue	11	4	16	79
- over 360 days overdue	18	87	35	19
Total past due, but not impaired	192	102	207	115
Total individually impaired	552	40	549	45
Less impairment provision	(552)	(40)	(549)	(45)
Total	1,763	288	907	291

As at 31 December 2017, 2% (31 December 2016: 9%) of receivables which were overdue but not impaired related to key customers and 60% (31 December 2016: 71%) – to SCM and other related parties.

14 Trade and other receivables (continued)

As at 31 December 2017, trade and other receivables totalling USD 250 million (31 December 2016: USD 123 million) have been pledged as collateral for borrowings (Note 19).

15 Cash and cash equivalents

	31 December 2017	31 December 2016
Current accounts	207	198
Cash in transit	43	19
Bank deposits up to 3 months	9	9
Total cash and cash equivalents	259	226

The bank balances and term deposits are neither past due nor impaired. Analysis by credit quality of bank balances and term deposits is as follows:

	31 December 2017	31 December 2016
<i>As rated by Moody's:</i>		
- Aa2	13	19
- A1	92	61
- A2	-	-
- A3	35	14
- Baa1	2	4
- Baa2	4	-
- Ba2	4	37
Not rated – FUIB	39	41
Not rated – US and European banks	18	20
Not rated – Other Ukrainian banks	9	11
Cash in transit (in various banks)	43	19
Total cash and cash equivalents	259	226

As at 31 December 2017 and 2016, amounts in category "Not rated – FUIB" relate to First Ukrainian International Bank (a related party which is under common control of SCM).

As at 31 December 2017, included in Ba2 rating are USD 4 million related to balance in Switzerland subsidiary of international bank, which does not have own credit rating and for which rating was based on its parents' rating. As at 31 December 2016, included in A1, A3 and Ba2 ratings are USD 12 million, USD 11 million and USD 37 million, respectively, related to balances in Ukrainian and Russian subsidiaries of international banks, which do not have own credit ratings and for which ratings were based on their parents' ratings.

As at 31 December 2017, cash and cash equivalents totalling USD 16 million (31 December 2016: USD 11 million) have been pledged as collateral for borrowings (Note 19).

16 Share capital and share premium

	Number of outstanding shares			Total par value of shares	Share premium	Total
	Class A	Class B	Class C			
At 31 December 2016	6,750	2,251	474	0	6,225	6,225
At 31 December 2017	6,750	2,251	474	0	6,225	6,225

As at 31 December 2017 and 2016, the issued share capital comprised 6,750 ordinary Class A shares, 2,251 ordinary Class B shares and 474 ordinary Class C shares with a par value of EUR 10. Each ordinary share carries one vote and is fully paid.

16 Share capital and share premium (continued)

In 2014, the Company changed its Articles of Association and created three classes of shares (A, B and C). Ownership interests of SCM Limited were transferred to new Class A shares. Ownership interests of SMART were transferred to new Class B shares. Ownership interests of the previous Class B shares were transferred to new Class C shares. Additional rights of these new classes of shares were established, the most significant of which were:

- Class C shareholders have the right to a portion of net assets of the Company and are represented at shareholders' meetings;
- the establishment of a Supervisory Board of ten members, where seven are appointed by the majority of Class A and Class C shareholders and three are appointed by the Class B shareholder;
- a number of decisions with respect to acquisitions and financing decisions above a specified amount require effectively consent of Class A and B shareholder; and
- Class C shares are not entitled to receive dividends.

17 Other reserves

	Revaluation of available- for-sale investments and share in OCI of associates	Revaluation of property, plant and equipment and share in revaluation reserve of PPE of the JV	Merger reserve	Cumulative currency translation reserve	Total
Balance as at 1 January 2016	(13)	4,876	(3,038)	(9,838)	(8,013)
Total comprehensive income / (loss) for the period	4	546	-	(652)	(102)
Depreciation transfer, net of tax	-	(327)	-	-	(327)
Balance as at 31 December 2016	(9)	5,095	(3,038)	(10,490)	(8,442)
Total comprehensive income / (loss) for the period	-	(125)	-	(84)	(209)
Depreciation transfer, net of tax	-	(283)	-	-	(283)
Balance as at 31 December 2017	(9)	4,687	(3,038)	(10,574)	(8,934)

The revaluation reserve for available-for-sale investments is transferred to profit or loss when realised through sale or impairment. Revaluation reserve for property, plant and equipment is transferred to retained earnings when realised through depreciation, sale or other disposal. Currency translation reserve is transferred to profit or loss when realised through disposal of a subsidiary by sale, liquidation, repayment of share capital or abandonment of all, or part of, that subsidiary.

Retained earnings of the Group represent the earnings of the Group entities from the date they have been established or acquired by the entities under common control. The Group's subsidiaries distribute profits as dividends or transfer them to reserves on the basis of their statutory financial statements prepared in accordance with local GAAP or IFRS as appropriate. Ukrainian legislation identifies the basis of distribution as retained earnings only, however this legislation and other statutory laws and regulations are open to legal interpretation. Since December 2014, there are particular temporary restrictions for Ukrainian entities to pay dividends abroad (Note 2).

The ability of the Group to pay dividends has been limited by the terms and conditions of the Group's agreements with its lenders and bondholders related to the debt restructuring process (Note 19).

18 Material non-controlling interests in subsidiaries

Subsidiaries that have non-controlling interest that is material to the Group have been determined by management based on combination of the following factors: (i) the percentage of shares held by non-controlling shareholders; (ii) accumulated amount of non-controlling interest ("NCI") in the subsidiary; and (iii) total assets, revenues, profit or loss and OCI of the respective subsidiaries.

The following table provides information about subsidiaries that have non-controlling interest that is material to the Group:

	Proportion of NCI (same as voting rights held by NCI)	Profit or loss attributable to NCI	OCI attributable to NCI	Amount of NCI in the subsidiary	Dividends paid to NCI during the year
As at 31 December 2017					
PrJSC Azovstal Iron and Steel Works	3.3%	-	(1)	30	1
PrJSC Avdiivka Coke Plant	5.4%	6	-	20	-
PrJSC Zaporozhkoks	47.8%	19	(3)	45	-
PrJSC Northern Iron Ore Enrichment Works	3.6%	11	(2)	31	-
Ferriera Valsider S.p.A.	30.0%	4	3	29	-
Other subsidiaries with NCI (Note 7)	n/a	(26)	(6)	(32)	-
Total		14	(9)	123	1
As at 31 December 2016					
PJSC Azovstal Iron and Steel Works	3.3%	1	1	34	-
PJSC Avdiivka Coke Plant	5.4%	2	(2)	15	-
JSC Zaporozhkoks	47.8%	7	(4)	29	-
PJSC Northern Iron Ore Enrichment Works	3.6%	5	(1)	38	-
Ferriera Valsider S.p.A.	30.0%	-	(1)	23	-
Other subsidiaries with NCI	n/a	(3)	3	(1)	-
Total		12	(4)	138	-

The summarised financial information of these subsidiaries (including the impact of consolidation fair value adjustments, but before intercompany eliminations), was as follows at 31 December 2017 and 2016:

	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Net assets
As at 31 December 2017					
PJSC Azovstal Iron and Steel Works	1,645	1,089	1,671	163	900
PJSC Avdiivka Coke Plant	629	250	466	31	382
PJSC Zaporozhkoks	233	44	175	8	94
PJSC Northern Iron Ore Enrichment Works	1,036	657	764	76	853
Ferriera Valsider S.p.A.	273	85	252	8	98
As at 31 December 2016					
PJSC Azovstal Iron and Steel Works	1,000	1,117	920	177	1,020
PJSC Avdiivka Coke Plant	449	265	399	30	285
PJSC Zaporozhkoks	98	38	69	7	60
PJSC Northern Iron Ore Enrichment Works	694	710	217	80	1,107
Ferriera Valsider S.p.A.	221	92	233	4	76

18 Material non-controlling interests in subsidiaries (continued)

	Revenue	Profit/ (loss)	Total comprehensive (loss) / income
Year ended 31 December 2017			
PrJSC Azovstal Iron and Steel Works	2,633	(21)	(65)
PrJSC Avdiivka Coke Plant	964	106	97
PrJSC Zaporozhkoks	323	40	34
PrJSC Northern Iron Ore Enrichment Works	963	294	238
Ferriera Valsider S.p.A.	497	12	23
Year ended 31 December 2016			
PJSC Azovstal Iron and Steel Works	1,498	26	37
PJSC Avdiivka Coke Plant	588	31	(10)
JSC Zaporozhkoks	181	14	6
PJSC Northern Iron Ore Enrichment Works	718	141	109
Ferriera Valsider S.p.A.	382	(1)	(5)

The Group's centralised treasury monitors the cash flows of the Group's subsidiaries and adjusts the subsidiaries' operating cash flows (e.g. by means of changing intragroup trading balances) to provide sufficient funds for the approved investing activities or payment of taxes, interest and dividends.

As stated in Note 19 in March 2017 the Group restructured its' bonds and pre-export financing which are secured with certain shares of the Group's subsidiaries.

The bonds are guaranteed on a joint and several basis by the Group's subsidiaries PrJSC Avdiivka Coke Plant, PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Khartsyzsk Pipe Plant, PrJSC Northern Iron Ore Enrichment Works, PrJSC Central Iron Ore Enrichment Works, PrJSC Azovstal Iron and Steel Works, PrJSC Yenakiieve Iron and Steel Works, PrJSC Ilyich Iron and Steel Works, Ukraine – Switzerland Joint Venture Limited Liability Company "Metalen" and Metinvest Management B.V. The terms of bonds, subject to certain exceptions and qualifications, limit the ability of the Group to:

- undertake certain amalgamation, merger, division, spin-off, transformation or other reorganisation or restructuring;
- incur financial indebtedness above certain limits;
- pay dividends or distributions in respect of its share capital or redeem or repurchase capital stock or subordinated debt;
- create mortgages, pledges, security interests, encumbrances, liens or other charges;
- transfer or sell assets;
- make capital expenditures above certain limits; and
- enter into transactions with affiliates on not arms-length basis.

PXF loans are guaranteed by PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Ilyich Iron and Steel Works and Metinvest Management B.V. Also, as a condition of these loans, certain subsidiaries of Metinvest (PrJSC Azovstal Iron and Steel Works, PrJSC Yenakiieve Iron and Steel Works, PrJSC Northern Iron Ore Enrichment Works, PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Ilyich Iron and Steel Works) are jointly committed to perform sales of steel products to Metinvest International S.A. The proceeds from such sales are transferred through special accounts pledged in favour of the PXF lenders which will have rights to these proceeds only in case when Metinvest does not make a scheduled payment under the credit facilities or otherwise defaults in respect of its obligations under the PXF loans. The amount of funds on such accounts as at 31 December 2017 is USD 1 million (31 December 2016: USD 0 million).

19 Loans and borrowings

As at 31 December, loans and borrowings were as follows:

	31 December 2017	31 December 2016
Non-current		
Bonds issued	1,159	-
Bank borrowings	1,074	-
Non-bank borrowings from related parties	460	-
Trade finance	36	-
Finance lease	10	-
Total non-current loans and borrowings	2,739	-
Current		
Trade finance	255	161
Bonds issued	7	1,183
Bank borrowings	7	1,110
Finance lease	2	-
Non-bank borrowings from related parties	-	425
Total current loans and borrowings	271	2,879
Total loans and borrowings	3,010	2,879

As at 31 December 2017, the bank borrowings include PXF in the amount of USD 1,058 million (31 December 2016: USD 1,093 million).

Following the inability to make necessary principal payments of pre-export financing in early 2015 and subsequent triggers of defaults and cross defaults under other banks and non-banks loans and borrowings the Group undertook a number of measures aimed at restructuring of its debt in the period from April 2015. This resulted in a reclassification of all non-current loans and borrowings to current loans as at 31 December 2016.

The Restructuring was implemented on 22 March 2017 when all conditions precedent were satisfied.

Key features of the Restructuring are:

- Existing bonds and PXF facilities were reprofiled and their maturities were extended:
 - 3 series of bonds due in 2016, 2017 and 2018 were exchanged into a new USD 1,197 million bond due 31 December 2021 (with a maximum amount of USD 1,225 million);
 - 4 syndicated PXF facilities were consolidated into a single USD 1,109 million PXF facility due 30 June 2021, with a grace period on scheduled repayments of principal until 31 December 2018;
 - All accrued and unpaid interest during the moratoriums under bonds and the standstill agreements under the PXF facilities was converted into the principal of the new instruments.
- New bond and PXF facility are treated as senior liabilities of the Group and rank pari passu between themselves. Relationships between bondholders and PXF lenders are governed by an Intercreditor Agreement.
- Interest rates increased for both debt instruments, but interest is payable in full to the extent there is available unrestricted cash (i.e. cash balance after deduction of cash in transit, amounts held in special accounts in Ukraine for the purpose of purchase of foreign currency, and certain other amounts). This provides a cash flow flexibility for the Group and makes it more resistant to the volatile external economic environment.
 - Interest rate increased for both debt instruments – for bonds to 10.875% per annum and for PXF to the aggregate of 4.16% per annum and LIBOR for US dollar with a 1% floor.
 - Until 31 December 2018, a minimum of 30% of interest is to be paid in cash. The remaining interest is paid via a quarterly cash sweep with a condition of the average unrestricted cash balance being above USD 180 million. All interest, except for catch-up interest, which is not paid in cash is to be capitalised. Catch-up interest under bonds is set at 1.5025% per annum and is payable to the extent of cash being available on the corresponding level of the cash sweep.
 - Starting 1 January 2019, all interest under both debt instruments is payable in cash in full amount.

19 Loans and borrowings (continued)

- In addition to recourse rights of bondholders and PXF lenders existing under debt instruments which were subject to the Restructuring, the creditors received rights over common security consisting of, inter alia, the following items. The common security is subject to release under certain circumstances.
 - share pledge over 100% of shares of Metinvest Management B.V. which is 100% owned by Metinvest B.V. and owns 99.8% of the share capital of PrJSC Ingulets Iron Ore Enrichment Works, 99.3% of the share capital of PrJSC Ilyich Iron and Steel Works and 50%+1 share of PrJSC Central Iron Ore Enrichment Works;
 - a guarantee from Metinvest Management B.V.;
 - share pledge over 50%+1 share of each of PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Ilyich Iron and Steel Works and PrJSC Central Iron Ore Enrichment Works;
 - pledge of certain equipment from PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Ilyich Iron and Steel Works and PrJSC Central Iron Ore Enrichment Works;
 - pledge over certain bank accounts (including debt service account).
- Certain covenants are imposed on the Group, including limitations to pay dividends, make certain payments, engage in certain transactions with related parties, make capital expenditures above certain levels, incur new debt on top of the permitted caps (unlimited trade finance, capital expenditure financing of USD 175 million, debt for general corporate purposes of USD 50 million), prepay or redeem subordinated debt before its maturity, as well as certain financial covenants (interest cover ratio, debt cover ratio, tangible net worth, gearing).
- Existing and future loans from SCM and SMART are to be subordinated in favour of the new bond and PXF facility.
- Additional reporting requirements are imposed on the Group.

The transaction was treated as a modification of original financial instrument as the difference between the present value of the cash flows under the new terms discounted using the original effective interest rate and discounted present value of the remaining cash flows of the original financial liability is less than 10 per cent. This difference (including the transaction fees paid) was accounted for through the change of the effective interest rate resulting in an increase from 5% to 7% for the PXF facilities and 10% to 12% for bonds.

As of 31 December 2017, USD 56 million of fees and costs paid directly related to restructuring were capitalised in the amount of borrowings.

As of 31 December 2017, the Group's restructured bonds were traded on open markets with a premium of approximately 5% (31 December 2016: the Group's 2018 bonds were traded on open market with a discount of approximately 8% to their nominal value, 2017 bonds - with a discount of approximately 9% and 2016 bonds - with discount of approximately 8%). As at 31 December 2017, the fair value of bonds was USD 1,251 million (31 December 2016: USD 1,102 million) as determined by reference to observable market quotations. Have these market quotations been used to determine the fair values of the bank borrowings as at 31 December 2017, those would be USD 1,161 million (31 December 2016: in the range of USD 1,032 million and USD 1,040 million respectively). Despite these quotations, these amounts do not necessarily represent the fair value of the bonds and bank borrowings as at 31 December 2016. These amounts reflect the situation as at 31 December 2016 when the company was in default and cross default on its bank and non-bank loans and borrowings.

The majority of the Group's bank borrowings and trade finance have variable interest rates. The weighted average effective interest rates and currency denomination of loans and borrowings as at the balance sheet dates are as follows:

<i>In % per annum</i>	31 December 2017				31 December 2016	
	USD	EUR	GBP	CHF	USD	EUR
Bank borrowings	7%	3%	-	-	5%	3%
Bonds issued	12%	-	-	-	10%	-
Non-bank borrowings from related parties	7%	-	-	-	10%	-
Trade finance	4%	3%	5%	7%	4%	2%
Finance lease	8%	-	-	-	-	-
Reported amount	2,844	144	20	2	2,802	77

19 Loans and borrowings (continued)

The Group defines net debt as the sum of bank loans, bonds, trade finance, seller notes and subordinated shareholder loans less cash and cash equivalents.

Movements in the Groups' net debt are presented below:

	Cash in banks	Deposits up to 3 months	Bank borro- wings	Bonds issued	Non- bank borro- wings from related parties	Trade finance	Seller's notes	Finance lease	Total
Net debt as at 1 January 2016	176	4	(1,091)	(1,146)	(393)	(228)	(88)	-	(2,766)
Cash flows	49	5	10	-	-	67	-	-	131
Interest accrued (Note 27, 10)	3	-	(81)	(123)	(35)	(6)	(8)	-	(250)
Interest paid / (received)	(3)	-	44	75	3	5	6	-	130
Legal and consulting fees capitalised	-	-	8	11	-	-	-	-	19
Currency translation differences	(8)	-	-	-	-	1	-	-	(7)
Net debt as of 31 December 2016	217	9	(1,110)	(1,183)	(425)	(161)	(90)	-	(2,743)
Cash flows	36	-	40	44	-	(117)	85	7	95
Interest accrued (Note 27, 10)	4	-	(77)	(128)	(35)	(8)	(6)	-	(250)
Interest paid / (received)	(4)	-	42	76	-	6	4	-	124
Legal and consulting fees capitalised	-	-	11	8	-	-	-	-	19
Commissions capitalised	-	-	16	17	-	-	-	-	33
Currency translation differences	(3)	-	(3)	-	-	(11)	-	-	(17)
Equipment received under finance lease	-	-	-	-	-	-	-	(19)	(19)
Net debt as of 31 December 2017	250	9	(1,081)	(1,166)	(460)	(291)	(7)	(12)	(2,758)

20 Seller's notes

	31 December 2017	31 December 2016
Current portion	7	90
Total seller's notes	7	90

Seller's notes represent consideration payable for acquisition of United Coal Company LLC (Group's subsidiary) in 2009.

On 4 January 2017, UCC Seller Notes were restructured. Maturity was extended by 5 years to 31 December 2021. Interest rate was increased from 7% per annum to 9% per annum. The principal repayments are to be done through the cash sweep mechanism to the extent that United Coal Company's price of coal sold exceeds a certain threshold, and it receives funds associated with various railroad rebate programs based on coal prices and to be calculated on a monthly basis. Until 31 December 2018, a minimum of 30% of interest is to be paid in cash. The remaining 70% of interest are to be paid in cash only if the average unrestricted cash (after repayment of 30% of interest and cash sweep) exceeds USD 15 million, otherwise it must be capitalised. Starting 1 January 2019, 100% of interest is payable in cash.

During the reporting period the Group repaid USD 85 million of principal according to the updated terms of notes agreement. Based on current market coal prices forecasts, management expects to settle the notes within twelve months of the reporting date.

As at 31 December 2017, nominal interest rate of seller's notes was approximated effective.

As of 31 December 2017 and 31 December 2016, the fair value of seller's notes approximated their carrying amount.

21 Retirement benefit obligations

The Group's defined benefit obligations relate to:

	31 December 2017	31 December 2016
State-defined early pensions for employees working in hazardous and unhealthy working conditions	352	300
Long-term employee benefits under collective bargaining agreements	17	26
Total defined benefit obligations	369	326

Nature and the risks and uncertainties associated with the Group's defined benefit obligations are further disclosed in the Note 4.

In October 2017 there were certain changes introduced to the Law of Ukraine on Mandatory State Pension Insurance.

- Increase in retirement age and required employment period which resulted in increase of preferential pensions period covered by the Group and consequently past service costs;
- Decrease of index used in the calculation of insurance period which subsequently led to decrease of pensions amount;
- The Government of Ukraine deblocked pensions indexation starting from 2019 which are now estimated as 50% of salary increase and 50% of inflation.

In addition retirement benefit obligations were impacted by the events as described in Note 7.

Changes in the present value of the defined benefit obligation were as follows:

	2017	2016
Defined benefit obligation as at 1 January	326	335
Current service cost	7	10
Remeasurements of the defined benefit liability resulting from:		
- changes in financial assumptions	36	13
- changes in demographic assumptions	48	(1)
- experience adjustments	18	(6)
Negative past service cost	(59)	(2)
Interest cost	42	46
Benefits paid	(23)	(29)
Curtailment (Note 7)	(15)	-
Currency translation difference	(11)	(40)
Defined benefit obligation as at 31 December	369	326

The amounts recognised in the consolidated income statement were as follows:

	2017	2016
Current service cost	7	10
Past service cost	(59)	(2)
Interest cost	42	46
Total	(10)	54

The principal actuarial assumptions used were as follows:

	31 December 2017	31 December 2016
Nominal discount rate	12.85%	14.40%
Nominal salary increase	10.0%	10.0%
Nominal pension entitlement increase (indexation)	7.5%	3.5%
Long-term inflation	5.0%	5.0%

21 Retirement benefit obligations (continued)

Assumptions about mortality are based on the publicly available mortality tables for city population of the respective regions of Ukraine (depending on the location of the Group's subsidiaries) for 2017 and are consistent with the prior year.

The sensitivity of the defined benefit obligation to changes in the principal assumptions is presented below:

	2017	2016
Nominal discount rate increase / decrease by 1 pp	(31) / 36	(26) / 30
Nominal salary increase / decrease by 1 pp	20 / (20)	12 / (13)
Inflation increase / decrease by 1 pp	8 / (10)	4 / (6)

The above sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The methods and types of assumptions used in preparing the sensitivity analysis did not change significantly compared to the previous period.

As at 31 December 2017, the weighted average maturity of the Group's defined benefit obligations is 9.2 years and it varies across different Group's subsidiaries from 7 to 10.5 years (31 December 2016: 8.3 years, varying from 7 to 9.6 years). Payments in respect of defined benefit obligations expected to be made during the year ending 31 December 2018 are USD 29 million (2017: USD 27 million).

22 Other non-current liabilities

	31 December 2017	31 December 2016
Asset retirement obligations	68	66
Tax liabilities under moratorium (Note 30)	7	7
Other non-current liabilities	5	6
Long-term advances received from related parties (Note 29)	-	13
Total other non-current liabilities	80	92

23 Trade and other payables

	31 December 2017	31 December 2016
Trade payables and payables on sales made on commission	1,354	1,081
Dividends payable to shareholders of Metinvest B.V.	88	88
Dividends payable to non-controlling shareholders of Company's subsidiaries	19	2
Payables for acquired property, plant and equipment and other intangible assets	74	38
Other financial liabilities	17	61
Total financial liabilities	1,552	1,270
Prepayments received	124	105
Accruals for employees' unused vacations and other payments to employees	62	54
Other taxes payable, including VAT	143	61
Wages and salaries payable	18	17
Other allowances and provisions	32	23
Total trade and other payables	1,931	1,530

According to terms of restructuring (Note 19), any payment of dividends prior to the settlement of 45% of relevant borrowings principal would trigger the ability of lenders to call for immediate repayment of borrowings.

24 Expenses by nature

	2017	2016
Raw materials including change in finished goods and work in progress	2,023	1,391
Goods and services for resale, including related transportation	2,351	1,205
Energy materials including gas, electricity and fuel	949	875
Wages and salaries	509	470
Transportation services	642	612
Repairs and maintenance expenses	194	172
Pension and social security costs	84	79
Pension costs – defined benefit obligations (Note 21)	(52)	8
Depreciation and amortisation	525	529
Impairment and devaluation of property, plant and equipment and other intangible assets (Notes 9 and 10)	35	34
Taxes and duties	88	84
Services and other costs	322	217
Total operating expenses	7,670	5,676

Classified in the consolidated income statement as:

– cost of sales	6,756	4,833
– distribution costs	721	660
– general and administrative expenses	193	183
Total operating expenses	7,670	5,676

Raw materials include externally purchased coke and coal, iron ore, scrap metal, ferroalloys, ancillary and other materials and cost of their transportation.

Unallocated fixed production costs incurred at the Group's subsidiaries during the months of operations at levels substantially below normal capacity are not included in the cost of inventories, are expensed in the profit or loss and presented within cost of sales according to their nature.

Auditor's fees. The following fees were expensed in the consolidated income statement in the reporting period:

	2017	2016
Audit of the financial statements (including audit fee of the signing firm of USD 0.2 million in 2017 and USD 0.1 million in 2016)	2	2
Total	2	2

During 2017, tax and other non-audit services expensed in the consolidated income statement amounted to USD 0.1 million and USD 0.1 million, respectively (2016: USD 0.2 million and USD 0.1 million). None of the services are performed by the signing firm.

25 Other operating income / (expense), net

Other operating income and expenses for the year ended 31 December were as follows:

	2017	2016
Charity and social payments	(10)	(6)
Maintenance of social infrastructure	(8)	(12)
VAT on sales below cost and VAT write-off	(7)	(9)
Impairment of trade and other receivables (Note 14)	(7)	(227)
Operating foreign exchange gains less losses, net	66	18
Gain on disposal of property, plant and equipment, net	7	3
Other income / (expense), net	(2)	11
Total other operating income / (expense), net	39	(222)

26 Finance income

Finance income for the year ended 31 December was as follows:

	2017	2016
Interest income:		
– loans issued	21	20
– bank deposits	4	3
– imputed interest on other financial instruments	-	3
Other finance income	4	-
Total finance income	29	26

27 Finance costs

Finance costs for the year ended 31 December were as follows:

	2017	2016
Net foreign exchange loss	50	106
Interest expense on:		
– borrowings	98	95
– bonds	128	123
– seller's notes	6	6
– imputed interest on seller's notes	-	2
Interest cost on retirement benefit obligations	42	46
Other finance costs	26	19
Total finance costs	350	397

During 2017, other finance costs mainly include factoring fees and discounting of the financial instruments (2016: factoring fees, discounting of the financial instruments and legal fees connected with debt restructuring).

Net foreign exchange losses arise on intragroup loans and dividends payable between the entities with different functional currencies.

28 Income tax

Income tax for the year ended 31 December was as follows:

	2017	2016
Current tax	241	82
Deferred tax	(17)	(41)
Income tax expense	224	41

The Group is subject to taxation in several tax jurisdictions, depending on the residence of its subsidiaries. In 2017, Ukrainian corporate income tax was levied on taxable income less allowable expenses at the rate of 18% (2016: 18%). In 2017, the tax rate for Swiss operations was 10% (2016: 10%) and for European companies tax rate in 2017 varied from 10% to 28% (2016: varied from 10% to 32%). The tax rate for US operations was 35% (2016: 35%).

Reconciliation between the expected and the actual taxation charge is provided below.

	2017	2016
IFRS profit / (loss) before tax	841	159
Tax calculated at domestic tax rates applicable to profits in the respective countries	72	(16)
Tax effect of items not deductible or assessable for taxation purposes:		
- impairment of non-current assets at UCC (Notes 8, 9)	13	2
- impairment of trade and other receivables	-	11
- other non-deductible expenses	66	51
- non-taxable income	(7)	(22)
Write-down / (reversal of write-down) of deferred tax assets, net	80	15
Income tax expense / (benefit)	224	41

28 Income tax (continued)

The effect of events described in Note 7 is included in the write-down of deferred tax assets stated above.

The weighted average applicable tax rate was 9% in 2017 (2016: (10%)). Variation in weighted average tax rate is mostly due to variation in profitability of the Group's subsidiaries in Ukraine some of which are profitable and some are loss making.

Differences between IFRS and Ukrainian and other countries' statutory taxation regulations give rise to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their tax bases.

	1 January 2017	Credited/ (charged) to income statement	Credited/ (charged) to other compre- hensive income	Currency translation difference	31 December 2017
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	4	(1)	-	-	3
Long-term receivables	2	1	-	-	3
Inventory valuation	9	16	-	-	25
Trade and other accounts receivable	30	1	-	(1)	30
Accrued expenses	19	1	-	-	20
Tax losses carried forward	52	(47)	-	-	5
Retirement benefit obligations	50	(2)	17	(2)	63
Other	52	(2)	-	4	54
Gross deferred tax asset	218	(33)	17	1	203
Less offsetting with deferred tax liabilities	(122)	34	(7)	1	(94)
Recognised deferred tax asset	96	1	10	2	109
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(480)	49	39	8	(384)
Inventory tax differences	(3)	(1)	-	-	(4)
Other	(7)	2	-	(1)	(6)
Gross deferred tax liability	(490)	50	39	7	(394)
Less offsetting with deferred tax assets	122	(34)	7	(1)	94
Recognised deferred tax liability	(368)	16	46	6	(300)

Other non-tax deductible expenses include mainly the expenses incurred by Metinvest B.V. and other subholdings where no sufficient taxable profits are expected to utilise these.

Deferred tax asset on unused tax losses not recognised of Ukrainian subsidiaries as at 31 December 2017 comprised USD 80 million (31 December 2016: USD 47 million). There are no expiry dates on tax losses carried forward in Ukraine and Italy. Deferred income tax assets are recognised for tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable; future taxable profits are estimated using the cash flow forecasts used for impairment testing of non-current assets (Note 8).

28 Income tax (continued)

	1 January 2016	Credited/ (charged) to income statement	Credited/ (charged) to other compre- hensive income	Currency translation difference	31 December 2016
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	21	(15)	-	(2)	4
Long-term receivables	1	1	-	-	2
Inventory valuation	4	5	-	-	9
Trade and other accounts receivable	13	19	-	(2)	30
Accrued expenses	7	13	-	(1)	19
Tax losses carried forward	115	(54)	-	(9)	52
Retirement benefit obligations	46	9	1	(6)	50
Other	79	(21)	-	(6)	52
Gross deferred tax asset	286	(43)	1	(26)	218
Less offsetting with deferred tax liabilities	(181)	43	(1)	17	(122)
Recognised deferred tax asset	105	-	-	(9)	96
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(508)	76	(106)	58	(480)
Inventory tax differences	(7)	4	-	-	(3)
Other	(14)	4	-	3	(7)
Gross deferred tax liability	(529)	84	(106)	61	(490)
Less offsetting with deferred tax assets	181	(43)	1	(17)	122
Recognised deferred tax liability	(348)	41	(105)	44	(368)

The tax charge relating to components of other comprehensive income is as follows:

	2017			2016		
	Before tax	Deferred tax charge	After tax	Before tax	Deferred tax charge	After tax
Revaluation decreases that offset previous increases in the carrying amount of property, plant and equipment	(228)	38	(190)	(7)	1	(6)
Revaluation of property, plant and equipment	-	-	-	636	(107)	529
Remeasurement of retirement benefit obligation	(102)	18	(84)	(6)	1	(5)
Other comprehensive income	(330)	56	(274)	623	(105)	518

In the context of the Group's current structure, tax losses and current tax assets of different Group companies may not be offset against current tax liabilities and taxable profits of other Group companies and, accordingly, taxes may accrue even where there is a consolidated tax loss. Deferred tax assets and liabilities are offset only when they relate to the same taxable entity and the entity has a legally enforceable right to set off current tax assets against current tax liabilities.

29 Balances and transactions with related parties

For the purposes of these consolidated financial statements, parties are considered to be related if one party has the ability to control the other party, is under common control, or can exercise significant influence over the other party in making financial and operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

As at 31 December 2017 and 2016 significant balances outstanding with related parties are detailed below:

31 December 2017						31 December 2016					
	SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group	SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group	
ASSETS											
Non-current trade and other receivables, including:	-	-	-	41	87	-	-	-	36	82	
Long-term loans issued	-	-	-	41	87	-	-	-	36	82	
Current trade and other receivables, including:	-	29	924	117	2	-	62	368	130	2	
Trade receivables and receivables on commission sales	-	27	814	51	2	-	61	269	30	2	
Prepayments made	-	-	-	52	-	-	-	-	69	-	
Loans issued	-	-	98	-	-	-	-	98	-	-	
Other financial receivables (short-term, non-interest bearing)	-	2	12	14	-	-	1	1	31	-	
Cash and cash equivalents	-	-	-	39	-	-	-	-	41	-	
LIABILITIES											
Other non-current liabilities	-	-	-	-	-	-	-	-	11	-	
Non-bank borrowings	-	-	-	341	119	-	-	-	315	110	
Trade and other payables, including:	41	50	716	116	48	41	81	510	139	48	
Dividends payable	40	-	-	15	48	40	-	-	-	48	
Trade payables and payables on sales made on commission	-	32	711	97	-	-	62	510	87	-	
Prepayments received	-	18	-	1	-	-	19	-	4	-	
Other financial liabilities	1	-	5	3	-	1	-	-	48	-	

29 Balances and transactions with related parties (continued)

Significant transactions (excluding purchases) with related parties during 2017 and 2016 are detailed below:

2017	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Sales, including:	11	942	62	1	1,016
Steel	-	27	53	1	81
Scrap metal	-	33	-	-	33
Coke and coking coal	9	520	1	-	530
Iron ore	-	275	1	-	276
Other	2	87	7	-	96
Other operating income/ (expenses), net	2	7	(2)	-	7
Finance income / (expenses), including:	-	11	(22)	(3)	(14)
Interest income – bank deposits	-	-	1	-	1
Interest income – loans issued	-	11	4	6	21
Interest expense – borrowings	-	-	(27)	(9)	(36)
2016	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Sales, including:	35	451	42	1	529
Steel	-	21	36	1	58
Scrap metal	-	32	3	-	35
Coke and coking coal	31	219	-	-	250
Iron ore	-	115	1	-	116
Other	4	64	2	-	70
Finance income / (expenses), including:	-	11	(23)	(4)	(16)
Interest income – bank deposits	-	-	2	-	2
Interest income – loans issued	-	11	3	5	19
Interest expense – borrowings	-	-	(28)	(9)	(37)

29 Balances and transactions with related parties (continued)

The following is a summary of purchases from related parties in 2017 and 2016:

2017	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Purchases, including:	38	1,523	1,174	1	2,736
Metal products	-	1,466	12	-	1,478
Coke and coking coal	17	-	54	-	71
Raw materials and spare parts	13	48	64	1	126
Electricity	-	-	386	-	386
Gas	-	5	236	-	241
Fuel	-	-	50	-	50
Services	-	2	314	-	316
Other	8	2	58	-	68

2016	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Purchases, including:	84	985	1,090	-	2,159
Metal products	1	944	5	-	950
Coke and coking coal	66	2	39	-	107
Raw materials and spare parts	9	31	76	-	116
Electricity	-	-	439	-	439
Gas	4	4	174	-	182
Fuel	-	-	49	-	49
Services	2	-	298	-	300
Other	2	4	10	-	16

Not included in the tables above are the Group's transactions on purchase and further re-sale of iron ore, coal and steel products from or to joint ventures where the Group is acting as an agent and not as principal. Income and costs related to such transactions are presented net within other operating income / (expense). The Group's net gain on such transactions was USD 11 million in 2017 (2016: USD 6 million).

In 2017, the remuneration of key management personnel of the Group comprised current salaries and related bonuses paid totalling USD 13.3 million (in 2016: USD 11.5 million).

As at 31 December 2017 and 2016, key management held the Group's bonds in the total amount of less than USD 1 million. Rights of these bondholders are not different from the rights of other bondholders.

30 Contingencies, commitments and operating risks

Tax legislation. Ukrainian tax, currency and customs legislation is subject to varying interpretations and changes, which can occur frequently. As a result, there is significant uncertainty as to the implementation or interpretation of the new legislation and unclear or non-existent implementing regulations. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and State authorities. It is possible that transactions and activities that have not been challenged in the past may be challenged. As a result, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

The Group's operations are vertically integrated and a significant portion of the Group's iron ore, coke and coal production is used in the subsequent production operations. Because of non-explicit requirements of the applicable tax legislation, intercompany transactions may be assessed by the Ukrainian tax authorities as non-market. Such transactions have not been challenged in the past by the tax authorities. However, it is possible with evolution of the interpretation of tax law in Ukraine and other jurisdictions plus changes in the approach of tax authorities, that such transactions could be challenged in the future.

The tax legislation had been expanded with the new transfer pricing rules effective from 1 September 2013 that are much more detailed than previous legislation and, to a certain extent, better aligned with the international transfer pricing principles. The new legislation allows the tax authorities to make transfer pricing adjustments and impose additional tax liabilities in respect of controlled transactions (transactions with related parties and some types of transactions with unrelated parties), if the transaction price is not arm's length and is not supported by relevant documentation. Since 1 January 2015, the transfer pricing rules were amended so that transactions between Ukrainian companies (irrespective whether they are related parties or not) ceased to be treated as controlled transactions.

Management believes it is taking appropriate measures to ensure compliance with the new transfer pricing legislation.

Bankruptcy proceedings. During 2006, bankruptcy proceedings were initiated against the Group's subsidiary PrJSC Krasnodonugol. The majority of the creditors' claims summarised by the external manager relate to the Group thus are eliminated on consolidation. As at 31 December 2017, the amount of financial and tax liabilities related to the bankruptcy proceedings recorded in these consolidated financial statements is USD 10 million (31 December 2016: USD 11 million), out of which USD 7 million (31 December 2016: USD 7 million) are presented as non-current tax liabilities under moratorium (Note 22).

Legal proceedings. From time to time and in the normal course of business, claims against the Group are received. On the basis of its own estimates and both internal and external professional advice management is of the opinion that no material losses will be incurred in respect of claims in excess of provisions that have been made in these consolidated financial statements.

Environmental matters. The enforcement of environmental regulation in Ukraine is evolving and the enforcement posture of government authorities is continually being reconsidered. The Group periodically evaluates its obligations (including asset retirement obligations) under environmental regulations. As obligations are determined, they are recognised immediately. Potential liabilities, which might arise as a result of changes in existing regulations, civil litigation or legislation, cannot be estimated, but could be material. In the current enforcement climate under existing legislation, management believes that there are no significant liabilities for environmental damage.

Capital expenditure commitments. As at 31 December 2017, the Group has contractual capital expenditure commitments in respect of property, plant and equipment totalling USD 185 million (31 December 2016: USD 135 million). The Group has already allocated the necessary resources in respect of these commitments. Management of the Group believes that future net income and funding will be sufficient to cover these and any similar commitments.

Guarantees issued. As at 31 December 2017 the Group's deposit amounting to USD 9 million was pledged as part of energy guarantee provided to the Group's related party. As at 31 December 2016, the Group has no outstanding guarantees to third parties.

Compliance with covenants. The Group is subject to certain covenants related primarily to its borrowings. Non compliance with such covenants may result in negative consequences for the Group including increase in the cost of borrowings and declaration of default. In March 2015 the Group breached its payment covenants triggering default and cross defaults under its bank and non-bank loans and borrowings, as well as bonds. However, subsequent to restructuring reached in March 2017 (Note 19) and as at 31 December 2017 the Group was in compliance with the covenants.

Insurance. Metinvest maintains mandatory insurance policies against certain types of risk in accordance with Ukrainian law, including life and health insurance; third party liability insurance on hazardous industrial assets and in respect of cargo and motor vehicles; voluntary insurance cover for most of its production facilities and in respect of cargo and motor vehicles; "All Risk" insurance to cover property damage and provide business interruption coverage including "inter-dependency" coverage for its key production facilities in Ukraine; property damage and business interruption policies in respect of its European and US assets.

31 Financial risk management

The Group activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Financial risk management is carried out jointly by the internal control and risk management department and the central treasury department. These departments identify, evaluate and mitigate financial risks in close co-operation with the Group's operating units.

(a) Market risk.

(i) Foreign exchange risk.

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign operations is managed through (i) borrowings denominated in the relevant foreign currencies; (ii) different treasury operations like forward, swap and other.

Foreign exchange risk is managed centrally by the Group's treasury. The Group's treasury has set up a policy to manage foreign exchange risk. The Group's treasury sets limits on the level of exposure by currency and maximum amount of exposure. The subsidiaries have not entered into transactions designed to hedge against these foreign currency risks without permission of the Group's treasury.

At 31 December 2017, if the UAH had strengthened / weakened by 25% against the US dollar with all other variables held constant, post-tax profit for the year would have been USD 61 million lower / higher (2016: if the UAH strengthened / weakened by 25% against USD dollar, post-tax profit for the year would have been USD 172 million lower / higher), mainly as a result of foreign exchange losses/gains on translation of US dollar denominated trade receivables and foreign exchange gains/losses on translation of US dollar denominated intragroup borrowings and dividends payable.

(ii) Price risk.

The Group's revenue is exposed to the market risk from price fluctuations related to the sale of its steel and iron ore products. The prices of the steel and iron ore products sold both within Ukraine and abroad are generally determined by market forces. These prices may be influenced by factors such as supply and demand, production costs (including the costs of raw material inputs) and global economic growth. The prices of the products that the Group sells to third parties are also affected by supply/demand and global/Ukrainian economic growth. Adverse changes in respect of any of these factors may reduce the revenue that the Group receives from the sale of its steel or mined products.

The Group's exposure to commodity price risk associated with the purchases is limited as the Group is vertically integrated and is self-sufficient for iron ore and certain portion of coking coal requirements.

No financial instruments are exposed to price risk.

(iii) Cash flow and fair value interest rate risk.

The Group's income and operating cash flows are dependent on changes in market interest rates.

The Group's interest rate risk arises from long-term and short-term borrowings. Borrowings attracted at variable rates expose the Group to cash flow interest rate risk. Borrowings attracted at fixed rates expose the Group to fair value interest rate risk. The Group's policy is to maintain a balanced borrowings portfolio of fixed and floating rate instruments. As at 31 December 2017, 54% of the total borrowings were provided to the Group at fixed rates (31 December 2016: 56%). During 2017 and 2016, the Group's borrowings at variable rate were denominated in USD, EUR and GBP.

31 Financial risk management (continued)

Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of attracting new debt management uses its judgment to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

Refer to Note 14, 19 and 31 for information about maturity dates and effective interest rates of financial instruments.

At 31 December 2017, if interest rates on USD, EUR and GBP denominated floating rate borrowings had been by 1 pp higher / lower (2016: 1 pp) with all other variables held constant, post-tax profit for the year would have been USD 11 million lower / higher (2016: USD 11 million).

(b) Credit risk

Credit risk is managed centrally by the Group management. Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. When wholesale customers are independently rated, these ratings are used for credit quality assessment. Otherwise, if there is no independent rating, the Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilisation of credit limits is regularly monitored.

Financial assets, which potentially subject the Group to credit risk, consist principally of cash, loans, trade and other accounts receivable.

Cash is placed with major Ukrainian and international reputable financial institutions, which are considered at time of deposit to have minimal risk of default.

The Group has policies in place to ensure that provision of loans and sales of products/services are made to customers with an appropriate credit history. The Group's credit risk exposure is monitored and analysed on a case-by-case basis. Credit evaluations are performed for all customers requiring credit over a certain amount. The carrying amount of loans, trade and other accounts receivable, net of provision for impairment, represents the maximum amount exposed to credit risk. Concentration of credit risk mainly relates to CIS and European countries where the major customers are located.

The maximum exposure to credit risk as at 31 December 2017 is USD 2,310 million (2016: USD 1,424 million) being the carrying value of long and short-term loans issued and receivables and cash. In order to reduce credit risk on receivables, the Group uses letters of credit, guarantees and trade insurance. The Group does not hold any collateral as security.

Management believes that credit risk is appropriately reflected in impairment allowances recognised against assets, and management does not expect any significant losses from non-performance by these counterparties.

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, the Group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

As at 22 March 2017 the Group has completed the restructuring of its debts to achieve healthy liquidity position and maintain its ability to continue operating on a going concern basis.

The Group treasury analyses the ageing of Group's assets and the maturity of Group's liabilities and plans their liquidity depending on the expected repayment of various instruments. In case of insufficient or excessive liquidity in individual entities, the Group relocates resources and funds among the entities of the Group to achieve optimal financing of the business needs of each entity.

31 Financial risk management (continued)

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the consolidated balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Cash flows from borrowings were calculated using spot rates.

At 31 December 2017	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	25	335	918	-
Trade finance	255	38	-	-
Bonds	38	120	1,555	-
Non-bank borrowings	-	-	636	-
Seller's notes	7	-	-	-
Finance lease	2	10	-	-
Financial trade and other payables	1,552	-	-	-
Total	1,879	503	3,109	-

At 31 December 2016	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	1,123	-	-	-
Trade finance	161	-	-	-
Bonds	1,196	-	-	-
Non-bank borrowings	425	-	-	-
Seller's notes	90	-	-	-
Financial trade and other payables	1,270	-	-	-
Total	4,265	-	-	-

32 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital on the basis of a gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings and Seller's Notes (including current and non-current parts) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

The Group has yet to determine its optimum gearing ratio. Presently, the majority of debt is due within 2-5 years and the Group is actively pursuing mechanisms to extend the credit terms to match its long-term investment strategy. As at 31 December 2016, all debt was either in default or matures within 1 year, but the Group managed to restructure them (Note 19) in 2017.

	31 December 2017	31 December 2016
Total borrowings (Note 19)	3,010	2,879
Seller's notes (Note 20)	7	90
Less: cash and cash equivalents (Note 15)	(259)	(226)
Net debt	2,758	2,743
Total equity	4,308	4,028
Total capital	7,066	6,771
Gearing ratio	39%	41%

33 Fair values of financial instruments

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date, which is Level 1 of fair valuation hierarchy. The quoted market price used for financial assets held by the Group is the current bid price. This valuation technique is used for fair value disclosures of bonds issued.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses a variety of methods and makes assumptions that are based on market conditions existing at each balance sheet date. Estimated discounted cash flows, are used to determine fair value for seller's notes. Calculation is based on current interest rates for new instruments with similar credit risk, currency and remaining maturity; such estimation represents Level 3 of fair value hierarchy.

The carrying values less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments.

The estimated fair values of financial instruments have been determined by the Group using available market information, where it exists, and appropriate valuation methodologies. However, judgement is required to interpret market data to determine the estimated fair value. Ukraine continues to display some characteristics of an emerging market and economic conditions continue to limit the volume of activity in the financial markets. Market quotations may be outdated or reflect distress sale transactions and therefore not represent fair values of financial instruments. Management has used all available market information in estimating the fair value of financial instruments.

Financial assets carried at amortised cost. The fair value of floating rate instruments is normally their carrying amount. The estimated fair value of fixed interest rate instruments is based on estimated future cash flows expected to be received discounted at current interest rates for new instruments with similar credit risk and remaining maturity. Discount rates used depend on credit risk of the counterparty. Carrying amounts of financial assets carried at amortised cost approximate their fair values.

Financial liabilities carried at amortised cost. The fair value is based on quoted market prices, if available. Except as discussed in the Note 19, the estimated fair value of fixed interest rate instruments with stated maturity, for which a quoted market price is not available, was estimated based on expected cash flows discounted at current interest rates for new instruments with similar credit risk and remaining maturity. The fair value of liabilities repayable on demand or after a notice period ("demandable liabilities") is estimated as the amount payable on demand, discounted from the first date that the amount could be required to be paid (Note 19, 20 and 22).

34 Reconciliation of classes of financial instruments with measurement categories

All of the Group's financial assets and financial liabilities are carried at amortised cost, except for investments in associates and joint ventures which are accounted for by the equity method of accounting.

35 Events after the balance sheet date

There were no events after the balance sheet date other than those already disclosed in these consolidated financial statements.

Metinvest B.V.

IFRS Consolidated Summary Financial Statements

31 December 2016

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IFRS Consolidated Summary Financial Statements

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Independent auditor's report

To: the board of directors of Metinvest B.V.

Report on the consolidated summary financial statements 2016

Our opinion

In our opinion, the accompanying consolidated summary financial statements 2016 of Metinvest B.V. ("The Company") are consistent, in all material respects, with the audited statutory financial statements, in accordance with the basis described in note 1.

The consolidated summary financial statements

The Company's consolidated summary financial statements derived from the audited statutory financial statements for the year ended 31 December 2016 comprise:

- the consolidated summary statement of financial position as at 31 December 2016;
- the consolidated summary statement of comprehensive income for the year then ended;
- the consolidated summary statement of changes in equity for the year then ended;
- the consolidated summary statement of cash flows for the year then ended; and
- the related notes to the consolidated summary financial statements.

The consolidated summary financial statements do not contain all of the disclosures required by International Financial Reporting Standards as adopted by the European Union and with Part 9 of Book 2 of the Dutch Civil Code. Reading the summary financial statements and the auditor's report there on, therefore, is not a substitute for reading the audited statutory financial statements of Metinvest B.V. and the auditor's report thereon.

The audited financial statements and the summary financial statements do not reflect the events that occurred subsequent to the date of our report on the audited financial statements.

Ref.: e0402898

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The audited statutory financial statements and our auditor's report thereon

We expressed an unmodified audit opinion on the audited statutory financial statements in our report dated 29 May 2017. The report also includes:

- A section 'Emphasis of matter - Uncertainties in the financial statements with respect to the political and economic uncertainties in Ukraine' that draws attention to Note 2 of the consolidated financial statements. As disclosed in Note 2, the operations of the Group have been affected, and may continue to be affected for the foreseeable future, by the continuing political and economic uncertainties in Ukraine, including the loss of control over the operations of the Group's assets located in the non-controlled territory in March 2017. These factors increase uncertainties regarding the Group's assessment of the carrying amounts of property, plant and equipment accounted for under revaluation model and the recoverable amounts of property, plant and equipment and goodwill under impairment testing.
- The communication of key audit matters. Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the audited financial statements of the current period.

Responsibilities of management for the consolidated summary financial statements

Management is responsible for the preparation of the consolidated summary financial statements in accordance with the basis described in note 1.

Auditor's responsibility

Our responsibility is to express an opinion on whether the consolidated summary financial statements are consistent, in all material respects, with the audited statutory financial statements based on our procedures, which we conducted in accordance with Dutch Law, including the Dutch Standard 810 'Engagements to report on summary financial statements'.

Amsterdam, 29 May 2017
PricewaterhouseCoopers Accountants N.V.

Originally has been signed by P.C. Dams RA

Metinvest B.V.
Consolidated Summary Balance Sheet
All amounts in millions of US dollars

	Note	31 December 2016	31 December 2015
ASSETS			
Non-current assets			
Goodwill	8	543	601
Other intangible assets	9	125	164
Property, plant and equipment	10	4,724	4,822
Investments in associates and joint ventures	11	908	779
Deferred tax asset	28	96	105
Income tax prepaid	12	25	105
Trade and other receivables	14	137	229
Total non-current assets		6,558	6,805
Current assets			
Inventories	13	949	766
Income tax prepaid	12	18	66
Trade and other receivables	14	1,580	1,365
Cash and cash equivalents	15	226	180
Total current assets		2,773	2,377
TOTAL ASSETS		9,331	9,182
EQUITY			
Share capital	16	0	0
Share premium	16	6,225	6,225
Other reserves	17	(8,442)	(8,013)
Retained earnings		6,107	5,674
Equity attributable to the owners of the Company		3,890	3,886
Non-controlling interest	18	138	138
TOTAL EQUITY		4,028	4,024
LIABILITIES			
Non-current liabilities			
Retirement benefit obligations	21	326	335
Deferred tax liability	28	368	348
Other non-current liabilities	22	92	103
Total non-current liabilities		786	786
Current liabilities			
Loans and borrowings	19	2,879	2,858
Seller's notes	20	90	88
Trade and other payables	23	1,548	1,426
Total current liabilities		4,517	4,372
TOTAL LIABILITIES		5,303	5,158
TOTAL LIABILITIES AND EQUITY		9,331	9,182

Signed and authorised for release on behalf of Metinvest B.V. on "29" May 2017:

Originally signed by Managing Director A, Yuriy Ryzhenkov

Originally signed by Managing Director B, ITPS (Netherlands) B.V.

Metinvest B.V.
Consolidated Summary Income Statement
All amounts in millions of US dollars

	Note	Year ended 31 December 2016	Year ended 31 December 2015
Revenue		6,223	6,832
Cost of sales	24	(4,833)	(6,087)
Gross profit		1,390	745
Distribution costs	24	(660)	(920)
General and administrative expenses	24	(183)	(199)
Other operating income / (expenses), net	25	(222)	(300)
Operating profit / (loss)		325	(674)
Finance income	26	26	26
Finance costs	27	(397)	(647)
Share of result of associates and joint ventures	11	205	131
Profit / (loss) before income tax		159	(1,164)
Income tax (expense) / benefit	28	(41)	161
Profit / (loss) for the year		118	(1,003)
Profit / (loss) is attributable to:			
Owners of the Company		106	(988)
Non-controlling interests		12	(15)
Profit / (loss) for the year		118	(1,003)

Consolidated Summary Statement of Comprehensive Income
All amounts in millions of US dollars

	Note	Year ended 31 December 2016	Year ended 31 December 2015
Profit / (loss) for the year		118	(1,003)
Other comprehensive income / (loss)			
<i>Items that will not be reclassified to profit or loss:</i>			
Remeasurement of retirement benefit obligation		(6)	(7)
Revaluation and impairment of property, plant and equipment	10, 24	629	886
Share in other comprehensive income of joint ventures		35	72
Income tax relating to items that will not be reclassified subsequently to profit or loss	28	(105)	(161)
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Currency translation differences		(666)	(2,525)
Total other comprehensive income / (loss)		(113)	(1,735)
Total comprehensive income / (loss) for the period		5	(2,738)
Total comprehensive income / (loss) attributable to:			
Owners of the Company		(3)	(2,680)
Non-controlling interest		8	(58)
Total comprehensive income / (loss) for the period		5	(2,738)

Metinvest B.V.
Consolidated Summary Statement of Cash Flows
All amounts in millions of US Dollars

	Note	Year ended 31 December 2016	Year ended 31 December 2015
Cash flows from operating activities			
Profit / (loss) before income tax		159	(1,164)
<i>Adjustments for:</i>			
Depreciation of property, plant and equipment ("PPE") and amortisation of intangible assets	24	529	615
Impairment and devaluation of PPE and other intangible assets	24	34	364
Impairment of goodwill		-	74
Impairment of associates and joint ventures		-	4
Gain on disposal of property, plant and equipment	25	(3)	(8)
Finance income	26	(26)	(26)
Finance costs	27	397	647
Unrealised operating foreign exchange differences		(18)	(115)
Net change in retirement benefit obligations, except for interest costs and remeasurements		(21)	(34)
Impairment of trade and other accounts receivable	25	227	292
Share of result of associates and joint ventures	11	(205)	(131)
Inventory write down, net	13	(45)	21
Other non-cash operating gains		(2)	(14)
Operating cash flows before working capital changes		1,026	525
(Increase) / decrease in inventories		(195)	123
(Increase) / decrease in trade and other accounts receivable		(442)	13
Increase in trade and other accounts payable		199	215
Cash generated from operations		588	876
Income taxes received/ (paid)		35	(39)
Interest paid		(133)	(200)
Net cash from operating activities		490	637
Cash flows from investing activities			
Purchase of property, plant and equipment and intangible assets		(358)	(275)
Proceeds from sale of property, plant and equipment		3	21
Proceeds from sale of Black Iron (Cyprus) Limited		6	-
Proceeds from repayments of loans issued	14	-	3
Interest received		18	14
Net cash used in investing activities		(331)	(237)
Cash flows from financing activities			
Proceeds from loans and borrowings	19	-	4
Repayment of loans and borrowings	19	(10)	(134)
Net trade financing repayment	19	(67)	(179)
Purchase of non-controlling interest		(1)	-
Other finance costs		(27)	(12)
Net cash used in financing activities		(105)	(321)
Effect of exchange rate changes on cash and cash equivalents		(8)	(13)
Net increase in cash and cash equivalents		46	66
Cash and cash equivalents at the beginning of the year		180	114
Cash and cash equivalents at the end of the year	15	226	180

Metinvest B.V.
Consolidated Summary Statement of Changes in Equity
All amounts in millions of US Dollars

	Attributable to owners of the Company					Non-controlling interest (NCI)	Total equity
	Share capital	Share premium	Other reserves	Retained earnings	Total		
Balance at 1 January 2015	0	6,225	(6,034)	6,372	6,563	199	6,762
Revaluation and impairment of property, plant and equipment (Note 10, 24)	-	-	859	-	859	27	886
Share in other comprehensive income of joint venture (Note 11)	-	-	72	-	72	-	72
Remeasurement of retirement benefit obligation	-	-	-	(6)	(6)	(1)	(7)
Income tax relating to components of other comprehensive income (Note 28)	-	-	(157)	1	(156)	(5)	(161)
Currency translation differences	-	-	(2,461)	-	(2,461)	(64)	(2,525)
Other comprehensive loss for the period	-	-	(1,687)	(5)	(1,692)	(43)	(1,735)
Loss for the period	-	-	-	(988)	(988)	(15)	(1,003)
Total comprehensive loss for the period	-	-	(1,687)	(993)	(2,680)	(58)	(2,738)
Realised revaluation reserve, net of tax	-	-	(292)	292	-	-	-
Acquisition of non-controlling interest in subsidiaries	-	-	-	3	3	(3)	-
Balance at 31 December 2015	0	6,225	(8,013)	5,674	3,886	138	4,024
Revaluation and impairment of property, plant and equipment (Note 10, 24)	-	-	618	-	618	11	629
Share in other comprehensive income of joint venture (Note 11)	-	-	36	(1)	35	-	35
Remeasurement of retirement benefit obligation	-	-	-	(7)	(7)	1	(6)
Income tax relating to components of other comprehensive income (Note 28)	-	-	(104)	1	(103)	(2)	(105)
Currency translation differences	-	-	(652)	-	(652)	(14)	(666)
Other comprehensive loss for the period	-	-	(102)	(7)	(109)	(4)	(113)
Profit for the period	-	-	-	106	106	12	118
Total comprehensive income / (loss) for the period	-	-	(102)	99	(3)	8	5
Realised revaluation reserve, net of tax	-	-	(327)	327	-	-	-
Acquisition of non-controlling interest in subsidiaries	-	-	-	7	7	(8)	(1)
Balance at 31 December 2016	0	6,225	(8,442)	6,107	3,890	138	4,028

1 Metinvest B.V. and its operations

Metinvest B.V. (the “Company” or “Metinvest”), is a private limited liability company registered in the Netherlands. The Company is beneficially owned by Mr. Rinat Akhmetov, through various entities commonly referred to as System Capital Management (“SCM”), and Mr. Vadim Novinsky, through various entities commonly referred to as “SMART” or “Smart Group”.

The Company and its subsidiaries (together referred to as the “Group” or “Metinvest Group”) are an integrated steel producer, owning assets in each link of the production chain – from iron ore mining, coking coal mining and coke production, through to semi-finished and finished steel production. The steel products, iron ore and coke and coal are sold on both the Ukrainian and export markets.

Until November 2007, the Company was indirectly 100% controlled by SCM (System Capital Management) Limited (“SCM Cyprus”).

In November 2007, the Company acquired from parties known as the Smart Group 82% of PrJSC Ingulets Iron Ore Enrichment Works in exchange for the transfer to SMART of 25% of the Company. Following the November 2007 transaction, Metinvest B.V. was owned 75% by SCM Cyprus and 25% by SMART. SCM Cyprus and SMART additionally agreed that both would sell/contribute to the Group their remaining equity interests in certain metals and mining assets owned by SCM and SMART. In exchange SMART would acquire certain additional rights over the management of the Company and the Group. Due to the complexity of the transaction, it was executed in several stages during 2007 through 2014; and was completed in July 2014.

In 2011, as part of the acquisition of Ilyich Group, the Company issued 5% of share capital to the sellers of Ilyich Group.

As of 31 December 2016 and throughout the periods presented in these consolidated financial statements, Metinvest B.V. is owned 71.24% by SCM Cyprus and 23.76% by companies of the Smart Group. The remaining 5% interest in the Company in the form of Class C shares has been acquired from the previous owners of Ilyich Group for the benefit of SCM and SMART. It is the intention of SCM and SMART to dispose of the said 5% interest in due course (after receipt of respective governmental approvals, if such will be necessary), and in such manner that the ultimate interest of SCM in the Company shall be 75% minus 1 share, and the ultimate interest of SMART in the Company shall be 25% plus 1 share, thus SCM remaining as the controlling shareholder.

The principal subsidiaries of Metinvest B.V. are presented below:

Name	Effective % interest as at 31 December		Segment	Country of incorporation
	2016	2015		
Metinvest Holding LLC	100.0%	100.0%	Corporate	Ukraine
Metinvest Management B.V.	100.0%	-	Corporate	Netherlands
PrJSC Azovstal Iron and Steel Works	96.7%	96.2%	Metallurgical	Ukraine
PrJSC Yenakieve Iron and Steel Works	92.2%	91.5%	Metallurgical	Ukraine
JV Metalen LLC	100.0%	100.0%	Metallurgical	Ukraine
PrJSC Khartsyzsk Pipe Plant	98.5%	98.5%	Metallurgical	Ukraine
Ferriera Valsider S.p.A.	70.0%	70.0%	Metallurgical	Italy
Metinvest Trameal S.p.A.	100.0%	100.0%	Metallurgical	Italy
Spartan UK Limited	100.0%	100.0%	Metallurgical	UK
Metinvest International SA	100.0%	100.0%	Metallurgical	Switzerland
Metinvest Eurasia LLC	100.0%	100.0%	Metallurgical	Russia
Metinvest Service Metal Centres LLC	100.0%	100.0%	Metallurgical	Ukraine
JSC Promet Steel	100.0%	100.0%	Metallurgical	Bulgaria
PrJSC Makiivka Iron and Steel Works	90.2%	90.2%	Metallurgical	Ukraine
PrJSC Ilyich Iron and Steel Works	99.3%	99.2%	Metallurgical	Ukraine
PrJSC Avdiivka Coke Plant	94.6%	93.0%	Metallurgical	Ukraine
PrJSC Zaporozhkoks	52.2%	52.2%	Metallurgical	Ukraine
PrJSC Donetskcoke	93.7%	93.6%	Metallurgical	Ukraine
PrJSC Northern Iron Ore Enrichment Works	96.4%	96.4%	Mining	Ukraine
PrJSC Central Iron Ore Enrichment Works	99.8%	99.8%	Mining	Ukraine
PrJSC Ingulets Iron Ore Enrichment Works	99.8%	99.8%	Mining	Ukraine
PrJSC Komsomolske Flux Plant	99.7%	99.7%	Mining	Ukraine
United Coal Company LLC (“UCC”)	100.0%	100.0%	Mining	USA
PrJSC Krasnodon Coal Company	92.9%	92.9%	Mining	Ukraine

As at 31 December 2016, the Group employed approximately 85 thousand people (31 December 2015: 91 thousand).

The consolidated financial statements of Metinvest B.V. for the year ended 31 December 2016 were authorised for issue in accordance with a resolution of the Board of Directors on 4 April 2017.

For better understanding of Metinvest’s financial position and the results of operations, these summary financial statements should be read in conjunction with the Metinvest’s audited financial statements as of and for the year ended 31 December 2016, which include all disclosures required by International Financial Reporting Standards as adopted by European Union and the statutory provisions of Part 9, Book 2, of the Dutch Civil Code.

2 Operating environment of the Group

The complete set of financial statements together with the auditor's report is available on request at Nassaulaan 2A, 2514 JS, The Hague.

The ongoing political and economic instability in Ukraine has led to a deterioration of State finances, volatility of financial markets, illiquidity on capital markets, higher inflation and a depreciation of the national currency against major foreign currencies. It has continued in 2016, though to a lesser extent as compared to 2014–2015.

The inflation rate in Ukraine during 2016 reduced to 12% (as compared to 43% in 2015), while GDP returned to growth of 2% (after 10% decline in 2015).

Devaluation of national currency during 2016 has been moderate. As at the date of this report the official exchange rate of Hryvnia against US dollar was UAH 26.35 per USD 1, compared to UAH 27.19 per USD 1 as at 31 December 2016 (31 December 2015: UAH 24.00 per USD 1). In 2016 the National Bank of Ukraine ("NBU") has made certain steps to ease the currency control restrictions introduced in 2014–2015. In particular, the required share of foreign currency proceeds subject to mandatory sale on the interbank market was decreased from 75% to 65% starting from 9 June 2016 and further to 50% starting from 5 April 2017, the settlement period for export-import transactions in foreign currency was increased from 90 to 120 days starting from 28 July 2016. Also starting from 13 June 2016, the NBU allowed Ukrainian companies to pay dividends to non-residents with a limit of USD 5 million per month. Current restrictions are effective until 16 June 2017. As of 31 December 2016, the amount of undistributed retained earnings of the Group's Ukrainian subsidiaries was approximately USD 1,658 million.

The IMF continued to support the Ukrainian government under the four-year Extended Fund Facility ("EFF") Programme was approved in March 2015, providing the third and the fourth tranches of approximately USD 1 billion in September 2016 and April 2017, respectively. Further disbursements of IMF tranches depend on the continued implementation of Ukrainian government reforms, and other economic, legal and political factors. The banking system remains fragile due to its: weak level of capital; its weakening asset quality caused by the economic situation; currency depreciation; and other factors.

The conflict in the parts of Eastern Ukraine which started in spring 2014 has not been resolved to date. However, there was no substantial sustained escalation of the conflict since the signing of ceasefire agreements in September 2014 until January 2017. The relationships between Ukraine and the Russian Federation remained strained.

On 1 January 2016, the agreement on the free trade area between Ukraine and the EU came into force. Just after that the Russian government implemented a trading embargo on many key Ukrainian export products. In response, the Ukrainian government implemented similar measures against Russian products. This had some but not a significant impact on Group's trading.

The majority of the Group's Metallurgical segment and some of the Mining segment is located in, or near to, the parts of the Donetsk and Lugansk regions where there has been armed conflict. This includes the city of Mariupol (where the Group's two largest steel plants, PrJSC Ilyich Iron and Steel Works and PrJSC Azovstal Iron and Steel Works, are located), which is approximately 20 kilometres from the line of contact of conflicting parties. Production at these plants has been negatively impacted by the situation starting from the second half of 2014. Despite the challenges, management still controlled these assets and oversaw their operations as of 31 December 2016.

The negative impact on production volumes has been caused primarily by disruptions in infrastructure (rail transportation, road transport and electricity and gas supply). This has resulted in some temporary suspensions of operations or decrease of production at some plants during 2014–2016. There has been no significant impact to the physical condition of the Group's assets as at 31 December 2016.

Further, in February-March 2017, there was an escalation of military confrontation near Avdiivka (where PrJSC Avdiivka Coke Plant is located), which led to temporary suspension of the production. Production on PrJSC Yenakiieve Iron and Steel Works (which includes two facilities located in Yenakiieve and Makiivka) and PrJCS Krasnodon Coal Company has been disrupted since February 2017 by a blockade of railway transportation between Ukraine and the uncontrolled territory.

Following these events, in February 2017, the self-proclaimed authorities in the non-controlled territory announced their intention to seize businesses located on the non-controlled territory and to require businesses to comply with various fiscal, regulatory and other requirements which contravene Ukrainian legislation. On 15 March 2017, the Group determined that it has lost control over the operations of entities located in the non-controlled territory, including PrJSC Yenakiieve Iron and Steel Works; JV Metalen LLC; PrJSC Makiivka Iron and Steel Works; PrJCS Krasnodon Coal Company; PrJSC Khartsyzsk Pipe Plant; and PrJSC Komsomolske Flux Plant; PrJSC Donetskcoke. As of 31 December 2016, the aggregate consolidated tangible assets of these entities amount to USD 511 million (5% of the Group's total consolidated assets). During 2016, these subsidiaries contributed USD 563 million to the Group's external revenues (9% of consolidated revenues) and incurred an aggregate net loss of USD 35 million. Management have concluded that these events do not impact the application of the going concern assumption for the preparation of these consolidated financial statements. The loss of control is considered to be a non-adjusting post-balance sheet event and, consequently, there has been no adjustment to the carrying values of the Group's assets or liabilities as of 31 December 2016.

2 Operating environment of the Group (continued)

Management have sought to actively manage and limit the impact of these events on the Group's operations by adopting a number of contingency arrangements.

The increase in the Group's steel production in 2016 (as compared to 2015) was 9%, while iron ore production decreased by 9% due to need to restore the rate and pace of overburden removal following cost-cutting measures undertaken in the second half of 2015 and first half of 2016. There was also a 7% reduction of production of coking coal due to unfavourable market environment during the first half of 2016.

The prices of steel, coking coal and iron ore experienced both volatility and an overall decline during 2014–2015 and reached the decade-lowest levels in the fourth quarter of 2015 and January–February 2016. Since March 2016, there was a notable increase in price levels. The benchmark price for hot-rolled coil (Metal Expert HRC CIS export FOB Black Sea) reached USD 492 in December 2016 which is 84% higher compared to December 2015. Benchmark iron ore price (Platts 62% Fe CFR China) increased from USD 39 per dry tonne in December 2015 to USD 81 per dry tonne in December 2016 and increased further in first months of 2017. Coking coal prices (HCC LV, FOB Australia) increased from USD 89 per tonne in December 2015 to USD 200 per tonne in December 2016. These price dynamics had positive impact on the Group's gross margins and overall financial results in 2016 as compared to 2015.

As at 31 December 2016 and 2015, the Group had significant balances receivable from and prepayments made to the State including prepaid income taxes and VAT recoverable (Note 14). The timing of settlement of these balances is uncertain and is dependent upon the availability of State funds and amounts of future taxable profits of Group's subsidiaries. During 2016 and January and February 2017, the Group's Ukrainian subsidiaries have received the refunds of prepaid income taxes and VAT recoverable of USD 71 million and USD 434 million, respectively.

These events in Ukraine increase uncertainties, including the Group's assessment of the revaluation of property, plant and equipment and the recoverable amount of property, plant and equipment and goodwill under impairment testing for assets located in the above mentioned eastern regions of Ukraine.

Despite certain improvements in 2016, the final resolution and the ongoing effects of the political and economic situation are difficult to predict but they may have further severe effects on the Ukrainian economy and the Group's business.

3 Going concern

In March 2015, the Group sought an agreement to defer principal payments from its pre-export financing (PXF) facilities due in March and April 2015. Whilst approval for the above deferral was obtained from the majority of PXF lenders under the facilities, the Group was unable to obtain the required consent of all PXF lenders. The Group initiated a broader restructuring and, consequently, did not make the necessary principal payments, triggering default and cross defaults under its bank and non-bank loans and borrowings, as well as bonds. This resulted in a reclassification of all non-current loans and borrowings to current loans and borrowings. The amount of liability to bondholders and PXF lenders is disclosed in Note 19.

The Group undertook a number of measures aimed at restructuring of its debt in the period from April 2015. Negotiations with bondholders were held based on which the High Court of Justice of England and Wales (the Court) sanctioned a moratorium of the Group on taking enforcement action or initiation of insolvency proceedings by bondholders until 27 May 2016; this moratorium was further extended by the Court until 30 November 2016. Further, the Group concluded and signed a standstill agreement with its PXF lenders initially until 27 May 2016 and later prolonged this until 30 November 2016.

On 23 December 2016, the Group agreed the principal finance documents with the majority of bondholders and PXF lenders for its debt restructuring as contemplated by the Heads of Terms (the Restructuring) and issued a practice statement letter (to formally bring the process to the attention of the creditors) in connection with a proposed scheme of arrangement under Part 26 of the Companies Act 2006 to implement the Restructuring (the Restructuring Scheme).

On 17 January 2017, the Court granted leave to the Company to convene scheme meetings of bondholders and PXF lenders to vote on the Restructuring Scheme on 6 February 2017. At the scheme meetings, the majority of bondholders and PXF lenders voted in favour the proposed Restructuring Scheme. On 8 February 2017, at the sanction hearing, the Court sanctioned the Restructuring Scheme.

The Restructuring was implemented on 22 March 2017 when all conditions precedent were satisfied.

Key features of the Restructuring are:

- Existing bonds and PXF facilities were reprofiled and their maturities were extended:
 - 3 series of bonds due in 2016, 2017 and 2018 were exchanged into a new USD 1,225 million bond due 31 December 2021;
 - 4 syndicated PXF facilities were consolidated into a single USD 1,100 million PXF facility due 30 June 2021, with a grace period on scheduled repayments of principal until 31 December 2018;
 - All accrued and unpaid interest during the moratoriums under bonds and the standstill agreements under the PXF facilities was converted into the principal of the new instruments.

3 Going concern (continued)

- New bond and PXF facility are treated as senior liabilities of the Group and rank pari passu between themselves. Relationships between bondholders and PXF lenders are governed by an Intercreditor Agreement.
- Interest rates increased for both debt instruments, but interest is payable in full to the extent there is available unrestricted cash (i.e. cash balance after deduction of cash in transit, amounts held in special accounts in Ukraine for the purpose of purchase of foreign currency, and certain other amounts). This provides a cash flow flexibility for the Group and makes it more resistant to the volatile external economic environment.
 - Interest rate increased for both debt instruments – for bonds to 10.875% per annum and for PXF to the aggregate of 4.16% per annum and LIBOR for US dollar with a 1% floor.
 - Until 31 December 2018, a minimum of approximately 30% of interest is to be paid in cash. The remaining interest is paid via a quarterly cash sweep with a condition of the average unrestricted cash balance being above USD 180 million. All interest, except for catch-up interest, which is not paid in cash is to be capitalised. Catch-up interest under bonds is set at 1.5025% per annum and is payable to the extent of cash being available on the corresponding level of the cash sweep.
 - Starting 1 January 2019, all interest under both debt instruments is payable in cash in full amount.
- In addition to recourse rights of bondholders and PXF lenders existing under debt instruments which were subject to the Restructuring, the creditors received rights over common security consisting of, inter alia, the following items. The common security is subject to release under certain circumstances.
 - share pledge over 100% of shares of Metinvest Management B.V. which is 100% owned by Metinvest B.V. and owns 99.8% of the share capital of PrJSC Ingulets Iron Ore Enrichment Works, 99.3% of the share capital of PrJSC Ilyich Iron and Steel Works and 50%+1 share of PrJSC Central Iron Ore Enrichment Works;
 - a guarantee from Metinvest Management B.V.;
 - share pledge over 50%+1 share of each of PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Ilyich Iron and Steel Works and PrJSC Central Iron Ore Enrichment Works;
 - pledge of certain equipment from PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Ilyich Iron and Steel Works and PrJSC Central Iron Ore Enrichment Works;
 - pledge over certain bank accounts (including debt service account).
- Certain covenants are imposed on the Group, including limitations to pay dividends, make certain restricted payments, engage in certain transactions with related parties, make capital expenditures above certain levels, incur new debt on top of the permitted caps (unlimited trade finance, capital expenditure financing of USD 175 million, debt for general corporate purposes of USD 50 million), prepay or redeem subordinated debt before its maturity, as well as certain financial covenants (interest cover ratio, debt cover ratio, tangible net worth, gearing).
- Existing and future loans from SCM and SMART are to be subordinated in favour of the new bond and PXF facility.
- Additional reporting requirements are imposed on the Group.

Following completed debt restructuring, international agencies Moody's Investors Service and Fitch Ratings upgraded the Group's credit ratings. On 23 March 2017, Moody's Investors Service reviewed rating to Caa2 ('stable' outlook) from Caa3 constrained by Ukraine's country ceiling for foreign currency debt. According to a press release published on 6 April 2017, Fitch upgraded Group's Long-Term Foreign-Currency Issuer Default Rating to B ('stable' outlook) from RD, which is one notch above Ukraine's B- country ceiling.

In addition, on 4 January 2017, UCC Seller Notes were restructured (Note 20). Maturity was extended by 5 years to 31 December 2021. Interest rate was increased from 7% per annum to 9% per annum. The principal repayments are to be done through the cash sweep mechanism based on coal prices and to be calculated on a monthly basis. Until 31 December 2018, a minimum of 30% of interest is to be paid in cash. The remaining 70% of interest are to be paid in cash only if the average unrestricted cash (after repayment of 30% of interest and cash sweep) exceeds USD 15 million, otherwise it must be capitalised. Starting 1 January 2019, 100% of interest is payable in cash.

Considering the fact that the restructuring agreement has been concluded and improvements in markets and Group's performance (as discussed in Note 2), uncertainty which might have casted significant doubt about the Group's ability to continue as going concern which existed prior to the restructuring has been substantially reduced. Further, loss of control in 2017 over the operations of entities located in the non-controlled territory (Note 2) did not impact the application of the going concern assumption. As such, management have concluded that the application of going concern assumption for the preparation of these consolidated financial statements is appropriate.

4 Basis of preparation and significant accounting policies

Basis of preparation and statement of compliance. These consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by European Union.

4 Basis of preparation and significant accounting policies (continued)

The consolidated financial statements have been prepared under the historical cost convention unless stated otherwise. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated. New and revised standards and interpretations adopted by the Group are disclosed in Note 6.

These consolidated financial statements are presented in millions of US dollars and all values are rounded off to the nearest million except where otherwise indicated.

Critical accounting estimates and judgements in applying accounting policies. The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and the reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily available from other sources. Although these estimates are based on management's best knowledge of current events and actions, actual results ultimately may differ from these estimates. The areas involving a high degree of judgement or complexity, or areas where assumptions and estimates are significant to the IFRS consolidated financial statements are disclosed in Note 5.

Principles of consolidation. Subsidiaries are all entities over which the group has control. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

The purchase method of accounting is used to account for the acquisition of subsidiaries. The cost of an acquisition is measured at the fair value of the assets given up, equity instruments issued and liabilities incurred or assumed at the date of exchange. The date of exchange is the acquisition date where a business combination is achieved in a single transaction. Where a business combination is achieved in stages, the previously held interest in an acquired business is included into the cost of business combination at fair value as of the acquisition date with resulting gains recognised in consolidated income statement.

Costs directly related to acquisition of subsidiaries are recognised in the consolidated income statement in the period in which they incurred and the services are received.

Goodwill is measured by deducting the net assets of the acquiree from the aggregate of the consideration transferred for the acquiree, the amount of non-controlling interest in the acquiree and fair value of an interest in the acquiree held immediately before the acquisition date. Any negative amount ("negative goodwill") is recognised in profit or loss, after management reassesses whether it identified all the assets acquired and all liabilities and contingent liabilities assumed and reviews appropriateness of their measurement.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated; unrealised losses are also eliminated unless the cost cannot be recovered. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies of the Group.

Non-controlling interest ("NCI") is that part of the net results and of the net assets of a subsidiary, including the fair value adjustments, which is attributable to interests which are not owned, directly or indirectly, by the Company. Non-controlling interest forms a separate component of equity.

Purchases of subsidiaries from parties under common control and merger reserve in equity. Purchases of subsidiaries from parties under common control are accounted under the predecessor values method. Under this method the financial statements of the entity are presented as if the businesses had been consolidated from the beginning of the earliest period presented (or the date that the entities were first under common control, if later). The assets and liabilities of the subsidiary transferred under common control are at the predecessor entity's book values. The difference between the consideration given and the aggregate book value of the assets and liabilities (as of the date of the transaction) of the acquired entity is recorded as an adjustment to equity. This is recorded as a merger reserve. No additional goodwill is created by such purchases.

Transactions with non-controlling interests. The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity. Non-controlling interest is measured on proportionate basis of net assets.

Investments in associates and joint ventures. Associates are entities over which the Group has significant influence, but not control, generally accompanying a shareholding of between 20 and 50 percent of the voting rights.

4 Basis of preparation and significant accounting policies (continued)

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Those parties are called joint ventures.

Investments in associates and joint ventures are accounted for by the equity method of accounting and are initially recognised at cost. The carrying amount of associates and joint ventures includes goodwill identified on acquisition, and is reduced for accumulated impairment losses, if any. The Group's share of the post-acquisition profits or losses of associates and joint ventures is recorded in the consolidated income statement, and its share of post-acquisition movements in reserves is recognised in other comprehensive income. When the Group's share of losses in an associate or joint venture equals or exceeds its interest in the associate, including any other unsecured accounts receivable, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and their associates and joint ventures are eliminated to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Segment reporting. Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the General Director of the Group that makes strategic decisions.

Company reports separately information about an operating segment that meets any of the following quantitative thresholds unless aggregation criteria are met:

- (a) Its reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.
- (b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.
- (c) Its assets are 10 per cent or more of the combined assets of all operating segments.

Foreign currency translation. The functional currency of each of consolidated entity is the currency of the primary economic environment in which the entity operates. The functional currency for the majority of the consolidated entities is either Ukrainian hryvnia ("UAH") or US dollar ("USD").

Transactions denominated in currencies other than the relevant functional currency are translated into the functional currency using the exchange rate prevailing at the date of the transaction. Foreign exchange gains and losses resulting from the settlement of the transactions and from the translation of monetary assets and liabilities into each entity's functional currency at year-end official exchange rates are recognised in the consolidated income statement.

The principal rate of exchange used for translating foreign currency balances is as follows:

	31 December 2016	31 December 2015
USD/UAH	27.19	24.00
EUR/UAH	28.42	26.22

Monetary assets and liabilities are translated into functional currency at the official exchange rate at the respective balance sheet dates. Translation at year end does not apply to non-monetary items.

Translation from functional to presentation currency. The Group has selected the US dollar ("USD") as the presentation currency. The USD has been selected as the presentation currency for the Group as: (a) management of the Group manages business risks and exposures, and measures the performance of its businesses in the USD; (b) the USD is widely used as a presentation currency of companies engaged primarily in metallurgy; and (c) the USD is the most convenient presentation currency for non-Ukrainian users of these IFRS consolidated financial statements.

The results and financial position of each consolidated entity are translated into the presentation currency as follows:

- (i) assets and liabilities for each balance sheet are translated at the closing rate at the date of that balance sheet;
- (ii) income and expenses for each income statement are translated at monthly average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- (iii) all resulting exchange differences are recognised through comprehensive income and they accumulate as a separate component of equity. All the components of consolidated equity at each balance sheet date are translated at the historical rate. The balancing figure goes to cumulative currency translation reserve in other reserves in equity.

4 Basis of preparation and significant accounting policies (continued)

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and at each balance sheet date are translated at the closing rate. When a subsidiary is disposed of through sale, liquidation, repayment of share capital or abandonment of all, or part of, that entity, the currency translation differences deferred in equity are reclassified to the consolidated income statement.

Current exchange restrictions in Ukraine are explained in Note 2. At present, the UAH is not a freely convertible currency outside of Ukraine.

Property, plant and equipment. Property, plant and equipment are stated using the revaluation model. Fair values are based on valuations by external independent valuers. The frequency of revaluation depends upon the movements in the fair values of the assets being revalued. Initial acquisitions and subsequent additions to property, plant and equipment are recognised at cost. Cost includes expenditure directly attributable to acquisition of the items. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads.

Increases in the carrying amount arising on revaluation are credited to other comprehensive income and accumulate in the other reserves in equity. When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. Decreases that offset previous increases in the carrying amount of the same asset decrease the previously recognised revaluation reserve through other comprehensive income; all other decreases are charged to the income statement. The revaluation reserve in equity is transferred directly to retained earnings when the surplus is realised either on the retirement or disposal of the asset or as the asset is used by the Group; in the latter case, the amount of the surplus realised is the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost.

Upon recognition, items of property, plant and equipment are divided into components, which represent items with a significant value that have different useful lives.

Expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately, is capitalised with the carrying amount of the replaced component being written off. Other subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the item of property, plant and equipment. All other expenditure is recognised in the consolidated income statement as an expense when incurred.

Property, plant and equipment are derecognised upon disposal or when no future economic benefits are expected from the continued use of the asset. Gains and losses on disposals determined by comparing proceeds with carrying amount of property, plant and equipment are recognised in the consolidated income statement.

Depreciation is charged to the consolidated income statement on a straight-line basis to allocate costs or revalued amounts of individual assets to their residual value over the estimated remaining useful lives. Depreciation commences at the moment when assets is ready for use. The estimated useful lives are as follows:

	Useful lives in years
Buildings and structures	from 2 to 60
Plant and machinery	from 2 to 35
Furniture, fittings and equipment	from 2 to 10

Estimates of remaining useful lives are made on a regular basis for all buildings, plant and machinery, with annual reassessments. Changes in estimates are accounted for prospectively.

The residual value of an asset is the estimated amount that the Group would currently obtain from disposal of the asset less the estimated costs of disposal, if the assets were already of the age and in the condition expected at the end of its useful life. The residual value of an asset is nil if the Group expects to use the asset until the end of its physical life. The assets' residual values and useful lives are reviewed, and adjusted, if appropriate, at each balance sheet date.

Construction in progress represents prepayments for property, plant and equipment, and the cost of property, plant and equipment, construction of which has not yet been completed. No depreciation is charged on such assets until they are ready for use.

The Company capitalises borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset.

Asset retirement obligations. According to the Code on Mineral Resources, Land Code of Ukraine, Mining Law, Law on Protection of Land and other legislative documents of Ukraine and the US, the Group is responsible for site restoration and soil rehabilitation upon abandoning its mines. Estimated costs of dismantling and removing an item of property, plant and equipment are added to the cost of an item of property, plant and equipment when the item is acquired. Changes in the measurement of an existing asset retirement obligation that result from changes in the estimated timing or amount of the outflows, or from changes in the discount rate are recognised as an adjustment to the cost of the respective asset through the income statement or other reserves in equity to the extent of any revaluation balance existence in respect of the related asset. Provisions in respect of abandonment and site restoration are evaluated and re-estimated annually, and are included in these consolidated financial statements at each balance sheet date at their expected net present value, using discount rates which reflect the economic environment in which the Group operates and are specific to a liability.

4 Basis of preparation and significant accounting policies (continued)

Goodwill. Goodwill on acquisitions of subsidiaries is presented separately in the consolidated balance sheet. It is carried at cost less accumulated impairment losses, if any. Gains and losses on the disposal of an entity or business unit include the carrying amount of goodwill relating to the entity or business unit disposed of.

Goodwill is allocated to cash generating units for the purposes of impairment testing. The allocation is made to those cash generating units or groups of cash generating units that are expected to benefit from the synergies of the business combination.

Other intangible assets. All of the Group's other intangible assets have definite useful lives and primarily include capitalised computer software and licences, mining licences, mining permits and coal reserves. Acquired computer software and other licences are capitalised on the basis of the costs incurred to acquire and bring them to use.

Other intangible assets are carried at cost less accumulated amortisation and impairment losses, if any. If impaired, the carrying amount of intangible assets is written down to the higher of value in use and fair value less costs of disposal. Cost of SAP ERP system is amortised on a straight-line basis over estimated useful life of 10 years. Licences and coal reserves are amortised using the units-of-production method over all estimated proven and probable reserve assigned to the mines. Proven and probable reserves exclude non-recoverable coal and ore reserves and estimated processing losses. Amortization rates are updated when revisions to coal reserve estimates are made.

Impairment of non-financial assets. Goodwill is tested annually for impairment. Assets that are subject to depreciation are reviewed for impairment whenever events and changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the assets carrying amount exceeds its recoverable amount. The recoverable amount is the higher of fair value less cost to sell and value in use. For purposes of assessing impairment, assets are grouped to the lowest levels for which there are separately identifiable cash flows (cash generating unit). Non-financial assets, other than goodwill, that have suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Classification of financial assets. All the Group's financial assets are loans and receivables.

Loans and receivables are financial receivables created by the Group by providing money, goods or services directly to a debtor, other than those receivables which are created with the intention to be sold immediately or in the short term or which are quoted in an active market. Loans and receivables comprise primarily loans, trade and other accounts receivable including purchased loans and promissory notes. They are included in current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as non-current assets.

Initial recognition of financial instruments. The Group's principal financial instruments comprise loans and borrowings, cash and cash equivalents and short-term deposits. The Group has various other financial instruments, such as trade debtors and trade creditors, which arise directly from its operations.

The Group's financial assets and liabilities are initially recognised at fair value plus transaction costs. Fair value at initial recognition is best evidenced by the transaction price. A gain or loss on initial recognition is only recorded if there is a difference between fair value and transaction price which can be evidenced by other observable current market transactions in the same instrument or by a valuation technique whose inputs include only data from observable markets.

All purchases and sales of financial instruments that require delivery within the time frame established by regulation or market convention ("regular way" purchases and sales) are recorded at trade date, which is the date that the Group commits to deliver a financial instrument. All other purchases and sales are recognised on the settlement date with the change in value between the commitment date and settlement date not recognised for assets carried at cost or amortised cost.

Subsequent measurement of financial instruments. Subsequent to initial recognition, the Group's financial liabilities and loans and receivables are measured at amortised cost. Amortised cost is calculated using the effective interest rate method and, for financial assets, it is determined net of any impairment losses. Premiums and discounts, including initial transaction costs, are included in the carrying amount of the related instrument and amortised based on the effective interest rate of the instrument.

The face values of financial assets and liabilities with a maturity of less than one year, less any estimated credit adjustments, are assumed to be their fair values. The fair value of financial liabilities is estimated by discounting the future contractual cash flows at the current market interest rate available to the Group for similar financial instruments.

Derecognition of financial assets. The Group derecognises financial assets when (i) the assets are redeemed or the rights to cash flows from the assets have otherwise expired or (ii) the Group has transferred substantially all the risks and rewards of ownership of the assets or (iii) the Group has neither transferred nor retained substantially all risks and rewards of ownership but has not retained control. Control is retained if the counterparty does not have the practical ability to sell the asset in its entirety to an unrelated third party without needing to impose additional restrictions on the sale.

The Group enters into transactions in the normal course of business by which it transfers financial assets to third parties. Depending on the circumstances, these transfers may either result in these financial assets being derecognised or continuing to be recognised.

4 Basis of preparation and significant accounting policies (continued)

Full derecognition occurs when the Group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, and transfers substantially all the risks and rewards of ownership. The risks include credit, interest rate, foreign currency, prepayment and other price risks.

Derecognition does not occur when the Group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, but either:

- retains substantially all of the risks and rewards of ownership of the transferred asset; or
- neither retains nor transfers substantially all of the risks and rewards of ownership but has retained control of the financial asset. In this situation, the financial assets are recognised on the balance sheet to the extent of Group's continuing involvement.

Income taxes. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities. The income tax charge is recognised in the consolidated income statement except if it is recognised in other comprehensive income or directly in equity because it relates to transactions that are also recognised, in the same or a different period, in other comprehensive income or directly in equity.

Current tax is the amount expected to be paid to or recovered from the taxation authorities in respect of taxable profits or losses for the current and prior periods.

Deferred income tax is provided using the balance sheet liability method for tax loss carry forwards and temporary differences arising between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. In accordance with the initial recognition exemption, deferred taxes are not recorded for temporary differences on initial recognition of an asset or a liability in a transaction other than a business combination if the transaction, when initially recorded, affects neither accounting nor taxable profit. Deferred tax liabilities are not recorded for temporary differences on initial recognition of goodwill and subsequently for goodwill which is not deductible for tax purposes. Deferred tax balances are measured at tax rates enacted or substantively enacted at the balance sheet date which are expected to apply to the period when the temporary differences will reverse or the tax loss carry forwards will be utilised. Deferred tax assets and liabilities are netted only within the individual companies of the Group. Deferred tax assets for deductible temporary differences and tax loss carry forwards are recorded only to the extent that it is probable that future taxable profit will be available against which the deductions can be utilised.

Deferred income tax is provided on post-acquisition retained earnings and other post-acquisition movements in reserves of subsidiaries, except where the Group controls the subsidiary's dividend policy and it is probable that the difference will not reverse through dividends or otherwise in the foreseeable future.

Inventories. Inventories are recorded at the lower of cost and net realisable value. Cost of inventory is determined on the weighted average principle. The cost of finished goods and work in progress comprises raw material, direct labour, other direct costs and related production overheads based on normal operating capacity but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the cost of completion and selling expenses.

Trade and other financial receivables. Trade and other financial receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered to be indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the consolidated income statement against other operating expenses. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited in the consolidated income statement against other operating expenses.

4 Basis of preparation and significant accounting policies (continued)

If the terms of an impaired financial asset held at amortised cost are renegotiated or otherwise modified because of financial difficulties of the counterparty, impairment is measured using the original effective interest rate before the modification of terms. The renegotiated asset is then derecognised and a new asset is recognised at its fair value only if the risks and rewards of the asset substantially changed. This is normally evidenced by a substantial difference between the present values of the original cash flows and the new expected cash flows

Prepayments. Prepayments are carried at cost less provision for impairment. A prepayment is classified as non-current when the goods or services relating to the prepayment are expected to be obtained after one year, or when the prepayment relates to an asset which will itself be classified as non-current upon initial recognition. Prepayments to acquire assets are transferred to the carrying amount of the asset once the Group has obtained control of the asset and it is probable that future economic benefits associated with the asset will flow to the Group. Other prepayments are charged to the income statement when the goods or services relating to the prepayments are received. If there is an indication that the assets, goods or services relating to a prepayment will not be received, the carrying value of the prepayment is written down accordingly and a corresponding impairment loss is recognised in the income statement.

Cash and cash equivalents. Cash and cash equivalents include cash in hand, deposits held at call with banks, and other short-term highly liquid investments with original maturities of three months or less. Restricted balances are excluded from cash and cash equivalents for the purposes of the cash flow statement. Balances restricted from being exchanged or used to settle a liability for at least twelve months after the balance sheet date are included in other non-current assets. Cash and cash equivalents are carried at amortised cost using effective interest rate method.

Share capital. Ordinary shares issued are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds. Any excess of the fair value of consideration received over the par value of shares issued is presented in the notes as a share premium.

Dividends. Dividends are recognised as a liability and deducted from equity at the balance sheet date only if they are declared before or on the balance sheet date. Dividends are disclosed when they are proposed before the balance sheet date or proposed or declared after the balance sheet date but before the financial statements are authorised for issue. If settlement of a dividend liability exceeds twelve months from the balance sheet date it is included within long-term liabilities and measured at the present value of the future cash flows required to settle the liability using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation.

Loans and borrowings. Loans and borrowings are recognised initially at fair value, net of transaction costs incurred and subsequently carried at amortised cost using the effective interest method.

Cash flows related to receipt and repayment of trade finance borrowings are presented within the statement of cash flows on a net basis.

Trade and other financial payables. Trade payables are accrued when the counterparty performs its obligations under the contract and are recognised initially at fair value and subsequently carried at amortised cost using the effective interest method. Amortised cost is calculated by taking into account any transaction costs and any discount or premium on settlement.

Derecognition of financial liabilities. A substantial modification of the terms of an existing financial liability or a part of it is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10 per cent different from the discounted present value of the remaining cash flows of the original financial liability. The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, are recognised in profit or loss. If the exchange or modification of financial liability is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

Prepayments received. Prepayments are carried at amounts originally received, net of VAT.

Provisions for liabilities and charges. Provisions for liabilities and charges are non-financial liabilities recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Where the Group expects a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

4 Basis of preparation and significant accounting policies (continued)

Contingent assets and liabilities. A contingent asset is not recognised in the financial statements but disclosed when an inflow of economic benefits is probable. When the realisation of income is virtually certain, then the related asset is not a contingent asset and the Group recognises such assets.

Contingent liabilities are not recognised in the financial statements unless it is probable that an outflow of economic resources will be required to settle the obligation and it can be reasonably estimated. Contingent liabilities are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote.

Employee benefits. Defined benefit plan. Certain Ukrainian entities within the Group participate in a mandatory State defined retirement benefit plan, which provides for early pension benefits for employees working in certain workplaces with hazardous and unhealthy working conditions. Certain Ukrainian entities also provide lump sum benefits upon retirement subject to certain conditions, as well as some other long-term employee benefits. The liability recognised in the balance sheet in respect of the defined benefit pension plan is the present value of the defined benefit obligation at the balance sheet date. The defined benefit obligation is calculated annually by professional actuaries using the Projected Unit Credit Method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds (if there is no deep market for high quality corporate bonds) that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income. Past service costs are recognised immediately in profit or loss.

Revenue recognition. Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value-added tax and discounts and after eliminating sales within the Group.

The Group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met for each of the Group's activities as described below. The amount of revenue is not considered to be reliably measurable until all contingencies relating to the sale have been resolved. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(a) Sale of goods, by-products and merchandise

The Group manufactures and sells a range of steel products to large, medium and small size customers. By-products and merchandise are sold to the same range of customers. Revenues from sales of goods, by-products and merchandise are recognised at the point of transfer of risks and rewards of ownership of the goods, normally when the goods are shipped. The Group normally uses standardised Incoterms such as cost-and-freight (CFR), free-carrier (FCA), cost-insurance-freight (CIF), free-on-board (FOB) and ex-works (EXW) which define the point of risks and rewards transfer. Revenue is recorded on an accrual basis as earned.

Sales are recorded based on the price indicated in the specifications to the sales contracts. The sales price is established separately for each specification.

The Group also engages in sale and purchase transactions the objective of which is to manage cash flows and/or to sell the products of its joint ventures through the Group's sales channels and where the Group acts as an agent. Such transactions are not revenue generating to the Group and accordingly such sales and purchases are presented on a net basis with any gain or loss presented in other operating income / (expenses). Accounts receivable and payable from such transactions are presented gross.

(b) Interest income

Interest income is recognised on a time-proportion basis using the effective interest method. When a receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at original effective interest rate of the instrument, and continues unwinding the discount as interest income.

(c) Sale of services

Sales of services are recognised in the accounting period in which the services are rendered, by reference to stage of completion of the specific transaction assessed on the basis of the actual service provided as a proportion of the total services to be provided.

(d) Dividend income

Dividend income is recognised when the right to receive payment is established.

(e) Commission income

The Group acts as an agent for sales transactions on behalf of the third parties. The commission income received by the Group as a fee for facilitating such transactions is recognised at the point of transfer of risks and rewards of ownership of the goods to the customers of the third parties. Such income is reported as part of other operating income.

4 Basis of preparation and significant accounting policies (continued)

Value added tax. VAT in Ukraine where the majority of the Group operations are concentrated is levied at two rates: 20% on domestic sales and imports of goods, works and services and 0% on export of goods. Export of services is exempt from VAT. A taxpayer's VAT liability equals the total amount of VAT collected within a reporting period, and for domestic operations arises on the earlier of the date of shipping goods to a customer or the date of receiving payment from the customer; for export operations arises on the date of customs clearance of exported goods. A VAT credit is the amount that a taxpayer is entitled to offset against his VAT liability in a reporting period. For domestic and export operations rights to VAT credit arise when a VAT invoice is received, which is issued on the earlier of the date of payment to the supplier or the date goods are received. Where provision has been made for impairment of receivables, the impairment loss is recorded for the gross amount of the debtor, including VAT. VAT assets recoverable in cash from the State are included into Group's assets. All other VAT assets and liabilities are netted only within the individual companies of the Group.

Recognition of expenses. Expenses are accounted for on an accrual basis. Cost of goods sold comprises the purchase price, transportation costs, commissions relating to supply agreements and other related expenses.

Finance income and costs. Finance income and costs comprise interest expense on borrowings, pension obligations, losses on early repayment of loans, interest income on funds invested, income on origination of financial instruments and foreign exchange gains and losses.

Changes in presentation. Where necessary, corresponding figures have been adjusted to conform to changes in the presentation in the current year. In particular, in 2016 the Group changed presentation of legal and consulting expenses related to debt restructuring. Such expenses were reclassified from general and administrative expenses to finance costs to better reflect the substance of such expenditures. This resulted in change in comparative information for the year ended 31 December 2015 amounting to USD 12 million.

5 Critical accounting estimates and judgements in applying accounting policies

The Group makes estimates and assumptions that affect the reported amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. Judgements that have the most significant effect on the amounts recognised in the IFRS consolidated financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next financial year include:

Impairment of property, plant and equipment, goodwill and other intangible assets. The Group and its subsidiaries are required to perform impairment tests for their assets or cash-generating units when there is indication that an asset or a cash-generating unit ("CGU") may be impaired. One of the determining factors in identifying a cash-generating unit is the ability to measure independent cash flows for that unit. Within the Group's identified cash-generating units a significant proportion of their output is input to another cash-generating unit. Therefore, judgement is needed in determining a cash-generating unit.

Annually the Group assesses whether goodwill is impaired. This requires estimation of the value in use / fair value less costs of disposal of the cash-generating units or groups of cash-generating units to which goodwill is allocated. Allocation of goodwill to groups of cash generating units requires significant judgement related to expected synergies. Estimating value in use / fair value less costs of disposal requires the Group to make an estimate of expected future cash flows from the cash-generating unit and also to choose a suitable discount rate in order to calculate the present value of those cash flows. Precision of future cash flows is dependent, inter alia, on quality of management's forecasts of benchmark price levels for key commodities, production volumes and production costs, and necessary capital expenditure levels.

Changes in the above estimates and judgments could have a material effect on the results of the impairment tests. The estimates used to assess the impairments are impacted by the uncertainty caused by events in Eastern Ukraine, including importantly future planned production and expected market prices (see discussion of operating environment in Note 2). The impact of the uncertainties is discussed further in Notes 8 and 10.

Revaluation of property, plant and equipment. On an annual basis management of the Group carries out an analysis to assess whether carrying amounts of items of property, plant and equipment differ materially from that which would be determined using fair value at the end of the reporting period. The analysis is based on price indices, developments in technology, movements in exchange rates since the date of latest revaluation, profitability of underlying businesses and other relevant factors. Where the analysis indicates that the fair values of items of property plant and equipment differ materially from the carrying amounts, further revaluation is performed involving independent valuers.

5 Critical accounting estimates and judgements in applying accounting policies (continued)

As most of the Group's property, plant and equipment is of specialised nature, its fair value as at 31 December 2016 is determined using depreciated replacement cost (Level 3) or, where it is available, the market value (Level 2). For some assets the fair values as of reporting date were obtained using indexation of their carrying amounts for relevant cumulative price indices since the last revaluation date impacting the replacement cost used in measurement of depreciated replacement cost (Level 3).

The majority of the structures, plant and machinery are specialised in nature and are rarely sold in the open market in Ukraine other than as part of a continuing business. The market for similar property, plant and equipment is not active in Ukraine and does not provide a sufficient number of sales of comparable assets to allow for using a market-based approach for determining fair value. Consequently, the fair value of structures, plant and machinery was primarily determined using depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical, functional or economic depreciation, and obsolescence. The depreciated replacement cost was estimated based on internal sources and analysis of Ukrainian and international markets for similar property, plant and equipment. Various market data was collected from published information, catalogues, statistical data etc., and industry experts and suppliers.

When performing valuation using these methods, the key estimates and judgments applied by the independent valuers, in discussion with the Group's internal valuation team and technicians, are as follows:

- choice of information sources for construction costs analysis (actual costs recently incurred by the Group, specialised reference materials and handbooks, estimates for cost of construction of various equipment etc.);
- determination of similar items for replacement cost of certain equipment, as well as corresponding adjustments required to take into account differences in technical characteristics and condition of new and existing equipment;
- selection of market data when determining market value where it is available as well as corresponding adjustments required to take into account differences in technical characteristics and the condition of new and existing equipment;
- determination of applicable cumulative price indices which would most reliably reflect the change in fair value of assets revalued using indexation of carrying amounts;
- use of directories of per-unit replacement cost for buildings and constructions, assuming that all buildings and constructions of similar type and nature within industry have similar replacement costs; and
- liquidation value for items, which are expected to be realised, less cost to sell.

The fair values obtained using depreciated replacement cost and indexation of carrying amounts are validated using discounted cash flow models (income approach, Level 3), and are adjusted if the values obtained using income approach are lower than those obtained using depreciated replacement cost or indexation of carrying amounts (i.e. there is economic obsolescence). Key inputs into discounted cash flow models are consistent with the assumptions used for goodwill impairment testing (Note 8), except for discount rates which are specific to each of the Group's subsidiaries and are pre-tax.

The results of this revaluation of property, plant and equipment are disclosed further in Note 10.

Changes in the above estimates and judgments could have a material effect on the fair value of property, plant and equipment, which, however, is impracticable to quantify due to wide variety of assumptions and assets being valued. The estimates used to assess the fair value of property, plant and equipment are impacted by the uncertainty caused by events in Eastern Ukraine, including importantly future planned production (see discussion of operating environment in Note 2). The impact of the uncertainties is discussed further in Notes 8 and 10.

Remaining useful lives of property, plant and equipment. The Group's management determines the estimated useful lives and related depreciation charges for its property, plant and equipment. This estimate is based on the technical characteristics, physical conditions, management's expectations on use of the respective assets and other factors. This affects depreciation charge and revaluation results.

Remaining useful lives for iron ore mining licences and coal reserves (Note 9) are estimated by management based on reserves' studies performed by independent experts. Results of such studies depend, inter alia, on expert's assessment of geological conditions and feasibility of extraction of mineral resources which is dependent on future levels of prices for iron ore and coking coal and costs of such extraction.

Impairment of trade and other accounts receivable. Management estimates the likelihood of the collection of trade and other accounts receivable based on an analysis of individual accounts. IAS 39 requires to estimate the impairment loss which is computed as the difference between the carrying value of a receivable and the present value of the future cash flows discounted at the receivables effective interest rate.

As discussed in Note 14, during the 2016 the Group has recognised full impairment of trade receivables from some of its key customers in the total amount of USD 220 million (2015: partial impairment of USD 254 million). Factors taken into consideration by management when estimating the future cash flow included an ageing analysis of trade and other accounts receivable, and the financial position and performance of and collection history with the customer. In the current environment there is significant judgement in estimating whether the impaired trade and other receivables and any related penalty interest will be collected.

5 Critical accounting estimates and judgements in applying accounting policies (continued)

Additionally, the estimates used to assess the impairment of trade and other accounts receivable from certain Ukrainian customers are impacted by the uncertainty caused by events in Eastern Ukraine (see discussion of operating environment in Note 2).

Related party transactions. In the normal course of business the Group enters into transactions with related parties. Judgement is applied in determining if transactions are priced at market or non-market terms, where there is no active market for such transactions, and also in estimating the timing of settlement of the balances due from related parties, where there is a history of prolongations. Financial instruments are recorded at origination at fair value using the effective interest method. The Group's accounting policy is to record gains and losses on related party transactions, other than business combination or equity investments, in the income statement. The basis for judgement is pricing for similar types of transactions with unrelated parties and an effective interest rate analysis.

Further, estimation of timing of settlement and recoverability of balances due from related parties requires judgement. Ability of shareholders and parties under their control to repay the amounts due to the Group is dependent to large extent on cash flows from the Group. Such cash flows in the current circumstances may be limited (Note 3). Herewith, the Group is in net payable position with major groups of its related parties (Note 29). No impairment was recognised in respect of balances due from related parties in these consolidated financial statements.

Deferred income tax asset recognition. The recognised deferred tax asset represents income taxes recoverable through future deductions from taxable profits and is recorded in the consolidated balance sheet. Deferred income tax assets are recorded to the extent that realisation of the related tax benefit is probable. The future taxable profits and the amount of tax benefits that are probable in the future are based on the long term strategy and plans prepared by management. The strategy is based on management's expectations that are believed to be reasonable under the circumstances and are disclosed in Note 8. In addition, a number of feasible tax planning opportunities are available to the Group to recover the deferred tax asset recognised.

Further, management exercised significant judgement in their assessment whether deferred tax asset related to impaired trade receivables from certain key customers (Note 14) can be recognised as at 31 December 2016 and 31 December 2015. Management estimated that it is not probable that the Group's subsidiaries will be able to realise the tax benefit of the respective deductible temporary differences to the full extent. As a result, as of 31 December 2016 deferred tax asset of USD 26 million (31 December 2015: USD 14 million) was recognised and deferred tax asset of USD 17 million (31 December 2015: USD 19 million) was not recognised in the consolidated balance sheet. Recognition of deferred tax asset as at 31 December 2016 is supported by proper tax planning performed by management which conforms to the Ukrainian tax legislation. Changes in the estimates and judgements made could have a material effect on these consolidated financial statements.

Post-employment and other long-term employee benefits obligations. Management assesses post-employment and other long-term employee benefit obligations using the Projected Unit Credit Method based on actuarial assumptions which represent management's best estimates of the variables that will determine the ultimate cost of providing post-employment and other employee benefits. Since the plan is administered by the State of Ukraine, the Group may not have full access to information and therefore assumptions regarding when, or if, an employee takes early retirement, whether the Group would need to fund pensions for ex-employees depending on whether that ex-employee continues working in hazardous conditions, the likelihood of employees transferring from State funded pension employment to Group funded pension employment could all have a significant impact on the pension obligation.

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The major assumptions used in determining the net cost (income) for pensions include the discount rate and future salary and benefits increase rate. Any changes in these assumptions will impact the carrying amount of pension obligations as disclosed in sensitivity analysis in Note 21.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of high-quality government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability. Other key assumptions for pension obligations are based in part on the current market conditions. Additional information is disclosed in Note 21.

Tax legislation. Ukrainian tax, currency and customs legislation continues to evolve. Conflicting regulations are subject to varying interpretations. Management believes its interpretations are appropriate and sustainable, but no guarantee can be provided against a challenge from the tax authorities (Note 28).

Functional currency. Judgement was applied in determining the functional currency of Metinvest B.V., which is a holding company for operations of the Group in Ukraine, Italy, the United States of America and other countries. The functional currency of Metinvest B.V. was determined on the basis that (i) in management's opinion Metinvest B.V. is not an extension of and is not integral to the Ukrainian operations; (ii) the primary economic exposures are to a number of countries; and (iii) Metinvest B.V. retains cash and obtains financing in US Dollars. Management therefore determined the US Dollar as the functional currency of Metinvest B.V. Amount of net payables of Metinvest B.V. totalled USD 2,111 million as at 31 December 2016 (31 December 2015: USD 1,991 million) where potential foreign exchange gains/losses could arise should a different functional currency (UAH) be determined.

6 Adoption of new or revised standards and interpretations

The following new standards and amendments to the standards, which are relevant to the Group and have been adopted by the European Union are effective in the European Union for the annual periods beginning on or after 1 January 2016:

- **Annual improvements to IFRSs 2012.** The improvements consist of changes to seven standards, four of which are relevant to the Group.

The basis for conclusions on IFRS 13 was amended to clarify that deletion of certain paragraphs in IAS 39 upon publishing of IFRS 13 was not made with an intention to remove the ability to measure short-term receivables and payables at invoice amount where the impact of discounting is immaterial. IAS 16 and IAS 38 were amended to clarify how the gross carrying amount and the accumulated depreciation are treated where an entity uses the revaluation model. The above amendments did not have any significant impact on the Group's financial statements.

Additionally, IFRS 8 was amended to require disclosure of judgement made by management in aggregating segments, including a description of the segments which have been aggregated and the economic indicators, which have been assessed in determining that aggregated segments share similar economic characteristics and a reconciliation of segment assets to the entity's assets when segment asset are reported. Operating segments disclosure was extended according to revised requirements.

- **Annual improvements to IFRSs 2014.** The amendments impact four standards, one of which is relevant to the Group. The amendment to IAS 19 clarifies that for post-employment benefit obligation, the decision regarding discount rate, existence of deep market in high-quality corporate bonds, of which government bonds to use as a basis, should be based on currency, that the liabilities are denominated in, and not the country where they arise. The above amendments did not have any significant impact on the Group's financial statements.

- **Amendment to IAS 1 – Disclosure Initiative.** The Standard was amended to clarify the concept of materiality and explains that an entity need not provide a specific disclosure required by IFRS if the information resulting from that disclosure is not material, even if the IFRS contains a list of specific requirements. The Standard also provides new guidance on subtotals in financial statements, in particular, such subtotals should be comprised of line items made up of amounts recognised and measured in accordance with IFRS; be presented and labelled in a manner that makes the line items that constitute the subtotal clear and understandable; be consistent from period to period; and not be displayed with more prominence than the subtotals and totals required by IFRS standards. The above amendments did not have any significant impact on the Group's financial statements.

The following new standards relevant to the Group have been adopted by the European Union, however not effective for the annual periods beginning on 1 January 2016 and not adopted earlier by the Group:

- **IFRS 15, Revenue from Contracts with Customers** (*effective for the periods beginning on or after 1 January 2018*). The new standard introduces the core principle that revenue must be recognised when the goods or services are transferred to the customer, at the transaction price. Any bundled goods or services that are distinct must be separately recognised, and any discounts or rebates on the contract price must generally be allocated to the separate elements. When the consideration varies for any reason, minimum amounts must be recognised if they are not at significant risk of reversal. Costs incurred to secure contracts with customers have to be capitalised and amortised over the period when the benefits of the contract are consumed.
- **IFRS 9, Financial Instruments** (*effective for annual periods beginning on or after 1 January 2018*). Key features of the new standard are:

Financial assets are required to be classified into three measurement categories: those to be measured subsequently at amortised cost, those to be measured subsequently at fair value through other comprehensive income (FVOCI) and those to be measured subsequently at fair value through profit or loss (FVPL).

Classification for debt instruments is driven by the entity's business model for managing the financial assets and whether the contractual cash flows represent solely payments of principal and interest (SPPI). If a debt instrument is held to collect, it may be carried at amortised cost if it also meets the SPPI requirement. Debt instruments that meet the SPPI requirement that are held in a portfolio where an entity both holds to collect assets' cash flows and sells assets may be classified as FVOCI. Financial assets that do not contain cash flows that are SPPI must be measured at FVPL (for example, derivatives). Embedded derivatives are no longer separated from financial assets but will be included in assessing the SPPI condition.

Investments in equity instruments are always measured at fair value. However, management can make an irrevocable election to present changes in fair value in other comprehensive income, provided the instrument is not held for trading. If the equity instrument is held for trading, changes in fair value are presented in profit or loss.

6 Adoption of new or revised standards and interpretations (continued)

Most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward unchanged to IFRS 9. The key change is that an entity will be required to present the effects of changes in own credit risk of financial liabilities designated at fair value through profit or loss in other comprehensive income.

IFRS 9 introduces a new model for the recognition of impairment losses – the expected credit losses (ECL) model. There is a ‘three stage’ approach which is based on the change in credit quality of financial assets since initial recognition. In practice, the new rules mean that entities will have to record an immediate loss equal to the 12-month ECL on initial recognition of financial assets that are not credit impaired (or lifetime ECL for trade receivables). Where there has been a significant increase in credit risk, impairment is measured using lifetime ECL rather than 12-month ECL. The model includes operational simplifications for lease and trade receivables.

The following new standards relevant to the Group have been issued, but have not been adopted by the European Union:

- **IFRS 16, Leases.** The new standard sets out the principles for the recognition, measurement, presentation and disclosure of leases. All leases result in the lessee obtaining the right to use an asset at the start of the lease and, if lease payments are made over time, also obtaining financing. Accordingly, IFRS 16 eliminates the classification of leases as either operating leases or finance leases as is required by IAS 17 and, instead, introduces a single lessee accounting model. Lessees will be required to recognise: (a) assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value; and (b) depreciation of lease assets separately from interest on lease liabilities in the income statement. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.
- **Amendments to IFRS 10 and IAS 28.** These amendments address an inconsistency between the requirements in IFRS 10 and those in IAS 28 in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognised when a transaction involves a business. A partial gain or loss is recognised when a transaction involves assets that do not constitute a business, even if these assets are held by a subsidiary.
- **Amendments to IAS 7.** The amended IAS 7 will require disclosure of a reconciliation of movements in liabilities arising from financing activities.
- **Amendment to IAS 12.** The amendment has clarified the requirements on recognition of deferred tax assets for unrealised losses on debt instruments. The entity will have to recognise deferred tax asset for unrealised losses that arise as a result of discounting cash flows of debt instruments at market interest rates, even if it expects to hold the instrument to maturity and no tax will be payable upon collecting the principal amount. The economic benefit embodied in the deferred tax asset arises from the ability of the holder of the debt instrument to achieve future gains (unwinding of the effects of discounting) without paying taxes on those gains.

The Group is assessing the possible impact of adoption of the above standards but it is not currently expected that it will be significant, except for IFRS 16. IFRS 16 will require the Group to recognise in the balance sheet assets taken in an operating lease and the related lease liabilities. Management has initiated an exercise to calculate the impact of this new standard. This is still ongoing and will be finalised by 1 January 2018. Management plans to apply IFRS 16 retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application.

Other new or revised standards or interpretations that will become effective for annual periods starting after 1 January 2017 will likely have no material impact to the Group.

7 Segment information

The Group's business is organised on the basis of the following main reportable segments:

- Metallurgical – comprising the production and sale of coke, semi-finished and finished steel products;
- Mining – comprising the production, enrichment and sale of iron ore and coal by the Group's Ukrainian operations and UCC, the Group's US coal operations. Output of the Group's mining business covers iron ore and coking coal needs of the Group's steelmaking business with surplus sold to third parties. While management reviews financial information of UCC separately from other mining operations, UCC operating segment has been aggregated with the Group's Ukrainian mining operations into the Mining reportable segment. The two operating segments were aggregated into one reportable segment as they have similar nature of products (mineral commodities used in metallurgy) and production processes (underground and open-pit mining with further enrichment), and sell products to customers in metallurgical industry and commodity traders. Prices for their products depend on global benchmark prices for hard coking coal and iron ore; as such their margins and growth rates show comparable dynamics over longer term.

As the Group entities are present in various jurisdictions, there are some differences in regulatory environment; however, they have no significant impact on segments' operating and financing activity. Segmentation presented in these consolidated financial statements is consistent with the structure of financial information regularly reviewed by Group's management, including Chief Operating Decision Maker (CODM).

Operating segments' performance is assessed based on a measure of adjusted EBITDA. This measurement basis excludes dividend income, impairment of goodwill, other intangible assets and property, plant and equipment, the effects of non-recurring expenditures from the operating segments and foreign exchange gains / losses. Revenues and expenses for internal reporting purposes have been accounted for using IFRS principles. Certain adjustments are applied by management to contractual prices for intersegment sales.

Segment information for the year ended 31 December 2016 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2016					
Sales – external	5,027	1,196	-	-	6,223
Sales to other segments	77	1,071	-	(1,148)	-
Total of the reportable segments' revenue	5,104	2,267	-	(1,148)	6,223
Adjusted EBITDA	572	428	(76)	(56)	868
Share in EBITDA of joint ventures	165	120	-	-	285
Adjusted EBITDA including share in EBITDA of joint ventures	737	548	(76)	(56)	1,153
<i>Reconciling items:</i>					
Depreciation and amortisation	(294)	(222)	(13)	-	(529)
Impairment and revaluation of PPE and other intangible assets	(25)	(9)	-	-	(34)
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					(80)
Finance income					26
Finance costs					(397)
Foreign exchange gains less losses, net					18
Other					2
Profit before income tax					159
	Metallurgical	Mining	Corporate		Total
Capital expenditure	196	174	4		374
Significant non-cash items included into adjusted EBITDA:					
- impairment of trade and other receivables	(70)	(157)	-		(227)

7 Segment information (continued)

Segment information for the year ended 31 December 2015 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2015					
Sales – external	5,407	1,425	-	-	6,832
Sales to other segments	109	1,436	-	(1,545)	-
Total of the reportable segments' revenue	5,516	2,861	-	(1,545)	6,832
Adjusted EBITDA	333	29	(95)	46	313
Share in EBITDA of joint ventures	153	59	-	-	212
Adjusted EBITDA including share in EBITDA of joint ventures	486	88	(95)	46	525
<i>Reconciling items:</i>					
Depreciation and amortisation					(615)
Impairment and revaluation of PPE and other intangible assets	(22)	(342)	-	-	(364)
Goodwill impairment	-	(74)	-	-	(74)
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					(81)
Finance income					26
Finance costs					(647)
Foreign exchange gains less losses, net					115
Other					(49)
Loss before income tax					(1,164)
	Metallurgical	Mining	Corporate		Total
Capital expenditure	137	136	12		285
Significant non-cash items included into adjusted EBITDA:					
- impairment of trade and other receivables	(45)	(247)	-		(292)

Analysis of revenue by category:

	Metallurgical	Mining	Total
2016			
Sales of own products	3,816	1,118	4,934
- Steel products	3,480	-	3,480
- Iron ore products	-	978	978
- Coal and coke	218	136	354
- Other	118	4	122
Resale of purchased goods	1,211	78	1,289
- Steel products	1,066	-	1,066
- Coal and coke	41	38	79
- Other	104	40	144
Total	5,027	1,196	6,223

7 Segment information (continued)

Analysis of revenue by category:

	Metallurgical	Mining	Total
2015			
Sales of own products	4,011	1,362	5,373
- Steel products	3,532	-	3,532
- Iron ore products	-	1,139	1,139
- Coal and coke	291	136	427
- Other	188	87	275
Resale of purchased goods	1,396	63	1,459
- Steel products	1,206	-	1,206
- Coal and coke	89	63	152
- Other	101	-	101
Total	5,407	1,425	6,832

The Group's two business segments operate in six main geographical areas. Revenue by location of customers is presented below:

2016	Metallurgical	Mining	Total
Ukraine	1,129	477	1,606
Rest of Europe	1,989	278	2,267
Middle East and Northern Africa	948	1	949
South Eastern Asia	76	337	413
Commonwealth of Independent States ("CIS")	591	-	591
North America	217	103	320
Other countries	77	-	77
Total	5,027	1,196	6,223

2015	Metallurgical	Mining	Total
Ukraine	1,151	468	1,619
Rest of Europe	2,090	165	2,255
Middle East and Northern Africa	1,266	39	1,305
South Eastern Asia	116	635	751
Commonwealth of Independent States ("CIS")	602	-	602
North America	111	118	229
Other countries	71	-	71
Total	5,407	1,425	6,832

As at 31 December 2016 and 31 December 2015, 94% of the Group's non-current assets, other than financial instruments and deferred tax assets, were located in Ukraine.

8 Goodwill

The movements of goodwill were as follows:

	2016	2015
As at 1 January		
Original amount	1,303	1,452
Accumulated impairment	(702)	(698)
Net carrying amount	601	754
Impairment	-	(74)
Currency translation differences	(58)	(79)
As at 31 December		
Original amount	1,222	1,303
Accumulated impairment	(679)	(702)
Net carrying amount	543	601

Management allocates and monitors goodwill at the following groups of cash generating units ("CGUs") which represent operating segments:

	31 December 2016	31 December 2015
Metallurgical	493	544
Mining	50	57
Total	543	601

After conducting the revaluation of property, plant and equipment and impairment testing of property, plant and equipment and other intangible assets (Notes 9 and 10), management has assessed the recoverable amount of goodwill. The recoverable amount has been determined based on fair value less cost to sell estimations.

To ensure that the impairment testing model fully reflects the anticipated long-term changes in cash flows, for the impairment test the Group used cash flow projections for 10 years which are consistent with the Group's strategy approved by senior management; the first year of forecast is based on the Group's approved business plan for the year.

The valuation method used for determination of each CGU fair value is mostly based on unobservable market data, which is within Level 3 of the fair value hierarchy.

The following table and further paragraphs summarise key assumptions on which management has based its cash flow projections to undertake the impairment testing of goodwill:

	2016	2015
Metallurgical		
Post-tax discount rate (USD)	11.67%	13.1%
EBITDA margins (based on FCA prices)	2017: 15%, 2018: 20%, further – from 14% to 20%	2016: 14%, 2017: 18%, further – from 16% to 17%
Growth rate in perpetual period	3%	3%
Mining		
Post-tax discount rate (USD)	12.07%	13.7%
EBITDA margins (based on FCA prices)	2017: 37%, 2018: 20%, further – from 27% to 35%	2016: 15%, 2017: 22%, further – from 21% to 27%
Growth rate in perpetual period	3%	3%

The values assigned to the key assumptions represent management's assessment of future trends in the business and are based on both external and internal sources.

Discount rate reflects the current market assessment of the time value of money and risks specific to the Group. The discount rate has been determined using the Capital Asset Pricing Model based on observable inputs, inputs from third party financial analysts and Group-specific inputs.

8 Goodwill (continued)

Forecasted benchmark **iron ore prices** for Fe 62% fines (CFR North China) are USD 60 per tonne in 2017, USD 48 per tonne in 2018 and recover at 4 % p.a. to USD 64 per tonne in 2026 (31 December 2015: range from USD 52 per tonne in 2016 to USD 70 per tonne in 2025). Forecasted prices for other iron ore products and prices at other markets were determined based on respective discounts or premiums for Fe content, pelletizing premiums, applicable transportation costs and historic discounts or premiums usual for those markets.

Forecasted **coal prices** used in the impairment test for all CGUs for low volatile hard coking coal (FOB Queensland) start from USD 161 per tonne in 2017, USD 124 per tonne in 2018 and grow at 2.25 % p.a. on average thereafter (31 December 2015: start from USD 89 per tonne in 2016 per ton, USD 108 per tonne in 2018 and grow at 1.3% on average thereafter). Forecasted prices for other types of coal and prices at other markets were determined based on respective historic discounts for differences in quality of each particular coal type and estimated transportation costs.

Forecasted prices for hot-rolled coils at Ukrainian ports used in the impairment test were estimated based on the benchmark (Metal Expert HRC CIS export FOB Black Sea). Forecasted prices are expected to reach USD 476 per tonne in 2026 (31 December 2015: USD 458 per tonne in 2025) from year-end levels. Forecasted prices for other steel products are based on historic discounts or premiums to prices for hot-rolled coils.

Forecasts from industry experts and other external reputable sources, as well as internal analysis were used by management to determine price levels used in the impairment test.

An exchange rate of 27 UAH for 1 USD in 2017 with gradual increase to 31.7 UAH for 1 USD in 2026 was used in the impairment test for all CGUs as of 31 December 2016 (31 December 2015: from 24 UAH for 1 USD in 2016 to 27.8 UAH for 1 USD in 2025).

Metallurgical segment. As at 31 December 2016, the Metallurgical segment's recoverable amount is USD 5,283 million and exceeds its total carrying amount by USD 1,096 million (31 December 2015: recoverable amount of USD 5,223 million, exceeded carrying amount by USD 671 million). The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of goodwill (and subsequently to property, plant and equipment and intangible assets) related to the Metallurgical segment:

	31 December 2016	31 December 2015
Volumes of production/sales		
Decrease in all the periods by 5.2%	-	Recoverable amount equals carrying amount
Decrease in all the periods by 7.4%	Recoverable amount equals carrying amount	-
Decrease in all the periods by 9.0%	Impairment of USD 229 million required	Impairment of USD 501 million required
Steel prices		
Decrease in all the periods by 1.4%	-	Recoverable amount equals carrying amount
Decrease in all the periods by 1.8%	Recoverable amount equals carrying amount	-
Decrease in all the periods by 2.6%	Impairment of USD 462 million required	Impairment of USD 603 million required
Decrease in all the periods by 4.0%	Impairment of USD 1,302 million required	Impairment of USD 1,227 million required
Iron ore prices		
Increase in all the periods by 7.5%	-	Recoverable amount equals carrying amount
Increase in all the periods by 10.0%	-	Impairment of USD 226 million required
Increase in all the periods by 14.6%	Recoverable amount equals carrying amount	-
Increase in all the periods by 17.0%	Impairment of USD 183 million required	-
Coal prices		
Increase in all the periods by 9.0%	-	Recoverable amount equals carrying amount
Increase in all the periods by 11.1%	Recoverable amount equals carrying amount	-
Increase in all the periods by 15.0%	Impairment of USD 382 million required	Impairment of USD 450 million required

8 Goodwill (continued)

	31 December 2016	31 December 2015
UAH/USD exchange rates		
Increase in all the periods by UAH 1	Recoverable amount increases by USD 423 million	Recoverable amount increases by USD 696 million
Discount rates		
Increase in all the periods by 2.1 pp	-	Recoverable amount equals carrying amount
Increase in all the periods by 2.3 pp	-	Impairment of USD 72 million required
Increase in all the periods by 5.3 pp	Recoverable amount equals carrying amount	-
Increase in all the periods by 7.0 pp	Impairment of USD 308 million required	-
Growth rate in perpetual period	No reasonable changes would lead to impairment	No reasonable changes would lead to impairment

Mining segment. As at 31 December 2016, the recoverable amount of the Mining segment is USD 2,036 million (31 December 2015: USD 1,571 million) and exceeds its total carrying amount by USD 453 million (31 December 2015: USD 93 million). The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of goodwill related to this group of CGUs:

	31 December 2016	31 December 2015
Iron ore prices		
Decrease in all the periods by 0.8%	-	Recoverable amount equals carrying amount
Decrease in all the periods by 3.3%	Recoverable amount equals carrying amount	-
Decrease in all the periods by 5.0%	Impairment of USD 231 million required	Impairment of USD 480 million required
Decrease in all the periods by 10.0%	Impairment of USD 915 million required	Impairment of USD 1,053 million required
UAH/USD exchange rates		
Increase in all the periods by UAH 1	Recoverable amount increases by USD 129 million	Recoverable amount increases by USD 190 million
Discount rates		
Increase in all the periods by 0.5 pp	-	Recoverable amount equals carrying amount
Increase in all the periods by 1.7 pp	-	Impairment of USD 157 million required
Increase in all the periods by 2.2 pp	Recoverable amount equals carrying amount	-
Increase in all the periods by 5.0 pp	Impairment of USD 291 million required	-
Growth rate in perpetual period	No reasonable changes would lead to impairment	No reasonable changes would lead to impairment

UCC. As at 31 December 2016, the recoverable amount of UCC is USD 174 million (31 December 2015: USD 180 million).

In 2015, total impairment loss of USD 399 million was recorded for UCC, out of which USD 74 million were recorded against goodwill, USD 270 million – against coal reserves and mining permits of separate mines (Note 9), and USD 55 million – against property, plant and equipment (Note 10). After impairment recognised in 2015, the goodwill balance related to UCC is nil.

8 Goodwill (continued)

The impairment losses resulted from the decline in coal prices in 2014 and further decline in 2015 (benchmark price of hard coking coal, FOB Queensland, decreased from USD 130 per ton in December 2013 to USD 110 in December 2014 and then further to USD 75 in December 2015) which were not expected to recover in full in the near future. The decrease of coal prices in all forecasted periods by 5% with all other variables held constant would result in additional impairment charge of USD 138 million.

In 2016, there was a significant increase in global coal prices which is expected to sustain in 2017. However, there was an offsetting increase in actual and forecasted average production cash costs per tonne (from 2015 actuals of USD 71 and 2016 forecast of USD 65 (2015 impairment test) to 2016 actual of USD 86 and 2017 forecast of USD 91 (2016 impairment test)). Further, in 2016 there has been a change of sales geography which led to decrease in price premiums (volumes previously sold on local market were shipped to Group's Ukrainian plants). These factors cumulatively led to no net reversal in 2016 of the impairment recognised in previous years, while within UCC property, plant and equipment of some CGUs (mines) were additionally impaired and some CGUs had reversal of impairment by the same amount of USD 36 million (Note 10). In 2016, the Group additionally recognised impairment of USD 7 million of coal reserves of one of the mines due to significant uncertainty in respect of its future development (Note 9).

The decrease of coal prices in all forecasted periods by 5% with all other variables held constant would result in an impairment charge of USD 158 million (31 December 2015: USD 74 million). The increase of production cash costs in all forecasted periods by 5% with all other variables held constant would result in an impairment of USD 123 million (31 December 2015: USD 72 million). Further substantial increase in cash costs and decrease in sales prices will not result in further material impairment of UCC's non-current assets.

The discount rate used for the impairment testing of UCC was 10% (31 December 2015: 13.27%). Change of discount rate by 1 p.p. leads to change of the recoverable amount by USD 5 million (31 December 2015: decrease of discount rate by 1 p.p. leads to decrease of impairment by USD 23 million). No other reasonable changes to the key assumptions used would result in material change of the recoverable amounts of UCC as of 31 December 2016 and 31 December 2015.

9 Other intangible assets

The movements of other intangible assets were as follows:

	Coal reserves	Licenses and mining permits	Other intangible assets	Total
As at 1 January 2015				
Cost	418	373	220	1,011
Accumulated amortisation and impairment	(143)	(163)	(171)	(477)
Net carrying amount	275	210	49	534
Additions	-	-	10	10
Impairment (Note 8)	(263)	(7)	-	(270)
Currency translation differences	-	(68)	(15)	(83)
Amortisation	(5)	(16)	(6)	(27)
As at 31 December 2015				
Cost	418	241	209	868
Accumulated amortisation and impairment	(411)	(122)	(171)	(704)
Net carrying amount	7	119	38	164
Impairment (Note 8)	(7)	-	-	(7)
Additions	-	-	5	5
Currency translation differences	-	(13)	(4)	(17)
Amortisation	-	(13)	(7)	(20)
As at 31 December 2016				
Cost	418	213	208	839
Accumulated amortisation and impairment	(418)	(120)	(176)	(714)
Net carrying amount	-	93	32	125

The iron ore license is being amortised using the units-of-production method over its remaining useful life of approximately 9 years.

The coal reserves were acquired as part of the acquisition of UCC in 2009. The coal reserves are being amortised using the units-of-production method over their useful lives of approximately 6-30 years. As at 31 December 2016, full amount of these reserves was impaired.

10 Property, plant and equipment

The movements of property, plant and equipment were as follows:

	Land	Buildings and structures	Plant and machinery	Furniture, fittings and equipment	Construction in progress	Total
Cost or valuation						
As at 1 January 2015	72	2,418	4,256	89	682	7,517
Additions	-	-	-	-	275	275
Transfers	-	94	135	9	(238)	-
Disposals	-	(4)	(36)	(3)	(8)	(51)
Reclassification to inventory	-	-	-	-	(13)	(13)
Elimination against gross carrying amount upon revaluation	(12)	(134)	(234)	(4)	-	(384)
Revaluation	-	297	584	5	-	886
Currency translation differences	(10)	(789)	(1,322)	(29)	(251)	(2,401)
As at 31 December 2015	50	1,882	3,383	67	447	5,829
Additions	-	-	-	-	369	369
Transfers	-	72	134	3	(209)	-
Disposals	-	(12)	(36)	(11)	(2)	(61)
Reclassification to inventory	-	-	-	-	(11)	(11)
Elimination against gross carrying amount upon revaluation	-	(135)	(452)	(2)	-	(589)
Revaluation surplus	-	336	615	-	40	991
Revaluation decreases that offset previous increases	-	(159)	(201)	-	(4)	(364)
Currency translation differences	(2)	(201)	(351)	(6)	(61)	(623)
As at 31 December 2016	48	1,783	3,092	51	569	5,543
Accumulated depreciation and impairment						
As at 1 January 2015	-	(336)	(572)	(37)	(34)	(979)
Charge for the year	-	(149)	(428)	(11)	-	(588)
Disposals	-	3	32	1	1	37
Transfers	-	-	-	-	-	-
Elimination against gross carrying amount upon revaluation	12	134	234	4	-	384
Impairment	(12)	(25)	(49)	(1)	(7)	(94)
Currency translation differences	-	103	104	13	13	233
As at 31 December 2015	-	(270)	(679)	(31)	(27)	(1,007)
Charge for the year	-	(132)	(371)	(9)	-	(512)
Disposals	-	9	34	8	-	51
Transfers	-	-	(1)	1	-	-
Elimination against gross carrying amount upon revaluation	-	135	452	2	-	589
Impairment	-	(10)	(5)	-	(10)	(25)
Currency translation differences	-	31	48	3	3	85
As at 31 December 2016	-	(237)	(522)	(26)	(34)	(819)
Net book value as at						
31 December 2015	50	1,612	2,704	36	420	4,822
31 December 2016	48	1,546	2,570	25	535	4,724

10 Property, plant and equipment (continued)

As at 31 December 2016 and 2015, construction in progress balance includes prepayments and letters of credit for property, plant and equipment of USD 38 million and USD 40 million, respectively.

During 2016 and 2015, management performed assessments of whether the carrying amounts of items of property, plant and equipment are materially different from their fair values. Where the material differences were identified as probable, the Group determined the fair value of its property, plant and equipment through a combination of independent appraisers and internal assessments. The Group aims to revalue a class of property, plant and equipment simultaneously; in case of revaluing a class on a rolling basis, the Group completes the revaluation within a short period, and keeps revaluations up to date. Substantially all the property, plant and equipment balance was either revalued or tested for impairment (whenever impairment indicators existed) during both 2016 and 2015.

Fair valuation of property, plant and equipment. As of 31 December 2016, due to further devaluation of UAH and accumulated inflation in Ukraine the Group decided to perform a revaluation of assets where fair value was expected to be significantly higher than their carrying amounts. These revalued assets represent 74% of total value of the Group's property, plant and equipment as of 31 December 2016.

The revaluation and impairment as at and for the year ended 31 December 2016 are recorded as follows:

	Recognised in Other comprehensive income	Recognised in profit and loss (Note 24)	Total
Revaluation surplus	968	23	991
Revaluation decreases that offset previous increases in the carrying amount	(332)	(32)	(364)
Net effect of revaluation	636	(9)	627
Assets written down during the year	(7)	(18)	(25)
Total	629	(27)	602

Included in the 'Revaluation surplus' line above is the reversal of impairment losses related to PrJSC Central Iron Ore Enrichment Works, out of which USD 126 million was recognised in other comprehensive income and USD 22 million was recognised in profit or loss. This reversal was largely driven by market increase in pelletizing premium and decrease in discount rate.

Included in the 'Assets written down during the year' line above is USD 36 million of reversal of prior year impairments related to some of UCC mines considered to be separate CGUs. These are offset by additional impairment of the same amount related to other UCC mines included in the same line.

Elimination of accumulated depreciation against cost or valuation was recognised only for revalued assets.

Assets located in or in close proximity to non-controlled territory. No uplift was recorded in respect of property, plant and equipment located in or in close proximity to the area not controlled by the government of Ukraine due to uncertainties as discussed in Note 2. These assets were subject to impairment testing. These assets represent 15% of the Group's property, plant and equipment as of 31 December 2016 and do not include plants located in Mariupol.

The specific risk of future severe physical damage or loss of control over assets located within or in close proximity to the areas not controlled by Ukrainian government was not taken into account when building cash flow projections nor was this included within the discount rate in either goodwill or CGU impairment testing. Factoring the impact of this risk into the impairment test would decrease the recoverable value of the related property, plant and equipment. Management has estimated that if the probability that this risk crystallises is 20% with respect to the CGUs located within the territories not controlled by the Ukrainian government and 10% for CGUs in close proximity to it, all other factors remaining constant, then the recoverable value of related property, plant and equipment would not fall below their carrying value at 31 December 2016 (31 December 2015: additional impairment loss of USD 18 million should be recognised). Although there would be certain headroom above the carrying value based on the impairment tests if the probability of the risk were considered to be 0%, in management's view it is not appropriate to recognize an uplift in fair value of these assets as at 31 December 2016 and 2015 in light of the uncertainties in the non-controlled area.

In March 2017, the Group lost control over the operations of the entities in the non-controlled territory (Note 2).

Considerations in respect of other assets. A revaluation exercise was considered unnecessary for other property, plant and equipment balances, mainly located outside of Ukraine, as management estimated that their fair value as of 31 December 2016 was not materially different from their cumulative carrying amount of USD 387 million (8% of total value of the Group's property, plant and equipment as of 31 December 2016). No impairment indicators were noted in respect of these assets.

Also, UCC impairment test has been performed as at 31 December 2016 (Note 8). UCC represented 3% of total value of the Group's property, plant and equipment as of 31 December 2016.

10 Property, plant and equipment (continued)

Assumptions used in impairment testing (including the economic obsolescence test performed as part of fair valuation). The recoverable amount has been determined based on fair value less costs of disposal calculations. Assumptions used in impairment testing of property, plant and equipment and other intangible assets are consistent with those used in goodwill impairment test (Note 8), except for discount rates for individual CGUs which included incremental size risk premia (as compared to size risk premia applicable to the whole segment) and were, therefore higher than those used for impairment testing of goodwill by 0.4%–0.69% p.p. for metallurgical CGUs (resulting discount rates for individual metallurgical CGUs being 12.07%–12.36% (2015: 13.69%–13.97%) and 0.29% p.p. for mining CGUs (resulting discount rates for individual mining CGUs being 12.36% (2015: 13.97%).

During 2016, USD 27 million of borrowing costs were capitalised as part of property, plant and equipment, capitalisation rate was 8% (2015: USD 28 million, capitalisation rate was 8%).

As at 31 December 2016 and 2015, no property, plant and equipment were pledged as collateral for loans and borrowings.

11 Investments in associates and joint ventures

The Group's investment in joint ventures and associates were as follows as at 31 December 2016 and 2015:

Name	Type of relationship	Segment	% of ownership	2016	2015
				Carrying value	Carrying value
Zaporozhstal Group	Joint venture	Metallurgical	49.9%	491	458
PJSC Southern Iron Ore Enrichment Works	Joint venture	Mining	45.9%	394	298
PrJSC Yenakievskiy Koksohimprom	Associate	Metallurgical	50.0%	10	7
PrJSC Zaporozhogneupor	Associate	Metallurgical	45.4%	2	2
IMU	Associate	Metallurgical	49.9%	11	7
Black Iron (Cyprus) Limited	Associate	Mining	-	-	6
Other	Associate	Mining	n/a	-	1
Total				908	779

All Group's associates and joint ventures are accounted for using the equity method.

None of the joint ventures and associates are traded on active markets and there are no reliable market prices available.

PJSC Southern Iron Ore Enrichment Works

PJSC Southern Iron Ore Enrichment Works is a large Ukrainian iron ore mining plant which produces iron ore concentrate and sinter. Its products are used by the Group's integrated steel plants and are also sold to the third parties (mostly in China, Ukraine and Europe) primarily through the Group's trading companies.

Zaporozhstal Group

The investment in the Zaporozhstal Group is represented by the number of interests in the steel and mining businesses, the most significant being:

- 49.9% effective interest in JSC Zaporozhstal Integrated Iron & Steel Works ("Zaporozhstal"), a large Ukrainian integrated steel plant which sources majority of its iron ore and coke consumption from the Group and sells majority of its finished products through the Group's trading companies;
- 24% effective interest in PrJSC Zaporizhya Iron Ore Plant, large iron ore mining enterprise in Ukraine which sells part of its iron ore output to Zaporozhstal; and
- 42.8% effective interest in PrJSC Zaporozhkoks and a 49.2% effective interest in PrJSC Zaporozhogneupor which are Group's subsidiary and associate respectively.

As at 31 December 2016 and 2015, Metinvest's investments in Zaporozhstal Group and PJSC Southern Iron Ore Enrichment Works were classified as joint ventures due to the fact that decisions on the key relevant activities require participation of and unanimous consents both from Metinvest and from the other shareholders of the Zaporozhstal Group and PJSC Southern Iron Ore Enrichment Works.

11 Investments in associates and joint ventures (continued)

Movements in the carrying amount of the Group investments in associates and joint venture are presented below:

	2016	2015
Carrying amount at 1 January	779	906
Share of after tax results of joint ventures and associates	205	131
Share of other comprehensive income of joint ventures and associates	35	72
Impairment of share in Black Iron (Cyprus) Limited	-	(4)
Sale of share in Black Iron (Cyprus) Limited	(6)	-
Currency translation difference	(105)	(326)
Carrying amount at 31 December	908	779

The nature of the activities of the Group's associates, the Group's relationships with its associates and their key financial information is as follows:

- PrJSC Yenakievskiy Koksohimprom, Ukrainian producer of coke which sources majority of its coal consumption from the Group and sells majority of its coke output to the Group's steel plants; PrJSC Yenakievskiy Koksohimprom had revenues of USD 75 million and net profit of USD 7 million in 2016 (2015: USD 72 and USD 7, respectively) and total assets of USD 92 million as at 31 December 2016 (31 December 2015: USD 76 million);
- PrJSC Zaporozhzhneupor, Ukrainian producer of refractories, with revenue of USD 49 million and net profit of USD 1 million in 2016 (2015: revenue of USD 46 million and net loss of USD 1 million, respectively) and total assets of USD 24 million as at 31 December 2016 (31 December 2015: USD 24 million);
- Black Iron (Cyprus) Limited, entity which owns licences for development of two iron ore deposits nearby Kryvyi Rih, Ukraine. In January 2016, the Group sold its investment in Black Iron (Cyprus) Limited for consideration of USD 6 million which equals the carrying amount of investment as at 31 December 2015; and
- Industrial-Metallurgical Union ("IMU"), entity which owns 4.5% interest in ArcelorMittal Kryvyi Rih, the largest integrated steel plant in Ukraine.

The summarised financial information of the Group's joint ventures is as follows:

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2016	31 December 2015	31 December 2016	31 December 2015
Balance sheet:				
Non-current assets	796	864	363	318
Cash and cash equivalents	39	17	8	9
Other current assets	733	459	560	396
Total current assets	772	476	568	405
Trade and other payables and provisions	84	108	-	-
Other non-current financial liabilities	31	33	30	35
Total non-current liabilities	115	141	30	35
Trade and other payables and provisions	532	366	41	21
Other current financial liabilities	110	113	1	18
Total current liabilities	642	479	42	39
Net assets	811	720	859	649

11 Investments in associates and joint ventures (continued)

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2016	31 December 2015	31 December 2016	31 December 2015
Profit or loss for the year ended (selected items):				
Revenue	1,321	1,463	569	483
Depreciation and amortisation	(71)	(77)	(29)	(37)
Interest income	1	-	1	1
Interest expense	(17)	(32)	(4)	(5)
Income tax expense	(37)	(15)	(50)	(41)
Profit or loss	201	106	228	169
Statement of comprehensive income for the year ended:				
Other comprehensive income	(8)	145	74	3
Total comprehensive income	193	251	302	172
Dividends received by the Group during the year ended	-	-	-	-

The information above reflects the amounts presented in the financial statements of the joint ventures and associates and the impact of fair value adjustments made on acquisition of these joint ventures and associates, if any.

As at 31 December 2016, Zaporozhstal had a contingent liability with potential maximum outflow of USD 22 million (31 December 2015: USD 13 million). This contingent liability represents default interest on a loan taken by then a Zaporozhstal's subsidiary (deconsolidated by Zaporozhstal in 2015) which defaulted on this loan. The loan is guaranteed by Zaporozhstal. The financial guarantee was recognised in full by Zaporozhstal, but the default interest has not been accrued as there is uncertainty as to this amount.

The reconciliation of the net assets of the Group's joint ventures presented above to the carrying amounts of the respective investments is presented below:

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2016	31 December 2015	31 December 2016	31 December 2015
Net assets	811	720	859	649
Group's ownership, %	49.9%	49.9%	45.9%	45.9%
Group's interest in net assets	404	359	394	298
Goodwill	87	99	-	-
Carrying value	491	458	394	298

12 Income tax prepaid

	31 December 2016	31 December 2015
Non-current portion	25	105
Current portion	18	66
Total income tax prepaid	43	171

Group's income tax prepayments originated mainly on principal Ukrainian production subsidiaries due to legislative requirement of advance payment of corporate profit tax which was in force in previous periods. Starting from 1 January 2016 changes to Ukrainian Tax Code were enforced, including the cancellation of required advance payments of corporate profit tax.

The classification of prepayments as of 31 December 2016 is based on Group management's assessment of taxable profits of subsidiaries and amounts of expected cash refunds from the State during 2017.

13 Inventories

	31 December 2016	31 December 2015
Finished goods and work in progress	475	367
Raw materials	329	255
Ancillary materials, spare parts and consumables	113	114
Goods for resale	32	30
Total inventories	949	766

In 2016, the Group had net reversal of an inventory write-down of USD 45 million due to sale of respective inventories, increase of steel prices and recovery of gross margins. In 2015, net inventory write down expense was USD 21 million.

As at 31 December 2016, inventories totalling USD 50 million (31 December 2015: USD 69 million) have been pledged as collateral for borrowings (Note 19).

14 Trade and other receivables

	31 December 2016	31 December 2015
Non-current assets		
Trade receivables	-	201
Loans issued to SCM (USD denominated, 9% effective interest rate)	36	11
Loans issued to SMART (USD denominated, 9% effective interest rate)	82	-
Other non-current financial assets	6	7
Other non-current non-financial assets	13	10
Total non-current assets	137	229
Current financial assets		
Trade receivables and receivables on commission sales	907	757
Loans issued to joint venture (USD denominated, 11% effective interest rate, mature in 2017, renegotiated in 2016)	98	101
Loans issued to SMART (USD denominated, 9% effective interest rate)	-	75
Loans issued to SCM (USD denominated, 9% effective interest rate)	-	22
Other receivables	69	56
Total current financial assets	1,074	1,011
Current non-financial assets		
Recoverable value added tax	200	148
Prepayments made	177	142
Covered letters of credit related to inventory purchases	74	5
Prepaid expenses and other non-financial receivables	55	59
Total current non-financial assets	506	354
Total current assets	1,580	1,365
Total trade and other receivables (including non-current assets)	1,717	1,594

As at 31 December 2016, 9% (31 December 2015: 10%) of receivables which were overdue but not impaired related to key customers and 71% (31 December 2015: 69%) – to SCM and other related parties. Following further delays in payments from some of the Group's key customers beyond the originally expected dates and their certain operational and financial issues, management has re-assessed the recoverable amounts of receivables from these entities. As a result, during 2016 the Group recognised impairment provision for the full amount of these receivables which led to increase of provision from USD 315 million as of 31 December 2015 to USD 535 million as of 31 December 2016 for these debtors.

The increased level of prepayments made is a reflection of requirements of non-Ukrainian suppliers of goods and services for the increased risks and uncertainties of doing business with Ukrainian counterparties.

Recoverable VAT mainly relates to Ukrainian subsidiaries of the Group. During 2016, VAT refunds of USD 361 million were received by the Group (2015: USD 479 million). Although there are certain delays with the refund of part of this balance amounting to USD 35 million related to the subsidiaries located in the non-controlled territory, the Group has a proved right for the refund of this amount and considers this balance as fully recoverable.

During 2016, trade accounts receivable in the amount of USD 707 million have been sold to a third party (2015: USD 499 million). As at 31 December 2016 amount of such receivables which were still unsettled to a third party was USD 115 million (31 December 2015: USD 67 million). The carrying amount of the assets and liabilities that represent the entity's continuing involvement in the derecognised assets is USD 2 million (31 December 2015: USD 2 million). The maximum exposure to loss from such receivables relates to customer default only and is pre-agreed with the third party purchasing the receivables as the percentage of their nominal amount sold. Such percentage is determined with reference to the historical loss ratio and the statistical model of the respective markets the Group.

14 Trade and other receivables (continued)

Movements in the impairment provision for trade and other receivables are as follows:

	31 December 2016		31 December 2015	
	Trade receivables	Other financial receivables	Trade receivables	Other financial receivables
Provision for impairment at 1 January	329	49	77	27
Net impairment during the year	227	-	263	29
Currency translation differences	(7)	(4)	(11)	(7)
Provision for impairment at 31 December	549	45	329	49

Analysis by credit quality of financial trade and other receivables is as follows:

	31 December 2016		31 December 2015	
	Trade receivables and receivables on commission sales	Other financial receivables	Trade receivables and receivables on commission sales	Other financial receivables
Key customers	47	-	20	-
SCM and other related companies, including associates and joint ventures	56	117	54	145
Balances covered by bank letters of credit	85	-	77	-
Balances insured	159	-	121	-
Balances factored	52	3	26	-
Existing and new counterparties with no history of default	82	32	75	24
Balances renegotiated with SCM and othe related companies, including associates and joint ventures	185	24	27	26
Balances renegotiated with key customers	34	-	46	-
Total fully performing (not past due)	700	176	446	195
<i>Past due:</i>				
- less than 30 days overdue	80	-	81	53
- 30 to 90 days overdue	58	1	54	12
- 90 to 180 days overdue	18	16	58	2
- 180 to 360 days overdue	16	79	64	3
- over 360 days overdue	35	19	34	8
Total past due, but not impaired	207	115	291	78
Total individually impaired	549	45	550	49
Less impairment provision	(549)	(45)	(329)	(49)
Total	907	291	958	273

14 Trade and other receivables (continued)

As at 31 December 2016, trade and other receivables totalling USD 123 million (31 December 2015: USD 99 million) have been pledged as collateral for borrowings (Note 19).

15 Cash and cash equivalents

	31 December 2016	31 December 2015
Current accounts	198	160
Cash in transit	19	16
Bank deposits up to 3 months	9	4
Total cash and cash equivalents	226	180

The bank balances and term deposits are neither past due nor impaired. Analysis by credit quality of bank balances and term deposits is as follows:

	31 December 2016	31 December 2015
<i>As rated by Moody's:</i>		
- Aa2	19	-
- A1	61	53
- A2	-	2
- A3	14	-
- Baa1	4	-
- Baa2	-	12
- Ba2	37	21
Not rated – FUIB	60	71
Not rated – US and European banks	20	20
Not rated – Other Ukrainian banks	11	1
Total cash and cash equivalents	226	180

As at 31 December 2016 and 2015, amounts in category "Not rated – FUIB" relate to First Ukrainian International Bank (a related party which is under common control of SCM).

As at 31 December 2016, included in A1, A3 and Ba2 ratings are USD 12 million, USD 11 million and USD 37 million, respectively, related to balances in Ukrainian and Russian subsidiaries of international banks, which do not have own credit ratings and for which ratings were based on their parents' ratings.

As at 31 December 2016, cash and cash equivalents totalling USD 11 million (31 December 2015: USD 0 million) have been pledged as collateral for borrowings (Note 19).

16 Share capital and share premium

	Number of outstanding shares			Total par value of shares	Share premium	Total
	Class A	Class B	Class C			
At 31 December 2015	6,750	2,251	474	0	6,225	6,225
At 31 December 2016	6,750	2,251	474	0	6,225	6,225

As at 31 December 2016 and 2015, the issued share capital comprised 6,750 ordinary Class A shares, 2,251 ordinary Class B shares and 474 ordinary Class C shares with a par value of EUR 10. Each ordinary share carries one vote and is fully paid.

16 Share capital and share premium (continued)

In 2014, the Company changed its Articles of Association and created three classes of shares (A, B and C). Ownership interests of SCM Limited were transferred to new Class A shares. Ownership interests of SMART were transferred to new Class B shares. Ownership interests of the previous Class B shares were transferred to new Class C shares. Additional rights of these new classes of shares were established, the most significant of which were:

- Class C shareholders have the right to a portion of net assets of the Company and are represented at shareholders' meetings;
- the establishment of a Supervisory Board of ten members, where seven are appointed by the majority of Class A and Class C shareholders and three are appointed by the Class B shareholder;
- a number of decisions with respect to acquisitions and financing decisions above a specified amount require effectively consent of Class A and B shareholder; and
- Class C shares are not entitled to receive dividends.

17 Other reserves

	Revaluation of available- for-sale investments and share in OCI of associates	Revaluation of property, plant and equipment	Merger reserve	Cumulative currency translation reserve	Total
Balance as at 1 January 2015	(13)	4,394	(3,038)	(7,377)	(6,034)
Total comprehensive income / (loss) for the period	-	774	-	(2,461)	(1,687)
Depreciation transfer, net of tax	-	(292)	-	-	(292)
Balance as at 31 December 2015	(13)	4,876	(3,038)	(9,838)	(8,013)
Total comprehensive income / (loss) for the period	4	546	-	(652)	(102)
Depreciation transfer, net of tax	-	(327)	-	-	(327)
Balance as at 31 December 2016	(9)	5,095	(3,038)	(10,490)	(8,442)

The revaluation reserve for available-for-sale investments is transferred to profit or loss when realised through sale or impairment. Revaluation reserve for property, plant and equipment is transferred to retained earnings when realised through depreciation, sale or other disposal. Currency translation reserve is transferred to profit or loss when realised through disposal of a subsidiary by sale, liquidation, repayment of share capital or abandonment of all, or part of, that subsidiary.

Retained earnings of the Group represent the earnings of the Group entities from the date they have been established or acquired by the entities under common control. The Group's subsidiaries distribute profits as dividends or transfer them to reserves on the basis of their statutory financial statements prepared in accordance with local GAAP or IFRS as appropriate. Ukrainian legislation identifies the basis of distribution as retained earnings only, however this legislation and other statutory laws and regulations are open to legal interpretation. Since December 2014, there are particular temporary restrictions for Ukrainian entities to pay dividends abroad (Note 2).

The ability of the Group to pay dividends has been limited by the terms and conditions of the Group's agreements with its lenders and bondholders related to the debt restructuring process (Note 3).

18 Material non-controlling interests in subsidiaries

Subsidiaries that have non-controlling interest that is material to the Group have been determined by management based on combination of the following factors: (i) the percentage of shares held by non-controlling shareholders; (ii) accumulated amount of non-controlling interest ("NCI") in the subsidiary; and (iii) total assets, revenues, profit or loss and OCI of the respective subsidiaries.

The following table provides information about subsidiaries that have non-controlling interest that is material to the Group:

	Proportion of NCI (same as voting rights held by NCI)	Profit or loss attributable to NCI	OCI attributable to NCI	Amount of NCI in the subsidiary	Dividends paid to NCI during the year
As at 31 December 2016					
PrJSC Azovstal Iron and Steel Works	3.3%	1	1	34	-
PrJSC Avdiivka Coke Plant	5.4%	2	(2)	15	-
PrJSC Zaporozhkoks	47.8%	7	(4)	29	-
PrJSC Northern Iron Ore Enrichment Works	3.6%	5	(1)	38	-
Ferriera Valsider S.p.A.	30.0%	-	(1)	23	-
Other subsidiaries with NCI	n/a	(3)	3	(1)	-
Total		12	(4)	138	-
As at 31 December 2015					
PJSC Azovstal Iron and Steel Works	3.8%	(4)	(7)	37	-
PJSC Avdiivka Coke Plant	7.0%	2	(10)	21	-
JSC Zaporozhkoks	47.8%	6	(12)	26	-
PJSC Northern Iron Ore Enrichment Works	3.6%	(2)	(16)	36	-
Ferriera Valsider S.p.A.	30.0%	(8)	3	24	-
Other subsidiaries with NCI	n/a	(9)	(1)	(6)	-
Total		(15)	(43)	138	-

The summarised financial information of these subsidiaries (including the impact of consolidation fair value adjustments, but before intercompany eliminations), was as follows at 31 December 2016 and 2015:

	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Net assets
As at 31 December 2016					
PrJSC Azovstal Iron and Steel Works	1,000	1,117	920	177	1,020
PrJSC Avdiivka Coke Plant	449	265	399	30	285
PrJSC Zaporozhkoks	98	38	69	7	60
PrJSC Northern Iron Ore Enrichment Works	694	710		80	
Ferriera Valsider S.p.A.	221	92	217	4	1,107
			233		76
As at 31 December 2015					
PJSC Azovstal Iron and Steel Works	782	1,145	785	159	983
PJSC Avdiivka Coke Plant	390	314	357	52	295
JSC Zaporozhkoks	57	40	36	7	54
PJSC Northern Iron Ore Enrichment Works	490	745	156	81	998
Ferriera Valsider S.p.A.	179	123	210	11	81

18 Material non-controlling interests in subsidiaries (continued)

	Revenue	Profit/ (loss)	Total comprehensive (loss) / income
Year ended 31 December 2016			
PrJSC Azovstal Iron and Steel Works	1,498	26	37
PrJSC Avdiivka Coke Plant	588	31	(10)
PrJSC Zaporozhkoks	181	14	6
PrJSC Northern Iron Ore Enrichment Works	718	141	109
Ferriera Valsider S.p.A.	382	(1)	(5)
Year ended 31 December 2015			
PJSC Azovstal Iron and Steel Works	1,532	(117)	(314)
PJSC Avdiivka Coke Plant	608	26	(123)
JSC Zaporozhkoks	209	12	(13)
PJSC Northern Iron Ore Enrichment Works	616	(49)	(492)
Ferriera Valsider S.p.A.	398	(26)	(16)

The Group's centralised treasury monitors the cash flows of the Group's subsidiaries and adjusts the subsidiaries' operating cash flows (e.g. by means of changing intragroup trading balances) to provide sufficient funds for the approved investing activities or payment of taxes, interest and dividends.

In 2011 and 2014, the Company issued guaranteed bonds with aggregate amount of USD 1,183 million outstanding which were in default as at 31 December 2016 (Notes 3 and 19). The bonds are guaranteed on a joint and several basis by the Group's subsidiaries PrJSC Avdiivka Coke Plant, PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Khartsyzsk Pipe Plant, PrJSC Northern Iron Ore Enrichment Works, PrJSC Central Iron Ore Enrichment Works, PrJSC Azovstal Iron and Steel Works, PrJSC Yenakiieve Iron and Steel Works, PrJSC Ilyich Iron and Steel Works. The terms of bonds, subject to certain exceptions and qualifications, limit the ability of the Group to:

- undertake any amalgamation, merger, division, spin-off, transformation or other reorganisation or restructuring;
- incur additional indebtedness;
- pay dividends or distributions in respect of its share capital or redeem or repurchase capital stock or subordinated debt;
- create mortgages, pledges, security interests, encumbrances, liens or other charges;
- transfer or sell assets; and
- enter into transactions with affiliates.

Also, Metinvest entered into a number of PXF loans for an aggregate amount of USD 1,093 million which were in default as at 31 December 2016 (Notes 3 and 19). These loans are guaranteed by PrJSC Ingulets Iron Ore Enrichment Works and PrJSC Ilyich Iron and Steel Works. Also, as a condition of these loans, certain subsidiaries of Metinvest (PrJSC Azovstal Iron and Steel Works, PrJSC Yenakiieve Iron and Steel Works, PrJSC Northern Iron Ore Enrichment Works, PrJSC Ingulets Iron Ore Enrichment Works, Metinvest International S.A., PrJSC Ilyich Iron and Steel Works) are jointly committed to perform sales of steel products to Metinvest International S.A. from the date when the funds are drawn down by Metinvest. The commitment to sell steel products mirrors the initial contractual (pre-default) repayment schedule of the loans balances and extends to loans' initial contractual (pre-default) maturity dates. The proceeds from such sales are transferred through special accounts of the lenders and banks will have rights to these proceeds only in case when Metinvest does not make a scheduled payment under the credit facilities. There are no other restrictions to these accounts. The amount of funds on such accounts as at 31 December 2016 is USD 0 million (31 December 2015: USD 0 million).

See also discussion in Note 3 about other restrictions introduced as a result of restructuring.

19 Loans and borrowings

As at 31 December, loans and borrowings were as follows:

	31 December 2016	31 December 2015
Current		
Bonds issued	1,183	1,146
Bank borrowings	1,110	1,091
Non-bank borrowings from related parties	425	393
Trade finance	161	228
Total loans and borrowings	2,879	2,858

As at 31 December 2016, the bank borrowings include PXF in the amount of USD 1,093 million (31 December 2015: USD 1,073 million).

As disclosed in Note 3, the Group breached its payment covenants and, consequently, as a result of this breach and the associated impact of cross default the vast majority of loans and borrowing were reclassified to current loans and borrowings.

The Group has undergone a major debt restructuring process which was finalised before the date of issuance of these consolidated financial statements. Details of the restructuring agreements reached are described in Note 3. As of 31 December 2016, USD 19 million of fees and costs paid directly related to restructuring were capitalised in the amount of borrowings. Restructuring fees of approximately USD 55 million are payable in January-May 2017 and they were not recorded in 2016 as restructuring had not been completed as of 31 December 2016.

As of 31 December 2016, the Group's 2018 bonds were traded on open markets with a discount of approximately 8% (31 December 2015: 57%) to their nominal value, 2017 bonds were traded on open markets with a discount of approximately 9% (31 December 2015: 55%) and 2016 bonds were traded on open markets with discount of approximately 8% (31 December 2015: 58%). As at 31 December 2016, the fair value of bonds was USD 1,102 million (31 December 2015: USD 514 million) as determined by reference to observable market quotations. Have these market quotations been used to determine the fair values of the bank borrowings as at 31 December 2016, those would be in the range of USD 1,032 million to USD 1,040 million (31 December 2015: USD 462 million and USD 495 million respectively). Despite these quotations, these amounts do not necessarily represent the fair value of the bonds and bank borrowings. These amounts reflect the situation as at 31 December 2016 and 31 December 2015 when the company was in default and cross default on its bank and non-bank loans and borrowings.

The majority of the Group's bank borrowings and trade finance have variable interest rates. The weighted average effective interest rates and currency denomination of loans and borrowings as at the balance sheet dates are as follows:

	31 December 2016		31 December 2015	
<i>In % per annum</i>	USD	EUR	USD	EUR
Bank borrowings	5%	3%	6%	3%
Bonds issued	10%	-	10%	-
Non-bank borrowings from related parties	10%	-	10%	-
Trade finance	4%	2%	3%	2%
Reported amount	2,802	77	2,764	94

20 Seller's notes

	31 December 2016	31 December 2015
Current portion	90	88
Total seller's notes	90	88

Seller's notes represent consideration payable for acquisition of United Coal Company LLC (Group's subsidiary) in 2009.

Seller's notes are secured with a 100% of the capital of United Coal Company LLC and subordinated to other borrowings of the Group to the extent that total borrowings do not exceed USD 3 billion excluding interest.

As at 31 December 2016, seller's notes bear nominal interest rate of 7% p.a., and are recorded at an effective interest rate of 12.5% p.a. In January 2017, the Group renegotiated maturity, repayment schedule and interest rate of Seller's note (Note 3).

As of 31 December 2016 and 31 December 2015, the fair value of seller's notes approximated their carrying amount.

21 Retirement benefit obligations

The Group's defined benefit obligations relate to:

	31 December 2016	31 December 2015
State-defined early pensions for employees working in hazardous and unhealthy working conditions	300	289
Long-term employee benefits under collective bargaining agreements	26	46
Total defined benefit obligations	326	335

Nature and the risks and uncertainties associated with the Group's defined benefit obligations are further disclosed in the Note 5.

Adoption of certain changes to the pension legislation in Ukraine during 2015, being an increase of the required overall service period for men and women and gradual increase of the early retirement age for women by 5 years resulted in the negative past service cost recognised in profit and loss for year ended 31 December 2015.

On 9 August 2016, the Decree of Cabinet of Ministers of Ukraine No 461, regulating pension entitlement on preferential terms, came into force. Under the Decree, the list of positions and professions eligible to the early retirement pension was reduced. The effect of this reduction resulted in negative past services cost amounting to USD 2 million.

Changes in the present value of the defined benefit obligation were as follows:

	2016	2015
Defined benefit obligation as at 1 January	335	473
Current service cost	10	10
Remeasurements of the defined benefit liability resulting from:		
- changes in financial assumptions	13	(18)
- changes in demographic assumptions	(1)	(1)
- experience adjustments	(6)	26
Negative past service cost	(2)	(10)
Interest cost	46	49
Benefits paid	(29)	(34)
Currency translation difference	(40)	(160)
Defined benefit obligation as at 31 December	326	335

21 Retirement benefit obligations (continued)

The amounts recognised in the consolidated income statement were as follows:

	2016	2015
Current service cost	10	10
Past service cost	(2)	(10)
Interest cost	46	49
Total	54	49

The principal actuarial assumptions used were as follows:

	31 December 2016	31 December 2015
Nominal discount rate	14.40%	16.04%
Nominal salary increase	10%	0% in 2016, 12.9% – later
Nominal pension entitlement increase (indexation)	3.5%	3.6%
Long-term inflation	5.0%	5.0%

Assumptions about mortality are based on the publicly available mortality tables for city population of the respective regions of Ukraine (depending on the location of the Group's subsidiaries) for 2016 and are consistent with the prior year.

The sensitivity of the defined benefit obligation to changes in the principal assumptions is presented below:

	2016	2015
Nominal discount rate increase / decrease by 1 pp	(26) / 30	(23) / 26
Nominal salary increase / decrease by 1 pp	12 / (13)	8 / (8)
Nominal pension entitlement (indexation) increase / decrease by 1 pp	9 / (8)	7 / (7)
Inflation increase / decrease by 1 pp	4 / (6)	8 / (9)

The above sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

As at 31 December 2016, the weighted average maturity of the Group's defined benefit obligations is 8.3 years and it varies across different Group's subsidiaries from 7 to 9.6 years (31 December 2015: 7.9 years, varying from 6 to 9.5 years). Payments in respect of defined benefit obligations expected to be made during the year ending 31 December 2017 are USD 27 million (2016: USD 38 million).

22 Other non-current liabilities

	31 December 2016	31 December 2015
Asset retirement obligations	66	74
Long-term advances received from related parties (Note 29)	13	15
Tax liabilities under moratorium (Note 30)	7	8
Other non-current liabilities	6	6
Total other non-current liabilities	92	103

23 Trade and other payables

	31 December 2016	31 December 2015
Trade payables and payables on sales made on commission	1,081	984
Dividends payable to shareholders of Metinvest B.V.	88	88
Dividends payable to non-controlling shareholders of Company's subsidiaries	2	2
Payables for acquired property, plant and equipment and other intangible assets	38	54
Other financial liabilities	61	46
Total financial liabilities	1,270	1,174
Prepayments received	105	101
Accruals for employees' unused vacations and other payments to employees	54	51
Income tax payable	18	19
Other taxes payable, including VAT	61	45
Wages and salaries payable	17	17
Other allowances and provisions	23	19
Total trade and other payables	1,548	1,426

24 Expenses by nature

	2016	2015
Raw materials including change in finished goods and work in progress	1,391	1,476
Goods and services for resale, including related transportation	1,205	1,574
Energy materials including gas, electricity and fuel	875	1,005
Wages and salaries	470	507
Transportation services	612	957
Repairs and maintenance expenses	172	200
Pension and social security costs	79	111
Pension costs – defined benefit obligations (Note 21)	8	-
Depreciation and amortisation	529	615
Impairment and devaluation of property, plant and equipment and other intangible assets (Notes 9 and 10)	34	364
Taxes and duties	84	84
Services and other costs	217	313
Total operating expenses	5,676	7,206
Classified in the consolidated income statement as:		
– cost of sales	4,833	6,087
– distribution costs	660	920
– general and administrative expenses	183	199
Total operating expenses	5,676	7,206

Raw materials include externally purchased coke and coal, iron ore, scrap metal, ferroalloys, ancillary and other materials and cost of their transportation.

Unallocated fixed production costs incurred at the Group's subsidiaries during the months of operations at levels substantially below normal capacity are not included in the cost of inventories, are expensed in the profit or loss and presented within cost of sales according to their nature.

24 Expenses by nature (continued)

Auditor's fees. The following fees were expensed in the consolidated income statement in the reporting period:

	2016	2015
Audit of the financial statements (including audit fee of the signing firm of USD 0.1 million)	2	2
Total	2	2

25 Other operating (expense) / income, net

Other operating income and expenses for the year ended 31 December were as follows:

	2016	2015
Impairment of trade and other receivables (Note 14)	(227)	(292)
Maintenance of social infrastructure	(12)	(12)
VAT on sales below cost and VAT write-off	(9)	(27)
Charity and social payments	(6)	(17)
Impairment of goodwill of UCC (Note 8)	-	(74)
Impairment of share in Black Iron (Cyprus) Limited (Note 11)	-	(4)
Operating foreign exchange gains less losses, net	18	124
Gain on disposal of property, plant and equipment, net	3	8
Other income / (expense), net	11	(6)
Total other operating expense, net	(222)	(300)

The decrease in foreign exchange gains less losses is a reflection of stabilisation of UAH against major foreign currencies in 2016, as described in Note 2.

26 Finance income

Finance income for the year ended 31 December was as follows:

	2016	2015
Interest income:		
– loans issued	20	20
– bank deposits	3	3
– imputed interest on other financial instruments	3	3
Total finance income	26	26

27 Finance costs

Finance costs for the year ended 31 December were as follows:

	2016	2015
Net foreign exchange loss	106	372
Interest expense on:		
– borrowings	95	86
– bonds	123	113
– seller's notes	6	6
– imputed interest on seller's notes	2	3
Interest cost on retirement benefit obligations	46	49
Other finance costs	19	18
Total finance costs	397	647

Other finance costs include legal fees connected with debt restructuring and preceding negotiations, factoring fees and unwinding of discount on payables with deferred settlement date.

Net foreign exchange losses arise on intragroup loans and dividends payable between the entities with different functional currencies.

28 Income tax

Income tax for the year ended 31 December was as follows:

	2016	2015
Current tax	82	28
Deferred tax	(41)	(189)
Income tax expense / (benefit)	41	(161)

The Group is subject to taxation in several tax jurisdictions, depending on the residence of its subsidiaries. In 2016, Ukrainian corporate income tax was levied on taxable income less allowable expenses at the rate of 18% (2015: 18%). In 2016, the tax rate for Swiss operations was 10% (2015: 10%) and for European companies tax rate in 2016 varied from 10% to 32% (2015: varied from 10% to 34%). The tax rate for US operations was 35% (2015: 35%).

Reconciliation between the expected and the actual taxation charge is provided below.

	2016	2015
IFRS profit / (loss) before tax	159	(1,164)
Tax calculated at domestic tax rates applicable to profits in the respective countries	(16)	(340)
Tax effect of items not deductible or assessable for taxation purposes:		
- impairment of non-current assets at UCC (Notes 8, 9)	2	144
- impairment of trade and other receivables	11	22
- other non-deductible expenses	51	49
- non-taxable income	(22)	(10)
Write-down / (reversal of write-down) of deferred tax assets, net	15	(26)
Income tax expense / (benefit)	41	(161)

The weighted average applicable tax rate was (10%) in 2016 (2015: 29%). Variation in weighted average tax rate is mostly due to variation in profitability of the Group's subsidiaries in Ukraine some of which are profitable and some are loss making.

In 2016, certain amendment to Tax Code were adopted with effect from 1 January 2017, which include possibility to deduct expenses on receivables write-off in tax accounting, which was not allowed before. This, among other reasons, led to restoration of deferred tax assets on allowance for trade receivables (Note 5).

28 Income tax (continued)

Differences between IFRS and Ukrainian and other countries' statutory taxation regulations give rise to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their tax bases.

	1 January 2016	Credited/ (charged) to income statement	Credited/ (charged) to other compre- hensive income	Currency translation difference	31 December 2016
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	21	(15)	-	(2)	4
Long-term receivables	1	1	-	-	2
Inventory valuation	4	5	-	-	9
Trade and other accounts receivable	13	19	-	(2)	30
Accrued expenses	7	13	-	(1)	19
Tax losses carried forward	115	(54)	-	(9)	52
Retirement benefit obligations	46	9	1	(6)	50
Other	79	(21)	-	(6)	52
Gross deferred tax asset	286	(43)	1	(26)	218
Less offsetting with deferred tax liabilities	(181)	43	(1)	17	(122)
Recognised deferred tax asset	105	-	-	(9)	96
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(508)	76	(106)	58	(480)
Inventory tax differences	(7)	4	-	-	(3)
Other	(14)	4	-	3	(7)
Gross deferred tax liability	(529)	84	(106)	61	(490)
Less offsetting with deferred tax assets	181	(43)	1	(17)	122
Recognised deferred tax liability	(348)	41	(105)	44	(368)

Deferred tax asset on unused tax losses not recognised as at 31 December 2016 comprised USD 47 million (31 December 2015: USD 48 million). There are no expiry dates on tax losses carried forward in Ukraine and Italy. Deferred income tax assets are recognised for tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable; future taxable profits are estimated using the cash flow forecasts used for impairment testing of non-current assets (Note 8).

28 Income tax (continued)

	1 January 2015	Credited/ (charged) to income statement	Credited/ (charged) to other compre- hensive income	Currency translation difference	31 December 2015
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	105	(73)	-	(11)	21
Long-term receivables	-	1	-	-	1
Inventory valuation	18	(9)	-	(5)	4
Trade and other accounts receivable	-	13	-	-	13
Accrued expenses	35	(27)	-	(1)	7
Tax losses carried forward	103	48	-	(36)	115
Retirement benefit obligations	82	(9)	1	(28)	46
Other	3	70	-	6	79
Gross deferred tax asset	346	14	1	(75)	286
Less offsetting with deferred tax liabilities	(257)	28	(1)	49	(181)
Recognised deferred tax asset	89	42	-	(26)	105
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(703)	142	(162)	215	(508)
Inventory tax differences	(8)	-	-	1	(7)
Borrowings and long-term payables	(2)	2	-	-	-
Other	(48)	31	-	3	(14)
Gross deferred tax liability	(761)	175	(162)	219	(529)
Less offsetting with deferred tax assets	257	(28)	1	(49)	181
Recognised deferred tax liability	(504)	147	(161)	170	(348)

The tax charge relating to components of other comprehensive income is as follows:

	2016			2015		
	Before tax	Deferred tax charge	After tax	Before tax	Deferred tax charge	After tax
Revaluation of property, plant and equipment	629	(106)	523	886	(162)	724
Remeasurement of retirement benefit obligation	(6)	1	(5)	(7)	1	(6)
Other comprehensive income	623	(105)	518	879	(161)	718

In the context of the Group's current structure, tax losses and current tax assets of different Group companies may not be offset against current tax liabilities and taxable profits of other Group companies and, accordingly, taxes may accrue even where there is a consolidated tax loss. Deferred tax assets and liabilities are offset only when they relate to the same taxable entity and the entity has a legally enforceable right to set off current tax assets against current tax liabilities.

29 Balances and transactions with related parties

For the purposes of these consolidated financial statements, parties are considered to be related if one party has the ability to control the other party, is under common control, or can exercise significant influence over the other party in making financial and operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

As at 31 December 2016 and 2015 significant balances outstanding with related parties are detailed below:

31 December 2016						31 December 2015				
	SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group	SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group
ASSETS										
Non-current trade and other receivables, including:	-	-	-	36	82	-	-	-	14	-
Long-term loans issued	-	-	-	36	82	-	-	-	13	-
Other non-current assets	-	-	-	-	-	-	-	-	1	-
Current trade and other receivables, including:	-	62	368	130	2	-	50	274	122	77
Trade receivables and receivables on commission sales	-	61	269	30	2	-	50	172	35	2
Prepayments made	-	-	-	69	-	-	-	-	30	-
Loans issued	-	-	98	-	-	-	-	101	22	75
Other financial receivables (short-term, non-interest bearing)	-	1	1	31	-	-	-	1	35	-
Cash and cash equivalents	-	-	-	60	-	-	-	-	71	-
31 December 2016						31 December 2015				
	SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group	SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group
LIABILITIES										
Other non-current liabilities	-	-	-	11	-	-	-	-	15	-
Non-bank borrowings	-	-	-	315	110	-	-	-	292	101
Trade and other payables, including:	41	81	510	139	48	40	58	410	137	48
Dividends payable	40	-	-	-	48	40	-	-	-	48
Trade payables and payables on sales made on commission	-	62	510	87	-	-	41	402	99	-
Prepayments received	-	19	-	4	-	-	17	6	8	-
Other financial liabilities	1	-	-	48	-	-	-	2	30	-

29 Balances and transactions with related parties (continued)

Significant transactions (excluding purchases) with related parties during 2016 and 2015 are detailed below:

2016	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Sales, including:	35	451	42	1	529
Steel	-	21	36	1	58
Scrap metal	-	32	3	-	35
Coke and coking coal	31	219	-	-	250
Iron ore	-	115	1	-	116
Other	4	64	2	-	70
Finance income / (expenses), including:	-	11	(23)	(4)	(16)
Interest income – bank deposits	-	-	2	-	2
Interest income – loans issued	-	11	3	5	19
Interest expense – borrowings	-	-	(28)	(9)	(37)
2015	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Sales, including:	28	646	59	1	734
Steel	-	23	44	1	68
Scrap metal	-	46	3	-	49
Coke and coking coal	23	326	-	-	349
Iron ore	-	162	1	-	163
Other	5	89	11	-	105
Other operating income / (expense) net	-	-	(7)	-	(7)
Charity and social payments	-	-	(11)	-	(11)
Other	-	-	4	-	4
Finance income / (expenses), including:	-	11	(24)	(3)	(16)
Interest income – bank deposits	-	-	1	-	1
Interest income – loans issued	-	11	3	6	20
Interest expense – borrowings	-	-	(28)	(9)	(37)

29 Balances and transactions with related parties (continued)

The following is a summary of purchases from related parties in 2016 and 2015:

2016	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Purchases, including:	84	985	1,090	-	2,159
Metal products	1	944	5	-	950
Coke and coking coal	66	2	39	-	107
Raw materials and spare parts	9	31	76	-	116
Electricity	-	-	439	-	439
Gas	4	4	174	-	182
Fuel	-	-	49	-	49
Services	2	-	298	-	300
Other	2	4	10	-	16

2015	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Purchases, including:	77	1,135	981	-	2,193
Metal products	1	1,119	7	-	1,127
Coke and coking coal	67	1	11	-	79
Raw materials and spare parts	6	12	51	-	69
Electricity	-	-	454	-	454
Gas	-	-	105	-	105
Fuel	-	-	13	-	13
Services	1	-	330	-	331
Other	2	3	10	-	15

Not included in the tables above are the Group's transactions on purchase and further re-sale of iron ore, coal and steel products from or to joint ventures where the Group is acting as an agent and not as principal. Income and costs related to such transactions are presented net within other operating income / (expense). The Group's net gain on such transactions was USD 6 million in 2016 (2015: USD 3 million).

In 2016, the remuneration of key management personnel of the Group comprised current salaries and related bonuses paid totalling USD 11.5 million (in 2015: USD 11.5 million).

As at 31 December 2016 and 2015, key management held the Group's bonds in the total amount of less than USD 1 million. Rights of these bondholders are not different from the rights of other bondholders.

30 Contingencies, commitments and operating risks

Tax legislation. Ukrainian tax, currency and customs legislation is subject to varying interpretations and changes, which can occur frequently. With effect from 1 January 2011, Ukraine adopted the new Tax Code of Ukraine which was further revised, including in 2015 and 2016. Applicable taxes include value-added tax, corporate income tax, customs duties and other taxes. As a result, there is significant uncertainty as to the implementation or interpretation of the new legislation and unclear or non-existent implementing regulations. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and State authorities. It is possible that transactions and activities that have not been challenged in the past may be challenged. As a result, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

The Group's operations are vertically integrated and a significant portion of the Group's iron ore, coke and coal production is used in the subsequent production operations. Because of non-explicit requirements of the applicable tax legislation, intercompany transactions may be assessed by Ukrainian tax authorities as non-market. Such transactions have not been challenged in the past by the tax authorities. However, it is possible with evolution of the interpretation of tax law in Ukraine and other jurisdictions plus changes in the approach of tax authorities, that such transactions could be challenged in the future.

The tax legislation had been expanded with the new transfer pricing rules effective from 1 September 2013 that are much more detailed than previous legislation and, to a certain extent, better aligned with the international transfer pricing principles. The new legislation allows the tax authorities to make transfer pricing adjustments and impose additional tax liabilities in respect of controlled transactions (transactions with related parties and some types of transactions with unrelated parties), if the transaction price is not arm's length and is not supported by relevant documentation. Since 1 January 2015, the transfer pricing rules were amended so that transactions between Ukrainian companies (irrespective whether they are related parties or not) ceased to be treated as controlled transactions.

Management believes it is taking appropriate measures to ensure compliance with the new transfer pricing legislation.

Bankruptcy proceedings. During 2006, bankruptcy proceedings were initiated against the Group's subsidiary PrJSC Krasnodonugol. The majority of the creditors' claims summarised by the external manager relate to the Group thus are eliminated on consolidation. As at 31 December 2016, the amount of financial and tax liabilities related to the bankruptcy proceedings recorded in these consolidated financial statements is USD 11 million (31 December 2015: USD 12 million), out of which USD 7 million (31 December 2015: USD 8 million) are presented as non-current tax liabilities under moratorium (Note 22).

Legal proceedings. From time to time and in the normal course of business, claims against the Group are received. On the basis of its own estimates and both internal and external professional advice management is of the opinion that no material losses will be incurred in respect of claims in excess of provisions that have been made in these consolidated financial statements.

Environmental matters. The enforcement of environmental regulation in Ukraine is evolving and the enforcement posture of government authorities is continually being reconsidered. The Group periodically evaluates its obligations (including asset retirement obligations) under environmental regulations. As obligations are determined, they are recognised immediately. Potential liabilities, which might arise as a result of changes in existing regulations, civil litigation or legislation, cannot be estimated, but could be material. In the current enforcement climate under existing legislation, management believes that there are no significant liabilities for environmental damage.

Capital expenditure commitments. As at 31 December 2016, the Group has contractual capital expenditure commitments in respect of property, plant and equipment totalling USD 135 million (31 December 2015: USD 266 million). The Group has already allocated the necessary resources in respect of these commitments. Management of the Group believes that future net income and funding will be sufficient to cover this and any similar commitments.

Guarantees issued. As at 31 December 2016 and 2015, the Group has no outstanding guarantees to third parties.

Compliance with covenants. The Group breached its payment covenants and, consequently, as a result of this breach and the associated impact of cross default all non-current loans and borrowing have been classified as current as at 31 December 2016 and 2015 (Note 3).

Insurance. Metinvest maintains mandatory insurance policies against certain types of risk in accordance with Ukrainian law, including life and health insurance; third party liability insurance on hazardous industrial assets and in respect of cargo and motor vehicles; voluntary insurance cover for most of its production facilities and in respect of cargo and motor vehicles; "All Risk" insurance to cover property damage and provide business interruption coverage including "inter-dependency" coverage for its key production facilities in Ukraine; property damage and business interruption policies in respect of its European and US assets.

31 Financial risk management

The Group activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Financial risk management is carried out jointly by the internal control and risk management department and the central treasury department. These departments identify, evaluate and mitigate financial risks in close co-operation with the Group's operating units.

(a) Market risk.**(i) Foreign exchange risk.**

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign operations is managed through (i) borrowings denominated in the relevant foreign currencies; (ii) different treasury operations like forward, swap and other.

Foreign exchange risk is managed centrally by the Group's treasury. The Group's treasury has set up a policy to manage foreign exchange risk. The Group's treasury sets limits on the level of exposure by currency and maximum amount of exposure. The subsidiaries have not entered into transactions designed to hedge against these foreign currency risks without permission of the Group's treasury.

At 31 December 2016, if the UAH had strengthened / weakened by 25% against the US dollar with all other variables held constant, post-tax profit for the year would have been USD 172 million higher / lower (2015: if the UAH strengthened / weakened by 50% against USD dollar, post-tax profit for the year would have been USD 275 million higher / lower), mainly as a result of foreign exchange losses/gains on translation of US dollar denominated trade receivables and foreign exchange gains/losses on translation of US dollar denominated intragroup borrowings and dividends payable.

(ii) Price risk.

The Group's revenue is exposed to the market risk from price fluctuations related to the sale of its steel and iron ore products. The prices of the steel and iron ore products sold both within Ukraine and abroad are generally determined by market forces. These prices may be influenced by factors such as supply and demand, production costs (including the costs of raw material inputs) and global economic growth. The prices of the products that the Group sells to third parties are also affected by supply/demand and global/Ukrainian economic growth. Adverse changes in respect of any of these factors may reduce the revenue that the Group receives from the sale of its steel or mined products.

The Group's exposure to commodity price risk associated with the purchases is limited as the Group is vertically integrated and is self-sufficient for iron ore and certain portion of coking coal requirements.

No financial instruments are exposed to price risk.

(iii) Cash flow and fair value interest rate risk.

The Group's income and operating cash flows are dependent on changes in market interest rates.

The Group's interest rate risk arises from long-term and short-term borrowings. Borrowings attracted at variable rates expose the Group to cash flow interest rate risk. Borrowings attracted at fixed rates expose the Group to fair value interest rate risk. The Group's policy is to maintain a balanced borrowings portfolio of fixed and floating rate instruments. As at 31 December 2016, 56% of the total borrowings were provided to the Group at fixed rates (31 December 2015: 54%). During 2016 and 2015, the Group's borrowings at variable rate were denominated in USD and EUR.

31 Financial risk management (continued)

Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of attracting new debt management uses its judgment to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

Refer to Note 14, 19 and 31 for information about maturity dates and effective interest rates of financial instruments.

At 31 December 2016, if interest rates on USD and EUR denominated floating rate borrowings had been by 1 pp higher / lower (2015: 1 pp) with all other variables held constant, post-tax profit for the year would have been USD 11 million lower / higher (2015: USD 11 million).

(b) Credit risk

Credit risk is managed centrally by the Group management. Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. When wholesale customers are independently rated, these ratings are used for credit quality assessment. Otherwise, if there is no independent rating, the Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilisation of credit limits is regularly monitored.

Financial assets, which potentially subject the Group to credit risk, consist principally of cash, loans, trade and other accounts receivable.

Cash is placed with major Ukrainian and international reputable financial institutions, which are considered at time of deposit to have minimal risk of default.

The Group has policies in place to ensure that provision of loans and sales of products/services are made to customers with an appropriate credit history. The Group's credit risk exposure is monitored and analysed on a case-by-case basis. Credit evaluations are performed for all customers requiring credit over a certain amount. The carrying amount of loans, trade and other accounts receivable, net of provision for impairment, represents the maximum amount exposed to credit risk. Concentration of credit risk mainly relates to CIS and European countries where the major customers are located.

The maximum exposure to credit risk as at 31 December 2016 is USD 1,424 million (2015: USD 1,410 million) being the carrying value of long and short-term loans issued and receivables and cash. In order to reduce credit risk on receivables, the Group uses letters of credit, guarantees and trade insurance. The Group does not hold any collateral as security.

Management believes that credit risk is appropriately reflected in impairment allowances recognised against assets, and management does not expect any significant losses from non-performance by these counterparties.

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, the Group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Currently the Group has completed the restructuring of its debts to achieve healthy liquidity position and maintain its ability to continue operating on a going concern basis (Note 3).

The Group treasury analyses the ageing of Group's assets and the maturity of Group's liabilities and plans their liquidity depending on the expected repayment of various instruments. In case of insufficient or excessive liquidity in individual entities, the Group relocates resources and funds among the entities of the Group to achieve optimal financing of the business needs of each entity.

31 Financial risk management (continued)

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the consolidated balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Cash flows from borrowings were calculated using spot rates.

At 31 December 2016	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	1,123	-	-	-
Trade finance	161	-	-	-
Bonds	1,196	-	-	-
Non-bank borrowings	425	-	-	-
Seller's notes	90	-	-	-
Financial trade and other payables	1,270	-	-	-
Total	4,265	-	-	-

At 31 December 2015	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	1,099	-	-	-
Trade finance	228	-	-	-
Bonds	1,153	-	-	-
Non-bank borrowings	393	-	-	-
Seller's notes	93	-	-	-
Financial trade and other payables	1,174	-	-	-
Total	4,140	-	-	-

32 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital on the basis of a gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings and Seller's Notes (including current and non-current parts) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

The Group has yet to determine its optimum gearing ratio. Presently, all of its debt is either in default or matures within 1 year, but the Group is actively pursuing mechanisms to restructure its debt (Note 3) in order to extend the credit terms to match its long-term investment strategy.

	31 December 2016	31 December 2015
Total borrowings (Note 19)	2,879	2,858
Seller's notes (Note 20)	90	88
Less: cash and cash equivalents (Note 15)	(226)	(180)
Net debt	2,743	2,766
Total equity	4,028	4,024
Total capital	6,771	6,790
Gearing ratio	41%	41%

33 Fair values of financial instruments

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date, which is Level 1 of fair valuation hierarchy. The quoted market price used for financial assets held by the Group is the current bid price. This valuation technique is used for fair value disclosures of bonds issued.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses a variety of methods and makes assumptions that are based on market conditions existing at each balance sheet date. Estimated discounted cash flows, are used to determine fair value for seller's notes. Calculation is based on current interest rates for new instruments with similar credit risk, currency and remaining maturity; such estimation represents Level 3 of fair value hierarchy.

The carrying values less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments.

The estimated fair values of financial instruments have been determined by the Group using available market information, where it exists, and appropriate valuation methodologies. However, judgement is required to interpret market data to determine the estimated fair value. Ukraine continues to display some characteristics of an emerging market and economic conditions continue to limit the volume of activity in the financial markets. Market quotations may be outdated or reflect distress sale transactions and therefore not represent fair values of financial instruments. Management has used all available market information in estimating the fair value of financial instruments.

Financial assets carried at amortised cost. The fair value of floating rate instruments is normally their carrying amount. The estimated fair value of fixed interest rate instruments is based on estimated future cash flows expected to be received discounted at current interest rates for new instruments with similar credit risk and remaining maturity. Discount rates used depend on credit risk of the counterparty. Carrying amounts of financial assets carried at amortised cost approximate their fair values.

Financial liabilities carried at amortised cost. The fair value is based on quoted market prices, if available. Except as discussed in the Note 19, the estimated fair value of fixed interest rate instruments with stated maturity, for which a quoted market price is not available, was estimated based on expected cash flows discounted at current interest rates for new instruments with similar credit risk and remaining maturity. The fair value of liabilities repayable on demand or after a notice period ("demandable liabilities") is estimated as the amount payable on demand, discounted from the first date that the amount could be required to be paid (Note 19, 20 and 22).

34 Reconciliation of classes of financial instruments with measurement categories

All of the Group's financial assets and financial liabilities are carried at amortised cost, except for investments in associates and joint ventures which are accounted for by the equity method of accounting.

35 Events after the balance sheet date

The developments after the balance sheet date which are related to the operating environment and the debt restructuring are disclosed in the Notes 2 and 3, respectively.

Metinvest B.V.

Abbreviated IFRS Consolidated Financial Statements

31 December 2015

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Independent auditor's report

To: the general meeting of Metinvest B.V.

We have audited the accompanying summary financial statements 2015 of Metinvest B.V., The Hague ('the company'). The accompanying summary financial statements, which comprises the summary consolidated balances sheet as at 31 December 2015, the summary consolidated income statement, the statements of comprehensive income, statement of changes in equity and cash flow for the year then ended, and related notes, are derived from the audited financial statements of Metinvest B.V. and its subsidiaries (together: 'the Group') for the year 2015. We expressed an unqualified audit opinion on those financial statements in our report dated 26 April 2016. Those financial statements, and the summary financial statements, do not reflect the effects of events that occurred subsequent to the date of our report on those financial statements.

The summary financial statements do not contain the company financial statements as required by International Financial Reporting Standards as adopted by the European Union and with Part 9 of Book 2 of the Dutch Civil Code. Reading the summary financial statements, therefore, is not a substitute for reading the complete audited financial statements of Metinvest B.V.

Director's responsibility

The directors are responsible for the preparation of the summary of the audited financial statements.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit and the related explanatory notes based on our procedures, which we conducted in accordance with Dutch law, including the Dutch Standard 810 "Engagements to report on summary financial statements".

Opinion

In our opinion, the summary financial statements derived from the audited financial statements of Metinvest B.V. for the year 2015 are consistent, in all material respects, with those financial statements.

Material uncertainty related to going-concern

We draw your attention to Note 3 to the consolidated financial statements, which states that the Group is in default with respect to the majority of its loans and borrowings and is continuing the negotiations on the restructuring. This default gives a number of the Group's lenders the ability to legally require repayment of the respective debt on demand.

Ref.: e0377587

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As a consequence, in order for the Group to achieve positive cash flow for the period throughout 2016 and the first four months of 2017, the Group is crucially dependent on the willingness of the Group's lenders not to demand early repayment, and to continue their support to the Group by postponing the payment of interest in excess of 30% of the total due amount and restructuring a significant portion of payments due in 2016 and the first four months of 2017 to future periods. This matter, along with other matters as set forth in Note 3 and the uncertainties set forth in Note 2, indicates the existence of a material uncertainty that may cast significant doubt about the Group's ability to continue as a going concern.

Our opinion is not modified in respect of this matter.

Emphasis of an uncertainty in the financial statements with respect to the political and economic uncertainties in Ukraine

We draw your attention to Note 2 and Note 5 of the consolidated financial statements. As disclosed in Note 2, the operations of the Group have been affected, and may continue to be affected for the foreseeable future, by the continuing political and economic uncertainties in Ukraine as well as negative developments of the global commodity prices. These factors increase uncertainties regarding the Group's assessment of the carrying amounts of property, plant and equipment under revaluation model and the recoverable amounts of property, plant and equipment, goodwill and other intangible assets under impairment testing, as disclosed in Note 5.

Our opinion is not modified in respect of this matter.

Amsterdam, 26 April 2016
PricewaterhouseCoopers Accountants N.V.

Original signed by P.C. Dams RA

Metinvest B.V.
Abbreviated Consolidated Balance Sheet
All amounts in millions of US dollars

	Note	31 December 2015	31 December 2014
ASSETS			
Non-current assets			
Goodwill	8	601	754
Other intangible assets	9	164	534
Property, plant and equipment	10	4,822	6,538
Investments in associates and joint ventures	11	779	906
Deferred tax asset	28	105	89
Income tax prepaid	12	105	108
Trade and other receivables	14	229	139
Total non-current assets		6,805	9,068
Current assets			
Inventories	13	766	1,222
Income tax prepaid	12	66	110
Trade and other receivables	14	1,365	2,042
Cash and cash equivalents	15	180	114
Total current assets		2,377	3,488
TOTAL ASSETS		9,182	12,556
EQUITY			
Share capital	16	0	0
Share premium	16	6,225	6,225
Other reserves	17	(8,013)	(6,034)
Retained earnings		5,674	6,372
Equity attributable to the owners of the Company		3,886	6,563
Non-controlling interest	18	138	199
TOTAL EQUITY		4,024	6,762
LIABILITIES			
Non-current liabilities			
Loans and borrowings	19	-	1,878
Retirement benefit obligations	21	335	473
Deferred tax liability	28	348	504
Other non-current liabilities	22	103	67
Total non-current liabilities		786	2,922
Current liabilities			
Loans and borrowings	19	2,858	1,268
Seller's notes	20	88	86
Trade and other payables	23	1,426	1,518
Total current liabilities		4,372	2,872
TOTAL LIABILITIES		5,158	5,794
TOTAL LIABILITIES AND EQUITY		9,182	12,556

Signed and authorised for release on behalf of Metinvest B.V. on "25" April 2016:

Originally signed by Managing Director A, Yuriy Ryzhenkov

Originally signed by Managing Director B, ITPS (Netherlands) B.V.

Metinvest B.V.
Abbreviated Consolidated Income Statement
All amounts in millions of US Dollars

	Note	Year ended 31 December 2015	Year ended 31 December 2014
Revenue	7	6,832	10,565
Cost of sales	24	(6,087)	(8,240)
Gross profit		745	2,325
Distribution costs	24	(920)	(1,063)
General and administrative expenses	24	(211)	(287)
Other operating income / (expenses), net	25	(300)	130
Operating (loss) / profit		(686)	1,105
Finance income	26	26	25
Finance costs	27	(635)	(902)
Share of result of associates and joint ventures	11	131	142
(Loss) / profit before income tax		(1,164)	370
Income tax benefit / (expense)	28	161	(211)
(Loss) / profit for the year		(1,003)	159
Profit is attributable to:			
Owners of the Company		(988)	116
Non-controlling interests		(15)	43
(Loss) / profit for the year		(1,003)	159

Abbreviated Consolidated Statement of Comprehensive Income
All amounts in millions of US dollars

	Note	Year ended 31 December 2015	Year ended 31 December 2014
(Loss) / profit for the year		(1,003)	159
Other comprehensive income			
<i>Items that will not be reclassified to profit or loss:</i>			
Remeasurement of retirement benefit obligation		(7)	(38)
Revaluation and impairment of property, plant and equipment	10, 24	886	2,902
Share in other comprehensive income of joint ventures		72	123
Income tax relating to items that will not be reclassified subsequently to profit or loss	28	(161)	(514)
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Currency translation differences		(2,525)	(5,389)
Total other comprehensive loss		(1,735)	(2,916)
Total comprehensive loss for the period		(2,738)	(2,757)
Total comprehensive loss attributable to:			
Owners of the Company		(2,680)	(2,560)
Non-controlling interest		(58)	(197)
Total comprehensive loss for the period		(2,738)	(2,757)

Metinvest B.V.
Abbreviated Consolidated Statement of Cash Flow
All amounts in millions of US Dollars

	Note	Year ended 31 December 2015	Year ended 31 December 2014
Cash flows from operating activities			
(Loss) / profit before income tax		(1,164)	370
<i>Adjustments for:</i>			
Depreciation of property, plant and equipment ("PPE") and amortisation of intangible assets	24	615	850
Impairment and devaluation of PPE and other intangible assets	24	364	315
Impairment of goodwill		74	102
Impairment of associates and joint ventures		4	-
Gain on disposal of property, plant and equipment	25	(8)	(8)
Finance income	26	(26)	(25)
Finance costs	27	635	902
Unrealised operating foreign exchange differences		(115)	(315)
Net change in retirement benefit obligations, except for interest costs and remeasurements		(34)	(44)
Impairment of trade and other accounts receivable	25	292	60
Share of result of associates and joint ventures	11	(131)	(142)
Inventory write down, net	13	21	16
Other non-cash operating (gains) / losses		(14)	14
Operating cash flows before working capital changes		513	2,095
Decrease / (increase) in inventories		123	(267)
(Increase) / decrease in trade and other accounts receivable		13	211
Increase in trade and other accounts payable		215	38
Cash generated from operations		864	2,077
Income taxes paid		(39)	(353)
Interest paid		(200)	(235)
Net cash from operating activities		625	1,489
Cash flows from investing activities			
Purchase of property, plant and equipment and intangible assets		(275)	(549)
Proceeds from sale of property, plant and equipment		21	15
Acquisition of associates and joint ventures		-	(45)
Loans issued to related parties	14	-	(21)
Proceeds from repayments of loans issued	14	3	19
Interest received		14	22
Net cash used in investing activities		(237)	(559)
Cash flows from financing activities			
Proceeds from loans and borrowings	19	4	446
Repayment of loans and borrowings	19	(134)	(951)
Repayment of seller's notes	20	-	(90)
Net trade financing repayment	19	(179)	(484)
Payment for acquisition of non-controlling interest in subsidiaries		-	(75)
Dividends paid		-	(388)
Net cash used in financing activities		(309)	(1,542)
Effect of exchange rate changes on cash and cash equivalents		(13)	(57)
Net (decrease) / increase in cash and cash equivalents		66	(669)
Cash and cash equivalents at the beginning of the year		114	783
Cash and cash equivalents at the end of the year	15	180	114

The accompanying notes form an integral part of these consolidated financial statements

Metinvest B.V.
Abbreviated Consolidated Statement of Changes in Equity
All amounts in millions of US Dollars

<i>In million of US Dollars</i>	Attributable to owners of the Company					Non-controlling interest (NCI)	Total equity
	Share capital	Share premium	Other reserves	Retained earnings	Total		
Balance at 1 January 2014	0	5,461	(3,088)	6,277	8,650	981	9,631
Revaluation of property, plant and equipment (Note 10, 24)	-	-	2,752	-	2,752	150	2,902
Share in other comprehensive income of joint venture	-	-	123	-	123	-	123
Remeasurement of retirement benefit obligation	-	-	-	(36)	(36)	(2)	(38)
Income tax relating to components of other comprehensive income (Note 28)	-	-	(494)	7	(487)	(27)	(514)
Currency translation differences	-	-	(5,028)	-	(5,028)	(361)	(5,389)
Other comprehensive (loss) / income for the period	-	-	(2,647)	(29)	(2,676)	(240)	(2,916)
Profit for the period	-	-	-	116	116	43	159
Total comprehensive (loss) / income for the period	-	-	(2,647)	87	(2,560)	(197)	(2,757)
Realised revaluation reserve, net of tax	-	-	(256)	256	-	-	-
Acquisition of 2% interest in PJSC Nothern Iron Ore Enrichment Works from parties under common control	-	-	(43)	-	(43)	(32)	(75)
Acquisition and disposals of non-controlling interest in subsidiaries	-	-	-	(2)	(2)	5	3
Contribution of a joint venture and non-controlling interest in two existing subsidiaries by SMART (Note 11,16)	-	764	-	154	918	(558)	360
Dividends declared by the Company	-	-	-	(400)	(400)	-	(400)
Balance at 31 December 2014	0	6,225	(6,034)	6,372	6,563	199	6,762
Revaluation and impairment of property, plant and equipment (Note 10, 24)	-	-	859	-	859	27	886
Share in other comprehensive income of joint venture	-	-	72	-	72	-	72
Remeasurement of retirement benefit obligation	-	-	-	(6)	(6)	(1)	(7)
Income tax relating to components of other comprehensive income (Note 28)	-	-	(157)	1	(156)	(5)	(161)
Currency translation differences	-	-	(2,461)	-	(2,461)	(64)	(2,525)
Other comprehensive loss for the period	-	-	(1,687)	(5)	(1,692)	(43)	(1,735)
Loss for the period	-	-	-	(988)	(988)	(15)	(1,003)
Total comprehensive income for the period	-	-	(1,687)	(993)	(2,680)	(58)	(2,738)
Realised revaluation reserve, net of tax	-	-	(292)	292	-	-	-
Acquisition of non-controlling interest in subsidiaries	-	-	-	3	3	(3)	-
Balance at 31 December 2015	0	6,225	(8,013)	5,674	3,886	138	4,024

1 Metinvest B.V. and its operations

Metinvest B.V. (the “Company” or “Metinvest”), is a private limited liability company registered in the Netherlands. The Company is beneficially owned by Mr. Rinat Akhmetov, through various entities commonly referred to as System Capital Management (“SCM”), and Mr. Vadim Novinsky, through various entities commonly referred to as “SMART” or “Smart Group”.

The Company and its subsidiaries (together referred to as the “Group” or “Metinvest Group”) are an integrated steel producer, owning assets in each link of the production chain – from iron ore mining, coking coal mining and coke production, through to semi-finished and finished steel production. The steel products, iron ore and coke and coal are sold on both the Ukrainian and export markets.

Until November 2007, the Company was indirectly 100% controlled by SCM (System Capital Management) Limited (“SCM Cyprus”).

In November 2007 the Company acquired from parties known as Smart Group 82% of PJSC Ingulets Iron Ore Enrichment Works in exchange for the transfer to SMART of 25% of the Company. Following the November 2007 transaction, Metinvest B.V. was owned 75% by SCM Cyprus and 25% by SMART. SCM Cyprus and SMART additionally agreed that both would sell/contribute to the Group their remaining equity interests in certain metals and mining assets owned by SCM and SMART. In exchange SMART would acquire certain additional rights over the management of the Company and the Group. Due to the complexity of the transaction, it was executed in several stages during 2007 through 2014; and was completed in July 2014.

In 2011, as part of the acquisition of Ilyich Group, the Company issued 5% of its share capital to the sellers of Ilyich Group.

As of 31 December 2015, Metinvest B.V. is owned 71.24% by SCM Cyprus and 23.76% by companies of the Smart Group. The remaining 5% interest in the Company in the form of Class C shares has been acquired from the previous owners of Ilyich Group for the benefit of SCM and SMART. It is the intention of SCM and SMART to dispose of the said 5% interest in due course (after receipt of respective governmental approvals, if such will be necessary), and in such manner that the ultimate interest of SCM in the Company shall be 75% minus 1 share, and the ultimate interest of SMART in the Company shall be 25% plus 1 share, thus SCM remaining as the controlling shareholder.

The principal subsidiaries of Metinvest B.V. are presented below:

Name	Effective % interest as at 31 December		Segment	Country of incorporation
	2015	2014		
Metinvest Holding LLC	100.0%	100.0%	Corporate	Ukraine
PJSC Azovstal Iron and Steel Works	96.2%	96.1%	Metallurgical	Ukraine
PJSC Yenakiieve Iron and Steel Works	91.5%	90.8%	Metallurgical	Ukraine
JV Metalen LLC	100.0%	100.0%	Metallurgical	Ukraine
PJSC Khartsyzsk Pipe Plant	98.5%	98.3%	Metallurgical	Ukraine
Ferriera Valsider S.p.A.	70.0%	70.0%	Metallurgical	Italy
Metinvest Trametel S.p.A.	100.0%	100.0%	Metallurgical	Italy
Spartan UK Limited	100.0%	100.0%	Metallurgical	UK
Metinvest International SA	100.0%	100.0%	Metallurgical	Switzerland
Metinvest Eurasia LLC	100.0%	100.0%	Metallurgical	Russia
Metinvest Service Metal Centres LLC	100.0%	100.0%	Metallurgical	Ukraine
Metinvest Ukraine LLC	100.0%	100.0%	Metallurgical	Ukraine
JSC Promet Steel	100.0%	100.0%	Metallurgical	Bulgaria
PJSC Makiivka Iron and Steel Works	90.2%	90.2%	Metallurgical	Ukraine
PJSC Ilyich Iron and Steel Works	99.2%	99.2%	Metallurgical	Ukraine
PSC Ilyich Steel	100.0%	100.0%	Metallurgical	Ukraine
PJSC Avdiivka Coke Plant	93.0%	92.5%	Metallurgical	Ukraine
JSC Zaporozhkoks	52.2%	51.0%	Metallurgical	Ukraine
JSC Donetskkoks	93.6%	93.6%	Metallurgical	Ukraine
PJSC Northern Iron Ore Enrichment Works	96.4%	96.4%	Mining	Ukraine
PJSC Central Iron Ore Enrichment Works	99.8%	99.6%	Mining	Ukraine
PJSC Ingulets Iron Ore Enrichment Works	99.8%	99.8%	Mining	Ukraine
OSC Komsomolske Flux Plant	99.7%	99.7%	Mining	Ukraine
United Coal Company LLC (“UCC”)	100.0%	100.0%	Mining	USA
PJSC Krasnodon Coal Company	92.9%	92.4%	Mining	Ukraine

As at 31 December 2015, the Group employed approximately 91 thousand people (31 December 2014: 94 thousand).

1 Metinvest B.V. and its operations (continued)

The consolidated financial statements of Metinvest B.V. for the year ended 31 December 2015 were authorised for issue in accordance with a resolution of the Board of Directors on 25 April 2016.

For better understanding of Metinvest's financial position and the results of operations, these abbreviated financial statements should be read in conjunction with the Metinvest's audited financial statements as of and for the year ended 31 December 2015, which include all disclosures required by Dutch legislation.

The complete set of financial statements together with the auditor's report is available on request at Nassaulaan 2A, 2514 JS, Den Haag.

2 Operating environment of the Group

The recent political and economic instability in Ukraine has led to a deterioration of State finances, volatility of financial markets, illiquidity on capital markets, higher inflation and a depreciation of the national currency against major foreign currencies and has continued in 2015. The National Bank of Ukraine, among other measures, imposed a requirement for Ukrainian companies to sell 75% of their foreign currency revenue and other foreign currency inflows on the inter-bank market, restrictions on the purchase of foreign currency on the inter-bank market, and ban for payment of dividends abroad. These restrictions were prolonged several times and are currently effective until 8 June 2016. As of 31 December 2015, the amount of undistributed retained earnings of the Group's Ukrainian subsidiaries was approximately USD 1,732 million.

On 11 March 2015, the IMF Executive Board approved a four-year Extended Fund Facility ("EFF") programme for Ukraine in the amount exceeding USD 17 billion. During 2015 Ukraine obtained first and second tranches in accordance with EFF programme in the amount of USD 5 billion and USD 1.7 billion, respectively. Further disbursements of IMF tranches depend on the implementation of Ukrainian government reforms, and other economic, legal and political factors. In October 2015, Ukraine reached an agreement with the majority of its creditors for restructuring of the part of the national external debt in the amount of USD 15 billion. After reaching the above restructuring agreement on external debt with the majority of its creditors, the credit rating of Ukraine has improved. There remains a significant portion of debt for which a restructuring has not been agreed to.

On 1 January 2016, the agreement on the free trade area between Ukraine and the EU came into force. The Russian government reacted to this event by implementing a trading embargo on many key Ukrainian export products. In response, the Ukrainian government implemented similar measures against Russian products.

The banking system of Ukraine remains fragile due to its weak level of capital, its weakening asset quality caused by the economic situation, currency devaluation and other factors.

The conflict in the parts of Eastern Ukraine which started in spring 2014 has not been resolved to date. However, there was no substantial escalation of the conflict since the signing of ceasefire agreements in September 2014. The majority of the Group's Metallurgical segment and some of the Mining segment is located in, or near to, the parts of the Donetsk and Lugansk regions where there has been armed conflict. This includes the city of Mariupol (where the Group's two largest steel plants, PJSC Ilyich Iron and Steel Works and PJSC Azovstal Iron and Steel Works, are located), which is approximately 20 kilometres from the line of contact of conflicting parties. Production at these plants has been negatively impacted by the situation, starting from the second half of 2014. The Group retains operational controls over all its assets.

The negative impact on production volumes has been caused primarily by disruptions in infrastructure (rail transportation, road transport and electricity and gas supply). This has resulted in some temporary suspensions of operations or decrease of production at some plants during 2014 and 2015. Management have sought to actively manage and limit the impact of these events on the Group's operations by adopting a number of contingency arrangements. There has been no significant impact to the physical condition of the Group's assets.

During 2015 management of the Group has implemented certain measures in order to maintain profitability and liquidity, such as reduction in capital expenditures, reduction in administrative costs, termination of sea transportation of iron ore to plants located in Mariupol, suspension of production in open-hearth furnaces at PJSC Ilyich Iron and Steel Works, and other measures.

The reduction of steel production in 2015 (as compared to 2014) was 14%, a reduction of production of iron ore products was 7%. As of the beginning of 2016, PJSC Ilyich Iron and Steel Works and PJSC Azovstal Iron and Steel Works are working at approximately 72% of their capacity. In March 2015, after a one-month suspension of operations, PJSC Yenakiieve Iron and Steel Works, located within an area not controlled by the Ukrainian government, recommenced production. PJSC Khartsyzsk Pipe Plant has been idle starting June 2015 due to a lack of orders.

As of the date of this report the official NBU exchange rate of Hryvnya against US dollar was UAH 25.34 per USD 1, compared to UAH 24.00 per USD 1 as at 31 December 2015 and UAH 15.77 per USD 1 as at 1 January 2015. The devaluation of the Ukrainian Hryvnya ("UAH") during 2015 had a short-term positive impact on Group's financial results given that revenues are mostly USD-denominated and costs are partially UAH-denominated.

2 Operating environment of the Group (continued)

The prices of steel, coal and iron ore experienced both volatility and an overall decline during 2014 and 2015. The average benchmark price for hot-rolled coil (Metal Expert HRC CIS export FOB Black Sea) decreased by 32% year on-year in the first three quarters of 2015. In the fourth quarter of 2015 its price continued to decrease reaching the lowest level over the last 12 years. The trend in iron ore prices has been generally downwards since the start of 2014. Benchmark (Platts 62% Fe CFR China) prices decreased from USD 136 per dry tonne in December 2013 to USD 69 per dry tonne in December 2014 and further decreased to USD 39 per dry tonne in December 2015, the lowest level in the last ten years.

These events in Ukraine and in commodity markets increase uncertainties, including the Group's assessment of the fair value of property, plant and equipment and the recoverable amount of property, plant and equipment, goodwill and other intangible assets under impairment testing for assets located in Ukraine (Notes 8 and 10).

As of 31 December 2015, the Group had significant balances receivable from and prepayments made to the State mainly including prepaid income taxes and VAT recoverable (Notes 12 and 14). The timing of settlement of these balances is uncertain and is dependent upon the availability of State funds and amounts of future taxable profits of Group's subsidiaries.

The final resolution of the political and economic situation in Ukraine and the final effects of this are difficult to predict, but it may have further negative implications on the Ukrainian economy and the Group's business.

3 Going concern

In March 2015, the Group sought approval for a partial deferral of principal payments to May 2015 in respect of the pre-export financing (PXF) facilities due in March and April 2015. Whilst approval for the above deferral was obtained from the majority of PXF lenders under the facilities, the Group was unable to obtain the required consent of all PXF lenders. The Group was obliged to target a broader restructuring and consequently did not make the necessary principal payment, triggering default and cross defaults under its bank and non-bank loans and borrowings, as well as bonds. This has resulted in a reclassification from non-current loans and borrowings to current loans and borrowing of USD 1,585 million as of 31 December 2015. The amount of liability to bond holders and PXF lenders is disclosed in Note 19.

Discussions with creditors are currently ongoing with a view to agreeing a rescheduling plan, including a repayment extension.

In April 2015, the Group launched consent solicitations with respect to its bonds (totalling USD 1,145 million as of 31 December 2015). Following bondholders' meetings for the 2015, 2017 and 2018 bonds, the majority of bondholders agreed to waive existing and related potential events of default until the end of January 2016. Moreover, 2015 bondholders agreed to extend the maturity of the 2015 bonds from 20 May 2015 to 31 January 2016 in exchange for a redemption of 25% of principal (a payment of approximately USD 28.4 million was made by the Group in July 2015). Following the launch by the Group of a scheme of arrangement procedure on 29 January 2016 a competent English Court sanctioned a moratorium of the Group on taking enforcement action or initiation of insolvency proceedings by holders of 2016, 2017, 2018 bonds of Metinvest B.V. until 27 May 2016.

Further in December 2015 the Group concluded and signed on December 1, 2015 (expiring 29 January 2016) a standstill agreement with its PXF lenders which provides for a forbearance on the taking of enforcement action or the initiation of insolvency proceedings by the PXF lenders. The standstill period has been extended and is valid until 27 May 2016, but can be terminated at any time by resolution of two thirds of lenders. Lenders have agreed to support the liquidity of the Group by permitting the reduced payment of accrued interest to 30% starting from 31 January 2016. Since the date of default and up to the date of this report, the Group continues to pay interest on its loans and borrowings.

Management has prepared monthly cash flow projections for the remainder of 2016 and for the first four months of 2017. Additionally, management has performed a high-level liquidity analysis for the remainder of 2017 through to 2020 and considers that there is sufficient liquidity to maintain operations under the current circumstances. Based on cash flow projections, liquidity and other factors analysis, management plans to negotiate with the lenders a mutually acceptable schedule of repayment of borrowings and interest.

Although management remains in discussions with its lenders, it has not yet concluded a restructuring agreement. Thus there is an uncertainty which may cast significant doubt about the Group's ability to continue as a going concern and, therefore, the Group may be unable to realise its assets and discharge its liabilities in the normal course of business.

3 Going concern (continued)

The Group's ability to continue as a going concern is crucially dependent on the following conditions:

- willingness of the Group's lenders not to demand early repayment of borrowings in default;
- ability of the Group to negotiate with the lenders a mutually acceptable and feasible debt repayment schedule. The cash flow projections prepared by management assumes for a period of at least the next 12 months payment of 30% of accrued interest as well as no principal repayment of borrowings and seller's notes;
- absence of further deterioration of the situation on global iron ore and steel markets from that observed in December 2015 and January 2016. Monthly production and sales volumes for 2016 and 2017 were assumed to be consistent with the beginning of 2016; and
- absence of escalation of the conflict in the Eastern Ukraine (Note 2).

Despite these material uncertainties with respect to the repayment of the current loans and the debt restructuring, based on cash flow projections performed and an anticipated favourable outcome of the discussions with its lenders, management considers that the application of the going concern assumption for the preparation of this consolidated financial statements is appropriate.

4 Basis of preparation and significant accounting policies

Basis of preparation and statement of compliance. These consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by European Union. The consolidated financial statements have been prepared under the historical cost convention unless stated otherwise. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated. New and revised standards and interpretations adopted by Group are disclosed in Note 6.

These consolidated financial statements are presented in millions of US dollars and all values are rounded off to the nearest million except where otherwise indicated.

Critical accounting estimates and judgements in applying accounting policies. The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and the reported amounts of assets and liabilities, income and expense. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily available from other sources. Although these estimates are based on management's best knowledge of current events and actions, actual results ultimately may differ from these estimates. The areas involving a high degree of judgement or complexity, or areas where assumptions and estimates are significant to the IFRS consolidated financial statements are disclosed in Note 5.

Principles of consolidation. Subsidiaries are all entities over which the group has control. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

The purchase method of accounting is used to account for the acquisition of subsidiaries. The cost of an acquisition is measured at the fair value of the assets given up, equity instruments issued and liabilities incurred or assumed at the date of exchange. The date of exchange is the acquisition date where a business combination is achieved in a single transaction. Where a business combination is achieved in stages, the previously held interest in an acquired business is included into the cost of business combination at fair value as of the acquisition date with resulting gains recognised in consolidated income statement.

Costs directly related to acquisition of subsidiaries are recognised in the consolidated income statement in the period when incurred and the services are received.

Goodwill is measured by deducting the net assets of the acquiree from the aggregate of the consideration transferred for the acquiree, the amount of non-controlling interest in the acquiree and fair value of an interest in the acquiree held immediately before the acquisition date. Any negative amount ("negative goodwill") is recognised in profit or loss, after management reassesses whether it identified all the assets acquired and all liabilities and contingent liabilities assumed and reviews appropriateness of their measurement.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated; unrealised losses are also eliminated unless the cost cannot be recovered. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies of the Group.

4 Basis of preparation and significant accounting policies (continued)

Non-controlling interest ("NCI") is that part of the net results and of the net assets of a subsidiary, including the fair value adjustments, which is attributable to interests which are not owned, directly or indirectly, by the Company. Non-controlling interest forms a separate component of equity.

Purchases of subsidiaries from parties under common control and merger reserve in equity. Purchases of subsidiaries from parties under common control are accounted under the predecessor values method. Under this method the financial statements of the entity are presented as if the businesses had been consolidated from the beginning of the earliest period presented (or the date that the entities were first under common control, if later). The assets and liabilities of the subsidiary transferred under common control are at the predecessor entity's book values. The difference between the consideration given and the aggregate book value of the assets and liabilities (as of the date of the transaction) of the acquired entity is recorded as an adjustment to equity. This is recorded as a merger reserve. No additional goodwill is created by such purchases.

Transactions with non-controlling interests The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity. Non-controlling interest is valued on proportionate basis of net assets.

Investments in associates and joint ventures. Associates are entities over which the Group has significant influence, but not control, generally accompanying a shareholding of between 20 and 50 percent of the voting rights.

Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. A joint venture is an arrangement whereby the parties that contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control have rights to the net assets of the arrangement.

Investments in associates and joint ventures are accounted for by the equity method of accounting and are initially recognised at cost. The carrying amount of associates and joint ventures includes goodwill identified on acquisition, and is reduced for accumulated impairment losses, if any. The Group's share of the post-acquisition profits or losses of associates and joint ventures is recorded in the consolidated income statement, and its share of post-acquisition movements in reserves is recognised in other comprehensive income. When the Group's share of losses in an associate or joint venture equals or exceeds its interest in the associate, including any other unsecured accounts receivable, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and their associates and joint ventures are eliminated to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Any excess of the fair value of the Group's share in the acquired associate's or joint venture's net assets ("negative goodwill") is recognised immediately in the consolidated income statement.

Segment reporting. Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the General Director of the Group that makes strategic decisions.

Company reports separately information about an operating segment that meets any of the following quantitative thresholds unless aggregation criteria are met:

- (a) Its reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.
- (b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.
- (c) Its assets are 10 per cent or more of the combined assets of all operating segments.

Foreign currency translation. The functional currency of each of consolidated entity is the currency of the primary economic environment in which the entity operates. The functional currency for the majority of the consolidated entities is either Ukrainian hryvnia ("UAH") or US dollar ("USD").

Transactions denominated in currencies other than the relevant functional currency are translated into the functional currency using the exchange rate prevailing at the date of the transaction. Foreign exchange gains and losses resulting from the settlement of the transactions and from the translation of monetary assets and liabilities into each entity's functional currency at year-end official exchange rates are recognised in the consolidated income statement.

4 Basis of preparation and significant accounting policies (continued)

The principal rate of exchange used for translating foreign currency balances is as follows:

	31 December 2015	31 December 2014
USD/UAH	24.00	15.77
EUR/UAH	26.22	19.23

Monetary assets and liabilities are translated into functional currency at the official exchange rate at the respective balance sheet dates. Translation at year end does not apply to non-monetary items. Translation differences related to changes in amortised cost are recognised in profit or loss, and other changes in carrying amount are recognised in equity.

Translation from functional to presentation currency. The Group has selected the US dollar ("USD") as the presentation currency. The USD has been selected as the presentation currency for the Group as: (a) management of the Group manages business risks and exposures, and measures the performance of its businesses in the USD; (b) the USD is widely used as a presentation currency of companies engaged primarily in metallurgy; and (c) the USD is the most convenient presentation currency for non-Ukrainian users of these IFRS consolidated financial statements.

The results and financial position of each consolidated entity are translated into the presentation currency as follows:

- (i) assets and liabilities for each balance sheet are translated at the closing rate at the date of that balance sheet;
- (ii) income and expenses for each income statement are translated at monthly average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- (iii) all resulting exchange differences are recognised through comprehensive income and they accumulate as a separate component of equity. All the components of consolidated equity at each balance sheet date are translated at the historical rate. The balancing figure goes to cumulative currency translation reserve in other reserves in equity.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and at each balance sheet date are translated at the closing rate. When a subsidiary is disposed of through sale, liquidation, repayment of share capital or abandonment of all, or part of, that entity, the currency translation differences deferred in equity are reclassified to the consolidated income statement.

Exchange restrictions in Ukraine are limited to compulsory receipt of foreign accounts receivable within 90 days of sales, need for exporters to sell 75% of foreign currency revenue and restrictions on the purchase of foreign currency on the inter-bank market. At present, the UAH is not a freely convertible currency outside of Ukraine.

Property, plant and equipment. Property, plant and equipment are stated using the revaluation model. Fair values are based on valuations by external independent valuers. The frequency of revaluation depends upon the movements in the fair values of the assets being revalued. Subsequent additions to property, plant and equipment are recorded at cost. Cost includes expenditure directly attributable to acquisition of the items. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads. As at 31 December 2014 and 31 December 2013 property, plant and equipment are stated at revalued amounts less accumulated depreciation and provision for impairment, if required.

Increases in the carrying amount arising on revaluation are credited to other comprehensive income and increase the other reserves in equity. When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. Decreases that offset previous increases in the carrying amount of the same asset decrease the previously recognised revaluation reserve through other comprehensive income; all other decreases are charged to the income statement. The revaluation reserve in equity is transferred directly to retained earnings when the surplus is realised either on the retirement or disposal of the asset or as the asset is used by the Group; in the latter case, the amount of the surplus realised is the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset, and the net amount is restated to the revalued amount of the asset.

Upon recognition, items of property, plant and equipment are divided into components, which represent items with a significant value that can be allocated to a separate depreciation period.

Expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately, is capitalised with the carrying amount of the replaced component being written off. Other subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the item of property, plant and equipment. All other expenditure is recognised in the consolidated income statement as an expense when incurred.

4 Basis of preparation and significant accounting policies (continued)

Property, plant and equipment are derecognised upon disposal or when no future economic benefits are expected from the continued use of the asset. Gains and losses on disposals determined by comparing proceeds with carrying amount of property, plant and equipment are recognised in the consolidated income statement.

Depreciation is charged to the consolidated income statement on a straight-line basis to allocate costs or revalued amounts of individual assets to their residual value over the estimated remaining useful lives. Depreciation commences at the moment when assets is ready for use. The estimated remaining useful lives are as follows:

	Remaining useful lives in years
Buildings and structures	from 2 to 60
Plant and machinery	from 2 to 35
Furniture, fittings and equipment	from 2 to 10

Estimates of remaining useful lives are made on a regular basis for all buildings, plant and machinery, with annual reassessments. Changes in estimates are accounted for prospectively.

The residual value of an asset is the estimated amount that the Group would currently obtain from disposal of the asset less the estimated costs of disposal, if the assets were already of the age and in the condition expected at the end of its useful life. The residual value of an asset is nil if the Group expects to use the asset until the end of its physical life. The assets' residual values and useful lives are reviewed, and adjusted, if appropriate, at each balance sheet date.

Construction in progress represents prepayments for property, plant and equipment, and the cost of property, plant and equipment, construction of which has not yet been completed. No depreciation is charged on such assets until they are ready for use.

The Company capitalises borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset.

Asset retirement obligations. According to the Code on Mineral Resources, Land Code of Ukraine, Mining Law, Law on Protection of Land and other legislative documents, the Group is responsible for site restoration and soil rehabilitation upon abandoning its mines. Estimated costs of dismantling and removing an item of property, plant and equipment are added to the cost of an item of property, plant and equipment when the item is acquired. Changes in the measurement of an existing asset retirement obligation that result from changes in the estimated timing or amount of the outflows, or from changes in the discount rate are recognised in the income statement or other reserves in equity to the extent of any revaluation balance existence in respect of the related asset. Provisions in respect of abandonment and site restoration are evaluated and re-estimated annually, and are included in these consolidated financial statements at each balance sheet date at their expected net present value, using discount rates which reflect the economic environment in which the Group operates and are specific to a liability.

Goodwill. Goodwill on acquisitions of subsidiaries is presented separately in the consolidated balance sheet. Goodwill on acquisitions of associates is included in the investment in associates. It is carried at cost less accumulated impairment losses, if any. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to cash generating units for the purposes of impairment testing. The allocation is made to those cash generating units or groups of cash generating units that are expected to benefit from the business to which the goodwill arose.

Other intangible assets. All of the Group's other intangible assets have definite useful lives and primarily include capitalised computer software, licences, coal reserves and long-term sales contracts. Acquired computer software and other licences are capitalised on the basis of the costs incurred to acquire and bring them to use.

Other intangible assets are carried at cost less accumulated amortisation and impairment losses, if any. If impaired, the carrying amount of intangible assets is written down to the higher of value in use and fair value less costs to sell. Cost of SAP ERP system is amortised on a straight-line basis over estimated useful life of 10 years. Licences and coal reserves are amortised using the units-of-production method over all estimated proven and probable reserve assigned to the mines. Proven and probable reserves exclude non-recoverable coal and ore reserves and estimated processing losses. Amortization rates are updated when revisions to coal reserve estimates are made. Coal reserve estimates are reviewed when events and circumstances indicate a reserve change is needed. Long-term sales contracts are amortised using a units-of-production method, based on fulfilment of the contract.

4 Basis of preparation and significant accounting policies (continued)

Impairment of non-financial assets. Assets that have an indefinite useful life, for example goodwill, are not subject to amortisation and are tested annually for impairment. Assets that are subject to depreciation are reviewed for impairment whenever events and changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the assets carrying amount exceeds its recoverable amount. The recoverable amount is the higher of fair value less cost to sell and value in use. For purposes of assessing impairment, assets are grouped to the lowest levels for which there are separately identifiable cash flows (cash generating unit). Non-financial assets, other than goodwill, that have suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Classification of financial assets. The Group classifies financial assets as loans and receivables.

Loans and receivables are financial receivables created by the Group by providing money, goods or services directly to a debtor, other than those receivables which are created with the intention to be sold immediately or in the short term or which are quoted in an active market. Loans and receivables comprise primarily loans, trade and other accounts receivable including purchased loans and promissory notes. They are included in current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as non-current assets.

Initial recognition of financial instruments. The Group's principal financial instruments comprise loans and borrowings, cash and cash equivalents and short-term deposits. The Group has various other financial instruments, such as trade debtors and trade creditors, which arise directly from its operations.

The Group's financial assets and liabilities are initially recorded at fair value plus transaction costs. Fair value at initial recognition is best evidenced by the transaction price, except for the transactions with related parties which are based on contract value. A gain or loss on initial recognition is only recorded if there is a difference between fair value and transaction price which can be evidenced by other observable current market transactions in the same instrument or by a valuation technique whose inputs include only data from observable markets.

All purchases and sales of financial instruments that require delivery within the time frame established by regulation or market convention ("regular way" purchases and sales) are recorded at trade date, which is the date that the Group commits to deliver a financial instrument. All other purchases and sales are recognised on the settlement date with the change in value between the commitment date and settlement date not recognised for assets carried at cost or amortised cost.

Subsequent measurement of financial instruments. Subsequent to initial recognition, the Group's financial liabilities and loans and receivables are measured at amortised cost. Amortised cost is calculated using the effective interest rate method and, for financial assets, it is determined net of any impairment losses. Premiums and discounts, including initial transaction costs, are included in the carrying amount of the related instrument and amortised based on the effective interest rate of the instrument.

The face values of financial assets and liabilities with a maturity of less than one year, less any estimated credit adjustments, are assumed to be their fair values. The fair value of financial liabilities is estimated by discounting the future contractual cash flows at the current market interest rate available to the Group for similar financial instruments.

Derecognition of financial assets. Group derecognises financial assets when (i) the assets are redeemed or the rights to cash flows from the assets have otherwise expired or (ii) the Group has transferred substantially all the risks and rewards of ownership of the assets or (iii) the Group has neither transferred nor retained substantially all risks and rewards of ownership but has not retained control. Control is retained if the counterparty does not have the practical ability to sell the asset in its entirety to an unrelated third party without needing to impose additional restrictions on the sale.

Group enters into transactions in the normal course of business by which it transfers financial assets to third parties. Depending on the circumstances, these transfers may either result in these financial assets being derecognised or continuing to be recognised.

Full derecognition occurs when Group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, and transfers substantially all the risks and rewards of ownership. The risks include credit, interest rate, foreign currency, prepayment and other price risks.

Derecognition does not occur when Group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, but either:

- retains substantially all of the risks and rewards of ownership of the transferred asset; or
- neither retains nor transfers substantially all of the risks and rewards of ownership but has retained control of the financial asset. In this situation, the financial assets are recognised on the balance sheet to the extent of Group's continuing involvement.

4 Basis of preparation and significant accounting policies (continued)

Income taxes. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities. The income tax charge is recognised in the consolidated income statement except if it is recognised in other comprehensive income or directly in equity because it relates to transactions that are also recognised, in the same or a different period, in other comprehensive income or directly in equity.

Current tax is the amount expected to be paid to or recovered from the taxation authorities in respect of taxable profits or losses for the current and prior periods. Taxes, other than on income, are recorded within operating expenses.

Deferred income tax is provided using the balance sheet liability method for tax loss carry forwards and temporary differences arising between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. In accordance with the initial recognition exemption, deferred taxes are not recorded for temporary differences on initial recognition of an asset or a liability in a transaction other than a business combination if the transaction, when initially recorded, affects neither accounting nor taxable profit. Deferred tax liabilities are not recorded for temporary differences on initial recognition of goodwill and subsequently for goodwill which is not deductible for tax purposes. Deferred tax balances are measured at tax rates enacted or substantively enacted at the balance sheet date which are expected to apply to the period when the temporary differences will reverse or the tax loss carry forwards will be utilised. Deferred tax assets and liabilities are netted only within the individual companies of the Group. Deferred tax assets for deductible temporary differences and tax loss carry forwards are recorded only to the extent that it is probable that future taxable profit will be available against which the deductions can be utilised.

Deferred income tax is provided on post acquisition retained earnings and other post-acquisition movements in reserves of subsidiaries, except where the Group controls the subsidiary's dividend policy and it is probable that the difference will not reverse through dividends or otherwise in the foreseeable future.

Inventories. Inventories are recorded at the lower of cost and net realisable value. Cost of inventory is determined on the weighted average principle. The cost of finished goods and work in progress comprises raw material, direct labour, other direct costs and related production overheads based on normal operating capacity but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the cost of completion and selling expenses.

Trade and other receivables. Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered to be indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the consolidated income statement against other operating expenses. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited in the consolidated income statement against other operating expenses.

Renegotiated trade and other receivables are measured at amortised cost based on the new pattern of renegotiated cash flows. A gain or loss is recognised in the consolidated income statement on the date of renegotiation, which is subsequently amortised using the effective interest method. If the terms of a receivable are renegotiated or otherwise modified because of financial difficulties of the borrower or issuer, impairment is measured using the original effective interest rate before the modification of terms.

Prepayments. Prepayments are carried at cost less provision for impairment. A prepayment is classified as non-current when the goods or services relating to the prepayment are expected to be obtained after one year, or when the prepayment relates to an asset which will itself be classified as non-current upon initial recognition. Prepayments to acquire assets are transferred to the carrying amount of the asset once the Group has obtained control of the asset and it is probable that future economic benefits associated with the asset will flow to the Group. Other prepayments are charged to the income statement when the goods or services relating to the prepayments are received. If there is an indication that the assets, goods or services relating to a prepayment will not be received, the carrying value of the prepayment is written down accordingly and a corresponding impairment loss is recognised in the income statement.

4 Basis of preparation and significant accounting policies (continued)

Cash and cash equivalents. Cash and cash equivalents include cash in hand, deposits held at call with banks, and other short-term highly liquid investments with original maturities of three months or less. Restricted balances are excluded from cash and cash equivalents for the purposes of the cash flow statement. Balances restricted from being exchanged or used to settle a liability for at least twelve months after the balance sheet date are included in other non-current assets. Cash and cash equivalents are carried at amortised cost using effective interest rate method.

Share capital. Ordinary shares issued are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds. Any excess of the fair value of consideration received over the par value of shares issued is presented in the notes as a share premium.

Dividends. Dividends are recognised as a liability and deducted from equity at the balance sheet date only if they are declared before or on the balance sheet date. Dividends are disclosed when they are proposed before the balance sheet date or proposed or declared after the balance sheet date but before the financial statements are authorised for issue. If settlement of a dividend liability exceeds twelve months from the balance sheet date it is included within long-term liabilities and measured at the present value of the future cash flows required to settle the liability using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation.

Loans and borrowings. Loans and borrowings are recognised initially at fair value, net of transaction costs incurred and subsequently carried at amortised cost using the effective interest method.

Cash flows related to receipt and repayment of trade finance borrowings are presented within the statement of cash flows on a net basis.

Trade and other payables. Trade and other payables are recognised and initially measured under the policy for financial instruments. Subsequently, instruments with a fixed maturity are re-measured at amortised cost using the effective interest rate method. Amortised cost is calculated by taking into account any transaction costs and any discount or premium on settlement.

Derecognition of financial liabilities. A substantial modification of the terms of an existing financial liability or a part of it is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, are recognised in profit or loss. If the exchange or modification of financial liability is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

Prepayments received. Prepayments are carried at amounts originally received, net of VAT.

Provisions for liabilities and charges. Provisions for liabilities and charges are non-financial liabilities recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Where the Group expects a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

Contingent assets and liabilities. A contingent asset is not recognised in the financial statements but disclosed when an inflow of economic benefits is probable. When the realisation of income is virtually certain, then the related asset is not a contingent asset and Group recognises such assets.

Contingent liabilities are not recognised in the financial statements unless it is probable that an outflow of economic resources will be required to settle the obligation and it can be reasonably estimated. Contingent liabilities are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote.

4 Basis of preparation and significant accounting policies (continued)

Employee benefits. Defined benefit plan. Certain Ukrainian entities within the Group participate in a mandatory State defined retirement benefit plan, which provides for early pension benefits for employees working in certain workplaces with hazardous and unhealthy working conditions. Certain Ukrainian entities also provide lump sum benefits upon retirement subject to certain conditions, as well as some other long-term employee benefits. The liability recognised in the balance sheet in respect of the defined benefit pension plan is the present value of the defined benefit obligation at the balance sheet date. The defined benefit obligation is calculated annually by professional actuaries using the Projected Unit Credit Method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income. Past service costs are recognised immediately in profit or loss.

Revenue recognition. Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value-added tax and discounts and after eliminating sales within the Group.

The Group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met for each of the Group's activities as described below. The amount of revenue is not considered to be reliably measurable until all contingencies relating to the sale have been resolved. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(a) Sale of goods, by-products and merchandise

The Group manufactures and sells a range of steel products to large, medium and small size customers. By-products and merchandise are sold to the same range of customers. Revenues from sales of goods, by-products and merchandise are recognised at the point of transfer of risks and rewards of ownership of the goods, normally when the goods are shipped. If the Group agrees to transport goods to a specified location, revenue is recognised when the goods are passed to the customer at the destination point. The Group uses standardised INCOTERMS such as cost-and-freight (CFR), free-carrier (FCA), cost-insurance-freight (CIF), free-on-board (FOB) and ex-works (EXW) which define the point of risks and rewards transfer. Revenue is recorded on an accrual basis as earned.

Sales are recorded based on the price indicated in the specifications to the sales contracts. The sales price is established separately for each specification.

The Group also engages in sale and purchase transactions the objective of which is to manage cash flows. Such transactions are not revenue generating to the Group and accordingly such sales and purchases are presented on a net basis with any gain or loss presented in other operating income/(expenses). Accounts receivable and payable from such transactions are presented gross.

(b) Interest income

Interest income is recognised on a time-proportion basis using the effective interest method. When a receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at original effective interest rate of the instrument, and continues unwinding the discount as interest income.

(c) Sale of services

Sales of services are recognised in the accounting period in which the services are rendered, by reference to stage of completion of the specific transaction assessed on the basis of the actual service provided as a proportion of the total services to be provided.

(d) Dividend income

Dividend income is recognised when the right to receive payment is established.

(e) Commission income

The Group acts as an agent for sales transactions on behalf of the third parties. The commission income received by the Group as a fee for facilitating such transactions is recognised at the point of transfer of risks and rewards of ownership of the goods to the customers of the third parties. Such income is reported as part of other operating income.

4 Basis of preparation and significant accounting policies (continued)

Value added tax. VAT in Ukraine where the majority of the Group operations are concentrated is levied at two rates: 20% on domestic sales and imports of goods, works and services and 0% on export of goods. Export of services is exempt from VAT. A taxpayer's VAT liability equals the total amount of VAT collected within a reporting period, and for domestic operations arises on the earlier of the date of shipping goods to a customer or the date of receiving payment from the customer; for export operations arises on the date of customs clearance of exported goods. A VAT credit is the amount that a taxpayer is entitled to offset against his VAT liability in a reporting period. For domestic and export operations rights to VAT credit arise when a VAT invoice is received, which is issued on the earlier of the date of payment to the supplier or the date goods are received. Where provision has been made for impairment of receivables, the impairment loss is recorded for the gross amount of the debtor, including VAT. VAT assets recoverable in cash from the State are included into Group's assets. All other VAT assets and liabilities are netted only within the individual companies of the Group.

Recognition of expenses. Expenses are accounted for on an accrual basis. Cost of goods sold comprises the purchase price, transportation costs, commissions relating to supply agreements and other related expenses.

Finance income and costs. Finance income and costs comprise interest expense on borrowings, pension obligations, losses on early repayment of loans, interest income on funds invested, income on origination of financial instruments and foreign exchange gains and losses.

All interest and other costs incurred in connection with borrowings are expensed using the effective interest rate method if not capitalised. Interest income is recognised as it accrues, taking into account the effective yield on the asset.

Changes in presentation. Where necessary, corresponding figures have been adjusted to conform to changes in the presentation in the current year.

5 Critical accounting estimates and judgements in applying accounting policies

The Group makes estimates and assumptions that affect the reported amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. Judgements that have the most significant effect on the amounts recognised in the IFRS consolidated financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next financial year include:

Impairment of property, plant and equipment, goodwill and other intangible assets. The Group and its subsidiaries are required to perform impairment tests for their assets or cash-generating units when there is indication that an asset or a cash-generating unit ("CGU") may be impaired. One of the determining factors in identifying a cash-generating unit is the ability to measure independent cash flows for that unit. Within the Group's identified cash-generating units a significant proportion of their output is input to another cash-generating unit. Therefore judgement is needed in determining a cash-generating unit.

Annually the Group assesses whether goodwill is impaired. This requires estimation of the value in use / fair value less costs to sell of the cash-generating units or groups of cash-generating units to which goodwill is allocated. Allocation of goodwill to groups of cash generating units requires significant judgement related to expected synergies. Estimating value in use / fair value less costs to sell requires the Group to make an estimate of expected future cash flows from the cash-generating unit and also to choose a suitable discount rate in order to calculate the present value of those cash flows.

Changes in the above estimates and judgments could have a material effect on the results of the impairment tests. The estimates used to assess the impairments are impacted by the uncertainty caused by events in Eastern Ukraine and decline on the global commodity markets, including importantly future planned production and expected market prices (see discussion of operating environment in Note 2). The impact of the uncertainties is discussed further in Notes 8 and 10.

Impairment of trade and other accounts receivable. Management estimates the likelihood of the collection of trade and other accounts receivable based on an analysis of individual accounts. IAS 39 requires the estimate of an impairment loss which is computed as the difference between the carrying value of a receivable and the present value of the future cash flows discounted at the receivables effective interest rate.

As discussed in Note 14, during the 2015 the Group has recognised impairment of trade receivables from some of its key customers in the total amount of USD 255 million. Factors taken into consideration by management when estimating the future cash flow included an ageing analysis of trade and other accounts receivable, and the financial position of and collection history with the customer. In the current environment there is significant judgement in estimating the expected payment date, the discount rate and whether penalty interest will be collected.

Changes in the above estimates and judgments could have a material effect on the results of the impairment tests. In particular, had the discount rates used (15% for USD denominated receivables for Ukrainian and CIS customers) be higher by 1 p.p., the impairment loss would be USD 3 million higher; had the expected repayment dates be further delayed by 1 year, the impairment loss would be USD 29 million higher.

Additionally, the estimates used to assess the impairment of trade and other accounts receivable from certain Ukrainian customers are impacted by the uncertainty caused by events in Eastern Ukraine (see discussion of operating environment in Note 2).

Deferred income tax asset recognition. The recognised deferred tax asset represents income taxes recoverable through future deductions from taxable profits and is recorded in the consolidated balance sheet. Deferred income tax assets are recorded to the extent that realisation of the related tax benefit is probable. The future taxable profits and the amount of tax benefits that are probable in the future are based on the long term strategy and plans prepared by management. The strategy is based on management's expectations that are believed to be reasonable under the circumstances and are disclosed in Note 8. In addition, a number of feasible tax planning opportunities are available to the Group to recover the deferred tax asset recognised.

Post-employment and other long-term employee benefits obligations. Management assesses post-employment and other long-term employee benefit obligations using the Projected Unit Credit Method based on actuarial assumptions which represent management's best estimates of the variables that will determine the ultimate cost of providing post-employment and other employee benefits. Since the plan is administered by the State of Ukraine, the Group may not have full access to information and therefore assumptions regarding when, or if, an employee takes early retirement, whether the Group would need to fund pensions for ex-employees depending on whether that ex-employee continues working in hazardous conditions, the likelihood of employees transferring from State funded pension employment to Group funded pension employment could all have a significant impact on the pension obligation.

5 Critical accounting estimates and judgements in applying accounting policies (continued)

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The major assumptions used in determining the net cost (income) for pensions include the discount rate and future salary and benefits increase rate. Any changes in these assumptions will impact the carrying amount of pension obligations as disclosed in sensitivity analysis in Note 21.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of high-quality government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability. Other key assumptions for pension obligations are based in part on the current market conditions. Additional information is disclosed in Note 21.

Tax legislation. Ukrainian tax, currency and customs legislation continues to evolve. Conflicting regulations are subject to varying interpretations. Management believes its interpretations are appropriate and sustainable, but no guarantee can be provided against a challenge from the tax authorities (Note 30).

Related party transactions. In the normal course of business the Group enters into transactions with related parties. Judgement is applied in determining if transactions are priced at market or non-market terms, where there is no active market for such transactions, and also in estimating the timing of settlement of the balances due from related parties, where there is a history of prolongations. Financial instruments are recorded at origination at fair value using the effective interest method. The Group's accounting policy is to record gains and losses on related party transactions, other than business combination or equity investments, in the income statement. The basis for judgement is pricing for similar types of transactions with unrelated parties and an effective interest rate analysis.

Further, estimation of timing of settlement and recoverability of balances due from related parties requires judgement. Ability of shareholders and parties under their control to repay the amounts due to the Group is dependent to large extent on cash flows from the Group. Such cash flows in the current circumstances may be limited (Note 3). Herewith, the Group is in net payable position with major groups of its related parties (Note 29). No impairment was recognised in respect of balances due from related parties in these consolidated financial statements.

Revaluation of property, plant and equipment. On an annual basis management of the Group carries out an analysis to assess whether carrying amounts of items of property, plant and equipment differ materially from that which would be determined using fair value at the end of the reporting period. The analysis is based on price indices, developments in technology, movements in exchange rates since the date of latest revaluation, profitability of underlying businesses and other relevant factors. Where the analysis indicates that the fair values of items of property plant and equipment differ materially from the carrying amounts, further revaluation is performed involving independent valuers.

As most of the Group's property, plant and equipment is of specialised nature, its fair value is determined using depreciated replacement cost (Level 3) or, where it is available, the market value (Level 2). For some assets which were revalued as of previous balance sheet date, the fair values as of reporting date were obtained using indexation of their carrying amounts for relevant cumulative price indices or changes in foreign exchange rates (Level 3).

When performing valuation using these methods, the key estimates and judgments applied by the independent valuers, in discussion with the Group's internal valuation team and technicians, are as follows:

- choice of information sources for construction costs analysis (actual costs recently incurred by the Group, specialised reference materials and handbooks, estimates for cost of construction of various equipment etc.);
- determination of comparatives for replacement cost of certain equipment, as well as corresponding adjustments required to take into account differences in technical characteristics and condition of new and existing equipment;
- selection of market data when determining market value where it is available; and
- determination of applicable cumulative price indices or changes in foreign exchange rates which would most reliably reflect the change in fair value of assets revalued using indexation of carrying amounts.

The fair values obtained using depreciated replacement cost and indexation of carrying amounts are validated using discounted cash flow models (income approach, Level 3), and are adjusted if the values obtained using income approach are lower than those obtained using depreciated replacement cost or indexation of carrying amounts (i.e. there is economic obsolescence). Key inputs into discounted cash flow models are consistent with the assumptions used for goodwill impairment testing (Note 8), except for discount rates which are specific to each of the Group's subsidiaries and are pre-tax.

The results of this revaluation of property, plant and equipment is disclosed further in Note 10.

5 Critical accounting estimates and judgements in applying accounting policies (continued)

Changes in the above estimates and judgments could have a material effect on the fair value of property, plant and equipment, which, however, is impracticable to quantify due to wide variety of assumptions and assets being valued. The estimates used to assess the fair value of property, plant and equipment are impacted by the uncertainty caused by events in Eastern Ukraine and decline on the global commodity markets, including importantly future planned production and expected market prices (see discussion of operating environment in Note 2). The impact of the uncertainties is discussed further in Notes 8 and 10.

Remaining useful lives of property, plant and equipment. The Group's management determines the estimated useful lives and related depreciation charges for its property, plant and equipment. This estimate is based on the technical characteristics, physical conditions, management's expectations on use of the respective assets and other factors.

Remaining useful lives for iron ore mining licences and coal reserves (Note 9) are estimated by management based on reserves' studies performed by independent experts. Results of such studies depend, inter alia, on expert's assessment of geological conditions and feasibility of extraction of mineral resources which is dependent on future levels of prices for iron ore and coking coal and costs of such extraction.

Functional currency. Judgement was applied in determining the functional currency of Metinvest B.V., which is a holding company for operations of the Group in Ukraine, Italy, United States of America and other countries. The functional currency of Metinvest B.V. was determined on the basis that (i) in management's opinion Metinvest B.V. is not an extension of and is not integral to the Ukrainian operations; (ii) the primary economic exposures are to a number of countries; and (iii) Metinvest B.V. retains cash and obtains financing in US Dollars. Management therefore determined the US Dollar as the functional currency of Metinvest B.V. Amount of loans and other payables of Metinvest B.V. totalled USD 2,720 million as at 31 December 2015 (31 December 2014: USD 2,945 million) where potential foreign exchange gains/losses could arise should a different functional currency (UAH) be determined.

6 Adoption of new or revised standards and interpretations

There are no new standards and amendments to the standards which are relevant to the Group and became effective for the annual periods beginning on 1 January 2015.

The following new standards and amendments to the standards which are relevant to the Group and have been adopted by the European Union are effective in the European Union for the annual periods beginning on or after 1 January 2016, and have not been early adopted by the Group:

- Annual improvements to IFRSs 2012. The improvements consist of changes to seven standards, three of which are relevant to the Group. The basis for conclusions on IFRS 13 was amended to clarify that deletion of certain paragraphs in IAS 39 upon publishing of IFRS 13 was not made with an intention to remove the ability to measure short-term receivables and payables at invoice amount where the impact of discounting is immaterial. IAS 16 and IAS 38 were amended to clarify how the gross carrying amount and the accumulated depreciation are treated where an entity uses the revaluation model. The Group is not expecting any impact of the above amendments on its financial statements.

The following new standards relevant to the Group have been issued, but are not effective yet:

- IFRS 9, Financial Instruments;
- IFRS 15, Revenue from Contracts with Customers;
- IFRS 16, Leases;
- Amendments to IFRS 10 and IAS 28;
- Annual improvements to IFRSs 2014;
- Amendments to IAS 7; and
- Disclosure initiative amendments to IAS 1.

The Group is currently assessing the possible impact of adoption of the above standards but it is not currently expected that it will be significant. IFRS 16 will require the Group to recognise in the balance sheet assets taken in an operating lease and the related lease liabilities.

Other new or revised standards or interpretations that will become effective for annual periods starting after 1 January 2016 will likely have no material impact to the Group.

7 Segment information

The Group's business is organised on the basis of the following main operating segments:

- Metallurgical – comprising the production and sale of coke, semi-finished and finished steel products;
- Mining – comprising the production, enrichment and sale of iron ore and coal by the Group's Ukrainian operations, including UCC – comprising the production, enrichment and sale of coal by the Group's US operations. UCC operating segment has been aggregated with the Group's other Mining operations into the Mining reportable segment.

The Group is a vertically integrated steel and mining business. A significant portion of the Group's iron ore and coke and coal production are used in its steel production operations.

Operating segments' performance is assessed based on a measure of adjusted EBITDA. This measurement basis excludes dividend income, impairment of goodwill, other intangible assets and property, plant and equipment, the effects of non-recurring expenditures from the operating segments and, since 1 January 2015, foreign exchange gains / losses. Revenues and expenses for internal reporting purposes have been accounted for using IFRS principles. Certain adjustments are applied by management to contractual prices for intersegment sales.

Starting from 1 January 2015, management has changed the method of measurement of adjusted EBITDA so that both realised and unrealised foreign exchange gains and losses are now excluded from adjusted EBITDA. The effect of this change on adjusted EBITDA for the year ended 31 December 2015 is to decrease it by USD 115 million (compared with previous method of measurement). The comparative figures for adjusted EBITDA for 2014 are unchanged in the tables below, as those amounts were provided to chief operating decision maker in 2014. Should the new method of measurement been applied for the year ended 31 December 2014, adjusted EBITDA of Metallurgical segment would have been higher by USD 89 million (amounting to USD 1,212 million), adjusted EBITDA of Mining segment would have been lower by USD 536 million (amounting to USD 1,218 million) and total adjusted EBITDA would have been lower by USD 391 million (amounting to USD 2,311 million).

Segment information for the year ended 31 December 2015 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2015					
Sales – external	5,407	1,425	-	-	6,832
Sales to other segments	109	1,436	-	(1,545)	-
Total of the reportable segments' revenue	5,516	2,861	-	(1,545)	6,832
Adjusted EBITDA	333	29	(95)	34	301
Share in EBITDA of joint ventures	153	59	-	-	212
Adjusted EBITDA including share in EBITDA of joint ventures	486	88	(95)	34	513
<i>Reconciling items:</i>					
Depreciation and amortisation					(615)
Impairment and revaluation of PPE and other intangible assets	(22)	(342)	-	-	(364)
Goodwill impairment	-	(74)	-	-	(74)
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					(81)
Finance income					26
Finance costs					(635)
Foreign exchange gains less losses, net					115
Other					(49)
Loss before income tax					(1,164)
	Metallurgical	Mining	Corporate		Total
Capital expenditure	137	136	12		285
Significant non-cash items included into adjusted EBITDA:					
- impairment of trade and other receivables	(45)	(247)	-		(292)

7 Segment information (continued)

Analysis of revenue by category:

	Metallurgical	Mining	Total
2015			
Sales of own products	4,011	1,362	5,373
- Steel products	3,532	-	3,532
- Iron ore products	-	1,139	1,139
- Coal and coke	291	136	427
- Other	188	87	275
Resale of purchased goods	1,396	63	1,459
- Steel products	1,206	-	1,206
- Coal and coke	89	63	152
- Other	101	-	101
Total	5,407	1,425	6,832

Segment information for the year ended 31 December 2014 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2014					
Sales – external	8,165	2,400	-	-	10,565
Sales to other segments	81	1,694	-	(1,775)	-
Total of the reportable segments' revenue	8,246	4,094	-	(1,775)	10,565
Adjusted EBITDA	941	1,636	(140)	(35)	2,402
Share in EBITDA of joint venture	182	118	-	-	300
Adjusted EBITDA including share in EBITDA of joint venture	1,123	1,754	(140)	(35)	2,702
<i>Reconciling items:</i>					
Depreciation and amortisation				-	(850)
Impairment and devaluation of PPE	15	(330)	-	-	(315)
Goodwill impairment	-	(102)	-	-	(102)
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint venture					(158)
Finance income					25
Finance costs					(902)
Other					(30)
Profit before income tax					370
	Metallurgical	Mining	Corporate		Total
Capital expenditure	276	304	33		613
Significant non-cash items included into adjusted EBITDA:					
- unrealised operating foreign exchange gains less losses, net	(136)	505	2	(56)	315
- impairment of trade receivables	(9)	(51)	-		(60)

7 Segment information (continued)

Analysis of revenue by category:

	Metallurgical	Mining	Total
2014			
Sales of own products	6,226	2,358	8,584
- Steel products	5,662	-	5,662
- Iron ore products	-	2,127	2,127
- Coal and coke	320	176	496
- Other	244	55	299
Resale of purchased goods	1,939	42	1,981
- Steel products	1,667	-	1,667
- Coal and coke	24	42	66
- Other	248	-	248
Total	8,165	2,400	10,565

The Group's two business segments operate in six main geographical areas. Revenue by location of customers is presented below:

	Metallurgical	Mining	Total
2015			
Ukraine	1,151	468	1,619
Rest of Europe	2,090	165	2,255
Middle East and Northern Africa	1,266	39	1,305
South Eastern Asia	116	635	751
Commonwealth of Independent States ("CIS")	602	-	602
North America	111	118	229
Other countries	71	-	71
Total	5,407	1,425	6,832

	Metallurgical	Mining	Total
2014			
Ukraine	1,578	918	2,496
Rest of Europe	2,751	199	2,950
Middle East and Northern Africa	1,872	-	1,872
South Eastern Asia	516	1,150	1,666
Commonwealth of Independent States ("CIS")	1,073	1	1,074
North America	281	124	405
Other countries	94	8	102
Total	8,165	2,400	10,565

As at 31 December 2015 94% of the Group's non-current assets, other than financial instruments and deferred tax assets, were located in Ukraine (as at 31 December 2014: 93%).

8 Goodwill

The movements of goodwill were as follows:

	2015	2014
Book amount as at 1 January, net	754	1,005
Impairment	(74)	(102)
Currency translation differences	(79)	(149)
Book amount as at 31 December, net	601	754

Management allocates and monitors goodwill at the following groups of cash generating units ("CGUs") which represent operating segments:

	31 December 2015	31 December 2014
Metallurgical	544	594
Mining	57	86
UCC	-	74
Total	601	754

After conducting the impairment testing of property, plant and equipment and other intangible assets (Notes 9 and 10), management has assessed the recoverable amount of goodwill. The recoverable amount has been determined based on fair value less cost to sell estimations.

To ensure that impairment testing model fully reflects the anticipated long-term changes in cash flows, for the impairment test the Group used cash flow projections for 10 years which are consistent with the Group's strategy approved by senior management; first year of forecast is based on the Group's approved business plan for the year.

Valuation method used for determination of each CGU fair value is mostly based on unobservable market data, which is within Level 3 of the fair value hierarchy.

The following table and further paragraphs summarize key assumptions on which management has based its cash flow projections to undertake the impairment testing of goodwill:

	2015	2014
Metallurgical		
Post-tax discount rate (USD)	13.10%	16.0% for 2015–2016 and 12.6% for 2017 onwards
EBITDA margins	2016: 14%, 2017: 18%, further – from 16% to 17%	10% to 18%
Growth rate in perpetual period	3%	3%
Mining		
Post-tax discount rate (USD)	13.68%	16.0% for 2015–2016 and 12.6% for 2017 onwards
EBITDA margins	2016: 15%, 2017: 22%, further – from 21% to 27%	25% to 40%
Growth rate in perpetual period	3%	3%

The values assigned to the key assumptions represent management's assessment of future trends in the business and are based on both external and internal sources.

Discount rate reflects the current market assessment of the time value of money and risks specific to the Group. The discount rate has been determined using the Capital Asset Pricing Model based on observable inputs, inputs from third party financial analysts and Group-specific inputs.

8 Goodwill (continued)

Forecasted iron ore prices for Fe 62% fines (CFR North China) are USD 52 per tonne in 2016, USD 56 per tonne in 2017 and recover at 2.8 % p.a. to USD 70 per tonne in 2025 (31 December 2014: range from USD 80 per tonne in 2016 to USD 98 per tonne in 2024). Forecasted prices for other iron ore products and prices at other markets were determined based on respective discounts or premiums for Fe content, applicable transportation costs and historic discounts or premiums usual for those markets.

Forecasted coal prices used in the impairment test for all CGUs for low volatile hard coking coal (FOB Queensland) start from USD 89 per tonne in 2016, recover to USD 108 per tonne in 2018 and grow at 1.3 % p.a. on average thereafter (31 December 2014: start from USD 129 per tonne in 2015 per ton and grow at 2.5% on average thereafter). Forecasted prices for other types of coal and prices at other markets were determined based on respective historic discounts for differences in quality of each particular coal type and estimated transportation costs.

Forecasted prices for hot-rolled coils at Ukrainian ports are estimated to gradually increase from current levels (Note 2) to USD 458 per ton in 2025 (31 December 2014: from USD 464 in 2015 to USD 593 per ton in 2024). Forecasted prices for other steel products are based on historic discounts or premiums to prices for hot-rolled coils.

Forecasts from industry experts and other external reputable sources, as well as internal analysis were used by management to determine price levels used in the impairment test.

For entities of the Metallurgical segment which have been affected by the conflict in the Eastern Ukraine, the production volumes used in the model for 2016 are consistent with those achieved in the beginning of 2016 as described in the Note 2, and subsequently gradually increasing in 2017 and 2018 to approximately 75-85% of the plants' capacity (31 December 2014: 80-95% of the plants' capacity) and remaining stable onwards. Iron ore mining entities are expected to continue production at or close to full capacity (31 December 2014: full capacity).

Exchange rate of 24 UAH for 1 USD in 2016 with gradual increase to 27.8 UAH for 1 USD in 2025 was used in the impairment test for all CGUs as of 31 December 2015 (31 December 2014: from 16 UAH for 1 USD in 2015 to 21.4 UAH for 1 USD in 2024).

Metallurgical segment. As at 31 December 2015 the Metallurgical segment's recoverable amount is USD 5,223 million and exceeds its total carrying amount by USD 671 million (31 December 2014: recoverable amount of USD 6,014 million, exceeded carrying value by USD 1,139 million). The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of goodwill (and subsequently to property, plant and equipment and intangible assets) related to the Metallurgical segment:

	31 December 2015	31 December 2014
Volumes of production/sales		
Decrease in all the periods by 5.2%	Recoverable amount equals carrying amount	-
Decrease in all the periods by 9%	Impairment of USD 501 million required	Recoverable amount equals carrying amount
Steel prices		
Decrease in all the periods by 1.4%	Recoverable amount equals carrying amount	-
Decrease in all the periods by 2.6%	Impairment of USD 603 million required	Recoverable amount equals carrying amount
Decrease in all the periods by 4%	Impairment of USD 1,227 million required	Impairment of USD 647 million required
Iron ore prices		
Increase in all the periods by 7.5%	Recoverable amount equals carrying amount	Recoverable amount exceeds carrying amount by USD 182 million
Increase in all the periods by 10%	Impairment of USD 226 million required	Impairment of USD 137 million required
Coal prices		
Increase in all the periods by 9%	Recoverable amount equals carrying amount	Impairment of USD 64 million required
Increase in all the periods by 15%	Impairment of USD 450 million required	Impairment of USD 871 million required
UAH/USD exchange rates		
Increase in all the periods by UAH 1	Carrying amount increases by USD 696 million	Carrying amount increases by USD 1,441 million

8 Goodwill (continued)

	31 December 2015	31 December 2014
Discount rates		
Increase in all the periods by 2.1 pp	Recoverable amount equals carrying amount	-
Increase in all the periods by 2.3 pp	Impairment of USD 72 million required	Recoverable amount equals carrying amount
Growth rate in perpetual period	No reasonable changes would lead to impairment	No reasonable changes would lead to impairment

Mining segment. As at 31 December 2015 the recoverable amount of the Mining segment is USD 1,571 million (31 December 2014: USD 2,537 million) and exceeds its total carrying amount by USD 93 million (31 December 2014: USD 400 million). The table below summarises the impact of changes in main assumptions with all other variables held constant to the impairment of goodwill related to this group of CGUs:

	31 December 2015	31 December 2014
Iron ore prices		
Decrease in all the periods by 0.8%	Recoverable amount equals carrying amount	
Decrease in all the periods by 5%	Impairment of USD 480 million required	Recoverable amount equals carrying amount
Decrease in all the periods by 10%	Impairment of USD 1,053 million required	Impairment of USD 381 million required
UAH/USD exchange rates		
Increase in all the periods by UAH 1	Carrying amount increases by USD 190 million	Carrying amount increases by USD 305 million
Discount rates		
Increase in all the periods by 0.5 pp	Recoverable amount equals carrying amount	-
Increase in all the periods by 1.7 pp	Impairment of USD 157 million required	Recoverable amount equals carrying amount
Growth rate in perpetual period	No reasonable changes would lead to impairment	No reasonable changes would lead to impairment

UCC. As at 31 December 2015 goodwill in UCC impaired to 0 (as at 31 December 2014 amount of goodwill in UCC was USD 74 million).

As at 31 December 2015 recoverable amount of UCC was estimated at USD 195 million (31 December 2014: USD 603 million). Total impairment charge of USD 399 million (31 December 2014: USD 209 million) has been recorded for UCC, out of which USD 74 million (31 December 2014: USD 103 million) were recorded against goodwill, USD 270 million (31 December 2014: USD 106 million) – against coal reserves and mining permits of separate mines (Note 9), and USD 54 million (31 December 2014: USD 3 million) – against property, plant and equipment (Note 10).

The discount rate used for the impairment testing of UCC was 13.27% (31 December 2014: 12.99%). Change of discount rate by 1 p.p. leads to change of the recoverable amount by USD 23 million (31 December 2014: USD 64 million).

The impairment losses resulted from the decline in coal prices in 2014 and further decline in 2015 (benchmark price of hard coking coal, FOB Queensland, decreased from USD 130 per ton in December 2013 to USD 110 in December 2014 and then further to USD 75 in December 2015) which were not expected to recover in full in the near future. The decrease of coal prices in all forecasted periods by 5% with all other variables held constant would result in additional impairment charge of USD 73 million (31 December 2014: USD 152 million). No other reasonable changes to the assumptions used would result in material change of the recoverable amounts of UCC as of 31 December 2015 and 2014.

9 Other intangible assets

The movements of other intangible assets were as follows:

	Coal reserves	Licenses and mining permits	Other intangible assets	Total
As at 1 January 2014				
Cost	418	726	112	1,256
Accumulated amortisation and impairment	(31)	(272)	(41)	(344)
Net carrying amount	387	454	71	912
Additions	-	-	24	24
Impairment (Note 8)	(106)	(3)	-	(109)
Currency translation differences	-	(207)	(38)	(245)
Amortisation	(6)	(34)	(8)	(48)
As at 31 December 2014				
Cost	418	373	220	1,011
Accumulated amortisation and impairment	(143)	(163)	(171)	(477)
Net carrying amount	275	210	49	534
Additions	-	-	10	10
Impairment (Note 8)	(263)	(7)	-	(270)
Currency translation differences	-	(68)	(15)	(83)
Amortisation	(5)	(16)	(6)	(27)
As at 31 December 2015				
Cost	418	241	209	868
Accumulated amortisation and impairment	(411)	(122)	(171)	(704)
Net carrying amount	7	119	38	164

The iron ore license is being amortised using the units-of-production method over its remaining useful life of approximately 10 years.

The coal reserves were acquired as part of the acquisition of UCC in 2009. The coal reserves are being amortised using the units-of-production method over their useful lives of approximately 6-30 years.

10 Property, plant and equipment

The movements of property, plant and equipment were as follows:

	Land	Buildings and structures	Plant and machinery	Furniture, fittings and equipment	Construction in progress	Total
Cost or valuation						
As at 1 January 2014	83	3,400	4,957	138	937	9,515
Additions	-	-	-	-	589	589
Transfers	-	77	285	16	(378)	-
Disposals	-	(6)	(22)	(4)	(4)	(36)
Reclassification to inventory	-	-	-	-	(15)	(15)
Elimination against gross carrying amount upon revaluation	-	(203)	(591)	(15)	-	(809)
Revaluation	-	899	1,955	16	32	2,902
Currency translation differences	(11)	(1,749)	(2,328)	(62)	(479)	(4,629)
As at 31 December 2014	72	2,418	4,256	89	682	7,517
Additions	-	-	-	-	275	275
Transfers	-	94	135	9	(238)	-
Disposals	-	(4)	(36)	(3)	(8)	(51)
Reclassification to inventory	-	-	-	-	(13)	(13)
Elimination against gross carrying amount upon revaluation	(12)	(134)	(234)	(4)	-	(384)
Revaluation	-	297	584	5	-	886
Currency translation differences	(10)	(789)	(1,322)	(29)	(251)	(2,401)
As at 31 December 2015	50	1,882	3,383	67	447	5,829
Accumulated depreciation and impairment						
As at 1 January 2014	-	(381)	(853)	(48)	(21)	(1,303)
Charge for the year	-	(212)	(579)	(21)	-	(812)
Disposals	-	3	18	3	2	26
Elimination against gross carrying amount upon revaluation	-	203	591	15	-	809
Impairment	-	(125)	(63)	(3)	(15)	(206)
Currency translation differences	-	176	314	17	-	507
As at 31 December 2014	-	(336)	(572)	(37)	(34)	(979)
Charge for the year	-	(149)	(428)	(11)	-	(588)
Disposals	-	3	32	1	1	37
Transfers	-	-	-	-	-	-
Elimination against gross carrying amount upon revaluation	12	134	234	4	-	384
Impairment	(12)	(25)	(49)	(1)	(7)	(94)
Currency translation differences	-	103	104	13	13	233
As at 31 December 2015	-	(270)	(679)	(31)	(27)	(1,007)
Net book value as at						
31 December 2014	72	2,082	3,684	52	648	6,538
31 December 2015	50	1,612	2,704	36	420	4,822

10 Property, plant and equipment (continued)

During 2015 and 2014, management performed assessments whether the carrying amounts of items of property, plant and equipment are materially different from their fair values. Where the material differences were identified as probable, the Group determined the fair value of its property, plant and equipment through a combination of independent appraisers and internal assessments. The Group aims to revalue a class of property, plant and equipment simultaneously; in case of revaluing a class on a rolling basis, the Group completes the revaluation within a short period, and keeps revaluations up to date. Substantially all the property, plant and equipment balance was either revalued or tested for impairment (whenever impairment indicators existed) during both 2015 and 2014.

As at 30 June 2015, the Group decided to revalue its property, plant and equipment mainly due to significant inflation in Ukraine and further devaluation of UAH against USD and EUR during the six months ended 30 June 2015. This revaluation resulted in the revaluation surplus of USD 859 million recorded in other comprehensive income and USD 9 million recorded in profit or loss (being reversal of previously recognised impairment or devaluation). No uplift was recorded in respect of property, plant and equipment located in the area not controlled by the government of Ukraine due to uncertainties as discussed in Note 2.

Fair values of items of property, plant and equipment located in Ukraine were estimated as follows: carrying amounts were adjusted to account for relevant cumulative price indices (for construction works and materials, different types of equipment, etc.) in Ukraine since the date of the latest revaluation of such items; and the resulting fair values were validated using discounted cash flow forecasts (income approach), and were adjusted if the values obtained using income approach are lower than those obtained using indexation of carrying amounts.

Further, a revaluation of USD 27 million and an impairment of USD 23 million was recognised as a result of fair valuation of Ferriera Valsider S.p.A. as of 31 December 2015 (book value of 58 million spread over plant and machinery, buildings and structures and land as of 31 December 2015). A revaluation exercise was considered unnecessary for other property, plant and equipment balances located outside of Ukraine as management estimated that their fair value as of 31 December 2015 were not materially different from their cumulative carrying amount of USD 421 million.

Given that in the second half of 2015 the inflation and devaluation in Ukraine were not significant (2% and 12%, respectively), management concluded that the further material uplift in fair values of the property, plant and equipment compared to 30 June 2015 is highly unlikely. Instead, significant further deterioration of the steel and iron ore markets' current situation and the outlook (Note 2) represented an impairment indicator for Group's non-current assets (including goodwill, other intangible assets, and PPE) in metallurgical and mining businesses. Therefore, management has performed impairment testing of property, plant and equipment and other intangible assets such as mining licences at the level of individual CGUs (being individual plants) and, subsequently, impairment testing of goodwill at the level of Metallurgical, Mining and UCC segments (Note 8).

The recoverable amount has been determined based on fair value less costs of disposal calculations. Assumptions used in impairment testing of property, plant and equipment and other intangible assets are consistent with those used in goodwill impairment test (Note 8), except for discount rates for individual CGUs which included incremental size risk premia (as compared to size risk premia applicable to the whole segment) and were, therefore higher than that used for impairment testing of goodwill by 0.59%-0.87% p.p. for metallurgical CGUs (resulting discount rates for individual metallurgical CGUs being 13.69%-13.97%) and 0.29% p.p. for mining CGUs (resulting discount rates for individual mining CGUs being 13.97%).

The specific risk of future severe physical damage or loss of control over entities located within or in close proximity to the areas not controlled by Ukrainian government were not taken into account when building cash flow projections nor was this included within the discount rate in either goodwill or CGU impairment testing. If a 20% probability that this risk crystallises was applied with respect to the CGUs located within the territories not controlled by the Ukrainian government and 10% for CGUs in close proximity to it, all other factors remaining constant, then impairment of USD 18 million (31 December 2014: USD 464 million) of property, plant and equipment would need to be recognised.

Mining segment – 2014 impairment losses and 2015 update. Resulting from the test an impairment loss of USD 215 million and a revaluation reserve reversal of USD 249 million have been recognised in 2014 on two CGUs being iron ore mining (USD 316 million in aggregate) and coal mining (USD 145 million in aggregate) operations in Ukraine. These impairments were largely driven by decrease in iron ore and coal prices in 2014. These conditions continued to be in place in 2015 and resulted in an additional impairment charge of USD 7 million. An increase of iron ore prices by 13% (31 December 2014: 15%) would increase recoverable amount of iron ore mining CGU to its carrying amount before impairment. No reasonably possible change in any of the assumptions of the impairment model of coal mining CGU would change the amount of impairment.

During 2015 USD 28 million of borrowing costs were capitalised, capitalisation rate was 8% (2014: USD 23 million, capitalisation rate 7%).

As at 31 December 2015 and 2014 no buildings, plant and machinery were pledged to third parties as collateral for loans and borrowings.

11 Investments in associates and joint ventures

The Group's investment in joint ventures and associates were as follows as at 31 December 2015 and 2014:

Name	Type of relationship	Segment	% of ownership	2015	% of ownership	2014
				Carrying value		Carrying value
PJSC Southern Iron Ore Enrichment Works	Joint venture	Mining	45.9%	298	45.9%	345
Zaporozhstal Group	Joint venture	Metallurgical	49.9%	458	49.9%	522
PJSC Zaporozhstal	Associate	Metallurgical	45.4%	2	45.4%	4
PrJSC Yenakievskiy Koksohimprom	Associate	Metallurgical	50.0%	7	50.0%	6
IMU	Associate	Metallurgical	49.9%	7	49.9%	13
Black Iron (Cyprus) Limited	Associate	Mining	49.0%	6	49.0%	14
Other	Associate	Mining	n/a	1	n/a	2
Total				779		906

All Group's associates and joint ventures are accounted for using the equity method.

None of the joint ventures and associates is traded on active markets and there are no reliable market prices available.

PJSC Southern Iron Ore Enrichment Works

On 14 July 2014 the Company acquired a 44.8% ownership interest in PJSC Southern Iron Ore Enrichment Works. This ownership interest, together with the acquisition of non-controlling interests in two already consolidated subsidiaries made in consideration of an additional share in the Company together with a change in the ownership rights assigned to each share (see Note 16). Additional 1.1% of ownership interest in PJSC Southern Iron Ore Enrichment Works had been acquired in a separate transaction earlier in the year.

The Company has assessed the cost of acquisition of PJSC Southern Iron Ore Enrichment Works through valuation of its business using estimated discounted cash flows (Level 3). The resulting fair value of a USD 360 million is considered to be the fair value of consideration transferred and has been credited to share premium. Management has attributed fair values to identifiable assets and liabilities, including a mining license.

As of the date of acquisition, this investment was classified as a joint venture due to the fact that decisions about relevant activities require participation of and unanimous consent from both Metinvest and another major shareholder of PJSC Southern Iron Ore Enrichment Works.

PJSC Southern Iron Ore Enrichment Works is a large Ukrainian iron ore mining plant which produces iron ore concentrate and sinter. Its products are used by the Group's integrated steel plants and are also sold to the third parties (mostly in China, Ukraine and Europe) primarily through the Group's trading companies.

Zaporozhstal Group

Investment in Zaporozhstal Group is represented by the number of interests in the steel and mining businesses, the most significant being:

- 49.9% effective interest in JSC Zaporozhstal Integrated Iron & Steel Works ("Zaporozhstal"), a large Ukrainian integrated steel plant which sources majority of its iron ore and coke consumption from the Group and sells majority of its finished products through the Group's trading companies;
- 24% effective interest in JSC Zaporizhya Iron Ore Plant, large iron ore mining enterprise in Ukraine which sells part of its iron ore output to Zaporozhstal; and
- 42.8% effective interest in JSC Zaporozhkoks and a 49.2% effective interest in JSC Zaporozhstal which are Group's subsidiary and associate respectively.

As at 31 December 2015 and 2014, Metinvest's investment in Zaporozhstal Group was classified as a joint venture due to the fact that decisions on the key relevant activities require participation of and unanimous consents both from Metinvest and from the other shareholders of the Zaporozhstal Group.

11 Investments in associates and joint ventures (continued)

Movements in the carrying amount of the Group investments in associates and joint venture are presented below:

	2015	2014
Carrying amount at 1 January	906	786
Acquisition of share in PJSC Southern Iron Ore Enrichment Works	-	369
Acquisition of share in Black Iron (Cyprus) Limited	-	20
Impairment of share in Black Iron (Cyprus) Limited	(4)	-
Share of after tax results of joint ventures and associates	131	142
Share of other comprehensive income of joint ventures and associates	72	123
Currency translation difference	(326)	(534)
Carrying amount at 31 December	779	906

The nature of the activities of the Group's associates, Group's relationships with its associates and their key financial information is as follows:

- JSC Zaporozhneupor, Ukrainian producer of refractories, with revenues of USD 46 million and net loss of USD 1 million in 2015 (2014: USD 54 and USD 6, respectively) and total assets of USD 24 million as at 31 December 2015 (31 December 2014: USD 29 million);
- Yenakievskiy Koksohimprom, Ukrainian producer of coke which sources majority of its coal consumption from the Group and sells majority of its coke output to the Group's steel plants; Yenakievskiy Koksohimprom had revenues of USD 72 million and net profit of USD 7 million in 2015 (2014: USD 83 and USD 4, respectively) and total assets of USD 76 million as at 31 December 2015 (31 December 2014: USD 46 million)
- Black Iron (Cyprus) Limited, entity which owns licences for development of two iron ore deposits nearby Kryvyi Rih, Ukraine. In January 2016, the Group sold its investment in Black Iron (Cyprus) Limited for consideration of USD 6 million which equals the carrying amount of investment as at 31 December 2015; and
- Industrial-Metallurgical Union ("IMU"), entity which owns 4.5% interest in ArcelorMittal Kryvyi Rih, the largest integrated steel plant in Ukraine.

The summarised financial information of the Group's joint ventures is as follows:

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2015	31 December 2014	31 December 2015	31 December 2014
Balance sheet:				
Non-current assets	864	1,077	318	488
Cash and cash equivalents	17	12	9	5
Other current assets	459	470	396	392
Total current assets	476	482	405	397
Trade and other payables and provisions	366	74	-	-
Other non-current financial liabilities	113	109	35	53
Total non-current liabilities	479	183	35	53
Trade and other payables and provisions	108	448	21	80
Other current financial liabilities	33	186	18	-
Total current liabilities	141	634	39	80
Net assets	720	742	649	752

11 Investments in associates and joint ventures (continued)

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2015	31 December 2014	31 December 2015	31 December 2014
Profit or loss for the year ended (selected items):				
Revenue	1,463	1,862	483	316
Depreciation and amortisation	(77)	(75)	(37)	(26)
Interest income	-	-	1	4
Interest expense	(32)	(147)	(5)	(3)
Income tax expense	(15)	(16)	(41)	(46)
Profit or loss	106	111	169	190
Statement of comprehensive income for the year ended:				
Other comprehensive income	145	245	3	-
Total comprehensive income	251	346	172	190
Dividends received by the Group during the year ended	-	-	-	-

The information above reflects the amounts presented in the financial statements of the joint ventures and associates and impact of fair value adjustments made on acquisition of these joint ventures and associates, if any.

As at 31 December 2015, Zaporozhstal had a contingent liability with potential maximum outflow of USD 13 million (31 December 2014: nil). This contingent liability represents default interest on a loan taken by then a Zaporozhstal's subsidiary (deconsolidated by Zaporozhstal in 2015) which defaulted on this loan. The loan is guaranteed by Zaporozhstal. The financial guarantee was recognised in full by Zaporozhstal, but the default interest has not been accrued as there is uncertainty as to this amount.

The reconciliation of the net assets of the Group's joint ventures presented above to the carrying amounts of the respective investments is presented below:

	Zaporozhstal Group		PJSC Southern Iron Ore Enrichment Works	
	31 December 2015	31 December 2014	31 December 2015	31 December 2014
Net assets	720	742	649	752
Group's ownership, %	49.9%	49.9%	45.9%	45.9%
Group's interest in net assets	359	370	298	345
Goodwill	99	152	-	-
Carrying value	458	522	298	345

12 Income tax prepaid

	31 December 2015	31 December 2014
Non-current portion	105	108
Current portion	66	110
Total income tax prepaid	171	218

Group's income tax prepayments originated mainly on principal Ukrainian production subsidiaries due to legislative requirement of advance payment of corporate profit tax. The classification of prepayments as of 31 December 2015 is based on Group management's assessment of taxable profits of subsidiaries and amounts of expected cash refunds from the State during 2016.

Starting from 1 January 2016 changes to Ukrainian Tax Code were enforced, including the cancellation of required advance payments of corporate profit tax.

13 Inventories

	31 December 2015	31 December 2014
Finished goods and work in progress	367	566
Raw materials	255	409
Ancillary materials, spare parts and consumables	114	210
Goods for resale	30	37
Total inventories	766	1,222

In 2015, inventory write down expense was USD 21 million (2014: USD 16 million).

As at 31 December 2015, inventories totalling USD 69 million (31 December 2014: USD 151 million) have been pledged as collateral for borrowings (Note 19).

14 Trade and other receivables

	31 December 2015	31 December 2014
Non-current assets		
Trade receivables	201	-
Loans issued to related party (USD denominated, 9% effective interest rate, mature during 2017)	11	20
Loans issued to joint venture (USD denominated, 11% effective interest rate, mature in 2016)	-	98
Other non-current financial assets	7	11
Other non-current non-financial assets	10	10
Total non-current assets	229	139
Current financial assets		
Trade receivables and receivables on commission sales	757	1,544
Loans issued to joint venture (USD denominated, 11% effective interest rate, mature in 2016)	101	3
Loans issued to SMART (USD denominated, 9% effective interest rate, mature in 2015 and 2016)	75	70
Loans issued to SCM (USD denominated, 9% effective interest rate, mature in 2015 and 2016)	22	11
Other receivables	56	80
Total current financial assets	1,011	1,708
Current non-financial assets		
Recoverable value added tax	148	225
Prepayments made	142	45
Prepaid expenses and other non-financial receivables	64	64
Total current non-financial assets	354	334
Total current assets	1,365	2,042
Total trade and other receivables (including non-current assets)	1,594	2,181

The increased prepayments made are a reflection of requirements of non-Ukrainian suppliers of goods and services for the increased risks and uncertainties of doing business with Ukrainian counterparties.

Recoverable VAT mainly relates to Ukrainian subsidiaries of the Group. During 2015, VAT refunds of USD 479 million were received by the Group. Although there are certain delays with refund of part of this balance amounting to USD 43 million related to the subsidiaries located in the non-controlled territory, the Group has a proved right for refund of this amount and considers this balance as fully recoverable.

During 2015, trade accounts receivable in the amount of USD 491 million has been sold to a third party (2014: USD 175 million). As at 31 December 2015 amount of such unsettled receivables was USD 67 million (31 December 2014: USD 71 million). The carrying amount of the assets and liabilities that represent the entity's continuing involvement in the derecognised assets is USD 2 million (31 December 2014: USD 2 million). The maximum exposure to loss from such receivables relates to customer default only and is pre-agreed with the third party purchasing the receivables as the percentage of their nominal amount sold. Such percentage is determined with reference to the historical loss ratio and the statistical model of the respective markets the Group.

14 Trade and other receivables (continued)

Movements in the impairment provision for trade and other receivables are as follows:

	31 December 2015		31 December 2014	
	Trade receivables	Other financial receivables	Trade receivables	Other financial receivables
Provision for impairment at 1 January	77	27	56	25
Net impairment during the year	263	29	50	10
Currency translation differences	(11)	(7)	(29)	(8)
Provision for impairment at 31 December	329	49	77	27

Analysis by credit quality of financial trade and other receivables is as follows:

	31 December 2015		31 December 2014	
	Trade receivables and receivables on commission sales	Other financial receivables	Trade receivables and receivables on commission sales	Other financial receivables
Key customers	20	-	18	-
SCM and other related companies, including associates and joint ventures	54	145	73	244
Balances covered by bank letters of credit	77	-	202	-
Balances insured	147	-	249	-
Existing and new counterparties with no history of default	75	24	69	36
Balances renegotiated with SCM and other related companies, including associates and joint ventures	27	26	28	-
Balances renegotiated with key customers	46	-	12	-
Total fully performing (not past due)	446	195	651	280
<i>Past due:</i>				
- less than 30 days overdue	81	53	162	-
- 30 to 90 days overdue	54	12	91	-
- 90 to 180 days overdue	58	2	73	2
- 180 to 360 days overdue	64	3	33	2
- over 360 days overdue	34	8	16	9
Total past due, but not impaired	291	78	375	13
Total individually impaired	550	49	595	27
Less impairment provision	(329)	(49)	(77)	(27)
Total	958	273	1,544	293

14 Trade and other receivables (continued)

As at 31 December 2015, 10% of receivables overdue but not impaired related to key customers (2014: 12%) and 69% to SCM and other related parties (2014: 61%). Following further delays in payments from some of the Group's key customers beyond the originally expected dates and their certain operational and financial issues, management has re-assessed the recoverable amounts of receivables from these entities. As a result, during 2015 the Group has increased the impairment provision related to these receivables from USD 62 million as of 31 December 2014 to USD 317 million as of 31 December 2015 and classified USD 201 million of these balances as non-current assets (Note 5).

As at 31 December 2015, trade and other receivables totalling USD 99 million (31 December 2014: USD 175 million) have been pledged as collateral for borrowings (Note 19).

15 Cash and cash equivalents

	31 December 2015	31 December 2014
Current accounts	176	105
Bank deposits up to 3 months	4	9
Total cash and cash equivalents	180	114

The bank balances and term deposits are neither past due nor impaired. Analysis by credit quality of bank balances and term deposits is as follows:

	31 December 2015	31 December 2014
<i>As rated by Moody's:</i>		
- A1	53	-
- A2	2	35
- A3	-	1
- Baa2	12	3
- Ba1	-	2
- Ba2	21	-
- Ca	-	60
Not rated – Ukrainian banks	71	1
Not rated – other banks	21	12
Total cash and cash equivalents	180	114

As at 31 December 2015, amounts in not rated Ukrainian banks (31 December 2014: banks rated Ca) relate to First Ukrainian International Bank (a related party which is under common control of SCM).

16 Share capital and share premium

	Number of outstanding shares			Ordinary shares	Share premium	Total
	Class A	Class B	Class C			
At 31 December 2014	6,750	2,251	474	0	6,225	6,225
At 31 December 2015	6,750	2,251	474	0	6,225	6,225

As at 31 December 2015, the issued share capital comprised 6,750 ordinary class A shares (2014: 6,750), 2,251 ordinary class B shares (2014: 2,251) and 474 class C shares (2014: 474) with a par value of EUR 10. Each ordinary share carries one vote and is fully paid.

In 2014 the Company changed its Articles of Association and created three classes of shares (A, B and C). Ownership interests of SCM Limited were transferred to new Class A shares. Ownership interests of SMART were transferred to new Class B shares. Ownership interests of the previous Class B shares were transferred to new Class C shares. Additional rights of these new classes of shares were established, the most significant of which were:

- Class C shareholders have the right to a portion of net assets of the Company and are represented at shareholders' meetings.
- the establishment of a Supervisory Board of ten members, where seven are appointed by the majority of Class A and Class C shareholders and three are appointed by the Class B shareholder;
- a number of decisions with respect to acquisitions and financing decisions above a specified amount require effectively consent of Class A and B shareholder; and
- Class C shares are not entitled to receive dividends.

In 2014, as a result of the acquisition of 44.8% of PJSC Southern Iron Ore Enrichment Works, an additional 14.1% interest in PJSC Ingulets Iron Ore Enrichment Works and 16% interest PJSC Northern Iron Ore Enrichment Works (Notes 11 and 18) and the issuance of additional share and share rights, management recognised Share premium of USD 764 million on these transactions, being the fair value of shares contributed.

17 Other reserves

	Revaluation of available- for-sale investments and share in OCI of associates	Revaluation of property, plant and equipment	Merger reserve	Cumulative currency translation reserve	Total
Balance as at 1 January 2014	(13)	2,269	(2,995)	(2,349)	(3,088)
Total comprehensive income for the period	-	2,381	-	(5,028)	(2,647)
Depreciation transfer, net of tax	-	(256)	-	-	(256)
Acquisition of subsidiaries from parties under common control	-	-	(43)	-	(43)
Balance as at 31 December 2014	(13)	4,394	(3,038)	(7,377)	(6,034)
Total comprehensive income / (loss) for the period	-	774	-	(2,461)	(1,687)
Depreciation transfer, net of tax	-	(292)	-	-	(292)
Balance as at 31 December 2015	(13)	4,876	(3,038)	(9,838)	(8,013)

The revaluation reserve for available-for-sale investments is transferred to profit or loss when realised through sale or impairment. Revaluation reserve for property, plant and equipment is transferred to retained earnings when realised through depreciation, impairment, sale or other disposal. Currency translation reserve is transferred to profit or loss when realised through disposal of a subsidiary by sale, liquidation, repayment of share capital or abandonment of all, or part of, that subsidiary.

Retained earnings of the Group represent the earnings of the Group entities from the date they have been established or acquired by the entities under common control. Company subsidiaries distribute profits as dividends or transfer them to reserves on the basis of their statutory financial statements prepared in accordance with local GAAP as appropriate. Ukrainian legislation identifies the basis of distribution as retained earnings only, however this legislation and other statutory laws and regulations are open to legal interpretation. Since December 2014, there is temporary ban for Ukrainian entities to pay dividends abroad, which has been prolonged till 8 June 2016 (Note 2).

The ability of the Group to pay dividends has been limited by the terms and conditions of the Group's agreements with its lenders and bondholders related to the debt restructuring process (Note 3).

18 Material non-controlling interests in subsidiaries

Subsidiaries that have non-controlling interest that is material to the Group have been determined by management based on combination of the following factors: (i) the percentage of shares held by non-controlling shareholders; (ii) accumulated amount of non-controlling interest ("NCI") in the subsidiary; and (iii) total assets, revenues, profit or loss and OCI of the respective subsidiaries.

The following table provides information about subsidiaries that have non-controlling interest that is material to the Group:

	Proportion of NCI (same as voting rights held by NCI)	Profit or loss attributable to NCI	OCI attributable to NCI	Amount of NCI in the subsidiary	Dividends paid to NCI during the year
As at 31 December 2015					
PJSC Azovstal Iron and Steel Works	3.8%	(4)	(7)	37	-
PJSC Avdiivka Coke Plant	7.0%	2	(10)	21	-
JSC Zaporozhkoks	47.8%	6	(12)	26	-
PJSC Northern Iron Ore Enrichment Works	3.6%	(2)	(16)	36	-
PJSC Ingulets Iron Ore Enrichment Works	0.2%	-	(1)	1	-
Ferrieria Valsider S.p.A.	30.0%	(8)	3	24	-
Total		(6)	(43)	145	-
As at 31 December 2014					
PJSC Azovstal Iron and Steel Works	3.9%	2	(6)	51	-
PJSC Avdiivka Coke Plant	7.5%	(6)	(7)	31	-
JSC Zaporozhkoks	49.0%	(3)	(19)	33	-
PJSC Northern Iron Ore Enrichment Works	3.6%	32	(117)	54	-
PJSC Ingulets Iron Ore Enrichment Works	0.2%	32	(92)	2	1
Ferrieria Valsider S.p.A.	30.0%	(2)	(4)	29	
Total		55	(245)	199	1

The summarised financial information of these subsidiaries (including the impact of consolidation fair value adjustments, but before intercompany eliminations), was as follows at 31 December 2015 and 2014:

	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Net assets
As at 31 December 2015					
PJSC Azovstal Iron and Steel Works	782	1,145	785	159	983
PJSC Avdiivka Coke Plant	390	314	357	52	295
JSC Zaporozhkoks	57	40	36	7	54
PJSC Northern Iron Ore Enrichment Works	490	745	156	81	998
PJSC Ingulets Iron Ore Enrichment Works	994	650	1,091	57	496
Ferrieria Valsider S.p.A.	179	123	210	11	81
As at 31 December 2014					
PJSC Azovstal Iron and Steel Works	1,044	1,402	970	179	1,297
PJSC Avdiivka Coke Plant	186	483	207	44	418
JSC Zaporozhkoks	137	64	123	11	67
PJSC Northern Iron Ore Enrichment Works	946	1,110	365	201	1,490
PJSC Ingulets Iron Ore Enrichment Works	1,083	1,083	983	272	911
Ferrieria Valsider S.p.A.	252	72	226	1	97

18 Material non-controlling interests in subsidiaries (continued)

	Revenue	Profit/ (loss)	Total comprehensive (loss) / income
Year ended 31 December 2015			
PJSC Azovstal Iron and Steel Works	1,532	(117)	(314)
PJSC Avdiivka Coke Plant	608	26	(123)
JSC Zaporozhkoks	209	12	(13)
PJSC Northern Iron Ore Enrichment Works	616	(49)	(492)
PJSC Ingulets Iron Ore Enrichment Works	610	(149)	(415)
Ferriera Valsider S.p.A.	398	(26)	(16)
Year ended 31 December 2014			
PJSC Azovstal Iron and Steel Works	1,900	55	(119)
PJSC Avdiivka Coke Plant	568	(76)	(177)
JSC Zaporozhkoks	312	(6)	(44)
PJSC Northern Iron Ore Enrichment Works	1,101	164	(527)
PJSC Ingulets Iron Ore Enrichment Works	984	173	(744)
Ferriera Valsider S.p.A.	482	(8)	(22)

The Group's centralised treasury monitors the cash flows of the Group's subsidiaries and adjusts the subsidiaries' operating cash flows (e.g. by means of changing intragroup trading balances) to provide sufficient funds for the approved investing activities or payment of taxes, interest and dividends.

In partial consideration for the 2014 increase in shares and change in rights to the Smart Group the Company obtained additional 14% in Ingulets Iron Ore Enrichment works and 16% in Northern Iron Ore Enrichment works (both subsidiaries of the Group) resulting in a reduction in non-controlling interest of USD 558 million in 2014. The difference of USD 154 million between the carrying value of non-controlling interest derecognised and consideration transferred (i.e. share premium recognised – Note 16) was recognised in 2014 as a reduction in the equity attributable to the parent's shareholders (reflected directly in retained earnings).

In 2011 and 2014, the Company issued guaranteed bonds with aggregate amount of USD 1,146 million outstanding which were in default as at 31 December 2015 (Notes 3 and 19). The bonds are guaranteed on a joint and several basis by the Group's subsidiaries PJSC Avdiivka Coke Plant, PJSC Ingulets Iron Ore Enrichment Works, PJSC Khartsyzsk Pipe Plant, PJSC Northern Iron Ore Enrichment Works, PJSC Central Iron Ore Enrichment Works, PJSC Azovstal Iron and Steel Works, PJSC Yenakiieve Iron and Steel Works, PJSC Ilyich Iron and Steel Works. The terms of bonds, subject to certain exceptions and qualifications, limit the ability of the Group to:

- undertake any amalgamation, merger, division, spin-off, transformation or other reorganisation or restructuring;
- incur additional indebtedness;
- pay dividends or distributions in respect of its share capital or redeem or repurchase capital stock or subordinated debt;
- create mortgages, pledges, security interests, encumbrances, liens or other charges;
- transfer or sell assets; and
- enter into transactions with affiliates.

Also, Metinvest entered into a number of PXF loans for an aggregate amount of USD 1,073 million which were in default as at 31 December 2015 (Notes 3 and 19). These loans are guaranteed by Ingulets GOK and PJSC Ilyich Iron and Steel Works. Also, as a condition of these loans, certain subsidiaries of Metinvest (PJSC Azovstal Iron and Steel Works, PJSC Yenakiieve Iron and Steel Works, PJSC Northern Iron Ore Enrichment Works, PJSC Ingulets Iron Ore Enrichment Works, Metinvest International S.A., PJSC Ilyich Iron and Steel Works) are jointly committed to perform sales of steel products to Metinvest International S.A. from the date when the funds are drawn down by Metinvest. The commitment to sell steel products mirrors the repayment schedule of the loans balances and extends to loans' maturity dates. The proceeds from such sales are transferred through special accounts of the lenders and banks will have rights to these proceeds only in case when Metinvest does not make a scheduled payment under the credit facilities. There are no other restrictions to these accounts. The amount of funds on such accounts as at 31 December 2015 is USD 0 million (31 December 2014: USD 0 million).

19 Loans and borrowings

As at 31 December, loans and borrowings were as follows:

	31 December 2015	31 December 2014
Non-current		
Bank borrowings	-	476
Bonds issued	-	1,032
Non-bank borrowings from related parties	-	370
	-	1,878
Current		
Bank borrowings	1,091	714
Non-bank borrowings from related parties	393	-
Trade finance	228	416
Bonds issued	1,146	138
	2,858	1,268
Total loans and borrowings	2,858	3,146

The majority of the Group's bank borrowings and trade finance have variable interest rates. The weighted average effective interest rates and currency denomination of loans and borrowings as at the balance sheet dates are as follows:

	31 December 2015		31 December 2014	
<i>In % per annum</i>	USD	EUR	USD	EUR
Bank borrowings	6%	3%	4%	3%
Bonds issued	9%	-	9%	-
Non-bank borrowings from related parties	10%	-	10%	-
Trade finance	4%	-	3%	-
Reported amount	2,840	18	3,124	22

As disclosed in Note 3, the Group breached its payment covenants and consequently as a result of this breach and the associated impact of cross default the vast majority of loans and borrowing were reclassified to current loans and borrowings. As at 31 December 2015, the bank borrowing includes PXF in the amount USD 1,073 million (31 December 2014: USD 1,172 million).

As of 31 December 2015, the Group's 2018 bonds were traded on open markets with discount of approximately 57% (31 December 2014: 48%) to their nominal value, 2017 bonds were traded on open markets with discount of approximately 55% (31 December 2014: 48%) and 2016 bonds were traded on open markets with discount of approximately 58% (31 December 2014: 25%). As at 31 December 2015, the fair value of bonds was USD 514 million (31 December 2014: USD 676 million) as determined by reference to observable market quotations. Have these market quotations been used to determine the fair values of the bank borrowings as at 31 December 2015 would be in the range of USD 462 million to USD 495 million (31 December 2014: USD 629 million and USD 906 million respectively). Despite the trading volumes are low and these quotations may not represent the fair value of the bonds and bank borrowings, that approach is the most appropriate in the distressed situation given the company's default and cross default clauses on its bank and non-bank loans and borrowings, as well as bonds a vast majority of which were reclassified to current debt.

20 Seller's notes

	31 December 2015	31 December 2014
Current portion	88	86
Total seller's notes	88	86

Seller's notes are secured with a 100% of the capital of United Coal Company LLC (Group's subsidiary) and subordinated to other borrowings of the Group to the extent that total borrowings do not exceed USD 3 billion excluding interest.

Seller's notes bear nominal interest rate of 7% p.a., and are recorded at an effective interest rate of 12.5% p.a. The repayment of the notes was initially due in 2015. In January 2015 the Group renegotiated terms of the seller's notes to be repaid in 12 equal monthly instalments during 2016. There are no cross-default provisions related to the seller's notes.

As of 31 December 2015 and 31 December 2014, the fair value of seller's notes approximated their carrying amount.

21 Retirement benefit obligations

The Group's defined benefit obligations relate to:

	31 December 2015	31 December 2014
State-defined early pensions for employees working in hazardous and unhealthy working conditions	289	434
Long-term employee benefits under collective bargaining agreements	46	39
Total defined benefit obligations	335	473

Nature and the risks and uncertainties associated with the Group's defined benefit obligations are further disclosed in the Note 5.

Adoption of certain changes to the pension legislation in Ukraine during 2015, being an increase of the required overall service period for men and women and gradual increase of the early retirement age for women by 5 years resulted in the negative past service cost recognised in profit and loss for year ended 31 December 2015.

Changes in the present value of the defined benefit obligation were as follows:

	2015	2014
Defined benefit obligation as at 1 January	473	803
Current service cost	10	17
Remeasurements of the defined benefit liability resulting from:		
- changes in financial assumptions	(18)	16
- changes in demographic assumptions	(1)	3
- experience adjustments	26	19
Past service cost	(10)	-
Interest cost	49	70
Benefits paid	(34)	(61)
Currency translation difference	(160)	(394)
Defined benefit obligation as at 31 December	335	473

21 Retirement benefit obligations (continued)

The amounts recognised in the consolidated income statement were as follows:

	2015	2014
Current service cost	10	17
Past service cost	(10)	-
Interest cost	49	70
Total	49	87

The principal actuarial assumptions used were as follows:

	31 December 2015	31 December 2014
Nominal discount rate	16.04%	16.04%
Nominal salary increase	0% in 2016, 12.9% - later	12.9%-15.0%
Nominal pension entitlement increase (indexation)	3.6%	3.6%
Long-term inflation	5.0%	5.0%

Assumptions about mortality are based on the publicly available mortality tables for city population of the respective regions of Ukraine (depending on the location of Group's subsidiaries) for 2012 and are consistent with prior year.

The sensitivity of the defined benefit obligation to changes in the principal assumptions is presented below:

	2015	2014
Nominal discount rate increase / decrease by 1 pp	(23) / 26	(35) / 40
Nominal salary increase / decrease by 1 pp	8 / (8)	11 / (12)
Nominal pension entitlement (indexation) increase / decrease by 1 pp	7 / (7)	12 / (11)
Inflation increase / decrease by 1 pp	8 / (9)	10 / (12)

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

As at 31 December 2015, the weighted average maturity of the Group's defined benefit obligations is 7.9 years and it varies across different Group's subsidiaries from 6 to 9.5 years (31 December 2014: 9.3 years, varying from 6 to 12 years). Payments in respect of defined benefit obligations expected to be made during the year ending 31 December 2016 are USD 38 million.

22 Other non-current liabilities

	31 December 2015	31 December 2014
Asset retirement obligations	74	45
Long-term advances received from related parties (Note 29)	15	-
Tax liabilities under moratorium (Note 30)	8	12
Other non-current liabilities	6	10
Total other non-current liabilities	103	67

23 Trade and other payables

	31 December 2015	31 December 2014
Trade payables and payables on sales made on commission	984	996
Dividends payable to shareholders of Metinvest B.V.	88	88
Dividends payable to non-controlling shareholders of Company's subsidiaries	2	3
Payables for acquired property, plant and equipment and other intangible assets	54	95
Other financial liabilities	46	37
Total financial liabilities	1,174	1,219
Prepayments received	101	114
Accruals for employees' unused vacations and other payments to employees	51	67
Income tax payable	19	9
Other taxes payable	45	73
Wages and salaries payable	17	20
Other allowances	19	16
Total trade and other payables	1,426	1,518

24 Expenses by nature

	2015	2014
Raw materials including change in finished goods and work in progress	1,476	2,016
Goods for resale	1,574	1,935
Energy materials including gas, electricity and fuel	1,005	1,593
Wages and salaries	507	787
Transportation services	957	1,074
Repairs and maintenance expenses	200	296
Pension and social security costs	111	220
Pension costs – defined benefit obligations (Note 21)	-	17
Depreciation and amortisation	615	850
Impairment and devaluation of property, plant and equipment and other intangible assets (Notes 9 and 10)	364	315
Taxes and duties	84	149
Services and other costs	325	338
Total operating expenses	7,218	9,590
Classified in the income statement as		
- cost of sales	6,087	8,240
- distribution costs	920	1,063
- general and administrative expenses	211	287
Total operating expenses	7,218	9,590

Raw materials include externally purchased coke and coal, iron ore, scrap metal, ferroalloys, ancillary and other materials and cost of their transportation.

Unallocated fixed production costs incurred at the Group's subsidiaries during the months of operations at levels substantially below normal capacity are not included in the cost of inventories, are expensed in the profit or loss and presented within cost of sales according to their nature.

24 Expenses by nature (continued)

Auditor's fees. The following fees were expensed in the income statement in the reporting period:

	2015	2014
Audit of the financial statements (including audit fee of the signing firm of USD 0.1 million)	2	2
Total	2	2

25 Other operating (expense) / income, net

Other operating income and expenses for the year ended 31 December were as follows:

	2015	2014
Impairment of trade and other receivables (Note 14)	(292)	(60)
Impairment of goodwill (Note 8)	(74)	(102)
VAT on sales below cost	(27)	(8)
Maintenance of social infrastructure	(12)	(22)
Sponsorship and other Charity and social payments	(17)	(39)
Impairment of share in Black Iron (Cyprus) Limited (Note 11)	(4)	-
Operating foreign exchange gains less losses, net	124	391
Gain on disposal of property, plant and equipment, net	8	8
Other income / (expense), net	(6)	(38)
Total other operating (expense) / income, net	(300)	130

26 Finance income

Finance income for the year ended 31 December was as follows:

	2015	2014
Interest income:		
- loans issued	20	20
- bank deposits	3	3
- imputed interest on other financial instruments	3	-
Other finance income	-	2
Total finance income	26	25

The majority of finance income relates to term deposits and long term loans issued to related parties.

27 Finance costs

Finance costs for the year ended 31 December were as follows:

	2015	2014
Net foreign exchange loss	372	593
Interest expense		
- borrowings	86	100
- bonds	113	118
- seller's notes	6	8
- imputed interest on seller's notes	3	10
Interest cost on retirement benefit obligations	49	70
Other finance costs	6	3
Total finance costs	635	902

Net foreign exchange losses arise on intragroup loans and dividends payable between the entities with different functional currencies.

28 Income tax

Income tax for the year ended 31 December was as follows:

	2015	2014
Current tax	28	198
Deferred tax	(189)	13
Income tax (benefit) / expense	(161)	211

The Group is subject to taxation in several tax jurisdictions, depending on the residence of its subsidiaries. In 2015 Ukrainian corporate income tax was levied on taxable income less allowable expenses at the rate of 18% (2014: 18%). In 2015, the tax rate for Swiss operations was 10% (2014: 10%) and for European companies tax rate in 2015 varied from 10% to 34% (2014: varied from 10% to 31%). The tax rate for US operations was 35% (2014: 35%).

Reconciliation between the expected and the actual taxation charge is provided below.

	2015	2014
IFRS profit / (loss) before tax	(1,164)	370
Tax calculated at domestic tax rates applicable to profits in the respective countries	(340)	(10)
Tax effect of items not deductible or assessable for taxation purposes:		
- impairment of non-current assets at UCC (Notes 8, 9, 10)	144	36
- impairment of trade and other receivables	22	-
- other non-deductible expenses	49	78
- non-taxable income	(10)	(14)
Write-down / (reversal) of write-down of deferred tax assets, net	(26)	168
Indexation of tax base of PPE in Ukraine	-	(51)
Effect of other changes in estimates regarding realisability and timing of realisation of deferred tax balances	-	4
Income tax (benefit) / expense	(161)	211

The weighted average applicable tax rate was 29% in 2015 (2014: -2.7%). Variation in weighted average tax rate is mostly due to variation in profitability of Group's subsidiaries in Ukraine some of which are profitable and some are loss making.

28 Income tax (continued)

Differences between IFRS and Ukrainian and other countries' statutory taxation regulations give rise to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their tax bases.

	1 January 2015	Credited/ (charged) to income statement	Credited/ (charged) to other compre- hensive income	Currency translation difference	31 December 2015
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	105	(73)	-	(11)	21
Long-term receivables	-	1	-	-	1
Inventory valuation	18	(9)	-	(5)	4
Trade and other accounts receivable	-	13	-	-	13
Accrued expenses	35	(27)	-	(1)	7
Tax losses carried forward	103	69	-	(36)	136
Retirement benefit obligations	82	2	1	(28)	57
Other	3	38	-	6	47
Gross deferred tax asset	346	14	1	(75)	286
Less offsetting with deferred tax liabilities	(257)	28	(2)	50	(181)
Recognised deferred tax asset	89	42	(1)	(25)	105
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(703)	142	(162)	215	(508)
Inventory tax differences	(8)	-	-	1	(7)
Borrowings and long-term payables	(2)	2	-	-	-
Other	(48)	31	-	3	(14)
Gross deferred tax liability	(761)	175	(162)	219	(529)
Less offsetting with deferred tax assets	257	(28)	2	(50)	181
Recognised deferred tax liability	(504)	147	(160)	169	(348)

Deferred tax asset on unused tax losses not recognised as at 31 December 2015 comprised USD 48 million (31 December 2014: USD 144 million). There are no expiry dates on tax losses carried forward. Deferred income tax assets are recognised for tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable; future taxable profits are estimated using the cash flow forecasts used for impairment testing of non-current assets (Note 8).

28 Income tax (continued)

	1 January 2014	Credited/ (charged) to income statement	Credited/ (charged) to other compre- hensive income	Currency translation difference	31 December 2014
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	93	20	14	(22)	105
Long-term receivables	92	(47)	-	(45)	-
Inventory valuation	35	(8)	-	(9)	18
Trade and other accounts receivable	8	(3)	-	(5)	-
Accrued expenses	75	(36)	-	(4)	35
Tax losses carried forward	297	(91)	-	(103)	103
Retirement benefit obligations	128	10	7	(63)	82
Prepayments received	3	(3)	-	-	-
Other differences	24	2	(1)	(22)	3
Gross deferred tax asset	755	(156)	20	(273)	346
Less offsetting with deferred tax liabilities	(529)	90	(9)	191	(257)
Recognised deferred tax asset	226	(66)	11	(82)	89
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(588)	135	(535)	285	(703)
Advances paid	(3)	3	-	-	-
Inventory tax differences	(7)	(2)	-	1	(8)
Borrowings and long-term payables	(92)	45	-	45	(2)
Other differences	(31)	(38)	1	20	(48)
Gross deferred tax liability	(721)	143	(534)	351	(761)
Less offsetting with deferred tax assets	529	(90)	9	(191)	257
Recognised deferred tax liability	(192)	53	(525)	160	(504)

28 Income tax (continued)

The tax charge relating to components of other comprehensive income is as follows:

	2015			2014		
	Before tax	Deferred tax charge	After tax	Before tax	Deferred tax charge	After tax
Revaluation of property, plant and equipment	886	(162)	724	2,902	(521)	2,381
Remeasurement of retirement benefit obligation	(7)	1	(6)	(38)	7	(31)
Other comprehensive income	879	(161)	718	2,864	(514)	2,350

In the context of the Group's current structure, tax losses and current tax assets of different Group companies may not be offset against current tax liabilities and taxable profits of other Group companies and, accordingly, taxes may accrue even where there is a consolidated tax loss. Deferred tax assets and liabilities are offset only when they relate to the same taxable entity and the entity has a legally enforceable right to set off current tax assets against current tax liabilities.

Revisions were introduced to the Tax Code of Ukraine from 1 January 2015. Further revisions were introduced to the Tax Code from 1 January 2016 (Note 35). These changes were considered to be substantially enacted with respect of calculation of deferred taxes as at 31 December 2014 and 31 December 2015, respectively.

29 Balances and transactions with related parties

For the purposes of these IFRS consolidated financial statements, parties are considered to be related if one party has the ability to control the other party, is under common control, or can exercise significant influence over the other party in making financial and operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

As at 31 December 2015 and 2014 significant balances outstanding with related parties are detailed below:

31 December 2015						31 December 2014				
SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group		SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group
ASSETS										
Non-current trade and other receivables, including:	-	-	-	14	-	-	-	98	20	-
Long-term loans issued	-	-	-	13	-	-	-	98	20	-
Other non-current assets	-	-	-	1	-	-	-	-	-	-
Current trade and other receivables, including:	-	50	274	122	77	1	27	274	92	74
Trade receivables and receivables on commission sales	-	50	172	35	2	-	27	270	34	4
Prepayments made	-	-	-	30	-	-	-	1	4	-
Loans issued	-	-	101	22	75	-	-	3	11	70
Other financial receivables (short-term, non-interest bearing)	-	-	1	35	-	1	-	-	43	-
Cash and cash equivalents	-	-	-	71	-	-	-	-	60	-
31 December 2015						31 December 2014				
SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group		SCM Limited	Asso- ciates	Joint ventures	SCM and related entities	SMART Group
LIABILITIES										
Other non-current liabilities	-	-	-	15	-	-	-	1	1	-
Non-bank borrowings	-	-	-	292	101	-	-	-	278	92
Trade and other payables, including:	40	58	410	137	48	41	35	396	159	60
Dividends payable	40	-	-	-	48	40	-	-	-	48
Trade payables and payables on sales made on commission	-	41	402	99	-	-	32	394	118	-
Prepayments received	-	17	6	8	-	-	3	2	29	-
Other financial liabilities	-	-	2	30	-	1	-	-	12	12

29 Balances and transactions with related parties (continued)

Significant transactions (excluding purchases) with related parties during 2015 and 2014 are detailed below:

2015	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Sales, including:	28	646	59	1	734
Steel	-	23	44	1	68
Scrap metal	-	46	3	-	49
Coke and coking coal	23	326	-	-	349
Iron ore	-	162	1	-	163
Other	5	89	11	-	105
Other operating income/(expense) net	-	-	(7)	-	(7)
Charity and social payments	-	-	(11)	-	(11)
Other	-	-	4	-	4
Finance income / (expenses), including:	-	11	(24)	(3)	(16)
Interest income - bank deposits	-	-	1	-	1
Interest income - other	-	11	3	6	20
Other finance income (expenses)	-	-	(28)	(9)	(37)
2014	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Sales, including:	49	684	68	39	840
Steel	9	20	56	10	95
Scrap metal	-	82	3	-	85
Coke and coking coal	29	260	2	4	295
Iron ore	-	271	1	-	272
Other	11	51	6	25	93
Other operating income / (expense) net	1	-	(15)	-	(14)
Charity and social payments	-	-	(29)	-	(29)
Other	1	-	14	-	15
Finance income / (expenses), including:	-	11	(14)	(1)	(4)
Interest income - bank deposits	-	-	1	-	1
Interest income - other	-	11	4	5	20
Other finance income (expenses)	-	-	(19)	(6)	(25)

29 Balances and transactions with related parties (continued)

The following is a summary of purchases from related parties in 2015 and 2014:

2015	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Purchases, including:	77	1,135	981	-	2,193
Metal products	1	1,119	7	-	1,127
Coke and coking coal	67	1	11	-	79
Raw materials and spare parts	6	12	51	-	69
Electricity	-	-	454	-	454
Gas	-	-	105	-	105
Fuel	-	-	13	-	13
Services	1	-	330	-	331
Other	2	3	10	-	15

2014	Associates	Joint ventures	SCM and related entities	SMART Group	Total
Purchases, including:	93	1,563	1,569	56	3,281
Metal products	10	1,528	12	-	1,550
Coke and coking coal	73	15	49	-	137
Raw materials and spare parts	7	18	139	55	219
Electricity	-	-	689	-	689
Gas	-	-	230	-	230
Fuel	-	-	38	-	38
Services	2	2	402	-	406
Other	1	-	10	1	12

Not included in the tables above are Group's transactions on purchase and further re-sale of iron ore, coal and steel products from or to joint ventures where the Group is acting as an agent and not as principal. Income and costs related to such transactions are presented net within other operating income / (expense). Group's net gain on such transactions was USD 3 million in 2015 (2014: USD 9 million).

In 2014 the Group has obtained USD 444 million of loans from the related parties (9.5% p.a. repayable in 2017) and repaid USD 75 million of it during the year.

In 2015, the remuneration of key management personnel of the Group comprised current salaries and related bonuses totalling USD 11.5 million (in 2014: USD 10.9 million).

As at 31 December 2015, key management holds the Group's bonds in the total amount of less than USD 1 million. Rights of these bondholders are not different from the rights of other bondholders.

30 Contingencies, commitments and operating risks

Tax legislation. Ukrainian tax, currency and customs legislation is subject to varying interpretations and changes, which can occur frequently. With effect from 1 January 2011, Ukraine adopted the new Tax Code of Ukraine. Applicable taxes include value-added tax, corporate income tax, customs duties and other taxes. As a result, there is significant uncertainty as to the implementation or interpretation of the new legislation and unclear or non-existent implementing regulations. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and State authorities. It is possible that transactions and activities that have not been challenged in the past may be challenged. As a result, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

The Group's operations are vertically integrated and a significant portion of the Group's iron ore, coke and coal production is used in the subsequent production operations. Because of non-explicit requirements of the applicable tax legislation, intercompany transactions may be assessed by Ukrainian tax authorities as non-market. Such transactions have not been challenged in the past by the tax authorities. However, it is possible with evolution of the interpretation of tax law in Ukraine and other jurisdictions plus changes in the approach of tax authorities, that such transactions could be challenged in the future.

The tax legislation had been expanded with the new transfer pricing rules effective from 1 September 2013 that are much more detailed than previous legislation and, to a certain extent, better aligned with the international transfer pricing principles. The new legislation allows the tax authorities to make transfer pricing adjustments and impose additional tax liabilities in respect of controlled transactions (transactions with related parties and some types of transactions with unrelated parties), if the transaction price is not arm's length and is not supported by relevant documentation. Since 1 January 2015, the transfer pricing rules were amended so that transactions between Ukrainian companies (irrespective whether they are related parties or not) ceased to be treated as controlled transactions.

Management believes it is taking appropriate measures to ensure compliance with the new transfer pricing legislation.

Bankruptcy proceedings. During 2006, bankruptcy proceedings were initiated against the Group's subsidiary JSC Krasnodonugol. The majority of the creditors' claims summarised by the external manager relate to the Group thus are eliminated on consolidation. As at 31 December 2015, the amount of the financial liabilities recorded in these financial statements is USD 15 million. USD 8 million are presented as non-current liability related to the bankruptcy moratorium (Note 22).

Legal proceedings. From time to time and in the normal course of business, claims against the Group are received. On the basis of its own estimates and both internal and external professional advice management is of the opinion that no material losses will be incurred in respect of claims in excess of provisions that have been made in these consolidated financial statements.

Environmental matters. The enforcement of environmental regulation in Ukraine is evolving and the enforcement posture of government authorities is continually being reconsidered. The Group periodically evaluates its obligations (including asset retirement obligations) under environmental regulations. As obligations are determined, they are recognised immediately. Potential liabilities, which might arise as a result of changes in existing regulations, civil litigation or legislation, cannot be estimated, but could be material. In the current enforcement climate under existing legislation, management believes that there are no significant liabilities for environmental damage.

Capital expenditure commitments. As at 31 December 2015, the Group has contractual capital expenditure commitments in respect of property, plant and equipment totalling USD 266 million (31 December 2014: USD 166 million). The Group has already allocated the necessary resources in respect of these commitments. Management of the Group believes that future net income and funding will be sufficient to cover this and any similar commitments.

Guarantees issued. As at 31 December 2015 and 2014, the Group has no outstanding guarantees to third parties.

Compliance with covenants. The Group breached its payment covenants and consequently as a result of this breach and the associated impact of cross default the vast majority of loans and borrowing were reclassified to current loans and borrowings. (Note 3).

Insurance. Metinvest maintains mandatory insurance policies against certain types of risk in accordance with Ukrainian law, including life and health insurance; third party liability insurance on hazardous industrial assets and in respect of cargo and motor vehicles; voluntary insurance cover for most of its production facilities and in respect of cargo and motor vehicles; "All Risk" insurance to cover property damage and provide business interruption coverage including "inter-dependency" coverage for its key production facilities in Ukraine; property damage and business interruption policies in respect of its European and US assets.

31 Financial risk management

The Group activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Financial risk management is carried out jointly by the internal control and risk management department and the central treasury department. These departments identify, evaluate and mitigate financial risks in close co-operation with the Group's operating units.

(a) Market risk.

(i) Foreign exchange risk.

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign operations is managed through (i) borrowings denominated in the relevant foreign currencies; (ii) different treasury operations like forward, swap and other.

Foreign exchange risk is managed centrally by the Group treasury. The Group treasury has set up a policy to manage foreign exchange risk. The Group treasury sets limits on the level of exposure by currency and maximum amount of exposure. The subsidiaries have not entered into transactions designed to hedge against these foreign currency risks without permission of the Group treasury.

At 31 December 2015, if the UAH had strengthened / weakened by 50% against the US dollar with all other variables held constant, post-tax profit for the year would have been USD 44 million higher / lower (2014: if the UAH strengthened / weakened by 50% against USD dollar, post tax profit for the year would have been USD 190 million higher / lower), mainly as a result of foreign exchange losses/gains on translation of US dollar denominated trade receivables and foreign exchange gains/losses on translation of US dollar denominated borrowings.

(ii) Price risk.

Metinvest's revenue is exposed to the market risk from price fluctuations related to the sale of its steel and iron ore products. The prices of the steel and iron ore products sold both within Ukraine and abroad are generally determined by market forces. These prices may be influenced by factors such as supply and demand, production costs (including the costs of raw material inputs) and global economic growth. The prices of the products that Metinvest sells to third parties are also affected by supply/demand and global/Ukrainian economic growth. Adverse changes in respect of any of these factors may reduce the revenue that Metinvest receives from the sale of its steel or mined products.

Metinvest's exposure to commodity price risk associated with the purchases is limited as the Group is vertically integrated and is self sufficient for iron ore and certain portion of coking coal requirements.

No financial instruments are exposed to price risk.

(iii) Cash flow and fair value interest rate risk.

The Group's income and operating cash flows are dependent on changes in market interest rates.

The Group's interest rate risk arises from long-term and short-term borrowings. Borrowings attracted at variable rates expose the Group to cash flow interest rate risk. Borrowings attracted at fixed rates expose the Group to fair value interest rate risk. The Group's policy is to maintain a balanced borrowings portfolio of fixed and floating rate instruments. As at 31 December 2015, 54% of the total borrowings were provided to the Group at fixed rates (31 December 2014: 49%). During 2015 and 2014, the Group's borrowings at variable rate were denominated in USD and EUR.

31 Financial risk management (continued)

Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of attracting new debt management uses its judgment to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

Refer to Note 14, 19 and 31 for information about maturity dates and effective interest rates of financial instruments.

At 31 December 2015, if interest rates on USD and EUR denominated borrowings had been by 1 pp higher / lower (2014: 1 pp) with all other variables held constant, post-tax profit for the year would have been USD 11 million lower / higher (2014: USD 13 million).

(b) Credit risk

Credit risk is managed on group basis. Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. When wholesale customers are independently rated, these ratings are used for credit quality assessment. Otherwise, if there is no independent rating, the Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilisation of credit limits is regularly monitored.

Financial assets, which potentially subject the Group to credit risk, consist principally of cash, loans, trade and other accounts receivable.

Cash is placed with major Ukrainian and international reputable financial institutions, which are considered at time of deposit to have minimal risk of default.

The Group has policies in place to ensure that provision of loans and sales of products/services are made to customers with an appropriate credit history. The Group's credit risk exposure is monitored and analysed on a case-by-case basis. Credit evaluations are performed for all customers requiring credit over a certain amount. The carrying amount of loans, trade and other accounts receivable, net of provision for impairment, represents the maximum amount exposed to credit risk. Concentration of credit risk mainly relates to CIS and European countries where the major customers are located.

The maximum exposure to credit risk at 31 December 2015 is USD 1,410 million (2014: USD 1,951 million) being the carrying value of long and short-term loans issued and receivables and cash. In order to reduce credit risk on receivables, the Group uses letters of credit, guarantees and trade insurance. The Group does not hold any collateral as security.

Management believes that credit risk is appropriately reflected in impairment allowances recognised against assets, and management does not expect any significant losses from non-performance by these counterparties.

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, the Group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Currently the Group is in the process of renegotiating its debts to achieve healthy liquidity position and maintain its ability to continue operating on a going concern basis (Note 3).

The Group treasury analyses the ageing of their assets and the maturity of their liabilities and plans their liquidity depending on the expected repayment of various instruments. In case of insufficient or excessive liquidity in individual entities, the Group relocates resources and funds among the entities of the Group to achieve optimal financing of the business needs of each entity.

31 Financial risk management (continued)

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Cash flows from borrowings were calculated using spot rates.

At 31 December 2015	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	1,099	-	-	-
Trade finance	228	-	-	-
Bonds	1,153	-	-	-
Non-bank borrowings	393	-	-	-
Seller's notes	93	-	-	-
Financial trade and other payables	1,174	-	-	-
Total	4,140	-	-	-

At 31 December 2014	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	750	326	184	8
Trade finance	416	-	-	-
Bonds	215	237	1,005	-
Non-bank borrowings	35	35	381	-
Seller's notes	92	-	-	-
Financial trade and other payables	1,219	-	-	-
Total	2,727	598	1,570	8

32 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital on the basis of a gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings and Seller's Notes (including current and non-current parts) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

The Group has yet to determine its optimum gearing ratio. Presently, all of its debt is either in default or matures within 1 year, but the Group is actively pursuing mechanisms to restructure its debt in order (Note 3) to extend the credit terms to match its long-term investment strategy.

	31 December 2015	31 December 2014
Total borrowings (Note 19)	2,858	3,146
Seller's notes (Note 20)	88	86
Less: cash and cash equivalents (Note 15)	(180)	(114)
Net debt	2,766	3,118
Total equity	4,024	6,762
Total capital	6,790	9,880
Gearing ratio	41%	32%

33 Fair values of financial instruments

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date, which is Level 1 of fair valuation hierarchy. The quoted market price used for financial assets held by the Group is the current bid price. This valuation technique is used for fair value disclosures of bonds issued.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses a variety of methods and makes assumptions that are based on market conditions existing at each balance sheet date. Estimated discounted cash flows, are used to determine fair value for seller's notes. Calculation is based on current interest rates for new instruments with similar credit risk, currency and remaining maturity; such estimation represents Level 3 of fair value hierarchy.

The carrying values less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments.

The estimated fair values of financial instruments have been determined by the Group using available market information, where it exists, and appropriate valuation methodologies. However, judgement is required to interpret market data to determine the estimated fair value. Ukraine continues to display some characteristics of an emerging market and economic conditions continue to limit the volume of activity in the financial markets. Market quotations may be outdated or reflect distress sale transactions and therefore not represent fair values of financial instruments. Management has used all available market information in estimating the fair value of financial instruments.

Financial assets carried at amortised cost. The fair value of floating rate instruments is normally their carrying amount. The estimated fair value of fixed interest rate instruments is based on estimated future cash flows expected to be received discounted at current interest rates for new instruments with similar credit risk and remaining maturity. Discount rates used depend on credit risk of the counterparty. Carrying amounts of financial assets carried at amortised cost approximate their fair values.

Financial liabilities carried at amortised cost. The fair value is based on quoted market prices, if available. The estimated fair value of fixed interest rate instruments with stated maturity, for which a quoted market price is not available, was estimated based on expected cash flows discounted at current interest rates for new instruments with similar credit risk and remaining maturity. The fair value of liabilities repayable on demand or after a notice period ("demandable liabilities") is estimated as the amount payable on demand, discounted from the first date that the amount could be required to be paid (Note 19, 20 and 22).

34 Reconciliation of classes of financial instruments with measurement categories

All of the Group's financial assets and financial liabilities are carried at amortised cost, except for investments in associates and joint ventures which are accounted for by the equity method of accounting.

35 Events after the balance sheet date

The developments after the balance sheet date which are related to the operating environment and the debt restructuring are disclosed in the Notes 2 and 3, respectively.

Revisions to the Tax Code of Ukraine were adopted from 1 January 2016. The main changes affecting the Group were as follows:

- Cancellation of advance payment of corporate profit tax which was based on taxable profit of previous period; and
- Decrease of the rate of unified social contribution tax accrued on employee benefits from standard rates of 37%-50% in previous years (depending on companies' accident risk level; lower rates could be applied in 2015 subject to companies' compliance with certain criteria) to 22% in 2016 onwards.

There were certain improvements in the global market prices for steel and iron ore in February-April 2016 compared to levels observed in December 2015 and January 2016.

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Metinvest B.V.

**U.S.\$944,515,000 7.750 per cent. Senior Notes due 2023 and
U.S.\$647,661,000 8.500 per cent. Senior Notes due 2026**

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