NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019

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 2019 and throughout the periods presented in these consolidated financial statements, Metinvest B.V. is owned 71.24% by SCM Limited (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 2019	2018	Segment	Country of incorporation
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	100.0%	100.0%	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.	100.0%	100.0%	Metallurgical	Italy
Metinvest Trametal 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	100.0%	100.0%	Metallurgical	Ukraine
PrJSC Avdiivka Coke Plant	100.0%	100.0%	Metallurgical	Ukraine
PrJSC Zaporizhcoke	56.9%	56.9%	Metallurgical	Ukraine
PrJSC Donetskcoke	93.8%	93.8%	Metallurgical	Ukraine
PrJSC Northern Iron Ore Enrichment Works	96.8%	96.8%	Mining	Ukraine
PrJSC Central Iron Ore Enrichment Works	100.0%	100.0%	Mining	Ukraine
PrJSC Ingulets Iron Ore Enrichment Works	100.0%	100.0%	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	99.9%	99.9%	Mining	Ukraine

As at 31 December 2019, the Group employed approximately 66 thousand people (31 December 2018: 66 thousand).

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 2019 were authorised for issue in accordance with a resolution of the Supervisory Board on 20 February 2020.

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 2019, 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

In 2018-2019, the Ukrainian economy has continued to demonstrate decent growth amid overall macroeconomic stabilisation supported by structural reforms, a rise in domestic investment, revival in household consumption due to an increase in real wages and improved consumer confidence, expansion in the agricultural sector, increase in construction activity and improved environment on external markets. GDP continued to grow at estimated 3.3% in 2019 and 2018.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

2 OPERATING ENVIRONMENT OF THE GROUP CONTINUED

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. The inflation rate in Ukraine slowed to 4.1% in 2019 (as compared to 9.8% in 2018), which allowed the NBU to start key policy rate cuts after a lengthy period of rate increases – from 18.0% effective 7 September 2018 to 13.5% effective 13 December 2019 and to 11.0% effective 31 January 2020. As of the date of this report the official NBU exchange rate of hryvnia against US dollar was UAH 24.53 per US$1, compared to UAH 23.69 per US$1 as at 31 December 2019 and UAH 27.69 per US$1 as at 31 December 2018.

In 2018-2019, the NBU has continued to further 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 gradually decreased from 50% to 30% starting from 1 March 2019 and was cancelled from 20 June 2019. Additionally, the settlement period for export-import transactions in foreign currency was steadily increased from 180 to 365 days starting from 16 May 2019. On 7 May 2019, the NBU increased the amount of the dividends payments allowed to Ukrainian companies to non-residents to EUR12 million per month and subsequently cancelled this limitation starting from 10 July 2019.

Ukraine has remained active on to international debt capital markets to manage external debt maturity profile. In 2018-2019, Ukraine not only issued several USD-denominated Eurobond tranches, but also issued its first EUR-denominated tranche in the last 15 years. Additionally, in May 2019, Clearstream, the international central securities depositary of Deutsche Börse Group, opened an account at the NBU, which eased access for international investors to local government bonds, improved sustainability of the government debt portfolio by increasing the share of hryvnia-denominated debt and led to foreign currency inflow into the country.

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 March of 2017, the Group determined that it had lost control over the operations of entities located on the temporarily non-controlled territory. Since March 2017, all of the remaining Metinvest Group's assets are operating without physical disruption. The Metinvest Group does not operate any assets on the temporarily non-controlled territory.

Metinvest's financial performance is largely dependent on the global price of and demand for steel and steel products, iron ore and coal. The prices of steel products are influenced by many factors, including global economic conditions, demand, worldwide production capacity, capacity utilisation rates, raw material costs, foreign exchange rates and improvements in steel making processes. In 2018-2019, steel and iron ore prices have experienced significant fluctuations.

The average benchmark price for hot-rolled coil (Metal Expert HRC CIS export FOB Black Sea) amounted to US$468 per tonne in 2019, down 16% comparing to the 2018 average varying from highest level in March 2018 of approximately US$613 per tonne to the lowest level in October 2019 of approximately US$388 per tonne with recovery by the year end to US$463 per tonne. Average coking coal price (HCC LV, FOB Australia) decreased on average by 14%, from US$209 per tonne in 2018 to US$178 per tonne in 2019. Negative trends in steel and coal market were compensated by a significant increase in average benchmark iron ore price (Platts 62% Fe CFR China) from US$69 per dry tonne in 2018 to US$93 per dry tonne in 2019.

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.

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.

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

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.

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).

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

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 2019	31 December 2018
USD/UAH	23.69	27.69
EUR/UAH	26.42	31.71

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. 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 historical 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 accumulated 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.

3 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 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.

Leased assets. The Group recognises assets and liabilities for all leases within term of more than 12 months, unless the underlying asset is of low value. A lessee recognises a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments.

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset (underlying asset) for a period of time in exchange for consideration. The Group determines the lease term as the non-cancellable period of a lease, together with periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option and periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

The right-of-use asset is initially recognised at the commencement date and measured at cost. The cost of right-of-use asset includes the amount of initial measurement of the lease liability and any lease payments made at or before the commencement date, less any lease incentive received. The lease liability is initially recognised at the commencement date and measured at present value of the lease payments that are not paid at that date.

The rights-of-use asset is subsequently measured at cost, less any accumulated depreciation and any accumulated impairment losses. The lease liability is subsequently measured using effective interest rate method. The carrying amount is remeasured to reflect any re-assessment or lease modifications, or to reflect revised in-substance fixed lease payments. A re-assessment of the lease liability takes place if the cash flows change based on the original terms and conditions of the lease. A lease modification is a change in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease. Described above changes to the lease liability amount should be adjusted in the right-of-use asset amount. Any changes that are required by original lease agreement terms, including changes impacted by reviewed market lease payment or extension of lease period, should be treated rather as reassessment than modification. Effective date of changes is the date on which both parties agree to lease agreement changes.

The Group depreciates the right-of-use asset on the straight line basis from the lease commencement date to the earlier of the end of useful life of the right-of-use asset or the end of the lease term. Depreciation should be recognised separately from interest on lease liabilities in the income statement.

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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

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 and ore 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.

Initial recognition of financial instruments. At initial recognition, the Group measures a financial asset or financial liability at its fair value plus or minus transaction costs that are directly attributable to the acquisition of the financial instruments if financial asset or financial liability are not accounted at fair value through profit or loss (FVPL). Transaction costs of financial assets or financial liabilities carried at FVPL are expensed in profit and loss in the consolidated income statement.

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 the transaction price and the fair value, which can be evidenced by a quoted price in an active market for an identical asset or liability or is based on a valuation technique that uses only data from observable markets.

Classification and subsequent measurement of financial assets. The Group classifies its financial assets in the following measurement categories:
– those to be subsequently measured at fair value (either through other comprehensive income (FVOCI), or through profit or loss); and
– those to be measured at amortised cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

The business model reflects how the Group manages the assets in order to generate cash flows – whether the Group's objective is: (i) solely to collect the contractual cash flows from the assets ("hold to collect contractual cash flows") or (ii) to collect both the contractual cash flows and the cash flows arising from the sale of assets ("hold to collect contractual cash flows and sell") or, if neither of (i) or (ii) is applicable, the financial assets are classified as part of "other" business model and measured at FVPL.

Business model is determined for a group of assets (on a portfolio level) based on all relevant evidence about the activities that the Group undertakes to achieve the objective set out for the portfolio available at the date of the assessment. Factors considered by the Group in determining the business model include the purpose and composition of a portfolio, past experience on how the cash flows for the respective assets were collected, how risks are assessed and managed and how the assets' performance is assessed.

Where the business model is to hold assets to collect contractual cash flows or to hold contractual cash flows and sell, the Group assesses whether the cash flows represent solely payments of principal and interest (SPPI). In making this assessment, the Group considers whether the contractual cash flows are consistent with a basic lending arrangement, i.e. interest includes only consideration for credit risk, time value of money, other basic lending risks and profit margin.

Where the contractual terms introduce exposure to risk or volatility that is inconsistent with a basic lending arrangement, the financial asset is classified and measured at FVPL. The SPPI assessment is performed on initial recognition of an asset and it is not subsequently reassessed.

Three measurement categories into which the Group classifies its debt financial assets are as follows:

1) Amortised cost: assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other operating income/(expenses). Impairment losses are presented in other operating income/(expenses) or as a separate line item in the consolidated income statement, if material.
2) Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses which are recognised in profit or loss. Interest income from these financial assets is included in profit or loss using the effective interest rate method. Impairment expenses are presented in other operating income/(expenses) or as a separate line item in the consolidated income statement, if material.

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

3) Fair value through profit or loss: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other operating income/(expenses) in the period in which it arises.

The Group subsequently measures all equity investments at fair value. Dividends from such investments continue to be recognised in profit or loss as other operating income when the Group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in other operating income/(expenses) in the consolidated income statement as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

Financial assets are included in current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as non-current assets.

Financial assets impairment – expected credit loss allowance. After the initial recognition, an expected credit loss allowance (ECL) is recognised for financial assets measured at amortised cost and at FVOCI, resulting in an immediate accounting loss in the consolidated income statement.

The measurement of expected credit losses reflects: (i) an unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes, (ii) time value of money, and (iii) all reasonable and supportable information that is available without undue cost and effort at the end of each reporting period about past events, current conditions and forecasts of future conditions.

Financial instruments measured at amortised cost and contract assets are presented in the consolidated balance sheet net of the allowance for expected credit losses.

Generally, the impairment methodology is a three stage model applied dependent on whether there has been a significant increase in credit risk of a financial instrument since the initial recognition.

If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses (Stage 1 of ECL model) considering that the maximum period of credit risk exposure cannot exceed financial instrument term to maturity. At each reporting date, the Group measures the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses if the credit risk on that financial instrument has increased significantly since initial recognition (Stage 2 of ECL model). If the Group determines that a financial asset is credit-impaired, the asset is transferred to Stage 3 and its ECL is measured as a lifetime ECL.

For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised at the time of the initial recognition of the receivables (Stage 2 of ECL model). For loans issued and bank accounts the Group applies general model for impairment based on changes in credit quality since initial recognition is applied. For loans that are repayable on demand, expected credit losses is equal to the effect of discounting the amount due on the loan.

As at reporting date the Group has three types of financial assets that are subject to expected credit loss model:
– cash and cash equivalents;
– trade receivables for sales of goods and services;
– loans issued.

The Group uses different approaches for analysis of expected credit losses arisen on the financial assets from related parties, significant customers and other customers.

For all significant debtors and related parties, the calculation of expected credit losses is carried out on an individual basis taking into account agreement terms, expected repayment period, internally assessed credit risks for significant debtors based on the financial performance and taking into account external credit rating, if available. ECL rate is calculated based on credit spread implicit in the average yield on bonds of similar credit risk companies and adjusted for maturity, risk free rate and liquidity premium.

For individually insignificant debtors the Group calculates expected credit losses using a provision matrix by grouping customers by country of location. This matrix is based on the Group's historical default rates over the expected life of the financial receivables and is adjusted for forward-looking estimates.

The Group does not recognise the expected credit loss allowance on cash and cash equivalents if it was determined that the effect of such loss allowance is not material as at the reporting date.

Reclassification of financial assets. Financial instruments are reclassified only when the business model for managing the portfolio as a whole changes. The reclassification has a prospective effect and takes place from the beginning of the first reporting period that follows after the change in the business model. The Group did not change its business model during the current and comparative period and did not make any reclassifications.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

Modification and derecognition of financial assets. The Group sometimes renegotiates or otherwise modifies the contractual terms of the financial assets. The Group assesses whether the modification of contractual cash flows is substantial considering, among other, the following factors: change in contractual terms that substantially affects the risk profile of the asset, significant change in interest rate, change in the currency denomination, new collateral or credit enhancement that significantly affects the credit risk associated with the asset or a significant extension of a loan when the borrower is not in financial difficulties.

If the modified terms are substantially different, the rights to cash flows from the original asset expire and the Group derecognises the original financial asset and recognises a new asset at its fair value. The date of modification is considered to be the date of initial recognition for subsequent impairment calculation purposes, including determining whether significant increase in credit risk has occurred. The Group also assesses whether the new loan or debt instrument meets the SPPI criterion. Any difference between the carrying amount of the original asset derecognised and fair value of the new substantially modified asset is recognised in profit or loss.

In a situation where the renegotiation was driven by financial difficulties of the counterparty and inability to make the originally agreed payments, the Group compares the original and revised expected cash flows to assess whether the risks and rewards of the asset are substantially different as a result of the contractual modification. If the risks and rewards do not change, the modified asset is not substantially different from the original asset and the modification does not result in derecognition. The Group recalculates the gross carrying amount by discounting the modified contractual cash flows by the original effective interest rate, and recognises a modification gain or loss in profit or loss.

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.

The write-off of financial asset also represents a derecognition event. Financial assets are written-off, in whole or in part, when the Group has no reasonable expectations of recovering these assets.

Classification and subsequent measurement of financial liabilities. All the financial liabilities are classified as subsequently measured at amortised cost, except for (i) derivatives, financial liabilities held for trading, contingent consideration recognised by an acquirer in a business combination and other financial liabilities designated as such at initial recognition, which are measured at FVPL, and (ii) financial guarantee contracts and loan commitments at a below-market interest rate.

Modification and derecognition of financial liabilities. Upon modification of financial liabilities the Group adjusts the amortised cost of a financial liability to reflect revised estimated contractual cash flows. For these purposes the Group recalculates the amortised cost of the financial liability as the present value of the estimated future contractual cash flows that are discounted at the financial instrument's original effective interest rate. Modifications of liabilities that do not result in extinguishment are accounted for as a change in estimate using a cumulative catch up method, with any gain or loss recognised in profit or loss, unless the economic substance of the difference in carrying values is attributed to a capital transaction with owners.

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. If an exchange of debt instruments or modification of terms is accounted for as an extinguishment, any costs or fees incurred are recognised as part of the gain or loss on the extinguishment.

Upon determination of whether modification or an extinguishment have occurred the Group performs analysis in order to determine if there was a substantial modification of the terms quantitative in nature of an existing financial liability or a part of it. The quantitative analysis represents performance of a 10 per cent test. No qualitative factors are considered.

If the exchange or modification 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. Modifications of liabilities that do not result in extinguishment are accounted for as a change in estimate using a cumulative catch up method, with any gain or loss recognised in profit or loss, unless the economic substance of the difference in carrying values is attributed to a capital transaction with owners.

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

Financial guarantees. Financial guarantees require the Group to make specified payments to reimburse the holder of the guarantee for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Financial guarantees are initially recognised at their fair value, which is normally evidenced by the amount of fees received. This amount is amortised on a straight line basis over the life of the guarantee. At the end of each reporting period, the guarantees are measured at the higher of (i) the amount of the loss allowance for the guaranteed exposure determined based on the expected loss model, and (ii) the remaining unamortised balance of the amount at initial recognition. In addition, an expected credit loss allowance is recognised for fees receivable that are recognised in the consolidated balance sheet as an asset.

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 most likely 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.

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.

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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

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.

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 if it is probable that some outflow of resources will be needed to settle the class of obligations as a whole.

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 (or as) the Group satisfies a performance obligation by transferring a promised good or service to a customer and the customer obtains ability to direct the use of and substantially all of the remaining benefits from the asset. For each performance obligation identified, the Group determines at contract inception whether it satisfies the performance obligation over time or at a point in time.

For each performance obligation satisfied over time, the Group recognises revenue over time by measuring the progress towards complete satisfaction of that performance obligation proportionally to the services provision period. If a performance obligation is not satisfied over time, the Group satisfies the performance obligation at a point in time at which a customer obtains control of a promised asset.

When another party is involved in providing goods or services to a customer, the Group determines whether the nature of its promise is a performance obligation to provide the specified goods or services itself (acting as a principal) or to arrange for those goods or services to be provided by the other party (acting as an agent). When the Group satisfies a performance obligation as a principal, revenue is recognised in the gross amount of consideration to which it expects to be entitled in exchange for the specified good or service transferred, when as an agent – the Group recognises revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party.

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

(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 control over 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 control 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.

3 BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES CONTINUED

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 sales are not treated as gross revenue generated by the Group and accordingly such sales and purchases are presented on a net basis with any gain or loss presented in revenue. 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.

The Group provides freight services to the customers as part of standard products sales contract. Management considers that freight services should be treated as separate performance obligations and should be recognised over the transportation period.

(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 revenue.

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.

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. In 2019, the Group changed presentation of Income Statement starting to present expenses by their nature, not by function. This presentation provides more relevant information about business activity of the Group and diminishes judgement about functional classification of operating expenses. The new presentation is more consistent with how management analyses the performance of the Group.

Cost of sales, distribution costs, general and administrative expenses and other operating income/(expenses) for the year ended 31 December 2018, of US$9,093 million, US$885 million, US$226 million and US$120 million, respectively, were presented as Net operating costs in amount of US$10,246 million excluding impairment of property, plant and equipment of US$5 million and impairment of financial assets of US$73 million which were shown separately. The breakdown of expenses disclosed in Note 23 remains similar to the one presented in 2018 annual financial statements.

Where necessary, corresponding figures have been adjusted to conform to changes in the presentation in the current year.

Management excluded sales of coal produced by the third parties from intersegment mining sales within the Note 7 to allow the users to better understand the segments results and improve comparability between them. This resulted in a decrease of mining segment sales to other segments in comparative information for 2018 financial year by US$628 million.

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 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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS IN APPLYING ACCOUNTING POLICIES CONTINUED

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.

The most recent detailed calculations of goodwill impairment for Metallurgical and Mining segments were performed as of 31 December 2019, as disclosed in Note 8.

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, plan 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).

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.

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.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS IN APPLYING ACCOUNTING POLICIES CONTINUED

Impairment of trade and other accounts receivable. During 2015 and 2016, the Group recognised full impairment of trade receivables from some of its key customers in the total amount of US$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 customers. 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.

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 18). The expected credit loss allowance was recognised in respect of balances due from related parties as disclosed in Note 13 of 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 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 20.

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 20.

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.

Loss of control over the assets located on the temporarily non-controlled territory. In March 2017, 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.

Operations of the entities located on the non-controlled territory is 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 they 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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS IN APPLYING ACCOUNTING POLICIES CONTINUED

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 US$13 million (before the impairment) 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 US$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.

(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 and therefore no accumulated CTR on those entities is reclassified to profit and loss (which would be the case if it is determined that operations lost represent a disposal of foreign operations).

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 US$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.

(iii) Impairment of property, plant and equipment located on the temporarily non-controlled territory. The Group still holds the legal title over assets located on the temporarily non-controlled territory 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. Therefore, management has determined that the loss of control over the physical assets does not require the derecognition of these assets.

As such, management of the Group has performed an impairment assessment of the respective property, plant and equipment and determined that the recoverable amount of these assets is zero, thus recognising US$205 million as decrease of previously recognised revaluation in Other Comprehensive Income and US$228 million as impairment charge in profit and loss for the year ended 31 December 2017. Would the judgement be made that the assets are derecognised, the whole amount of US$433 million of decrease of carrying value of property, plant and equipment would need to be charged as loss on disposal in profit and loss. Additionally, the remaining revaluation reserve related to these assets in the amount of US$330 million (remained upon translation to presentation currency) would need to be transferred to retained earnings.

5 ADOPTION OF NEW OR REVISED STANDARDS AND INTERPRETATIONS

Adoption of IFRS 16 Leases. The adoption of IFRS 16 Leases from 1 January 2019 resulted in changes in accounting policies and adjustments to the amounts recognised in the annual financial statements. The Group applied the new rules using a modified retrospective approach from 1 January 2019, which means that the cumulative impact of the adoption was recognised in retained earnings as at 1 January 2019 and that comparatives were not restated.

IMPACT ON THE FINANCIAL INFORMATION

As a result of the changes in the Group's accounting policies, the following adjustments were recognised for each individual line item. Line items that were not affected by the changes have not been included.

Balance sheet (extract)	31 December 2018	IFRS 16 effect	1 January 2019
Non-current assets			
Property, plant and equipment	4,490	4	4,494
Non-current liabilities			
Loans and borrowings	2,194	2	2,196
Current liabilities			
Loans and borrowings	489	2	491

For leases previously classified as finance leases the Group recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application. As at 1 January 2019, carrying amount of finance lease asset transferred to the right-of-use asset is US$26 million. The measurement principles of IFRS 16 are only applied after that date.

The actual impact of the adoption of IFRS 16 is different from the preliminary calculation disclosed in 2018 financial statements as the Group reassessed terms of some of its arrangements and concluded that related payments should not have been capitalised as they do not meet criteria of IFRS 16.

6 NEW ACCOUNTING PRONOUNCEMENTS

The following standards and interpretations apply for the first time to financial reporting periods commencing on or after 1 January 2019:
- ***IFRS 16 Leases.*** Impact of adoption of this standard is disclosed in Note 5;
- ***IFRIC 23 Uncertainty over Income Tax Treatments***;
- ***Prepayment Features with Negative Compensation – Amendments to IFRS 9***;
- ***Annual Improvements to IFRS Standards 2015-2017 Cycle – amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23***;
- ***Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures***;
- ***Amendments to IAS 19 Plan Amendment, Curtailment or Settlement***.

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:
- ***Sale or Contribution of Assets between an Investor and its Associate or Joint Venture – Amendments to IFRS 10 and IAS 28*** (issued on 11 September 2014 and effective for annual periods beginning on or after a date to be determined by the IASB);
- ***Definition of a business – Amendments to IFRS 3*** (issued on 22 October 2018 and effective for acquisitions from the beginning of annual reporting period that starts on or after 1 January 2020);
- ***Interest Rate Benchmark Reform (amendments to IFRS 9, IAS 39 and IFRS 7)*** (issued on 26 September 2019, the amendments will be effective for annual periods beginning on or after January 1, 2020 and must be applied retrospectively. Early application is permitted).
- ***Amendments to the Conceptual Framework for Financial Reporting*** (issued on 29 March 2018 and effective for annual periods beginning on or after 1 January 2020);
- ***Definition of materiality – Amendments to IAS 1 and IAS 8*** (issued on 31 October 2018 and effective for annual periods beginning on or after 1 January 2020).

These have no material impact on the Group.

Other new or revised standards or interpretations that will become effective for annual periods starting on or after 1 January 2020 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 of iron ore 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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

7 SEGMENT INFORMATION CONTINUED

Segment information for the year ended 31 December 2019 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2019					
Sales – external	8,688	2,069	–	–	**10,757**
Sales to other segments	83	1,321	–	(1,404)	**–**
Total of the reportable segments' revenue	**8,771**	**3,390**	**–**	**(1,404)**	**10,757**
Timing of revenue recognition					
At a point in time	8,034	1,722	–	–	**9,756**
Over time	654	347	–	–	**1,001**
Total of the reportable segments' external revenue	**8,688**	**2,069**	**–**	**–**	**10,757**
Adjusted EBITDA	**(48)**	**1,117**	**(86)**	**63**	**1,046**
Share in EBITDA of joint ventures	(59)	226	–	–	**167**
Adjusted EBITDA including share in EBITDA of joint ventures	**(107)**	**1,343**	**(86)**	**63**	**1,213**
Reconciling items:					
Depreciation and amortisation	(365)	(327)	(12)	–	**(704)**
Impairment of PPE and other intangible assets	(39)	(45)	–	–	**(84)**
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					**(81)**
Finance income					**253**
Finance costs					**(276)**
Foreign exchange gains less losses, net					**57**
Other					**10**
Profit before income tax					**388**

	Metallurgical	Mining	Corporate	Total
Capital expenditure	519	510	26	**1,055**
Significant non-cash items included into adjusted EBITDA:				
impairment of trade and other receivables	65	12	1	**78**
write-off of trade and other payables	(23)	–	–	**(23)**

Segment information for the year ended 31 December 2018 was as follows:

	Metallurgical	Mining	Corporate	Eliminations	Total
2018					
Sales – external	10,064	1,816	–	–	**11,880**
Sales to other segments	70	1,303	–	(1,373)	**–**
Total of the reportable segments' revenue	**10,134**	**3,119**	**–**	**(1,373)**	**11,880**
Timing of revenue recognition					
At a point in time	9,411	1,623	–	–	**11,034**
Over time	653	193	–	–	**846**
Total of the reportable segments' external revenue	**10,064**	**1,816**	**–**	**–**	**11,880**
Adjusted EBITDA	**1,135**	**1,091**	**(96)**	**50**	**2,180**
Share in EBITDA of joint ventures	156	177	–	–	**333**
Adjusted EBITDA including share in EBITDA of joint ventures	**1,291**	**1,268**	**(96)**	**50**	**2,513**
Reconciling items:					
Depreciation and amortisation	(292)	(250)	(8)	–	**(550)**
Impairment of PPE and other intangible assets	(3)	(2)	–	–	**(5)**
Share of result of associates and depreciation, amortisation, tax and finance income and costs in joint ventures					**(160)**
Finance income					**68**
Finance costs					**(334)**
Foreign exchange gains less losses, net					**(70)**
Other					**1**
Profit before income tax					**1,463**

	Metallurgical	Mining	Corporate	Total
Capital expenditure	513	366	19	**898**
Significant non-cash items included into adjusted EBITDA:				
impairment of trade and other receivables	61	10	2	**73**
write-off of trade and other payables	(33)	–	–	**(33)**

ALL AMOUNTS IN MILLIONS OF US DOLLARS

7 SEGMENT INFORMATION CONTINUED

Analysis of revenue by category:

	Metallurgical	Mining	Total
2019			
Sales of own products	**5,535**	**1,988**	**7,523**
Steel products	4,772	–	4,772
Iron ore products	–	1,831	1,831
Coal and coke	548	145	693
Other	215	12	227
Resale of purchased goods	**3,153**	**81**	**3,234**
Steel products	2,751	–	2,751
Coal and coke	234	67	301
Other	168	14	182
Total	**8,688**	**2,069**	**10,757**

Analysis of revenue by category:

	Metallurgical	Mining	Total
2018			
Sales of own products	**6,222**	**1,601**	**7,823**
Steel products	5,331	–	5,331
Iron ore products	–	1,508	1,508
Coal and coke	653	84	737
Other	238	9	247
Resale of purchased goods	**3,842**	**215**	**4,057**
Steel products	3,475	–	3,475
Coal and coke	174	196	370
Other	193	19	212
Total	**10,064**	**1,816**	**11,880**

The Group's two business segments operate in six main geographical areas. Revenue by location of customers is presented below:

	Metallurgical	Mining	Total
2019			
Ukraine	2,370	786	**3,156**
Rest of Europe	2,846	763	**3,609**
Middle East and Northern Africa	1,645	11	**1,656**
South Eastern Asia	463	478	**941**
Commonwealth of Independent States (CIS)	825	–	**825**
North America	450	14	**464**
Other countries	89	17	**106**
Total	**8,688**	**2,069**	**10,757**

	Metallurgical	Mining	Total
2018			
Ukraine	2,570	770	**3,340**
Rest of Europe	3,200	791	**3,991**
Middle East and Northern Africa	2,195	–	**2,195**
South Eastern Asia	465	236	**701**
Commonwealth of Independent States (CIS)	758	–	**758**
North America	754	3	**757**
Other countries	122	16	**138**
Total	**10,064**	**1,816**	**11,880**

As at 31 December 2019 and 31 December 2018, 95% and 92%, respectively, of the Group's non-current assets, other than financial instruments and deferred tax assets, were located in Ukraine.

As at 31 December 2019 and 31 December 2018, number of employees attributable to Metallurgical segment amounted to 47 thousand, Mining segment – 19 thousand.

Average number of employees in 2019 approximated 63 thousand, in 2018 – 61 thousand. In 2019, 2 employees were hired in the Netherlands (2018: 1 employee).

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

8 GOODWILL

The movements of goodwill were as follows:

	2019	2018
As at 1 January		
Original amount	1,284	1,315
Accumulated impairment	(690)	(712)
Net carrying amount	**594**	**603**
Acquisition	–	16
Currency translation differences	7	(25)
As at 31 December		
Original amount	1,278	1,284
Accumulated impairment	(677)	(690)
Net carrying amount	**601**	**594**

Management allocates and monitors goodwill at the following groups of cash generating units (CGUs) which represent operating segments:

	31 December 2019	31 December 2018
Metallurgical	545	546
Mining	56	48
Total	**601**	**594**

During the year ended 31 December 2018 the Group has acquired 100% interest in Unisteel LLC.

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.

As of 31 December 2017 and 31 December 2018, management has concluded that the likelihood of recoverable amount being less than the carrying amount of the unit was remote. As such, the relevant goodwill impairment testing details were carried forward from 2016.

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:

	2019	2016
Metallurgical		
Post-tax discount rate (USD)	12.32%	11.67%
EBITDA margins (based on FCA prices)	2020: 10%, 2021: 14%, further – from 15% to 17%	2018: 20%, 2019: 20%, further – from 14% to 20%
Growth rate in perpetual period	3%	3%
Mining		
Post-tax discount rate (USD)	12.57%	12.07%
EBITDA margins (based on FCA prices)	2020: 38%, 2021: 29%, further – from 32% to 34%	2018: 29%, 2019: 20%, further – from 27% to 35%
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 cost of equity 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 US$79 per tonne in 2020, US$69 per tonne in 2021 and recover at 2% p.a. to US$82 per tonne in 2029 (31 December 2016: range from US$48 per tonne to US$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, pelletising 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) are US$160 per tonne in 2020, US$157 per tonne in 2021 and grow at 2% p.a. on average thereafter (31 December 2016: start from US$161 per tonne in 2017, US$124 per tonne in 2018 and grow at 2% 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 US$500 per tonne in 2020 with gradual increase by 5% till 2023 and further by 2% to US$642 per tonne in 2029 (31 December 2016: US$394 per tonne in 2017 and 2018, US$410 per tonne in 2019, US$430 per tonne in 2020 with gradual increase by 2% to US$476 per tonne in 2026). Forecasted prices for other steel products are based on historic discounts or premiums to prices for hot-rolled coils.

Management assumed that forecasted sales volume of the mines will remain at the current level of 27.6 million tonnes while sales volumes of metallurgical plants at the current level of 8.8 million tonnes.

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 26.5 UAH for US$1 in 2020 with gradual increase to 37.7 UAH for US$1 in 2029 was used in the impairment test for all CGUs as of 31 December 2019 (31 December 2016: from 27 UAH for US$1 in 2017 to 31.7 UAH for US$1 in 2026).

Metallurgical segment. As at 31 December 2019, the Metallurgical segment's recoverable amount is US$6,368 million and exceeds its total carrying amount by US$1,059 million (31 December 2016: recoverable amount of US$5,283 million, exceeded carrying amount by US$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 2019	31 December 2016
Volumes of production/sales		
Decrease in all the periods by 6.9%	Recoverable amount equals carrying amount	–
Decrease in all the periods by 7.4%	Impairment of US$87 million required	Recoverable amount equals carrying amount
Decrease in all the periods by 9.0%	Impairment of US$327 million required	Impairment of US$229 million required
Steel prices		
Decrease in all the periods by 1.6%	Recoverable amount equals carrying amount	–
Decrease in all the periods by 1.8%	Impairment of US$148 million required	Recoverable amount equals carrying amount
Decrease in all the periods by 2.6%	Impairment of US$657 million required	Impairment of US$462 million required
Decrease in all the periods by 4.0%	Impairment of US$1,582 million required	Impairment of US$1,302 million required
Iron ore prices		
Increase in all the periods by 12.8%	Recoverable amount equals carrying amount	–
Increase in all the periods by 14.6%	Impairment of US$142 million required	Recoverable amount equals carrying amount
Increase in all the periods by 17.0%	Impairment of US$342 million required	Impairment of US$183 million required
Coal prices		
Increase in all the periods by 10.9%	Recoverable amount equals carrying amount	–
Increase in all the periods by 11.1%	Impairment of US$19 million required	Recoverable amount equals carrying amount
Increase in all the periods by 15.0%	Impairment of US$395 million required	Impairment of US$382 million required
UAH/USD exchange rates		
Increase in all the periods by UAH 1	Recoverable amount increases by US$471 million	Recoverable amount increases by US$423 million
Discount rates		
Increase in all the periods by 4.4 pp	Recoverable amount equals carrying amount	–
Increase in all the periods by 5.3 pp	Impairment of US$247 million required	Recoverable amount equals carrying amount
Increase in all the periods by 7.0 pp	Impairment of US$651 million required	Impairment of US$308 million required
Growth rate in perpetual period	No reasonable changes would lead to impairment	No reasonable changes would lead to impairment

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

8 GOODWILL CONTINUED

Mining segment. As at 31 December 2019, the recoverable amount of the Mining segment is US$3,832 million (31 December 2016: US$2,036 million) and exceeds its total carrying amount by US$1,297 million (31 December 2016: US$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 2019	31 December 2016
Iron ore prices		
Decrease in all the periods by 3.3%	–	Recoverable amount equals carrying amount
Decrease in all the periods by 5.0%	–	Impairment of US$231 million required
Decrease in all the periods by 7.2%	Recoverable amount equals carrying amount	–
Decrease in all the periods by 10.0%	Impairment of US$494 million required	Impairment of US$915 million required
UAH/USD exchange rates		
Increase in all the periods by UAH 1	Recoverable amount increases by US$165 million	Recoverable amount increases by US$129 million
Discount rates		
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 US$291 million required
Increase in all the periods by 6.5 pp	Recoverable amount equals carrying amount	–
Increase in all the periods by 7.5 pp	Impairment of US$121 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 2019, the recoverable amount of UCC is US$170 million (31 December 2018: US$144 million) and is equal to its carrying amount. The recoverable amount has been determined based on fair value less cost to sell estimations.

No additional net impairment or reversal of previous impairment was recognised in 2019.

The discount rate used for the impairment testing of UCC was 10.44% (31 December 2018: 10.58%).

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 2019	31 December 2018
Coal prices		
Decrease in all the periods by 3.0%	Impairment of US$119 million required	Impairment of US$114 million required
Cash costs		
Increase in all the periods by 3.0%	Impairment of US$97 million required	Impairment of US$93 million required
Discount rates		
Increase in all the periods by 1 pp	Impairment of US$7 million required	Impairment of US$6 million required

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 2018				
Cost	418	220	215	**853**
Accumulated amortisation and impairment	(418)	(132)	(183)	**(733)**
Net carrying amount	**–**	**88**	**32**	**120**
Additions	–	–	13	**13**
Currency translation differences	–	2	–	**2**
Amortisation	–	(5)	(11)	**(16)**
As at 31 December 2018				
Cost	418	223	228	**869**
Accumulated amortisation and impairment	(418)	(138)	(194)	**(750)**
Net carrying amount	**–**	**85**	**34**	**119**
Additions	–	–	17	**17**
Currency translation differences	–	14	5	**19**
Amortisation	–	(3)	(12)	**(15)**
As at 31 December 2019				
Cost	418	260	258	**936**
Accumulated amortisation and impairment	(418)	(164)	(214)	**(796)**
Net carrying amount	**–**	**96**	**44**	**140**

ALL AMOUNTS IN MILLIONS OF US DOLLARS

9 OTHER INTANGIBLE ASSETS CONTINUED

As at 31 December 2019, the iron ore license is being amortised using the units-of-production method over its remaining useful life of approximately 29 years. The Group revised useful life comparing to 31 December 2018 as a result of reassessment of iron ore reserves.

The coal reserves were acquired as part of the acquisition of UCC in 2009. As at 31 December 2019 and 31 December 2018, 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 2018	**55**	**1,837**	**3,302**	**60**	**648**	**5,902**
Acquisition of subsidiaries	–	2	8	–	–	**10**
Additions	–	–	–	–	885	**885**
Transfers	2	56	446	23	(527)	**–**
Disposals	–	(6)	(41)	(2)	(1)	**(50)**
Reclassification to inventory	–	–	–	–	(21)	**(21)**
Currency translation differences	(1)	15	26	3	2	**45**
As at 31 December 2018	**56**	**1,904**	**3,741**	**84**	**986**	**6,771**
Change in accounting policy (Note 5)	–	2	1	1	–	**4**
As at 1 January 2019	**56**	**1,906**	**3,742**	**85**	**986**	**6,775**
Additions	–	–	–	–	1,038	**1,038**
Transfers	6	215	766	27	(1,014)	**–**
Disposals	–	(12)	(48)	(2)	(2)	**(64)**
Elimination against accumulated depreciation upon revaluation	–	(371)	(1,106)	(23)	(5)	**(1,505)**
Revaluation surplus	3	337	803	1	(41)	**1,103**
Revaluation decreases that offset previous increases	(1)	(135)	(154)	–	(1)	**(291)**
Reclassification to inventory	–	–	–	–	(19)	**(19)**
Currency translation differences	(2)	285	553	11	176	**1,023**
As at 31 December 2019	**62**	**2,225**	**4,556**	**99**	**1,118**	**8,060**
Accumulated depreciation and impairment						
As at 1 January 2018	**–**	**(565)**	**(1,054)**	**(40)**	**(111)**	**(1,770)**
Charge for the year	–	(135)	(395)	(10)	–	**(540)**
Disposals	–	5	40	2	1	**48**
Transfers	–	9	(10)	1	–	**–**
Impairment	–	(1)	(5)	(2)	(2)	**(10)**
Currency translation differences	–	(1)	(2)	(2)	(4)	**(9)**
As at 31 December 2018	**–**	**(688)**	**(1,426)**	**(51)**	**(116)**	**(2,281)**
Charge for the year	–	(173)	(513)	(12)	–	**(698)**
Disposals	–	12	47	2	2	**63**
Transfers	–	1	(1)	–	–	**–**
Elimination against gross carrying amount upon revaluation	–	371	1,106	23	5	**1,505**
Impairment	–	(2)	(30)	(2)	(8)	**(42)**
Currency translation differences	–	(87)	(139)	(7)	(20)	**(253)**
As at 31 December 2019	**–**	**(566)**	**(956)**	**(47)**	**(137)**	**(1,706)**
Net book value as at						
31 December 2018	**56**	**1,216**	**2,315**	**33**	**870**	**4,490**
31 December 2019	**62**	**1,659**	**3,600**	**52**	**981**	**6,354**

As at 31 December 2019 and 2018, construction in progress balance includes prepayments for property, plant and equipment of US$62 million and US$84 million, respectively.

As at 31 December 2019, the Group has recognised right-of-use asset in the amount of US$57 million within Property, plant and equipment, mainly attributable to plant and machinery.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

10 PROPERTY, PLANT AND EQUIPMENT CONTINUED

During 2019 and 2018, 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 2019 and 2018.

Fair valuation of property, plant and equipment. As of 31 August 2019, due to further fluctuations 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 93% of total value of the Group's property, plant and equipment as of 31 December 2019.

The revaluation and impairment as at and for the year ended 31 December 2019 are recorded as follows:

	Recognised in profit and loss	Recognised in other comprehensive income	Total
Revaluation surplus	–	1,164	**1,164**
Revaluation decreases that offset previous increases in the carrying amount	–	(310)	**(310)**
Net effect of revaluation	**–**	**854**	**854**
Assets written down during the year	(84)	–	**(84)**
Total	**(84)**	**854**	**770**

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 2019 was not materially different from their cumulative carrying amount of US$264 million (4% of total value of the Group's property, plant and equipment as of 31 December 2019). No impairment indicators were noted in respect of these assets.

Also, UCC impairment test has been performed as at 31 December 2019 (Note 8). UCC represented 3% of total value of the Group's property, plant and equipment as of 31 December 2019.

During 2019, US$31 million of borrowing costs were capitalised as part of property, plant and equipment, capitalisation rate was 8% (2018: US$26 million, capitalisation rate was 9%).

As at 31 December 2019, US$75 million of property, plant and equipment were pledged as collateral for loans and borrowings (as at 31 December 2018: US$37 million).

11 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

The Group's investment in joint ventures and associates were as follows as at 31 December 2019 and 2018:

			2019		2018	
Name	Type of relationship	Segment	% of ownership	Carrying value	% of ownership	Carrying value
Zaporizhstal Group	Joint venture	Metallurgical	49.99%	823	49.91%	672
Southern Iron Ore Enrichment Works Group	Joint venture	Mining	45.87%	260	45.87%	199
Pokrovske coal business	Associate	Mining	24.77%	189	25.00%	153
IMU	Associate	Metallurgical	49.91%	5	49.91%	37
PrJSC Zaporizhvohnetryv	Associate	Metallurgical	45.39%	5	45.39%	5
PJSC Dniprovskiy Coke Plant	Associate	Metallurgical	49.37%	5	–	–
PrJSC Yuzkoks	Associate	Metallurgical	23.71%	14	–	–
Total				**1,301**		**1,066**

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.

SOUTHERN IRON ORE ENRICHMENT WORKS GROUP

Southern Iron Ore Enrichment Works Group 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.

During the year ended 31 December 2019, Southern Iron Ore Enrichment Works Group has declared dividends of US$124 million attributable to the Group (2018: US$413 million).

11 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES CONTINUED

ZAPORIZHSTAL GROUP

The investment in the Zaporizhstal Group is represented by the number of interests in the steel and mining businesses, the most significant being:

- 49.99% effective interest in JSC Zaporizhstal Integrated Iron & Steel Works ("Zaporizhstal"), 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;
- 24.27% effective interest in PrJSC Zaporizhya Iron Ore Plant, large iron ore mining enterprise in Ukraine which sells part of its iron ore output to Zaporizhstal; and
- 42.77% effective interest in PrJSC Zaporizhcoke and a 49.21% effective interest in PrJSC Zaporizhvohnetryv which are Group's subsidiary and associate respectively.

As at 31 December 2019 and 2018, Metinvest's investments in Zaporizhstal Group and Southern Iron Ore Enrichment Works Group 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 Zaporizhstal Group and Southern Iron Ore Enrichment Works Group.

POKROVSKE COAL BUSINESS

In July 2018, the Group has acquired 24.99% of the effective interest in several entities, the most significant of which are PJSC "Colliery Pokrovske" and "Enrichment Factory "Svyato-Varvarinskaya" LLC (the "Pokrovske coal business"). The acquired entities form a business of extraction of raw coal, its further enrichment and sale of coal concentrate. As of the date of acquisition, the investment was classified as an associate.

Purchase price of the stake acquired by Metinvest amounted to US$190 million, payable in instalments over the maximum period of 1.5 years together with relevant interest. The price and share in business were revised in July 2019 to US$185 million for 24.77% of ownership as a result of the finalisation of the purchase price allocation.

Identifiable assets and liabilities acquired are measured at their fair values at the acquisition date. The valuation of property, plant and equipment and identifiable intangible assets (mining license) was performed by an independent professional appraiser.

As most of the Pokrovske coal business 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 impacting the replacement cost used in measurement of depreciated replacement cost (Level 3).

The valuation of mining license acquired was performed based on the discounted cash flow model (Level 3).

The following table summarises key assumptions on which management has based its cash flow projections to undertake the valuation of identifiable assets as at acquisition date.

	2018
Post-tax discount rate (USD)	13.96%
EBITDA margins	64% in 2019, 58%-65% in 2020-2024, 45%-57% starting from 2025
Growth rate in perpetual period	1.90%
Coal prices forecast for 2019-2025	US$191 per tonne in 2019, US$160-169 in 2020-2024, starting from 2025 prices are adjusted for the level of inflation in the USA

The values assigned to the key assumptions represented management's assessment of future trends in the business and are based on both external and internal sources.

The discount rate reflects the current market assessment of the time value of money and risks specific to the Pokrovske coal business. The cost of equity has been determined using the Capital Asset Pricing Model based on observable inputs, inputs from third party financial analysts and Pokrovske coal business-specific inputs.

OPTION

In addition, the Group has obtained an option to purchase the remaining 75.01% (revised in July 2019 to 75.22%) from the other co-investors conditional on obtaining all relevant governmental and other consents. Management believes that this option does not represent a substantial voting right which may indicate the presence of control of Metinvest over the business.

As at acquisition date the Group has assessed the fair value of the option of US$130 million through Black-Scholes-Merton option pricing model (Level 3) and recognised it within other non-current assets at the date of acquisition.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

11 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES CONTINUED

When performing valuation using this method, the key estimates and judgments applied by the management, were as follows:

	31 December 2019	31 December 2018
Volatility of share prices	33%	40%
Time for execution of the option	1.6 years	2.6 years
Risk free rate	1.59%	2.46%
Fair value of the stake	713	614

The following table summarises key assumptions on which management has based its cash flow projections to undertake the valuation of fair value of the stake.

	31 December 2019	31 December 2018
Post-tax discount rate (USD)	12.41%	13.96%
EBITDA margins	approximately 50%	approximately 60%
Growth rate in perpetual period	3.00%	1.90%
Coal prices forecast for 2019-2025	US$160 per tonne in 2020, US$157-171 in 2021-2025, starting from 2026 prices are adjusted for the level of inflation in the USA	US$191 per tonne in 2019, US$160-169 in 2020-2024, starting from 2025 prices are adjusted for the level of inflation in the USA

The sensitivity of the option fair value to changes in the principal assumptions is presented below:

	31 December 2019	31 December 2018
Volatility increase/decrease by 1 pp	3/(3)	4/(4)
Fair value of the stake increase/decrease by US$10 million	6/(6)	6/(5)
Time to expiration increase/decrease by 1 month	3/(3)	3/(3)
Risk free rate increase/decrease by 1 pp	5/(5)	6/(5)

The above sensitivity analysis is based on a change in one assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

A reconciliation of movements in the fair value of the option for the year ended 31 December 2019 and 31 December 2018 is as follows:

	2019	2018
Fair value at 1 January	**130**	**–**
Purchases	–	130
Gains or losses recognised in profit or loss for the year	(8)	–
Fair value at 31 December	**122**	**130**

GUARANTEE

In exchange for the option obtained, Metinvest guaranteed settlement of acquisition related obligations and took responsibility of timely payment to the sellers of US$570 million with an interest of 8% per annum.

The fair value of financial guarantee issued at the origination date was considered to be equal to the fair value of option received in exchange for it. As at 31 December 2019, the management has concluded, that there has been no worsening of financial position of the co-investors.

The amount of guarantee is amortised on a straight line basis over the life of the guarantee.

The guarantee issued was recorded in the Group's balance sheet within the trade and other accounts payable and other non-current liabilities.

PRJSC YUZKOKS

In January 2019, the Group acquired 23.71% effective interest in PrJSC Yuzkoks, the Ukrainian producer of metallurgical coke, for the consideration of US$30 million. PrJSC Yuzkoks generated revenue of US$155 million and net loss of US$60 million in the period from February to December of 2019, as at 31 December 2019 total assets amounted to US$309 million.

PRJSC DNIPROVSKIY COKE PLANT

In August 2019, the Group secured additional long-term supplies of coke by acquiring 49.37% of PrJSC Dniprovskiy Coke Plant for a consideration of US$11 million. PrJSC Dniprovskiy Coke Plant generated revenue of US$49 million and net loss of US$10 million in the period from September to December of 2019, as at 31 December 2019 total assets amounted to US$544 million.

ALL AMOUNTS IN MILLIONS OF US DOLLARS

11 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES CONTINUED

Movements in the carrying amount of the Group investments in associates and joint ventures are presented below:

	2019		2018	
	Joint ventures	Associates	Joint ventures	Associates
Carrying amount at 1 January	**871**	**195**	**1,072**	**13**
Share of after tax results of joint ventures and associates	92	(6)	198	(25)
Share of other comprehensive income of joint ventures and associates	83	(39)	(1)	26
Acquisition of Pokrovske coal business	–	(5)	–	190
Acquisition of Dniprovskiy Coke Plant and Yuzkoks	–	41	–	–
Dividends declared	(124)	–	(413)	–
Currency translation difference	161	32	15	(9)
Carrying amount at 31 December	**1,083**	**218**	**871**	**195**

During 2019, Zaporizhstal 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 Group's share in revaluation result of property, plant and equipment of US$79 million was included within the 'Share of other comprehensive income of joint ventures' line above.

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 Zaporizhvohnetryv, Ukrainian producer of refractories, with revenue of US$101 million and net profit of US$2 million in 2019 (2018: revenue of US$88 million and net profit of US$4 million, respectively) and total assets of US$78 million as at 31 December 2019 (31 December 2018: US$60 million);
- Industrial-Metallurgical Union (IMU), entity which owns 4.5% interest in ArcelorMittal Kryvyi Rih, the largest integrated steel plant in Ukraine. Management has elected to present fair value gains and losses on this equity investment in other comprehensive income, as such there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. The Group recognised US$38 million of share of other comprehensive loss of IMU arising from remeasurement of an investment held by this associate.

The summarised financial information of the Group's material joint ventures and associates is presented below.

	Zaporizhstal Group		Southern Iron Ore Enrichment Works Group		Pokrovske coal business	
	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018
Balance sheet:						
Non-current assets	**1,323**	**947**	**584**	**419**	**1,974**	**1,712**
Cash and cash equivalents	8	17	4	8	17	22
Other current assets	1,473	1,597	265	228	284	309
Total current assets	**1,481**	**1,614**	**269**	**236**	**301**	**331**
Other non-current liabilities	145	101	110	65	324	301
Other non-current financial liabilities	20	13	–	–	4	4
Total non-current liabilities	**165**	**114**	**110**	**65**	**328**	**305**
Trade and other payables and provisions	1,081	1,160	176	157	111	92
Other current financial liabilities	111	110	–	–	1,515	1,423
Total current liabilities	**1,192**	**1,270**	**176**	**157**	**1,626**	**1,515**
Net assets	**1,447**	**1,177**	**567**	**433**	**321**	**223**

As at 31 December 2019, the temporary differences associated with interests in joint ventures for which deferred tax liabilities have not been recognised amounted to US$19 million (2018: US$18 million).

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

ALL AMOUNTS IN MILLIONS OF US DOLLARS

11 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES CONTINUED

	Zaporizhstal Group		Southern Iron Ore Enrichment Works Group		Pokrovske coal business	
	For the year ended 31 December 2019	For the year ended 31 December 2018	For the year ended 31 December 2019	For the year ended 31 December 2018	For the year ended 31 December 2019	For the 5 months ended 31 December 2018
Profit or loss for the year ended (selected items):						
Revenue	1,836	2,200	963	778	506	169
Depreciation and amortisation	(44)	(78)	(48)	(40)	(120)	(73)
Finance income	31	4	1	2	186	4
Finance costs	(24)	(24)	(6)	(5)	(254)	(122)
Income tax expense	21	(37)	(91)	(88)	(1)	3
Profit or loss	(107)	198	316	217	48	(124)
Statement of comprehensive income for the year ended:						
Other comprehensive income	155	(2)	11	–	–	–
Total comprehensive income	48	196	327	217	48	(124)
Dividends received by the Group during the year ended	–	–	124	413	–	–

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 2019 and 31 December 2018, the holding company of Pokrovske Coal business pledged 44.16% of shares of PJSC "Colliery Pokrovske" as a collateral for amounts to be paid for acquisition of Pokrovske coal. PJSC "Colliery Pokrovske" further owns 55% of shares of "Enrichment Factory "Svyato-Varvarinskaya" LLC.

The reconciliation of the net assets of the Group's principal joint ventures and associate presented above to the carrying amounts of the respective investments is presented below:

	Zaporizhstal Group		Southern Iron Ore Enrichment Works Group		Pokrovske coal business	
	For the year ended 31 December 2019	For the year ended 31 December 2018	For the year ended 31 December 2019	For the year ended 31 December 2018	For the year ended 31 December 2019	For the 5 months ended 31 December 2018
Net assets	1,447	1,177	567	433	321	223
Group's ownership	49.99%	49.91%	45.87%	45.87%	24.77%	24.99%
Group's interest in net assets	723	587	260	199	80	56
Goodwill	100	85	–	–	109	97
Carrying value	**823**	**672**	**260**	**199**	**189**	**153**

12 INVENTORIES

	31 December 2019	31 December 2018
Finished goods and work in progress	548	612
Raw materials	411	465
Ancillary materials, spare parts and consumables	166	177
Goods for resale	60	93
Total inventories	**1,185**	**1,347**

In 2019, write-downs of inventories to net realisable value amounted to US$27 million (2018: US$9 million).

As at 31 December 2019, inventories totalling US$139 million (31 December 2018: US$112 million) have been pledged as collateral for borrowings (Note 18).

ALL AMOUNTS IN MILLIONS OF US DOLLARS

13 TRADE AND OTHER RECEIVABLES

	31 December 2019	31 December 2018
Non-current assets		
Trade receivables	367	128
Loans issued to SCM (USD denominated, 9% effective interest rate)	171	42
Loans issued to SMART (USD denominated, 9% effective interest rate)	96	88
Option for acquisition of interest in Pokrovske coal business (Note 11)	122	130
Other non-current financial assets	72	6
Other non-current non-financial assets	14	11
Total non-current assets	**842**	**405**
Current financial assets		
Trade receivables and receivables on commission sales	2,197	2,056
Loans issued to SCM and SMART (UAH denominated)	52	46
Loans issued to joint venture (USD denominated, 11% effective interest rate, mature in 2020, renegotiated in 2019)	97	98
Other receivables	98	70
Total current financial assets	**2,444**	**2,270**
Current non-financial assets		
Recoverable value added tax	307	240
Prepayments made	99	153
Covered letters of credit related to inventory purchases	23	17
Prepaid expenses and other non-financial receivables	155	110
Total current non-financial assets	**584**	**520**
Total current assets	**3,028**	**2,790**
Total trade and other receivables (including non-current assets)	**3,870**	**3,195**

Recoverable VAT mainly relates to Ukrainian subsidiaries of the Group. During 2019, VAT refunds of US$668 million were received by the Group (2018: US$623 million). As at 31 December 2018, VAT assets in the full amount of US$46 million for subsidiaries whose operations were located on the temporarily non-controlled territory were impaired due to uncertainty caused by timing and probability of recoverability.

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 2019, the creditworthiness of certain Group's customers has deteriorated. As a result, as at 31 December 2019, the Group has reclassified the respective trade and other receivables in the amount of US$239 million from current assets. The net exposure from these counterparties increased by US$252 million from 1 January 2019 following the fluctuation of steel, coke and coal prices in 2019. The Group has assessed the lifetime expected credit losses for these balances in the amount of US$100 million, representing 18% of the net exposure.

The calculation of expected credit losses for these balances is carried out on an individual basis taking into account agreement terms, expected repayment period, internally assessed credit risks for these counterparties, and expected future cash flows as well as the assets which may be used to settle the indebtedness. Management assumes that the underlying assets and cash flows might be collected through various procedures where the Group will make all required efforts to find appropriate solution to recover the carrying amounts of receivables. Management assumes that the fair value of the underlying assets is sufficient to cover the outstanding balances net of expected credit losses and expects that these balances will be settled within 3 years.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

13 TRADE AND OTHER RECEIVABLES CONTINUED

Analysis by credit quality of financial trade and other receivables and expected credit loss allowance as at 31 December 2019 is as follows:

	Loss rate	Gross carrying amount	Lifetime ECL	Carrying amount	Basis
Loans issue to related parties	2.6%	424	(8)	416	Adjusted yield to maturity on corporate bonds
Total loans issued		**424**	**(8)**	**416**	
Trade and other receivables from key customers including credit impaired		1,360	(652)	708	
Trade and other receivables from related parties including credit impaired		1,564	(101)	1,463	
Total trade and other receivables for which individual approach for ECL is used		**2,924**	**(753)**	**2,171**	
Ukraine – less than 30 days overdue	0.50%	48	–	48	Historical payment discipline
Ukraine – overdue more than 30 days	13%	8	–	8	Historical payment discipline
Ukraine – credit impaired	100%	51	(51)	–	
Other countries – less than 30 days overdue	0.09%	500	–	500	Historical payment discipline
Other countries – overdue more than 30 days	8%	7	–	7	Historical payment discipline
Other countries – credit impaired	100%	11	(11)	–	
Total trade and other receivables for which provision matrix is used		**625**	**(62)**	**563**	
Total		**3,973**	**(823)**	**3,150**	

Loss rate for trade and other receivables from key customers approximated 3.8% and determined based on adjusted yield to maturity on corporate bonds, for credit impaired balances from key customers loss rate is within the range 25%-100%.

Loss rate for trade and other receivables from related parties approximated 3.8% and determined based on adjusted yield to maturity on corporate bonds, for credit impaired balances from key customers loss rate is within the range 10%-100%.

The loss rates presented in the table above for unimpaired receivables are 12-month loss rates which are adjusted to reflect the maturity of individual balances.

Analysis by credit quality of financial trade and other receivables as at 31 December 2018 is as follows:

	Loss rate	Gross carrying amount	Lifetime ECL	Carrying amount	Basis
Loans issue to related parties	5.3%	281	(7)	274	Adjusted yield to maturity on corporate bonds
Total loans issued		**281**	**(7)**	**274**	
Trade and other receivables from key customers including credit impaired		1,158	(557)	601	
Trade and other receivables from related parties including credit impaired		1,101	(31)	1,070	
Total trade and other receivables for which individual approach for ECL is used		**2,259**	**(588)**	**1,671**	
Ukraine – less than 30 days overdue	0.50%	44	–	44	Historical payment discipline
Ukraine – overdue more than 30 days	13%	4	–	4	Historical payment discipline
Ukraine – credit impaired	100%	42	(42)	–	
Other countries – less than 30 days overdue	0.09%	537	–	537	Historical payment discipline
Other countries – overdue more than 30 days	8%	4	–	4	Historical payment discipline
Other countries – credit impaired	100%	11	(11)	–	
Total trade and other receivables for which provision matrix is used		**642**	**(53)**	**589**	
Total		**3,182**	**(648)**	**2,534**	

Loss rate for trade and other receivables from key customers approximated 3.8%-6.8% and determined based on adjusted yield to maturity on corporate bonds, for credit impaired balances from key customers loss rate is 100%.

Loss rate for trade and other receivables from related parties approximated 5.3% and determined based on adjusted yield to maturity on corporate bonds, for credit impaired balances from key customers loss rate is 100%.

ALL AMOUNTS IN MILLIONS OF US DOLLARS

13 TRADE AND OTHER RECEIVABLES CONTINUED

The following table explains the changes in the credit loss allowance for trade and other receivables under simplified ECL model between the beginning and the end of the annual period:

	Trade and other receivables	Loans issued	Trade and other receivables – credit impaired	Total
Balance at 31 December 2018	**32**	**7**	**609**	**648**
Net new originated/(derecognised) during the period	4	7	8	**19**
Individual financial assets transferred to credit impaired	(16)	–	16	**–**
Changes in estimates and assumptions	(11)	(6)	76	**59**
Write-offs	–	–	(3)	**(3)**
Forex movements	2	–	98	**100**
Balance at 31 December 2019	**11**	**8**	**804**	**823**

Movements in the impairment provision for trade and other receivables during 2018 were as follows:

	Trade and other receivables	Loans issued	Total
Balance at 1 January 2018 (adjusted)	**615**	**5**	**620**
Net new originated/(derecognised) during the period	19	1	20
Changes in estimates and assumptions	6	1	7
Write-offs	(5)	–	(5)
Forex movements	6	–	6
Balance at 31 December 2018	**641**	**7**	**648**

During 2019, trade accounts receivable in the amount of US$1,454 million have been sold to a third party (2018: US$1,547 million). As at 31 December 2019, amount of such receivables which were still unsettled to a third party was US$270 million (31 December 2018: US$242 million). The carrying amount of the assets and liabilities that represent the entity's continuing involvement in the derecognised assets is US$1 million (31 December 2018: US$3 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.

As at 31 December 2019, trade and other receivables totalling US$228 million (31 December 2018: US$224 million) have been pledged as collateral for borrowings and payables (Note 18).

As at 31 December 2019, the Group's deposit amounting to US$8 million was pledged for obligation of the Group's related party (31 December 2018: US$10 million).

14 CASH AND CASH EQUIVALENTS

	31 December 2019	31 December 2018
Current accounts	213	215
Cash in transit	30	46
Bank deposits up to 3 months	31	19
Total cash and cash equivalents	**274**	**280**

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

14 CASH AND CASH EQUIVALENTS

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 2019	31 December 2018
As rated by Moody's:		
Aa2	4	7
A1	72	59
A2	–	–
A3	35	35
Baa1	5	14
Baa2	–	–
Baa3	8	3
Ba2	5	–
B2	–	2
Caa1	2	1
Not rated – FUIB	78	85
Not rated – US and European banks	9	11
Not rated – Other Ukrainian banks	26	17
Cash in transit (in various banks)	30	46
Total cash and cash equivalents	**274**	**280**

As at 31 December 2019 and 2018, 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 2019, included in Ba2 rating are US$2 million (2018: included in B2 rating are US$2 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 2019, cash and cash equivalents totalling US$15 million (31 December 2018: US$12 million) have been pledged as collateral for borrowings (Note 18).

15 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 2019	**6,750**	**2,251**	**474**	**0**	**6,225**	**6,225**
At 31 December 2018	**6,750**	**2,251**	**474**	**0**	**6,225**	**6,225**

As at 31 December 2019 and 2018, 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 EUR10. 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.

ALL AMOUNTS IN MILLIONS OF US DOLLARS

16 OTHER RESERVES

	Share in other comprehensive income of joint venture and associates	Revaluation of property, plant and equipment and share in revaluation reserve of PPE of JVs and associates	Merger reserve	Cumulative currency translation reserve	Total
Balance as at 1 January 2018	(9)	4,687	(3,038)	(10,574)	**(8,934)**
Total comprehensive income/(loss) for the period	26	(5)	–	30	**51**
Depreciation transfer, net of tax	–	(261)	–	–	**(261)**
Balance as at 31 December 2018	**17**	**4,421**	**(3,038)**	**(10,544)**	**(9,144)**
Total comprehensive income/(loss) for the period	60	688	–	847	**1,595**
Depreciation transfer, net of tax	–	(255)	–	–	**(255)**
Balance as at 31 December 2019	**77**	**4,854**	**(3,038)**	**(9,697)**	**(7,804)**

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.

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 refinance transaction (Note 18).

17 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 2019					
PrJSC Zaporizhcoke	42.8%	–	27	85	–
PrJSC Northern Iron Ore Enrichment Works	3.2%	10	10	55	(4)
Other subsidiaries with NCI	n/a	–	(7)	(42)	–
Total		**10**	**30**	**98**	**(4)**
As at 31 December 2018					
PrJSC Zaporizhcoke	42.8%	17	–	57	–
PrJSC Northern Iron Ore Enrichment Works	3.2%	10	–	35	(11)
Other subsidiaries with NCI	n/a	16	–	(34)	–
Total		**43**	**–**	**58**	**(11)**

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 2019 and 2018:

	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Net assets
As at 31 December 2019					
PrJSC Zaporizhcoke	157	120	57	21	199
PJSC Northern Iron Ore Enrichment Works	1,891	911	874	201	1,727
As at 31 December 2018					
PrJSC Zaporizhcoke	250	58	165	9	134
PJSC Northern Iron Ore Enrichment Works	1,378	659	858	69	1,110

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

17 MATERIAL NON-CONTROLLING INTERESTS IN SUBSIDIARIES CONTINUED

	Revenue	Profit/(loss)	Total comprehensive (loss)/income
Year ended 31 December 2019			
PrJSC Zaporizhcoke	472	3	65
PrJSC Northern Iron Ore Enrichment Works	1,290	307	617
Year ended 31 December 2018			
PrJSC Zaporizhcoke	341	41	40
PrJSC Northern Iron Ore Enrichment Works	1,086	301	308

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.

According to the terms of Refinancing (Note 18), bonds benefit from suretyship granted by PrJSC Northern Iron Ore Enrichment Works.

PrJSC Northern Iron Ore Enrichment Works is also 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 had 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 account as at 31 December 2019 is US$8 million (31 December 2018: US$9 million).

18 LOANS AND BORROWINGS

As at 31 December, loans and borrowings were as follows:

	31 December 2019	31 December 2018
Non-current		
Bonds issued	2,074	1,680
Bank borrowings	338	499
Lease liability	30	15
Total non-current loans and borrowings	**2,442**	**2,194**
Current		
Bonds issued	25	29
Bank borrowings	153	93
Trade finance	399	363
Lease liability	13	4
Total current loans and borrowings	**590**	**489**
Total loans and borrowings	**3,032**	**2,683**

As at 31 December 2019, the bank borrowings include PXF in the amount of US$411 million (31 December 2018: US$538 million).

2018 Refinancing

On April 23, 2018, Metinvest completed the refinancing of its US$2,271 million of debt, consisting of the issuance of two tranches of bonds which replaced a significant part of existing 2021 bonds and the amendment and restatement of its PXF facility ("Refinancing").

Key features of the 2018 Refinancing are:

- On 4 April 2018, Metinvest priced a US$1,350 million bond offering across two tranches: a US$825 million 5-year tranche bearing a fixed interest rate of 7.75% per annum due in April 2023; and a US$525 million 8-year tranche bearing a fixed rate of 8.50% per annum due in April 2026. The US$1,350 million bond offering consisted of refinancing of US$1,070 million of the 2021 bond as well as raising of US$280 million of new finances.
- In addition, certain PXF holders agreed to shift their exposure from the PXF facility to new bonds. As a result, the final new issuance of bonds amounted to US$1,592.2 million: consisting of US$944.5 million 5-year and a US$647.7 million 8-year tranches.
- Following the refinancing, US$117 million of the 2021 bonds remain outstanding, their interest rate was decreased to fixed 7.50% per annum, while their terms and conditions were amended and restated in line with the terms and conditions of newly issued bonds.
- The PXF facility was amended and restated to, inter alia, extend its maturity to October 2022. Interest rate for PXF facility was set at USD LIBOR plus margin, paid fully in cash. After a required partial repayment of the PXF facility, a shift of certain lenders to the new bond issue and an attraction of a new tranche of US$65 million, the total amount of the PXF facility amounted to US$765 million.
- Two instruments were structurally untied: cash sweep common for bonds and the PXF facility was removed, while common security was released.

ALL AMOUNTS IN MILLIONS OF US DOLLARS

18 LOANS AND BORROWINGS CONTINUED

- Each instrument received collateral, guarantees typical for such instruments. Bonds benefit from suretyships granted by six entities, including PrJSC Azovstal Iron and Steel Works, PrJSC Ilyich Iron and Steel Works, PrJSC Avdiivka Coke Plant, PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Central Iron Ore Enrichment Works and PrJSC Northern Iron Ore Enrichment Works. The PXF facility benefits from suretyships granted by four entities, including PrJSC Ilyich Iron and Steel Works, PrJSC Ingulets Iron Ore Enrichment Works, PrJSC Central Iron Ore Enrichment Works and Metinvest Management B.V., security assignments of rights under certain export, commission and offtake contracts, as well as pledges of certain bank accounts and rights under certain commission contracts.
- Certain restrictive covenants continue to be imposed on the Group, including limitation to pay dividends, make certain restricted payments, engage in certain transactions with related parties, incur new debt, as well as certain financial covenants (interest cover ratio, debt cover ratio, tangible net worth and gearing). These covenants have been eased when compared to the terms of prior debt.

Change in PXF facility (apart from PXF shifted exposure) and US$117 million of the 2021 bonds 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 transaction resulted in recognition of loss on modification amounting to US$23 million and was recognised in income statement as part of loss on refinance.

Refinancing of US$1,070 million of the 2021 bond and US$239 million of PXF shifted exposure was accounted for as extinguishment of the prior financial liability and recognition of the new debt instruments. Gain on extinguishment amounted to US$6 million and was recognised in income statement as part of loss on refinance.

2019 Refinancing

In October 2019, Metinvest priced a dual-currency Eurobond offering issuing a US$500 million 10-year tranche bearing a fixed interest rate of 7.75% per annum due in October 2029; and a EUR300 million 5-year tranche bearing a fixed rate of 5.625% per annum due in June 2025. The US$500 million bond offering consisted of refinancing of US$440 million of the 2023 bond as well as raising of US$60 million of new finances. Both tranches benefit from the same suretyships and are subject to the substantially similar restrictive covenants as the 2021, 2023 and 2026 bonds.

Refinancing of US$440 million of the 2023 bond was accounted for as extinguishment of the prior financial liability and recognition of the new debt instrument. The loss on extinguishment amounted to US$6 million and was recognised in income statement as part of finance costs.

As of 31 December 2019, the Group's bonds were traded on open markets. Fair value of bonds and discount/premium are as follows:

	31 December 2019		31 December 2018	
	Fair value	Premium/ (Discount)	Fair value	Premium/ (Discount)
Bonds due in 2021	116	0.5%	114	(2.7%)
Bonds due in 2023	547	5.6%	884	(8.9%)
Bonds due in 2025	342	1.9%	–	–
Bonds due in 2026	709	7.7%	594	(9.8%)
Bonds due in 2029	520	2.5%	–	–
Total	**2,234**		**1,592**	

Have these market quotations been used to determine the fair values of the PXF as at 31 December 2019, those would be US$419 million (31 December 2018: US$499 million).

The majority of the Group's bank borrowings and trade finance have floating 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 2019			31 December 2018		
In % per annum	US$	EUR	GBP	US$	EUR	GBP
Bank borrowings	7%	5%	–	7%	6%	–
Bonds issued	9%	6%	–	9%	–	–
Trade finance	5%	3%	4%	5%	3%	5%
Lease liability	8%	5%	–	8%	–	–
Reported amount	**2,487**	**512**	**33**	**2,481**	**170**	**32**

The Group defines net debt as the sum of bank loans, bonds, trade finance, lease liability, deferred consideration and seller notes, non-bank borrowings less cash and cash equivalents.

18 LOANS AND BORROWINGS CONTINUED

Movements in the Groups' net debt are presented below:

	Cash in banks	Deposits up to 3 months	Bank borrowings	Bonds issued	Non-bank borrowings from related parties	Trade finance	Deferred consider-ation and seller's notes	Finance lease	Total
Net debt as at 1 January 2018	**250**	**9**	**(1,097)**	**(1,201)**	**(460)**	**(291)**	**(7)**	**(12)**	**(2,809)**
Interest paid/(received)	–	(1)	49	99	113	12	5	2	**279**
Other cash flows	16	10	273	(264)	369	(79)	137	(1)	**461**
Interest accrued (Note 25, 10)	–	1	(48)	(134)	(22)	(13)	(5)	(2)	**(223)**
Legal and consulting fees capitalised	–	–	–	13	–	–	–	–	**13**
Commissions capitalised	–	–	22	–	–	–	–	–	**22**
Effect of refinancing	–	–	(34)	17	–	–	–	–	**(17)**
Currency translation differences	(5)	–	4	–	–	8	–	–	**7**
Equipment received under finance lease	–	–	–	–	–	–	–	(6)	**(6)**
Transfers	–	–	239	(239)	–	–	–	–	**–**
Acquisition of associate	–	–	–	–	–	–	(190)	–	**(190)**
Net debt as of 31 December 2018	**261**	**19**	**(592)**	**(1,709)**	**–**	**(363)**	**(60)**	**(19)**	**(2,463)**
Change in accounting policy (Note 5)	–	–	–	–	–	–	–	(4)	**(4)**
Adjusted net debt as at 1 January 2019	**261**	**19**	**(592)**	**(1,709)**	**–**	**(363)**	**(60)**	**(23)**	**(2,467)**
Interest paid/(received)	(5)	–	38	145	–	14	2	2	**196**
Other cash flows	(18)	12	89	(384)	–	(37)	55	10	**(273)**
Interest accrued (Note 25, 10)	5	–	(36)	(150)	–	(16)	(2)	(3)	**(202)**
Legal and consulting fees capitalised	–	–	–	5	–	–	–	–	**5**
Commissions capitalised	–	–	7	–	–	–	–	–	**7**
Effect of refinancing	–	–	–	(6)	–	–	–	–	**(6)**
Currency translation differences	–	–	3	(2)	–	3	–	(2)	**2**
Equipment received as lease asset	–	–	–	–	–	–	–	(27)	**(27)**
Other movements	–	–	–	2	–	–	5	–	**7**
Net debt as of 31 December 2019	**243**	**31**	**(491)**	**(2,099)**	**–**	**(399)**	**–**	**(43)**	**(2,758)**

19 DEFERRED CONSIDERATION AND SELLER'S NOTES

	31 December 2019	31 December 2018
Current portion	–	60
Total deferred consideration and seller's notes	**–**	**60**

In July 2018, the Group has acquired stake in the Pokrovske coal business for US$190 million of which US$60 million remained outstanding as at 31 December 2018. The Group settled payables for this acquisition till the end of 2019. For the details on the arrangement refer to Note 11.

As at 31 December 2018, nominal interest rate of deferred consideration and seller's notes approximated effective interest rate, the fair value of deferred consideration and seller's notes approximated their carrying amount.

20 RETIREMENT BENEFIT OBLIGATIONS

The Group's defined benefit obligations relate to:

	31 December 2019	31 December 2018
State-defined early pensions for employees working in hazardous and unhealthy working conditions	565	391
Long-term employee benefits under collective bargaining agreements	32	20
Total defined benefit obligations	**597**	**411**

Nature and the risks and uncertainties associated with the Group's defined benefit obligations are further disclosed in the Note 4.

20 RETIREMENT BENEFIT OBLIGATIONS CONTINUED

Changes in the present value of the defined benefit obligation were as follows:

	2019	2018
Defined benefit obligation as at 1 January	**411**	**369**
Current service cost	15	10
Remeasurements of the defined benefit liability resulting from:		
changes in financial assumptions	20	(30)
changes in demographic assumptions	(8)	1
experience adjustments	68	40
Interest cost	55	44
Benefits paid	(34)	(27)
Currency translation difference	70	4
Defined benefit obligation as at 31 December	**597**	**411**

The amounts recognised in the consolidated income statement were as follows:

	2019	2018
Current service cost	15	10
Interest cost	55	44
Total	**70**	**54**

The principal actuarial assumptions used were as follows:

	31 December 2019	31 December 2018
Nominal discount rate	10.91%	14.03%
Nominal salary increase	5.00% – 5.83%	10.00%
Nominal pension entitlement increase (indexation)	6.42%	7.2%
Long-term inflation	5.83%	6.2%

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 2019 and are consistent with the prior year.

The sensitivity of the defined benefit obligation to changes in the principal assumptions is presented below:

	2019	2018
Nominal discount rate increase/decrease by 1 pp	(50)/57	(34)/40
Nominal salary increase/decrease by 1 pp	28/(26)	17/(17)
Inflation increase/decrease by 1 pp	4/(5)	4/(7)

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 2019, the weighted average maturity of the Group's defined benefit obligations is 9.0 years and it varies across different Group's subsidiaries from 8.1 to 14 years (31 December 2018: 9.5 years, varying from 8.2 to 14 years). Payments in respect of defined benefit obligations expected to be made during the year ending 31 December 2020 are US$37 million (2019: US$27 million).

21 OTHER NON-CURRENT LIABILITIES

	31 December 2019	31 December 2018
Asset retirement obligations	64	52
Tax liabilities under moratorium (Note 28)	8	7
Other non-current liabilities	30	24
Guarantee issued (Note 11)	93	113
Total other non-current liabilities	**195**	**196**

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

22 TRADE AND OTHER PAYABLES

	31 December 2019	31 December 2018
Trade payables and payables on sales made on commission	1,760	1,527
Dividends payable to shareholders of Metinvest B.V.	304	41
Dividends payable to non-controlling shareholders of Company's subsidiaries	6	9
Payables for acquired property, plant and equipment and other intangible assets	227	118
Other financial liabilities	47	27
Total financial liabilities	**2,344**	**1,722**
Prepayments received	142	136
Accruals for employees' unused vacations and other payments to employees	98	74
Other taxes payable, including VAT	124	128
Wages and salaries payable	33	25
Guarantee issued (Note 11)	6	8
Other allowances and provisions	32	33
Total trade and other payables	**2,779**	**2,126**

23 NET OPERATING COSTS (EXCLUDING ITEMS SHOWN SEPARATELY)

	2019	2018
Raw materials including change in finished goods and work in progress	3,059	2,714
Goods and services for resale, excluding related transportation	2,962	3,690
Energy materials including gas, electricity and fuel	1,050	1,117
Wages and salaries	790	606
Transportation services	862	751
Repairs and maintenance expenses	265	224
Pension and social security costs	140	103
Pension costs – defined benefit obligations (Note 20)	15	10
Depreciation and amortisation	704	550
Taxes and duties	119	94
Services and other costs	386	340
Charity and expenses on social activities	13	16
Maintenance of social infrastructure	24	9
VAT on sales below cost and VAT write-off	7	7
Operating foreign exchange (gains)/losses, net	(57)	70
Gain on disposal of property, plant and equipment, net	(5)	(10)
Write-off of trade and other payables	(23)	(33)
Other operating income	(41)	(12)
Total net operating expenses (excluding items shown separately)	**10,270**	**10,246**

Raw materials include externally purchased coke and coal, iron ore, scrap metal, ferroalloys, ancillary and other materials and cost of their transportation.

Auditor's fees. The following fees were expensed in the consolidated income statement in the reporting period:

	2019	2018
Audit of the financial statements (including audit fee of the signing firm of US$0.2 million in 2019 and US$0.2 million in 2018)	2	2
Total	**2**	**2**

During 2019, tax and other non-audit services expensed in the consolidated income statement amounted to US$0.2 million and US$0.3 million, respectively (2018: US$0.3 million and US$0.7 million), including US$0.3 million of other non-audit services fees of signing firm during 2019 (US$0.2 million during 2018).

24 FINANCE INCOME

Finance income for the year ended 31 December was as follows:

	2019	2018
Net foreign exchange gain	197	23
Interest income:		
loans issued	27	21
bank deposits	5	8
imputed interest on other financial instruments	–	7
Other finance income	24	9
Total finance income	**253**	**68**

Net foreign exchange gains arise on intragroup loans and dividends payable between the entities with different functional currencies. During 2019 and 2018, other finance income is represented by amortisation of the guarantee issued (Note 11).

ALL AMOUNTS IN MILLIONS OF US DOLLARS

25 FINANCE COSTS

Finance costs for the year ended 31 December were as follows:

	2019	2018
Interest expense on:		
borrowings	26	57
bonds	145	134
deferred consideration and seller's notes	2	5
Interest cost on retirement benefit obligations	55	44
Refinance fees	26	60
Loss on modification and extinguishment	6	17
Other finance costs	16	17
Total finance costs	**276**	**334**

During 2019 and 2018, other finance costs mainly include factoring fees and discounting of the financial instruments.

26 INCOME TAX

Income tax for the year ended 31 December was as follows:

	2019	2018
Current tax	187	306
Deferred tax	(140)	(31)
Income tax expense	**47**	**275**

The Group is subject to taxation in several tax jurisdictions, depending on the residence of its subsidiaries. In 2019 and 2018, Ukrainian corporate income tax was levied on taxable income less allowable expenses at the rate of 18%. The tax rate for Swiss operations was 10% and for European companies tax rate in 2019 varied from 10% to 28%. The tax rate for the US operations was 21%.

Reconciliation between the expected and the actual taxation charge is provided below.

	2019	2018
IFRS profit before tax	388	1,463
Tax calculated at domestic tax rates applicable to profits in the respective countries	43	202
Tax effect of items not deductible or assessable for taxation purposes:		
impairment of trade and other receivables	–	–
other non-deductible expenses	21	65
non-taxable income	–	–
Tax benefits	(19)	(19)
Under/(over) provision of current tax in prior years	(2)	2
Write-down/(reversal of write-down) of deferred tax assets, net	4	25
Income tax expense	**47**	**275**

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 them.

The weighted average applicable tax rate was 11% in 2019 (2018: 14%). 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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

26 INCOME TAX CONTINUED

	1 January 2019	Credited/ (charged) to income statement	Credited/ (charged) to other comprehensive income	Currency translation difference	31 December 2019
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	2	–	–	–	2
Long-term receivables	3	–	–	–	3
Inventory valuation	16	(15)	–	–	1
Trade and other accounts receivable	39	8	–	7	54
Accrued expenses	1	1	–	–	2
Tax losses carried forward	7	66	–	1	74
Retirement benefit obligations	63	6	14	11	94
Other	52	(11)	–	6	47
Gross deferred tax asset	**183**	**55**	**14**	**25**	**277**
Less offsetting with deferred tax liabilities	(103)	(64)	(2)	(23)	(192)
Recognised deferred tax asset	**80**	**(9)**	**12**	**2**	**85**
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(332)	85	(145)	(62)	(454)
Inventory tax differences	(8)	–	–	–	(8)
Other	(4)	1	–	–	(3)
Gross deferred tax liability	**(344)**	**86**	**(145)**	**(62)**	**(465)**
Less offsetting with deferred tax assets	104	63	2	23	192
Recognised deferred tax liability	**(240)**	**149**	**(143)**	**(39)**	**(273)**

Deferred tax asset on unused tax losses not recognised by Ukrainian subsidiaries as at 31 December 2019 comprised US$104 million (31 December 2018: US$81 million) and mainly relates to the entities whose physical assets are located on the non-controlled territory of Ukraine. The Group does not recognise this deferred tax asset as it does not expect profits to be generated by these entities in the foreseeable future. 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 consistent with those used for impairment testing of non-current assets.

	1 January 2018 (adjusted)	Credited/ (charged) to income statement	Credited/ (charged) to other comprehensive income	Currency translation difference	31 December 2018
Tax effect of deductible temporary differences					
Property, plant and equipment and intangible assets	3	(1)	–	–	2
Long-term receivables	3	–	–	–	3
Inventory valuation	25	(9)	–	–	16
Trade and other accounts receivable	34	5	–	–	39
Accrued expenses	20	(19)	–	–	1
Tax losses carried forward	5	2	–	–	7
Retirement benefit obligations	63	(1)	–	1	63
Other	54	(1)	–	(1)	52
Gross deferred tax asset	**207**	**(24)**	**–**	**–**	**183**
Less offsetting with deferred tax liabilities	(94)	(10)	–	1	(103)
Recognised deferred tax asset	**113**	**(34)**	**–**	**1**	**80**
Tax effect of taxable temporary differences					
Property, plant and equipment and intangible assets	(384)	58	–	(6)	(332)
Inventory tax differences	(4)	(4)	–	–	(8)
Other	(6)	1	–	1	(4)
Gross deferred tax liability	**(394)**	**55**	**–**	**(5)**	**(344)**
Less offsetting with deferred tax assets	94	10	–	–	104
Recognised deferred tax liability	**(300)**	**65**	**–**	**(5)**	**(240)**

ALL AMOUNTS IN MILLIONS OF US DOLLARS

26 INCOME TAX CONTINUED

The tax charge relating to components of other comprehensive income is as follows:

	2019			2018		
	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	(310)	56	(254)	(5)	–	(5)
Revaluation of property, plant and equipment	1,164	(201)	963	–	–	–
Remeasurement of retirement benefit obligation	(80)	14	(66)	(11)	–	(11)
Other comprehensive income	**774**	**(131)**	**643**	**(16)**	**–**	**(16)**

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.

27 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 2019 and 2018, significant balances outstanding with related parties are detailed below:

	31 December 2019					31 December 2018				
	SCM Limited (Cyprus)	Asso-ciates	Joint ventures	Entities related to SCM	SMART Group	SCM Limited (Cyprus)	Asso-ciates	Joint ventures	Entities related to SCM	SMART Group
ASSETS										
Non-current trade and other receivables, including:	**–**	**367**	**–**	**171**	**96**	**–**	**–**	**–**	**42**	**88**
Long-term loans issued	–	–	–	171	96	–	–	–	42	88
Trade receivables and receivables on commission sales	–	367	–	–	–	–	–	–	–	–
Current trade and other receivables, including:	**–**	**77**	**1,032**	**194**	**24**	**–**	**34**	**1,057**	**225**	**23**
Trade receivables and receivables on commission sales	–	75	903	82	2	–	32	945	121	3
Prepayments made	–	–	–	70	–	–	–	2	65	–
Loans issued	–	–	97	30	22	–	–	98	26	20
Other financial receivables (short-term, non-interest bearing)	–	2	32	12	–	–	2	12	13	–
Cash and cash equivalents	**–**	**–**	**–**	**78**	**–**	**–**	**–**	**–**	**85**	**–**

	31 December 2019					31 December 2018				
	SCM Limited (Cyprus)	Asso-ciates	Joint ventures	Entities related to SCM	SMART Group	SCM Limited (Cyprus)	Asso-ciates	Joint ventures	Entities related to SCM	SMART Group
LIABILITIES										
Trade and other payables, including:	**270**	**121**	**515**	**146**	**35**	**41**	**142**	**653**	**148**	**1**
Dividends payable to shareholders of Metinvest B.V.	269	–	–	–	35	40	–	–	–	1
Dividends payable to non-controlling shareholders of Company's subsidiaries	–	–	–	3	–	–	–	–	6	–
Trade payables and payables on sales made on commission	–	99	503	137	–	–	123	648	135	–
Prepayments received	–	22	–	1	–	–	19	–	1	–
Other financial liabilities	1	–	12	5	–	1	–	5	6	–

In 2018, dividends paid disclosed in the consolidated statement of cash flows include US$47 million of dividends paid by the Company to its Class B shareholder (SMART), US$9 million paid by the Company's subsidiaries to entities related to SCM that are shareholders in such subsidiaries, and US$2 million of payments to other non-related parties.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

27 BALANCES AND TRANSACTIONS WITH RELATED PARTIES (CONTINUED)

In 2019, dividends paid disclosed in the consolidated statement of cash flows include US$56 million of dividends paid by the Company to its Class B shareholder (SMART), US$40 million of dividends paid by the Company to its Class A shareholders (SCM Limited (Cyprus), US$3 million paid by the Company's subsidiaries to entities related to SCM that are shareholders in such subsidiaries, and US$1 million of payments to other non-related parties.

Significant transactions (excluding purchases) with related parties during 2019 and 2018 are detailed below:

2019	Associates	Joint ventures	Entities related to SCM	SMART Group	Total
Sales, including:	**147**	**1,169**	**79**	**3**	**1,398**
Steel	17	30	61	3	**111**
Scrap metal	–	21	–	–	**21**
Coke and coking coal	124	665	11	–	**800**
Iron ore	–	405	1	–	**406**
Other	6	48	6	–	**60**
Other operating income/(expenses), net	**1**	**(1)**	**(3)**	**–**	**(3)**
Expected credit losses charge	(62)	8	(2)	2	**(54)**
Finance income/(expenses), including:	**–**	**11**	**12**	**6**	**29**
Interest income – bank deposits	–	–	2	–	**2**
Interest income – loans issued	–	11	10	6	**27**

2018	Associates	Joint ventures	Entities related to SCM	SMART Group	Total
Sales, including:	**9**	**1,236**	**190**	**2**	**1,437**
Steel	6	30	68	2	**106**
Scrap metal	–	52	–	–	**52**
Coke and coking coal	1	719	116	–	**836**
Iron ore	–	391	1	–	**392**
Other	2	44	5	–	**51**
Other operating income/(expenses), net	**–**	**1**	**(2)**	**–**	**(1)**
Expected credit losses charge	–	(2)	(1)	(1)	**(4)**
Finance income/(expenses), including:	**–**	**11**	**(9)**	**1**	**3**
Interest income – bank deposits	–	–	2	–	**2**
Interest income – loans issued	–	11	4	6	**21**
Interest expense – borrowings	–	–	(15)	(5)	**(20)**

The following is a summary of purchases from related parties in 2019 and 2018:

2019	Associates	Joint ventures	Entities related to SCM	SMART Group	Total
Purchases, including:	**525**	**1,766**	**1,391**	**1**	**3,683**
Metal products	–	1,685	11	–	**1,696**
Coke and coking coal	484	4	55	–	**543**
Raw materials and spare parts	33	50	109	1	**193**
Electricity	–	–	496	–	**496**
Gas	–	–	229	–	**229**
Fuel	–	–	91	–	**91**
Services	–	8	370	–	**378**
Other	8	19	30	–	**57**

2018	Associates	Joint ventures	Entities related to SCM	SMART Group	Total
Purchases, including:	**171**	**2,108**	**1,349**	**–**	**3,628**
Metal products	–	2,049	10	–	**2,059**
Coke and coking coal	141	3	83	–	**227**
Raw materials and spare parts	23	45	83	–	**151**
Electricity	–	–	431	–	**431**
Gas	–	6	325	–	**331**
Fuel	–	–	64	–	**64**
Services	3	1	313	–	**317**
Other	4	4	40	–	**48**

During 2018, the Group has acquired the non-controlling interest of Ferriera Valsider S.p.A. from SCM related entity for US$42 million, the outstanding payable for the interest acquired as at 31 December 2018 was US$6 million which was repaid in 2019.

27 BALANCES AND TRANSACTIONS WITH RELATED PARTIES (CONTINUED)

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 revenue. The Group's net gain on such transactions was US$7 million in 2019 (2018: US$18 million).

In 2019, the remuneration of key management personnel of the Group comprised current salaries and related bonuses paid totalling US$15.0 million (in 2018: US$15.3 million).

As at 31 December 2019 and 2018, key management held the Group's bonds in the total amount of less than US$1 million. Rights of these bondholders are not different from the rights of other bondholders.

28 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 2019, the amount of financial and tax liabilities related to the bankruptcy proceedings recorded in these consolidated financial statements is US$12 million (31 December 2018: US$10 million), out of which US$8 million (31 December 2018: US$7 million) are presented as non-current tax liabilities under moratorium (Note 21).

In July 2019, the bankruptcy proceedings were initiated in respect of one of the Group's subsidiaries, PrJSC Yenakiieve Iron and Steel Works. Creditor's claims were assessed by the court-appointed manager and the Group's subsidiaries formed majority in the creditor's committee in January 2020. Management of the Group does not expect that the bankruptcy proceedings will result in liquidation of the entity.

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.

On 26 February 2019, a pre-judgment conservation order under Dutch law (the "Order") was issued by the court with respect to Metinvest B.V.'s shareholdings in its two subsidiaries registered and existing under the laws of the Netherlands (the "Dutch Subsidiaries"). The Order was issued on the basis of a claim for damages for the amount of US$47 million allegedly caused by Metinvest B.V. Except that the Group may not dispose of its shareholdings in the Dutch Subsidiaries, the Order does not affect the legal capacity of any Group entities to incur debt, create security or give guarantees, enter into commercial and trade contracts or otherwise affect in any way the ordinary course of business and operational activities of the Group. If Metinvest B.V. were to give sufficient security for the asserted claim, this would be a ground for lifting the Order. The Group continues to challenge the main claim.

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 2019, the Group has contractual capital expenditure commitments in respect of property, plant and equipment totalling US$347 million (31 December 2018: US$295 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.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED

ALL AMOUNTS IN MILLIONS OF US DOLLARS

28 CONTINGENCIES, COMMITMENTS AND OPERATING RISKS CONTINUED

Guarantees issued. As at 31 December 2018 and 31 December 2019 the Group has issued a financial guarantee related to the settlement of the obligations for the acquisition of associate as disclosed in Note 11.

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. As at 31 December 2019 and 2018, 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.

29 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.

At 31 December 2019, 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 been US$130 million lower/higher (2018: if the UAH strengthened/weakened by 25% against USD, post-tax profit for the year would have been US$128 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 floating 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 2019, 75% of the total borrowings were provided to the Group at fixed rates (31 December 2018: 69%). During 2019 and 2018, the Group's borrowings at floating rate were denominated in USD, EUR and GBP.

Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or floating rates. However, at the time of attracting new debt management uses its judgment to decide whether it believes that a fixed or floating rate would be more favourable to the Group over the expected period until maturity.

Refer to Note 13, 18 and below for information about maturity dates and effective interest rates of financial instruments.

At 31 December 2019, if interest rates on USD, EUR and GBP denominated floating rate borrowings had been by 1 pp higher/lower (2018: 1 pp) with all other variables held constant, post-tax profit for the year would have been US$6 million lower/higher (2018: US$7 million).

29 FINANCIAL RISK MANAGEMENT CONTINUED

(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 and financial guarantees issued. 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 2019 is US$4,076 million (2018: US$3,532 million) being the carrying value of long and short-term loans issued, receivables, cash and the amount of the commitment in respect of the financial guarantees issued as disclosed in Note 29 (c) below. 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.

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.

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 foreign exchange rates.

At 31 December 2019	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	176	210	139	20
Trade finance	399	–	–	–
Bonds	194	276	914	1,754
Guarantee	116	155	381	–
Lease liability	16	15	20	1
Financial trade and other payables	2,344	30	–	8
Total	**3,246**	**686**	**1,454**	**1,783**

At 31 December 2018	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Bank borrowings	130	218	319	12
Trade finance	363	–	–	–
Bonds	176	139	1,410	778
Deferred consideration and seller's notes	65	–	–	–
Guarantee	45	120	484	69
Finance lease	6	6	13	–
Financial trade and other payables	1,722	24	–	7
Total	**2,507**	**507**	**2,226**	**866**

30 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 loans and borrowings and deferred considerations and seller's notes less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

NOTES TO THE SUMMARY IFRS CONSOLIDATED FINANCIAL STATEMENTS – 31 DECEMBER 2019 CONTINUED
ALL AMOUNTS IN MILLIONS OF US DOLLARS

30 CAPITAL RISK MANAGEMENT CONTINUED

The Group has yet to determine its optimum gearing ratio. Presently, the majority of debt is due within 1-5 years and the Group is actively pursuing mechanisms to extend the credit terms to match its long-term investment strategy.

	31 December 2019	31 December 2018
Total loans and borrowings (Note 18)	3,032	2,683
Deferred consideration and seller's notes (Note 19)	–	60
Less: cash and cash equivalents (Note 14)	(274)	(280)
Net debt	**2,758**	**2,463**
Total equity	6,930	5,403
Total capital	**9,688**	**7,866**
Gearing ratio	28%	31%

31 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.

The estimated fair value and related methods and assumptions used for the valuation of the option received are disclosed in Note 11.

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 18, 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 18, 19 and 21).

32 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, trade receivables subject to factoring and the option carried at fair value through profit or loss. As at 31 December 2019 the carrying amount of the balances subject to factoring amounted to US$104 million (31 December 2018: US$109 million).

33 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.