EVRAZ plc Consolidated Financial Statements Year Ended 31 December 2018

Consolidated Statement of Operations

in millions of US dollars, except for per share information

	Notes	Year ended 31 December 2018	2017	2016
Continuing operations				
Revenue				
Sale of goods	**3**	**$ 12,525**	$ 10,520	$ 7,477
Rendering of services	**3**	**311**	307	236
		12,836	10,827	7,713
Cost of revenue	**7**	**(8,011)**	(7,485)	(5,521)
Gross profit		**4,825**	3,342	2,192
Selling and distribution costs	**7**	**(1,013)**	(717)	(623)
General and administrative expenses	**7**	**(546)**	(540)	(469)
Social and social infrastructure maintenance expenses		**(27)**	(31)	(23)
Loss on disposal of property, plant and equipment		**(11)**	(4)	(22)
Impairment of assets	**6**	**(30)**	12	(465)
Foreign exchange gains/(losses), net		**361**	(54)	(48)
Other operating income		**24**	39	22
Other operating expenses	**7**	**(55)**	(61)	(101)
Profit from operations		**3,528**	1,986	463
Interest income	**7**	**18**	14	10
Interest expense	**7**	**(359)**	(437)	(481)
Share of profits/(losses) of joint ventures and associates	**11**	**9**	11	(23)
Gain/(loss) on financial assets and liabilities, net	**7**	**13**	(57)	(9)
Gain/(loss) on disposal groups classified as held for sale, net	**12**	**(10)**	(360)	–
Other non-operating gains/(losses), net	**7**	**2**	(2)	(52)
Profit/(loss) before tax		**3,201**	1,155	(92)
Income tax benefit/(expense)	**8**	**(731)**	(396)	(96)
Net profit/(loss)		**$ 2,470**	$ 759	$ (188)
Attributable to:				
Equity holders of the parent entity		**$ 2,406**	$ 699	$ (215)
Non-controlling interests		**64**	60	27
		$ 2,470	$ 759	$ (188)
Earnings/(losses) per share for profit/(loss) attributable to equity holders of the parent entity, US dollars:				
Basic	**20**	**$ 1.67**	$ 0.49	$ (0.15)
Diluted	**20**	**$ 1.65**	$ 0.48	$ (0.15)

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

in millions of US dollars

	Notes	Year ended 31 December		
		2018	**2017**	**2016**
Net profit/(loss)		**$ 2,470**	$ 759	$ (188)
Other comprehensive income/(loss)				
Other comprehensive income to be reclassified to profit or loss in subsequent periods				
Exchange differences on translation of foreign operations into presentation currency		**(1,120)**	266	543
Exchange differences recycled to profit or loss on disposal of subsidiaries	**4,12**	**63**	747	–
Net gains/(losses) on cash flow hedges	**25**	**(3)**	9	–
		(1,060)	1,022	543
Effect of translation to presentation currency of the Group's joint ventures and associates	**11**	**(13)**	4	13
		(13)	4	13
Items not to be reclassified to profit or loss in subsequent periods				
Net gains/(losses) on equity instruments at fair value through other comprehensive income*	**13**	**59**	30	–
Gains/(losses) on re-measurement of net defined benefit liability	**23**	**28**	26	11
Income tax effect	**8**	**(6)**	(15)	–
		22	11	11
Total other comprehensive income/(loss)		**(992)**	1,067	567
Total comprehensive income/(loss), net of tax		**$ 1,478**	$ 1,826	$ 379
Attributable to:				
Equity holders of the parent entity		**$ 1,441**	$ 1,762	$ 341
Non-controlling interests		**37**	64	38
		$ 1,478	$ 1,826	$ 379

* *In connection with the adoption of IFRS 9 (Note 2) net gains/(losses) on available-for-sale financial assets, which were previously presented as reclassified to profit or loss in subsequent periods, were transferred to net gains/(losses) on equity instruments at fair value through other comprehensive income within Items not to be reclassified to profit or loss in subsequent periods.*

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Financial Position

in millions of US dollars

The financial statements of EVRAZ plc (registered number 7784342) on pages 144–243 were approved by the Board of Directors on 27 February 2019 and signed on its behalf by Alexander Frolov, Chief Executive Officer.

	Notes	31 December 2018	31 December 2017	31 December 2016
ASSETS				
Non-current assets				
Property, plant and equipment	**9**	**$ 4,202**	$ 4,933	$ 4,652
Intangible assets other than goodwill	**10**	**206**	259	297
Goodwill	**5**	**864**	917	880
Investments in joint ventures and associates	**11**	**74**	79	64
Deferred income tax assets	**8**	**92**	173	156
Other non-current financial assets	**13**	**91**	151	91
Other non-current assets	**13**	**44**	39	45
		5,573	6,551	6,185
Current assets				
Inventories	**14**	**1,474**	1,198	984
Trade and other receivables	**15**	**835**	731	502
Prepayments		**113**	89	60
Loans receivable		**29**	11	13
Receivables from related parties	**16**	**11**	12	8
Income tax receivable		**35**	50	43
Other taxes recoverable	**17**	**201**	225	192
Other current financial assets	**18**	**35**	47	33
Cash and cash equivalents	**19**	**1,067**	1,466	1,157
		3,800	3,829	2,992
Assets of disposal groups classified as held for sale	**12**	**–**	–	27
		3,800	3,829	3,019
Total assets		**$ 9,373**	$ 10,380	$ 9,204
EQUITY AND LIABILITIES				
Equity				
Equity attributable to equity holders of the parent entity				
Issued capital	**20**	**$ 75**	$ 1,507	$ 1,507
Treasury shares	**20**	**(196)**	(231)	(270)
Additional paid-in capital		**2,480**	2,500	2,517
Revaluation surplus		**110**	111	112
Unrealised gains and losses	**13,25**	**6**	39	–
Accumulated profits		**3,026**	635	415
Translation difference		**(3,820)**	(2,777)	(3,790)
		1,681	1,784	491
Non-controlling interests	**32**	**257**	242	186
		1,938	2,026	677
Non-current liabilities				
Long-term loans	**22**	**4,186**	5,243	5,502
Deferred income tax liabilities	**8**	**258**	328	348
Employee benefits	**23**	**226**	284	317
Provisions	**24**	**222**	269	205
Other long-term liabilities	**25**	**38**	54	94
Amounts payable under put options for shares in subsidiaries	**4**	**–**	61	–
		4,930	6,239	6,466
Current liabilities				
Trade and other payables	**26**	**1,216**	1,128	935
Contract liabilities		**320**	272	266
Short-term loans and current portion of long-term loans	**22**	**377**	148	392
Payables to related parties	**16**	**122**	256	226
Income tax payable		**104**	67	39
Other taxes payable	**27**	**266**	212	169
Provisions	**24**	**35**	32	26
Amounts payable under put options for shares in subsidiaries	**4**	**65**	–	–
		2,505	2,115	2,053
Liabilities directly associated with disposal groups classified as held for sale	**12**	**–**	–	8
		2,505	2,115	2,061
Total equity and liabilities		**$ 9,373**	$ 10,380	$ 9,204

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows

in millions of US dollars

	Year ended 31 December		
	2018	**2017**	**2016**
Cash flows from operating activities			
Net profit/(loss)	**$ 2,470**	$ 759	$ (188)
Adjustments to reconcile net profit/(loss) to net cash flows from operating activities:			
Deferred income tax (benefit)/expense *(Note 8)*	**48**	(89)	(87)
Depreciation, depletion and amortisation *(Note 7)*	**542**	561	521
Loss on disposal of property, plant and equipment	**11**	4	22
Impairment of assets	**30**	(12)	465
Foreign exchange (gains)/losses, net	**(361)**	54	48
Interest income	**(18)**	(14)	(10)
Interest expense	**359**	437	481
Share of (profits)/losses of associates and joint ventures	**(9)**	(11)	23
(Gain)/loss on financial assets and liabilities, net	**(13)**	57	9
(Gain)/loss on disposal groups classified as held for sale, net	**10**	360	–
Other non-operating (gains)/losses, net	**(2)**	2	52
Allowance for expected credit losses	**(1)**	10	1
Changes in provisions, employee benefits and other long-term assets and liabilities	**(16)**	(26)	(7)
Expense arising from equity-settled awards *(Note 21)*	**15**	17	16
Other	**(2)**	2	(3)
	3,063	2,111	1,343
Changes in working capital:			
Inventories	**(482)**	(199)	(17)
Trade and other receivables	**(128)**	(201)	(38)
Prepayments	**(48)**	(27)	(1)
Receivables from/payables to related parties	**(58)**	24	136
Taxes recoverable	**(24)**	(32)	(32)
Other assets	**–**	(2)	(3)
Trade and other payables	**108**	150	40
Contract liabilities	**63**	19	20
Taxes payable	**148**	123	62
Other liabilities	**(9)**	(9)	(7)
Net cash flows from operating activities	**2,633**	1,957	1,503
Cash flows from investing activities			
Issuance of loans receivable to related parties	**(1)**	(2)	(1)
Issuance of loans receivable	**(1)**	(2)	–
Proceeds from repayment of loans receivable, including interest	**2**	4	2
Purchases of subsidiaries, net of cash acquired *(Note 4)*	**–**	(5)	–
Proceeds from sale of other investments *(Note 13)*	**92**	–	–
Restricted deposits at banks in respect of investing activities	**–**	(1)	1
Short-term deposits at banks, including interest	**11**	7	4
Purchases of property, plant and equipment and intangible assets	**(521)**	(595)	(382)
Proceeds from disposal of property, plant and equipment	**4**	15	7
Proceeds from sale of disposal groups classified as held for sale, net of transaction costs *(Note 12)*	**52**	412	27
Dividends received	**6**	1	1
Other investing activities, net	**(22)**	(1)	1
Net cash flows used in investing activities	**(378)**	(167)	(340)

Continued on the next page

Consolidated Statement of Cash Flows (continued)

in millions of US dollars

	Year ended 31 December		
	2018	**2017**	**2016**
Cash flows from financing activities			
Purchases of non-controlling interests *(Note 4)*	**$ (24)**	$ –	$ –
Contributions of non-controlling shareholders to the Group's subsidiaries	**–**	2	13
Payments for investments on deferred terms *(Note 11)*	**(11)**	(11)	(8)
Dividends paid by the parent entity to its shareholders *(Note 20)*	**(1,556)**	(430)	–
Dividends paid by the Group's subsidiaries to non-controlling shareholders	**(1)**	–	–
Proceeds from bank loans and notes	**1,412**	2,441	1,301
Repayment of bank loans and notes, including interest	**(2,459)**	(3,344)	(2,428)
Net proceeds from/(repayment of) bank overdrafts and credit lines, including interest	**–**	(139)	(5)
Payments under covenants reset	**–**	–	(4)
Restricted deposits at banks in respect of financing activities	**12**	(13)	–
Realised gains/(losses) on derivatives not designated as hedging instruments *(Note 25)*	**11**	2	(250)
Realised gains/(losses) on hedging instruments *(Note 25)*	**11**	14	14
Payments under finance leases, including interest	**(1)**	(2)	(1)
Other financing activities, net	**–**	1	(1)
Net cash flows used in financing activities	**(2,606)**	(1,479)	(1,369)
Effect of foreign exchange rate changes on cash and cash equivalents	**(48)**	(2)	(10)
Net increase/(decrease) in cash and cash equivalents	**(399)**	309	(216)
Cash and cash equivalents at the beginning of the year	**1,466**	1,157	1,375
Decrease/(increase) in cash of disposal groups classified as assets held for sale *(Note 12)*	**–**	–	(2)
Cash and cash equivalents at the end of the year	**$ 1,067**	$ 1,466	$ 1,157
Supplementary cash flow information:			
Cash flows during the year:			
Interest paid	**$ (320)**	$ (405)	$ (413)
Interest received	**9**	8	6
Income taxes paid by the Group	**(623)**	(427)	(149)

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

in millions of US dollars

	Attributable to equity holders of the parent entity									
	Issued capital	Treasury shares	Additional paid-in capital	Revaluation surplus	Unrealised gains and losses	Accumu-lated profits	Translation difference	Total	Non-controlling interests	Total equity
At 31 December 2017	**$ 1,507**	**$ (231)**	**$ 2,500**	**$ 111**	**$ 39**	**$ 635**	**$ (2,777)**	**$ 1,784**	**$ 242**	**$ 2,026**
Net profit	–	–	–	–	–	2,406	–	2,406	64	2,470
Other comprehensive income/(loss)	–	–	–	–	56	22	(1,043)	(965)	(27)	(992)
Transfer of realised gains on sold equity instruments to accumulated profits *(Note 13)*	–	–	–	–	(89)	89	–	–	–	–
Reclassification of revaluation surplus to accumulated profits in respect of the disposed items of property, plant and equipment	–	–	–	(1)	–	1	–	–	–	–
Reclassification of additional paid-in capital in respect of the disposed subsidiaries	–	–	(35)	–	–	35	–	–	–	–
Total comprehensive income/(loss) for the period	–	–	(35)	(1)	(33)	2,553	(1,043)	1,441	37	1,478
Reduction in par value of shares *(Note 20)*	(1,432)	–	–	–	–	1,432	–	–	–	–
Acquisition of non-controlling interests in subsidiaries *(Note 4)*	–	–	–	–	–	(3)	–	(3)	(21)	(24)
Transfer of treasury shares to participants of the Incentive Plans *(Notes 20 and 21)*	–	35	–	–	–	(35)	–	–	–	–
Share-based payments *(Note 21)*	–	–	15	–	–	–	–	15	–	15
Dividends declared by the parent entity to its shareholders *(Note 20)*	–	–	–	–	–	(1,556)	–	(1,556)	–	(1,556)
Dividends declared by the Group's subsidiaries to non-controlling shareholders	–	–	–	–	–	–	–	–	(1)	(1)
At 31 December 2018	**$ 75**	**$ (196)**	**$ 2,480**	**$ 110**	**$ 6**	**$ 3,026**	**$ (3,820)**	**$ 1,681**	**$ 257**	**$ 1,938**

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity (continued)

in millions of US dollars

	Attributable to equity holders of the parent entity									
	Issued capital	Treasury shares	Additional paid-in capital	Revaluation surplus	Unrealised gains and losses	Accumu-lated profits	Translation difference	Total	Non-controlling interests	Total equity
At 31 December 2016	$ 1,507	$ (270)	$ 2,517	$ 112	$ –	$ 415	$ (3,790)	$ 491	$ 186	$ 677
Net profit	–	–	–	–	–	699	–	699	60	759
Other comprehensive income/(loss)	–	–	–	–	39	11	1,013	1,063	4	1,067
Reclassification of revaluation surplus to accumulated profits in respect of the disposed items of property, plant and equipment	–	–	–	(1)	–	1	–	–	–	–
Reclassification of additional paid-in capital in respect of the disposed subsidiaries	–	–	(34)	–	–	34	–	–	–	–
Total comprehensive income/(loss) for the period	–	–	(34)	(1)	39	745	1,013	1,762	64	1,826
Derecognition of non-controlling interests on sale of subsidiaries *(Note 12)*	–	–	–	–	–	–	–	–	(6)	(6)
Derecognition of non-controlling interests under put options *(Note 4)*	–	–	–	–	–	(56)	–	(56)	(4)	(60)
Contribution of a non-controlling shareholder to share capital of the Group's subsidiary	–	–	–	–	–	–	–	–	2	2
Transfer of treasury shares to participants of the Incentive Plans *(Notes 20 and 21)*	–	39	–	–	–	(39)	–	–	–	–
Share-based payments *(Note 21)*	–	–	17	–	–	–	–	17	–	17
Dividends declared by the parent entity to its shareholders *(Note 20)*	–	–	–	–	–	(430)	–	(430)	–	(430)
At 31 December 2017	$ 1,507	$ (231)	$ 2,500	$ 111	$ 39	$ 635	$ (2,777)	$ 1,784	$ 242	$ 2,026

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity (continued)

in millions of US dollars

	Attributable to equity holders of the parent entity									
	Issued capital	**Treasury shares**	**Additional paid-in capital**	**Revaluation surplus**	**Unrealised gains and losses**	**Accumu-lated profits**	**Translation difference**	**Total**	**Non-controlling interests**	**Total equity**
At 31 December 2015	$ 1,507	$ (305)	$ 2,501	$ 124	$ –	$ 644	$ (4,335)	$ 136	$ 133	$ 269
Net loss	–	–	–	–	–	(215)	–	(215)	27	(188)
Other comprehensive income/(loss)	–	–	–	–	–	11	545	556	11	567
Reclassification of revaluation surplus to accumulated profits in respect of the disposed items of property, plant and equipment	–	–	–	(12)	–	12	–	–	–	–
Total comprehensive income/(loss) for the period	–	–	–	(12)	–	(192)	545	341	38	379
Acquisition of non-controlling interests in subsidiaries	–	–	–	–	–	(2)	–	(2)	2	–
Contribution of a non-controlling shareholder to share capital of the Group's subsidiary	–	–	–	–	–	–	–	–	13	13
Transfer of treasury shares to participants of the Incentive Plans *(Notes 20 and 21)*	–	35	–	–	–	(35)	–	–	–	–
Share-based payments *(Note 21)*	–	–	16	–	–	–	–	16	–	16
At 31 December 2016	$ 1,507	$ (270)	$ 2,517	$ 112	$ –	$ 415	$ (3,790)	$ 491	$ 186	$ 677

The accompanying notes form an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements Year ended 31 December 2018

1. Corporate Information

These consolidated financial statements were authorised for issue by the Board of Directors of EVRAZ plc on 27 February 2019.

EVRAZ plc ("EVRAZ plc" or "the Company") was incorporated on 23 September 2011 as a public company limited by shares under the laws of the United Kingdom with the registered number in England of 7784342. The Company's registered office is at 5th Floor, 6 St. Andrew Street, London, EC4A 3AE, United Kingdom.

The Company is a parent entity of Evraz Group S.A. (Luxembourg), a holding company which owns steel production, mining and trading companies. The Company, together with its subsidiaries (the "Group"), is involved in the production and distribution of steel and related products, vanadium products and coal and iron ore mining. The Group is one of the largest steel producers globally.

Until 3 September 2018 Lanebrook Limited ("Lanebrook") registered in Cyprus was the ultimate controlling party of the Group. On that date Lanebrook distributed all its ownership interest in EVRAZ plc to its direct shareholders in proportion to their holdings in Lanebrook. At 31 December 2018, EVRAZ plc is jointly controlled by a group of 3 shareholders: Greenleas International Holdings Limited (BVI), Abiglaze Limited (Cyprus) and Crosland Global Limited (Cyprus).

The major subsidiaries included in the consolidated financial statements of the Group were as follows at 31 December:

	Effective ownership interest, %				
Subsidiary	**2018**	**2017**	**2016**	**Business activity**	**Location**
EVRAZ Nizhny Tagil Metallurgical Plant	**100.00**	100.00	100.00	Steel production	Russia
EVRAZ Consolidated West-Siberian Metallurgical Plant	**100.00**	100.00	100.00	Steel production	Russia
EVRAZ Dneprovsk Metallurgical Plant	**–**	97.73	97.73	Steel production	Ukraine
EVRAZ Inc. NA	**100.00**	100.00	100.00	Steel production	USA
EVRAZ Inc. NA Canada	**100.00**	100.00	100.00	Steel production	Canada
Raspadskaya	**83.84**	81.95	81.95	Coal mining	Russia
Yuzhkuzbassugol	**100.00**	100.00	100.00	Coal mining	Russia
EVRAZ Kachkanarsky Mining-and-Processing Integrated Works	**100.00**	100.00	100.00	Ore mining and processing	Russia
Evrazruda (in 2018 merged with EVRAZ Consolidated West-Siberian Metallurgical Plant)	**–**	100.00	100.00	Ore mining	Russia
EVRAZ Sukha Balka	**–**	–	99.42	Ore mining	Ukraine

The full list of the Group's subsidiaries and other significant holdings as of 31 December 2018 is presented in Note 34.

2. Significant Accounting Policies

Basis of Preparation

These consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as adopted by the European Union.

International Financial Reporting Standards are issued by the International Accounting Standard Board ("IASB"). IFRSs that are mandatory for application for the annual periods beginning on or after 1 January 2018, but not adopted by the European Union, do not have any significant impact on the Group's consolidated financial statements.

The consolidated financial statements have been prepared under the historical cost convention, except as disclosed in the accounting policies below. Exceptions include, but are not limited to, property, plant and equipment at the date of transition to IFRS accounted for at deemed cost, equity instruments measured at fair value, assets classified as held for sale measured at the lower of their carrying amount or fair value less costs to sell and post-employment benefits measured at present value.

Going Concern

These consolidated financial statements have been prepared on a going concern basis.

Changes in Accounting Policies

New/Revised Standards and Interpretations Adopted in 2018:

- IFRS 9 "Financial Instruments"

Starting from 2018, the Group applies IFRS 9 "Financial Instruments" that replaced IAS 39 "Financial Instruments: Recognition and Measurement". The impact of the adoption of IFRS 9 to the Group's consolidated financial statements was as follows:

(a) Classification and measurement

IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model, in which assets are managed and their cash flow characteristics. IFRS 9 includes three principal classification categories for financial assets: measured at amortised cost, at fair value through other comprehensive income and at fair value through profit or loss. It eliminates the existing IAS 39 categories of held to maturity, loans and receivables and available-for-sale financial assets.

The Group continued measuring all financial assets, which were previously measured at fair value, at fair value through profit or loss with the exception of equity investments in Delong Holdings Limited, which were classified as available-for-sale at 31 December 2017 (Note 13). At 1 January 2018, the Group has irrevocably designated these investments as measured at fair value through other comprehensive income. For such financial instruments all subsequent changes in fair value are reported in other comprehensive income, no impairment losses are recognised in profit or loss and no gains or losses are recycled to profit or loss upon derecognition.

Loans and trade receivables are held to collect contractual cash flows and are expected to give rise to cash flows representing solely payments of principal and interest. The Group analysed the contractual cash flow characteristics of those instruments and concluded that they meet the criteria for amortised cost measurement under IFRS 9. Therefore, reclassification for these instruments was not required.

(b) Impairment

Under IFRS 9, the new impairment model requires the recognition of impairment provisions based on the expected credit losses rather than only incurred credit losses under IAS 39. The expected credit losses represent measures of an asset's credit risk. This requires judgement about how changes in economic factors affect expected credit losses, which is determined on a probability-weighted basis.

2. Significant Accounting Policies (continued)

Changes in Accounting Policies (continued)

New/Revised Standards and Interpretations Adopted in 2018 (continued)

The new impairment model applies to the Group's financial assets, including, but not limited to, trade and other receivables, loans receivable, restricted deposits, cash and cash equivalents.

Loss allowances are measured on either of the following bases:
- 12-month basis – these are expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date; or
- lifetime basis – these are expected credit losses that result from all possible default events over the expected life of a financial instrument.

This did not impact on the loss allowance for trade debtors and other financial assets held at amortised cost.

The Group's cash and cash equivalents have low credit risk based on the external credit ratings of banks and financial institutions. Therefore, the Group determined that no additional allowances are required at 1 January 2018 in connection with the adoption of the new impairment model under IFRS 9.

(c) Hedge accounting

The Group made a choice to continue applying IAS 39 "Financial Instruments: Recognition and Measurement" to all existing hedge contracts.

The Group has elected the modified retrospective approach for IFRS 9, but it did not record the cumulative impact of the new standard upon initial application due to its immateriality.

- IFRS 15 "Revenue from Contracts with Customers"

IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The new revenue standard superseded all previous revenue recognition requirements under IFRS. The Group analysed the impacts of IFRS 15 on its consolidated financial statements considering the following:

(a) Sale of goods and services

For contracts with customers in which the sale of goods produced by the Group is generally expected to be the only performance obligation, adoption of IFRS 15 had no any impact on the Group's revenue and profit or loss. The Group continued to recognise the revenue at the point in time when control of the asset is transferred to the customer, generally on dispatch or shipping of the goods.

Some contracts with customers provide a right of return, trade discounts or volume rebates. The Group recognises revenue from the sale of goods measured at the fair value of the consideration received or receivable, net of the estimated returns and price concessions, trade discounts and volume rebates. IFRS 15 requires the estimated variable consideration to be constrained to prevent over-recognition of revenue, i.e. variable consideration should be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The application of the constraint did not result in any effects as the Group applied similar principles.

2. Significant Accounting Policies (continued)

Changes in Accounting Policies (continued)

(b) Advances received from customers

Under certain contracts, the Group produces steel products specifically for the needs of some customers. The Group has enforceable rights to payment of 100% of the contract price if the contract is cancelled after the pipe manufacturing process has begun. The Group recognises revenue from such contracts at the moment of the transfer of control. The Group analysed whether these contracts require the recognition of revenue over the period of manufacturing the products and concluded that the performance obligation under these contracts does not meet criteria for the recognition over time. The Group concluded that the customers do not simultaneously receive and consume the benefits provided by the Group's performance nor do the customers control the assets as it is created or enhanced. Also despite the steel products are manufactured under customer specifications, they can be sold to another customer without any rework at a market price or with a discount.

The Group receives only short-term advances from its customers. The Group decided to use the practical expedient provided in IFRS 15, which allows not to adjust the promised amount of consideration for the effects of a significant financing component in the contracts where the Group expects, at contract inception, that the period between the Group's transfer of a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Therefore, for short-term advances, the Group will not account for a financing component even if it is significant.

(c) Principal versus agent considerations

The Group enters into contracts with its customers, under which the Group provides transportation and handling services using third party providers (i.e. the Group selects suitable firms and manages the shipment and delivery). These services are provided to the customers before, or after, they obtain control over the goods. The cost of services is included in the contract price.

Under IFRS 15, transportation and handling services rendered by the Group before control over the goods is transferred to the customers do not represent a separate performance obligation. Therefore, the Group continued to recognise these services at the moment when control over the goods is passed to the customers.

With respect to the contracts when the Group provides transportation and handling services after obtaining control over the goods by the customers, the Group concluded that these services represent a separate performance obligation and the Group acts as a principal rather than an agent. Consequently, the control over its services is transferred over time. This change in the accounting policies had no significant impact on the Group's consolidated financial statements and, therefore, the Group did not adjust its consolidated financial statements or the comparative amounts at the date of initial recognition of IFRS 15.

(d) Presentation and disclosure requirements

For the performance obligations under transportation and handling services rendered by the Group in contracts in which it acts as a principal, it was decided to continue presenting revenues from these services within the caption "Sales of goods" in the consolidated statement of operations.

(e) Other adjustments

The recognition and measurement requirements in IFRS 15 are also applicable for recognition and measurement of any gains or losses on disposal of non-financial assets (such as items of property and equipment and intangible assets), when that disposal is not in the ordinary course of business. There were no such transactions in the reporting period.

The Group has elected the modified retrospective approach for IFRS 15, but it did not record the cumulative impact of the new standard upon initial application due to its immateriality.

2. Significant Accounting Policies (continued)

Changes in Accounting Policies (continued)

- Amendments to IFRS 2 – Classification and Measurement of Share-based Payment Transactions

The IASB issued amendments to IFRS 2 "Share-based Payment" that address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash settled to equity settled. On adoption, entities are required to apply the amendments without restating prior periods, but retrospective application is permitted if elected for all three amendments and other criteria are met. These amendments do not have any impact on the Group's consolidated financial statements.

- Amendments to IAS 40 – Transfers of Investment Property

The amendments clarify when an entity should transfer property, including property under construction or development into, or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. A mere change in management's intentions for the use of a property does not provide evidence of a change in use. These amendments do not have any impact on the Group's consolidated financial statements.

- IFRIC 22 "Foreign Currency Transactions and Advance Consideration"

The Interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, then the entity must determine a date of the transactions for each payment or receipt of advance consideration. This Interpretation does not have any impact on the Group's consolidated financial statements as the Group applies the same accounting practice.

Other amendments, clarifications and improvements, which became effective from 1 January 2018, had no impact on the financial position and performance of the Group or the disclosures in the consolidated financial statements.

The Group has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

Standards Issued But Not Yet Effective in the European Union

Standards not yet effective for the financial statements for the year ended 31 December 2018	Effective for annual periods beginning on or after
▪ IFRS 16 "Leases"	1 January 2019
▪ Amendments to IAS 28 – Long-term Interests in Associates and Joint Ventures	1 January 2019
▪ Amendments to IAS 19 – Plan Amendment, Curtailment or Settlement	1 January 2019*
▪ Amendments to IFRS 9 – Prepayment Features with Negative Compensation	1 January 2019
▪ IFRIC 23 "Uncertainty over Income Tax Treatments"	1 January 2019
▪ Annual Improvements to IFRSs 2015-2017 Cycle	1 January 2019*
▪ Amendment to IFRS 3 – Definition of Business	1 January 2020*
▪ Amendments to IAS 1 and IAS 8 – Definition of Materiality	1 January 2020*
▪ Amendments to References to the Conceptual Framework in IFRS Standards	1 January 2020*
▪ IFRS 17 "Insurance Contracts"	1 January 2021*

* *Subject to EU endorsement*

2. Significant Accounting Policies (continued)

Changes in Accounting Policies (continued)

Standards Issued But Not Yet Effective in the European Union (continued)

The Group expects that the adoption of the pronouncements listed above, except for IFRS 16, will not have a significant impact on the Group's results of operations and financial position in the period of initial application.

The Group plans to apply IFRS 16 "Leases" from 1 January 2019 using the modified retrospective approach, i.e. the comparative information will not be restated. Under this approach both lease liabilities and right-of-use assets will be recognised at the date of transition to IFRS 16 in the same amount. The Group has completed the analysis of possible impact of the application of this standard on its consolidated financial statements. Main categories of contracts, which will be affected by the requirements of IFRS 16, are operating leases of gondola cars, land under production facilities and land used for mining, and certain items of machinery and equipment. The Group expects to recognise approximately $200 million of lease liabilities as a result of application of the new standard.

The Group will not apply IFRS 16 for the leases to explore for or use coal, iron ore and similar non-regenerative resources. Currently the Group is reviewing its lease portfolio to determine which leases will not be subject to IFRS 16.

The Group has elected to use the following practical expedients proposed by the standard:
- on initial application initial direct costs will be excluded from the measurement of the right-of-use asset;
- on initial application IFRS 16 will only be applied to contracts that were previously classified as leases;
- for all classes of underlying assets each lease component and any associated non-lease components will be accounted as a single lease component;
- lease payments for contracts with a duration of 12 months or less or leases for which the underlying assets are of low value will continue to be expensed to the statement of profit or loss on a straight-line basis over the lease term.

In previous years and in 2018, the majority of the Group's outstanding short and long-term lease agreements were cancellable. IAS 17 requires disclosing operating lease commitments only for non-cancellable leases, while under IFRS 16 the Group is also required to include in lease liabilities the payments relating to the term periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

Significant Accounting Judgements and Estimates

Accounting Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimates, which have the most significant effect on the amounts recognised in the consolidated financial statements:
- In 2015, following the placement of Highveld Steel and Vanadium Limited under the business rescue procedures, the Group lost control over the subsidiary and it is not expected that it will re-obtain control in the future. As a result, the Group ceased to consolidate this entity starting 14 April 2015.
- The Group determined based on the criteria in IFRIC 4 "Determining whether an Arrangement Contains a Lease" that the supply contracts with PraxAir and Air Liquide do not contain a lease. These contracts included the construction of air separation plants by PraxAir and Air Liquide to be owned and operated by them and the supply of oxygen and other industrial gases produced by the enities to the Group's steel plants for a long-term period on a take or pay basis. Management believes that these arrangements do not convey a right to the Group to use the assets as the Group does not have an ability to operate the assets or to direct other parties to operate the assets; it does not control physical access to the assets; and it is expected that more than an insignificant amount of the assets' output will be sold to the parties unrelated to the Group. The commitments under the contracts are disclosed in Note 30.

Estimation Uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

Impairment of Property, Plant and Equipment

The Group assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Group makes an estimate of the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money and the risks specific to the assets. In 2018, 2017 and 2016, the Group recognised a net impairment reversal/(loss) of $(30) million, $20 million and $(151) million, respectively (Notes 6 and 9).

The determination of impairments of property, plant and equipment involves the use of estimates that include, but are not limited to, the cause, timing and amount of the impairment. Impairment is based on a large number of factors, such as changes in current competitive conditions, expectations of growth in the industry, increased cost of capital, changes in the future availability of financing, technological obsolescence, discontinuance of service, current replacement costs and other changes in circumstances that indicate that impairment exists. In 2018, the impairment test models take into account the tariffs imposed by the US and Canada against each other on import of steel and steel products, whose effect is assumed to last until 2022 (Note 6).

2. Significant Accounting Policies (continued)

Significant Accounting Judgements and Estimates (continued)

Estimation Uncertainty (continued)

Impairment of Property, Plant and Equipment (continued)

The determination of the recoverable amount of a cash-generating unit involves the use of estimates by management. Methods used to determine the value in use include discounted cash flow-based methods, which require the Group to make an estimate of the 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. These estimates, including the methodologies used, may have a material impact on the value in use and, ultimately, the amount of any impairment.

Impairment of Goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the 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.

The carrying amount of goodwill at 31 December 2018, 2017 and 2016 was $864 million, $917 million and $880 million, respectively. In 2018, 2017 and 2016, the Group recognised an impairment loss in respect of goodwill in the amount of $Nil, $Nil and $316 million, respectively (Note 5). More details of the assumptions used in estimating the value in use of the cash-generating units to which goodwill is allocated are provided in Note 6.

Mineral Reserves

Mineral reserves and the associated mine plans are a material factor in the Group's computation of a depletion charge. The Group estimates its mineral reserves in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code"). Estimation of reserves in accordance with the JORC Code involves some degree of uncertainty. The uncertainty depends mainly on the amount of reliable geological and engineering data available at the time of the estimate and the interpretation of this data, which also requires use of subjective judgement and development of assumptions.

The changes in the pricing environment and geology-related risk factors may lead to a revision of mining plans, decisions to abandon or to mothball certain parts of a mine, to a reassessment of the capital expenditures required for the extraction of the proved and probable reserves, as well as to the changes in the resources classified as proved and probable reserves. As the value of the Group's mining assets is very significant (Note 9), these changes may have a material impact on the depletion charge and impairment, which may arise as a result of a decline in the recoverable amounts of the affected mines.

Post-Employment Benefits

The Group uses an actuarial valuation method for the measurement of the present value of post-employment benefit obligations and related current service cost. This involves the use of demographic assumptions about the future characteristics of the current and former employees who are eligible for benefits (mortality, both during and after employment, rates of employee turnover, disability and early retirement, etc.) as well as financial assumptions (discount rate, future salary and benefit levels, expected rate of return on plan assets, etc.). More details are provided in Note 23.

Foreign Currency Transactions

The presentation currency of the Group is the US dollar because presentation in US dollars is most relevant for the major current and potential users of the consolidated financial statements.

The functional currencies of the Group's subsidiaries are the Russian rouble, US dollar, euro, Czech koruna, South African rand, Canadian dollar and Ukrainian hryvnia. At the reporting date, the assets and liabilities of the subsidiaries with functional currencies other than the US dollar are translated into the presentation currency at the rate of exchange ruling at the end of the reporting period, and their statements of operations are translated at the exchange rates that approximate the exchange rates at the dates of the transactions. The exchange differences arising on the translation are taken directly to a separate component of equity. On disposal of a subsidiary with functional currency other than the US dollar, the deferred cumulative amount recognised in equity relating to that particular subsidiary is recognised in the statement of operations.

2. Significant Accounting Policies (continued)

Foreign Currency Transactions (continued)

The following exchange rates were used in the consolidated financial statements:

	2018		2017		2016	
	31 December	**average**	**31 December**	**average**	**31 December**	**average**
USD/RUB	69.4706	62.7078	57.6002	58.3529	60.6569	67.0349
EUR/RUB	79.4605	73.9546	68.8668	65.9014	63.8111	74.2336
EUR/USD	1.1450	1.1810	1.1993	1.1297	1.0541	1.1069
USD/CAD	1.3658	1.2962	1.2530	1.2979	1.3427	1.3248
USD/UAH	27.6880	27.2029	28.0672	26.5947	27.1909	25.5458

Transactions in foreign currencies in each subsidiary of the Group are initially recorded in the functional currency at the rate ruling at the date of the transaction. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rate of exchange ruling at the end of the reporting period. All resulting differences are taken to the statement of operations.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the closing rate.

Basis of Consolidation

Subsidiaries

Subsidiaries, which are those entities in which the Group has an interest of more than 50% of the voting rights and over which the Group has control, or otherwise has power to exercise control over their operations, are consolidated. Subsidiaries are consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

All intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, accounting policies for subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

Non-controlling interest is the equity in a subsidiary not attributable, directly or indirectly, to a parent. Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from the parent’s shareholders’ equity.

Total comprehensive income is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Acquisition of Subsidiaries

Business combinations are accounted for using the acquisition method.

The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the Group measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree’s identifiable net assets.

Acquisition costs incurred are expensed and included in administrative expenses.

2. Significant Accounting Policies (continued)

Basis of Consolidation (continued)

Acquisition of Subsidiaries (continued)

If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability will be recognised in accordance with IFRS 9 either in profit or loss or as a change to other comprehensive income. If the contingent consideration is classified as equity, it should not be remeasured until it is finally settled within equity.

The initial accounting for a business combination involves identifying and determining the fair values to be assigned to the acquiree's identifiable assets, liabilities and contingent liabilities and the cost of the combination. If the initial accounting for a business combination can be determined only provisionally by the end of the period in which the combination is effected because either the fair values to be assigned to the acquiree's identifiable assets, liabilities or contingent liabilities or the cost of the combination can be determined only provisionally, the Group accounts for the combination using those provisional values. The Group recognises any adjustments to those provisional values as a result of completing the initial accounting within twelve months of the acquisition date.

Comparative information presented for the periods before the completion of initial accounting for the acquisition is presented as if the initial accounting had been completed from the acquisition date.

Increases in Ownership Interests in Subsidiaries

The differences between the carrying values of net assets attributable to interests in subsidiaries acquired and the consideration given for such increases is either added to additional paid-in capital, if positive, or charged to accumulated profits, if negative, in the consolidated financial statements.

Purchases of Controlling Interests in Subsidiaries from Entities under Common Control

Purchases of controlling interests in subsidiaries from entities under common control are accounted for using the pooling of interests method.

The assets and liabilities of the subsidiary transferred under common control are recorded in these financial statements at the historical cost of the controlling entity (the "Predecessor"). Related goodwill inherent in the Predecessor's original acquisition is also recorded in the financial statements. Any difference between the total book value of net assets, including the Predecessor's goodwill, and the consideration paid is accounted for in the consolidated financial statements as an adjustment to the shareholders' equity.

These financial statements, including corresponding figures, are presented as if a subsidiary had been acquired by the Group on the date it was originally acquired by the Predecessor.

Put Options over Non-controlling Interests

The Group derecognises non-controlling interests if non-controlling shareholders have a put option over their holdings. The difference between the amount of the liability recognised in the statement of financial position over the carrying value of the derecognised non-controlling interests is charged to accumulated profits.

2. Significant Accounting Policies (continued)

Investments in Associates

Associates are entities in which the Group generally has between 20% and 50% of the voting rights, or is otherwise able to exercise significant influence, but which it does not control or jointly control.

Investments in associates are accounted for under the equity method of accounting and are initially recognised at cost including goodwill. Subsequent changes in the carrying value reflect the post-acquisition changes in the Group's share of net assets of the associate and goodwill impairment charges, if any.

The Group's share of its associates' profits or losses is recognised in the statement of operations and its share of movements in reserves is recognised in equity. However, when the Group's share of losses in an associate equals or exceeds its interest in the associate, the Group does not recognise further losses, unless the Group has legal or constructive obligations to make payments to, or on behalf of, the associate. If the associate subsequently reports profits, the Group resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised.

Unrealised gains on transactions between the Group and its associates 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.

Interests in Joint Ventures

The Group's interest in its joint ventures is accounted for under the equity method of accounting whereby an interest in jointly ventures is initially recorded at cost and adjusted thereafter for post-acquisition changes in the Group's share of net assets of joint ventures. The statement of operations reflects the Group's share of the results of operations of joint ventures.

Property, Plant and Equipment

The Group's property, plant and equipment is stated at purchase or construction cost, excluding the costs of day-to-day servicing, less accumulated depreciation and any impairment in value. Such cost includes the cost of replacing part of plant and equipment when that cost is incurred and recognition criteria are met.

The Group's property, plant and equipment include mining assets, which consist of mineral reserves, mine development and construction costs and capitalised site restoration costs. Mineral reserves represent tangible assets acquired in business combinations. Mine development and construction costs represent expenditures incurred in developing access to mineral reserves and preparations for commercial production, including sinking shafts and underground drifts, roads, infrastructure, buildings, machinery and equipment.

At each end of the reporting period management makes an assessment to determine whether there is any indication of impairment of property, plant and equipment. If any such indication exists, management estimates the recoverable amount, which is the higher of an asset's fair value less cost to sell and its value in use. The carrying amount is reduced to the recoverable amount, and the difference is recognised as impairment loss in the statement of operations or other comprehensive income. An impairment loss recognised for an asset in previous years is reversed if there has been a change in the estimates used to determine the asset's recoverable amount.

Land is not depreciated. Depreciation of property, plant and equipment, except for mining assets, is calculated on a straight-line basis over the estimated useful lives of the assets. The useful lives of items of property, plant and equipment and methods of their depreciation are reviewed, and adjusted as appropriate, at each fiscal year end.

2. Significant Accounting Policies (continued)

Property, Plant and Equipment (continued)

The table below presents the useful lives of items of property, plant and equipment.

	Useful lives (years)	Weighted average remaining useful life (years)
Buildings and constructions	15–60	19
Machinery and equipment	4–45	10
Transport and motor vehicles	7–20	8
Other assets	3–15	4

The Group determines the depreciation charge separately for each significant part of an item of property, plant and equipment.

Depletion of mining assets including capitalised site restoration costs is calculated using the units-of-production method based upon proved and probable mineral reserves. The depletion calculation takes into account future development costs for reserves which are in the production phase.

Maintenance costs relating to items of property, plant and equipment are expensed as incurred. Major renewals and improvements are capitalised, and the replaced assets are derecognised.

The Group has the title to certain non-production and social assets, primarily buildings and facilities of social infrastructure, which are carried at their recoverable amount of zero. The costs to maintain such assets are expensed as incurred.

Exploration and Evaluation Expenditures

Exploration and evaluation expenditures represent costs incurred by the Group in connection with the exploration for and evaluation of mineral resources before the technical feasibility and commercial viability of extracting a mineral resource are demonstrable. The expenditures include acquisition of rights to explore, topographical, geological, geochemical and geophysical studies, exploratory drilling, trenching, sampling, activities in relation to evaluating the technical feasibility and commercial viability of extracting mineral resources. These costs are expensed as incurred.

When the technical feasibility and commercial viability of extracting a mineral resource are demonstrable, the Group commences recognition of expenditures related to the development of mineral resources as assets. These assets are assessed for impairment when facts and circumstances suggest that the carrying amount of an asset may exceed its recoverable amount.

Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date as to whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset.

Finance leases, which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are capitalised from the commencement of the lease term at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged to interest expense.

The depreciation policy for depreciable leased assets is consistent with that for depreciable assets which are owned. If there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term or its useful life.

Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognised as an expense in the statement of operations on a straight-line basis over the lease term.

2. Significant Accounting Policies (continued)

Goodwill

Goodwill represents the excess of the aggregate of the consideration transferred for an acquisition of a subsidiary or an associte and the amount recognised for non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the acquiree, the difference is recognised in the consolidated statement of operations.

Goodwill on acquisition of a subsidiary is included in intangible assets. Goodwill on acquisition of an associate is included in the carrying amount of the investments in associates.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is reviewed for impairment annually or more frequently, if events or changes in circumstances indicate that the carrying amount may be impaired. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Impairment is determined by assessing the recoverable amount of the cash-generating unit, or the group of cash-generating units, to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative fair values of the operation disposed of and the portion of the cash-generating unit retained.

Intangible Assets Other Than Goodwill

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses. Expenditures on internally generated intangible assets, excluding capitalised development costs, are expensed as incurred.

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite life are reviewed at least at each year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are treated as changes in accounting estimates.

Intangible assets with indefinite useful lives are not amortised, they are tested for impairment annually either individually or at the cash-generating unit level.

2. Significant Accounting Policies (continued)

Intangible Assets Other Than Goodwill (continued)

The table below presents the useful lives of intangible assets.

	Useful lives (years)	Weighted average remaining useful life (years)
Customer relationships	1–15	5
Contract terms	10	5
Other	5–19	6

Certain water rights and environmental permits are considered to have indefinite lives as management believes that these rights will continue indefinitely.

The most part of the Group's intangible assets represents customer relationships arising on business combinations (Note 10).

Financial Assets

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them, i.e. how the Group manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

With the exception of trade and other receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

The Group measures financial assets at amortised cost if both of the following conditions are met:
- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

2. Significant Accounting Policies (continued)

Financial Assets (continued)

Trade and Other Accounts Receivable

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less an allowance for any amounts of the expected credit losses.

For trade and other receivables, the Group applies a simplified approach for calculating the expected credit losses. Therefore, the Group does not track changes in credit risk, but, instead, it recognises a loss allowance based on the lifetime expected credit losses at each reporting date. The Group separately determines the expected credit losses for individually significant balances or collectively for trade and other receivables that are not individually significant.

The expected credit losses for individually significant balances are estimated using debtors' historical credit loss experience adjusted for forward-looking factors specific to the debtors and economic environment.

Inventories

Inventories are recorded at the lower of cost and net realisable value. Cost of inventory is determined on the weighted average basis and includes expenditure incurred in acquiring or producing inventories and bringing them to their existing location and condition. The cost of finished goods and work in progress includes an appropriate share of production overheads based on normal operating capacity, but excluding borrowing costs.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale.

Value Added Tax

The tax authorities permit the settlement of sales and purchases value added tax ("VAT") on a net basis.

The Group's subsidiaries apply the accrual method for VAT recognition, under which VAT becomes payable upon invoicing and delivery of goods or rendering services as well upon receipt of prepayments from customers. VAT on purchases, even if not settled at the end of the reporting period, is deducted from the amount of VAT payable.

Where provision has been made for impairment of receivables, an impairment loss is recorded for the gross amount of the debtor, including VAT.

Cash and Cash Equivalents

Cash and cash equivalents comprise cash at bank and in hand and deposits with an original maturity of three months or less.

2. Significant Accounting Policies (continued)

Borrowings

Borrowings are initially recognised at fair value, net of directly attributable transaction costs. After initial recognition, borrowings are measured at amortised cost using the effective interest rate method; any difference between the amount initially recognised and the redemption amount is recognised as interest expense over the period of the borrowings.

Borrowing costs relating to qualifying assets are capitalised (Note 9).

Equity

Share Capital

Ordinary shares are classified as equity. External costs directly attributable to the issue of new shares are shown as a deduction in equity from the proceeds. Any excess of the fair value of consideration received over the par value of shares issued is recognised as additional paid-in capital.

Treasury Shares

Own equity instruments which are acquired by the Group (treasury shares) are deducted from equity. No gain or loss is recognised in statement of operations on the purchase, sale, issue or cancellation of the treasury shares.

Dividends

Dividends are recognised as a liability and deducted from equity only if they are declared before the end of the reporting period. Dividends are disclosed when they are proposed before the end of the reporting period or proposed or declared after the end of the reporting period but before the financial statements are authorised for issue.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. 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.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as an interest expense.

Site Restoration Provisions

The Group reviews site restoration provisions at each reporting date and adjusts them to reflect the current best estimate in accordance with IFRIC 1 “Changes in Existing Decommissioning, Restoration and Similar Liabilities”.

Provisions for site restoration costs are capitalised within property, plant and equipment.

2. Significant Accounting Policies (continued)

Employee Benefits

Social and Pension Contributions

Defined contributions are made by the Group to the Russian and Ukrainian state pension, social insurance and medical insurance funds at the statutory rates in force based on gross salary payments. The Group has no legal or constructive obligation to pay further contributions in respect of those benefits. Its only obligation is to pay contributions as they fall due. These contributions are expensed as incurred.

Defined Benefit Plans

The Group companies provide pensions and other benefits to their employees (Note 23). The entitlement to these benefits is usually conditional on the completion of a minimum service period. Certain benefit plans require the employee to remain in service up to retirement age. Other employee benefits consist of various compensations and non-monetary benefits. The amounts of benefits are stipulated in the collective bargaining agreements and/or in the plan documents.

The Group involves independent qualified actuaries in the measurement of employee benefit obligations.

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding net interest and the return on plan assets (excluding net interest), are recognised immediately in the statement of financial position with a corresponding debit or credit to retained earnings through other comprehensive income in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognised in profit or loss on the earlier of the date of the plan amendment or curtailment, and the date that the Group recognises restructuring-related costs.

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. It is recorded within interest expense in the consolidated statement of operations.

The Group recognises current service costs, past-service costs, gains and losses on curtailments and non-routine settlements in the consolidated statement of operations within “cost of sales”, “general and administrative expenses” and “selling and distribution expenses”.

Other Costs

The Group incurs employee costs related to the provision of benefits such as health services, kindergartens and other services. These amounts principally represent an implicit cost of employment and, accordingly, have been charged to cost of sales.

Share-based Payments

The Group has management compensation schemes (Note 21), under which certain senior executives and employees of the Group receive remuneration in the form of share-based payment transactions, whereby they render services as consideration for equity instruments (“equity-settled transactions”).

The cost of equity-settled transactions with grantees is measured by reference to the fair value of the Company’s shares at the date on which they are granted. The fair value is determined using the Black-Scholes-Merton model. In valuing equity-settled transactions, no account is taken of any conditions, other than market conditions.

2. Significant Accounting Policies (continued)

Share-based Payments (continued)

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity (additional paid-in capital), over the period in which service conditions are fulfilled, ending on the date on which the relevant persons become fully entitled to the award ("the vesting date"). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit in the statement of operations for a period represents the movement in cumulative expense recognised as at the beginning and end of that period.

No expense is recognised for awards if EBITDA-related conditions are not satisfied or participants lose the entitlement for the shares due to the termination of their employment. Accumulated share-based expense is adjusted to reflect the number of share options that eventually vest. For market-related performance conditions, such as TSR (Note 21), if the conditions are not met and the share options do not vest, then no reversal is made for the share-based expense previously recognised.

The TSR-related vesting condition of Incentive Plans adopted in 2017 and 2018 was considered by the Group as a market condition. As such, it was included in the estimation of the fair value of the granted shares and will not be subsequently revised. Vesting condition related to EBITDA was not taken into account when estimating the fair value of the share options at the grant date. Instead, this will be taken into account by adjusting the share-based expense based on the number of share options that eventually vest.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified. In addition, an expense is recognised for any modification which increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately.

The dilutive effect of outstanding share-based awards is reflected as additional share dilution in the computation of earnings per share (Note 20).

Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured.

The following specific recognition criteria must also be met before revenue is recognised:

Sale of Goods

Revenue is recognised when control over the goods has passed to the buyer and it is probable that the amount of consideration is collectible. The moment of transfer of control is determined by the contract terms and usually occurs at the date of shipment. Sale of goods includes the transportation and handling costs incurred.

2. Significant Accounting Policies (continued)

Revenue (continued)

Rendering of Services

The Group's revenues from rendering of services include electricity, transportation, port and other services. The pattern of revenue recognition reflects the transfer of services to customers and may occur at a point in time or over time.

Interest

Interest is recognised using the effective interest method.

Dividends

Revenue is recognised when the shareholders' right to receive the payment is established.

Rental Income

Rental income is accounted for on a straight-line basis over the lease term on ongoing leases.

Current Income Tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the end of the reporting period.

Current income tax relating to items recognised outside profit or loss is recognised in other comprehensive income or equity and not in the statement of operations.

Deferred Income Tax

Deferred tax assets and liabilities are calculated in respect of temporary differences using the liability method. Deferred income taxes are provided for all temporary differences arising between the tax basis of assets and liabilities and their carrying values for financial reporting purposes, except where the deferred income tax arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

A deferred tax asset is recorded only to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Various factors are considered to assess the probability of the future utilisation of deferred tax assets, including past operating results, operational plans, expiration of tax losses carried forward, tax legislation and tax planning strategies.

Deferred tax assets and liabilities are measured at tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates that have been enacted or substantively enacted at the end of the reporting period.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

3. Segment Information

For management purposes the Group has four reportable operating segments:

- *Steel* segment includes production of steel and related products at all mills except for those located in North America. Extraction of vanadium ore and production of vanadium products, iron ore mining and enrichment and certain energy-generating companies are also included in this segment as they are closely related to the main process of steel production.
- *Steel, North America* is a segment, which includes production of steel and related products in the USA and Canada.
- *Coal* segment includes coal mining and enrichment. It also included operations of Nakhodka Trade Sea Port (sold in June 2017) as it was used to a significant extent for shipping of products of the coal segment to the Asian markets.
- *Other operations* include energy-generating companies, shipping and railway transportation companies.

Management and investment companies are not allocated to any of the segments. Operating segments have been aggregated into reportable segments if they show a similar long-term economic performance, have comparable production processes, customer industries and distribution channels, operate in the same regulatory environment, and are generally managed and monitored together.

Transfer prices between operating segments are on an arm's length basis in a manner similar to transactions with third parties.

Management monitors the results of the operating segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on EBITDA (see below). This performance indicator is calculated based on management accounts that differ from the IFRS consolidated financial statements for the following reasons:

1) for the last month of the reporting period, the management accounts for each operating segment are prepared using a forecast for that month;
2) the statement of operations is based on local GAAP figures with the exception of depreciation and repair expenses which are adjusted to approximate the amount under IFRS;
3) in case of volatility of functional currencies the IFRS statements of operations are translated at the exchange rates that approximate the exchange rates at the dates of the transactions (quarterly, semi-annual averages, etc.) while in management accounts simple average for the whole accounting period is used.

Segment revenue is revenue reported in the Group's statement of operations that is directly attributable to a segment and the relevant portion of the Group's revenue that can be allocated to it on a reasonable basis, whether from sales to external customers or from transactions with other segments.

Segment expense is expense resulting from the operating activities of a segment that is directly attributable to the segment and the relevant portion of an expense that can be allocated to it on a reasonable basis, including expenses relating to external counterparties and expenses relating to transactions with other segments. Segment expense does not include social and social infrastructure maintenance expenses.

Segment result is segment revenue less segment expense that is equal to earnings before interest, tax, depreciation and amortisation ("EBITDA") for that segment.

Segment EBITDA is determined as a segment's profit/(loss) from operations adjusted for social and social infrastructure maintenance expenses, impairment of assets, profit/(loss) on disposal of property, plant and equipment and intangible assets, foreign exchange gains/(losses) and depreciation, depletion and amortisation expense. Management believes that this measure is more useful and relevant for the users and is more comparable with the Russian steel peers.

3. Segment Information (continued)

The following tables present measures of segment profit or loss based on management accounts.

Year ended 31 December 2018

US$ million	Steel	Steel, North America	Coal	Other operations	Eliminations	Total
Revenue						
Sales to external customers	**$ 8,373**	**$ 2,593**	**$ 1,533**	**$ 214**	**$ –**	**$ 12,713**
Inter-segment sales	**343**	**–**	**1,322**	**279**	**(1,944)**	**–**
Total revenue	**8,716**	**2,593**	**2,855**	**493**	**(1,944)**	**12,713**
Segment result – EBITDA	**$ 2,701**	**$ 18**	**$ 1,180**	**$ 17**	**$ (14)**	**$ 3,902**

Year ended 31 December 2017

US$ million	Steel	Steel, North America	Coal	Other operations	Eliminations	Total
Revenue						
Sales to external customers	$ 8,093	$ 1,868	$ 796	$ 87	$ –	$ 10,844
Inter-segment sales	295	–	1,142	301	(1,738)	–
Total revenue	8,388	1,868	1,938	388	(1,738)	10,844
Segment result – EBITDA	$ 1,567	$ 77	$ 1,164	$ 20	$ (24)	$ 2,804

Year ended 31 December 2016

US$ million	Steel	Steel, North America	Coal	Other operations	Eliminations	Total
Revenue						
Sales to external customers	$ 5,528	$ 1,464	$ 484	$ 63	$ –	$ 7,539
Inter-segment sales	194	–	676	233	(1,103)	–
Total revenue	5,722	1,464	1,160	296	(1,103)	7,539
Segment result – EBITDA	$ 986	$ 22	$ 613	$ 15	$ (44)	$ 1,592

3. Segment Information (continued)

The following table shows a reconciliation of revenue and EBITDA used by management for decision making and revenue and profit or loss before tax per the consolidated financial statements prepared under IFRS.

Year ended 31 December 2018

US$ million	Steel	Steel, North America	Coal	Other operations	Eliminations	Total
Revenue	$ 8,716	$ 2,593	$ 2,855	$ 493	$ (1,944)	$ 12,713
Reclassifications and other adjustments	163	(10)	(518)	(21)	509	123
Revenue per IFRS financial statements	$ 8,879	$ 2,583	$ 2,337	$ 472	$ (1,435)	$ 12,836
EBITDA	$ 2,701	$ 18	$ 1,180	$ 17	$ (14)	$ 3,902
Unrealised profits adjustment	(46)	–	(25)	–	4	(67)
Reclassifications and other adjustments	17	(4)	63	–	1	77
	(29)	(4)	38	–	5	10
EBITDA based on IFRS financial statements	$ 2,672	$ 14	$ 1,218	$ 17	$ (9)	$ 3,912
Unallocated subsidiaries						(135)
						$ 3,777
Social and social infrastructure maintenance expenses	(25)	–	(2)	–	–	(27)
Depreciation, depletion and amortisation expense	(239)	(137)	(158)	(3)	–	(537)
Impairment of assets	(18)	(2)	(10)	–	–	(30)
Loss on disposal of property, plant and equipment and intangible assets	(3)	(2)	(6)	–	–	(11)
Foreign exchange gains/(losses), net	31	(72)	30	(2)	–	(13)
	$ 2,418	$ (199)	$ 1,072	$ 12	$ (9)	$ 3,159
Unallocated income/(expenses), net						369
Profit/(loss) from operations						$ 3,528
Interest income/(expense), net						(341)
Share of profits/(losses) of joint ventures and associates						9
Gain/(loss) on financial assets and liabilities						13
Gain/(loss) on disposal groups classified as held for sale						(10)
Other non-operating gains/(losses), net						2
Profit/(loss) before tax						$ 3,201

3. Segment Information (continued)

Year ended 31 December 2017

US$ million	Steel	Steel, North America	Coal	Other operations	Eliminations	Total
Revenue	$ 8,388	$ 1,868	$ 1,938	$ 388	$ (1,738)	$ 10,844
Reclassifications and other adjustments	(645)	(4)	276	74	282	(17)
Revenue per IFRS financial statements	$ 7,743	$ 1,864	$ 2,214	$ 462	$ (1,456)	$ 10,827
EBITDA	$ 1,567	$ 77	$ 1,164	$ 20	$ (24)	$ 2,804
Unrealised profits adjustment	(49)	–	(4)	–	(9)	(62)
Reclassifications and other adjustments	(35)	(19)	66	1	–	13
	(84)	(19)	62	1	(9)	(49)
EBITDA based on IFRS financial statements	$ 1,483	$ 58	$ 1,226	$ 21	$ (33)	$ 2,755
Unallocated subsidiaries						(131)
						$ 2,624
Social and social infrastructure maintenance expenses	(29)	–	(1)	–	–	(30)
Depreciation, depletion and amortisation expense	(255)	(132)	(167)	(3)	–	(557)
Impairment of assets	31	(19)	–	–	–	12
Loss on disposal of property, plant and equipment and intangible assets	4	–	(7)	(1)	–	(4)
Foreign exchange gains/(losses), net	(31)	25	20	–	–	14
	$ 1,203	$ (68)	$ 1,071	$ 17	$ (33)	$ 2,059
Unallocated income/(expenses), net						(73)
Profit/(loss) from operations						$ 1,986
Interest income/(expense), net						(423)
Share of profits/(losses) of joint ventures and associates						11
Gain/(loss) on financial assets and liabilities						(57)
Gain/(loss) on disposal groups classified as held for sale						(360)
Other non-operating gains/(losses), net						(2)
Profit/(loss) before tax						$ 1,155

3. Segment Information (continued)

Year ended 31 December 2016

US$ million	Steel	Steel, North America	Coal	Other operations	Eliminations	Total
Revenue	$ 5,722	$ 1,464	$ 1,160	$ 296	$ (1,103)	$ 7,539
Reclassifications and other adjustments	(225)	–	162	67	170	174
Revenue per IFRS financial statements	$ 5,497	$ 1,464	$ 1,322	$ 363	$ (933)	$ 7,713
EBITDA	$ 986	$ 22	$ 613	$ 15	$ (44)	$ 1,592
Unrealised profits adjustment	(11)	–	(3)	–	2	(12)
Reclassifications and other adjustments	29	6	34	2	–	71
	18	6	31	2	2	59
EBITDA based on IFRS financial statements	$ 1,004	$ 28	$ 644	$ 17	$ (42)	$ 1,651
Unallocated subsidiaries						(109)
						$ 1,542
Social and social infrastructure maintenance expenses	(21)	–	(2)	–	–	(23)
Depreciation, depletion and amortisation expense	(219)	(155)	(141)	(3)	–	(518)
Impairment of assets	(11)	(430)	(24)	–	–	(465)
Loss on disposal of property, plant and equipment and intangible assets	(8)	(5)	(9)	–	–	(22)
Foreign exchange gains/(losses), net	(43)	14	107	–	–	78
	$ 702	$ (548)	$ 575	$ 14	$ (42)	$ 592
Unallocated income/(expenses), net						(129)
Profit/(loss) from operations						$ 463
Interest income/(expense), net						(471)
Share of profits/(losses) of joint ventures and associates						(23)
Gain/(loss) on financial assets and liabilities						(9)
Other non-operating gains/(losses), net						(52)
Profit/(loss) before tax						$ (92)

3. Segment Information (continued)

The revenues from external customers for each group of similar products and services are presented in the following table:

US$ million	**2018**	**2017**	**2016**
Steel			
Construction products	**$ 2,280**	$ 2,171	$ 1,783
Flat-rolled products	**415**	313	162
Railway products	**965**	863	584
Semi-finished products	**2,521**	2,523	1,694
Other steel products	**399**	349	246
Other products	**545**	440	331
Iron ore	**158**	191	155
Vanadium in slag	**228**	77	33
Vanadium in alloys and chemicals	**922**	466	268
Rendering of services	**71**	30	31
	8,504	7,423	5,287
Steel, North America			
Construction products	**247**	159	158
Flat-rolled products	**597**	427	372
Railway products	**380**	309	232
Tubular products	**1,167**	875	588
Other products	**168**	67	103
Rendering of services	**24**	26	10
	2,583	1,863	1,463
Coal			
Coal	**1,506**	1,266	756
Other products	**27**	24	12
Rendering of services	**25**	93	70
	1,558	1,383	838
Other operations			
Rendering of services	**191**	158	125
	191	158	125
	$ 12,836	$ 10,827	$ 7,713

3. Segment Information (continued)

Distribution of the Group's revenues by geographical area based on the location of customers for the years ended 31 December was as follows:

US$ million	**2018**	**2017**	**2016**
CIS			
Russia	**$ 4,564**	$ 4,255	$ 3,080
Ukraine	**480**	368	296
Kazakhstan	**237**	254	184
Belarus	**72**	62	45
Kyrgyzstan	**50**	36	12
Others	**97**	92	93
	5,500	5,067	3,710
America			
USA	**2,226**	1,465	826
Canada	**537**	546	682
Mexico	**154**	156	192
Others	**92**	34	22
	3,009	2,201	1,722
Asia			
Philippines	**631**	345	65
Taiwan	**433**	468	376
Republic of Korea	**409**	321	123
Indonesia	**346**	330	195
Thailand	**225**	189	138
Japan	**186**	149	117
Singapore	**133**	41	66
China	**114**	145	67
India	**60**	19	8
Mongolia	**58**	28	10
Others	**121**	127	207
	2,716	2,162	1,372
Europe			
European Union	**1,146**	775	390
Turkey	**254**	328	213
Others	**26**	25	37
	1,426	1,128	640
Africa			
Egypt	**86**	100	138
Kenya	**77**	106	78
Others	**16**	58	49
	179	264	265
Other countries	**6**	5	4
	$ 12,836	$ 10,827	$ 7,713

None of the Group's customers amounts to 10% or more of the consolidated revenues.

3. Segment Information (continued)

Non-current assets other than financial instruments, deferred tax assets and post-employment benefit assets were located in the following countries at 31 December:

US$ million	**2018**	**2017**	**2016**
Russia	**$ 3,258**	$ 3,879	$ 3,553
Canada	**1,221**	1,332	1,233
USA	**791**	818	877
Ukraine	**–**	61	144
Kazakhstan	**41**	51	53
Czech Republic	**35**	37	31
Italy	**41**	45	22
Republic of South Africa	**–**	–	17
Other countries	**3**	4	8
	$ 5,390	$ 6,227	$ 5,938

4. Changes in the Composition of the Group

Business Combinations

In June 2017, the Group purchased the business of Western Canada Machining Inc. (Alberta, Canada), which produces couplings for use in the oil and gas industry. The consideration amounted to $5 million in cash. At the date of business combination the fair value of net assets of the acquired company was $5 million.

Purchase of Non-controlling Interests

Raspadskaya

In 2018, the Group acquired an additional 1.89% ownership interest in Raspadskaya for cash consideration of $24 million. The excess of consideration over the carrying values of non-controlling interests acquired amounting to $3 million was charged to accumulated profits.

Mezhegeyugol

On 14 March 2017, the Group signed an option agreement with a non-controlling shareholder in respect of shares of Mezhegeyugol, a coal mining subsidiary of the Group. Under the agreement, the non-controlling shareholder has the right to sell to the Group (the put option) all its shares in Mezhegeyugol (39.9841%) for $39 million and to settle the loan payable to the Group for $25 million. As a result, the Group would hold 100% ownership interest in the subsidiary. The option can be exercised from 1 December 2019 to 1 December 2020.

The Group determined that the terms of the option agreement give the Group the rights to the beneficial interests in Mezgegeyugol and derecognised the non-controlling interests and recognised a liability under the put option. The difference between the discounted value of the liability under the put option ($60 million) and the carrying value of non-controlling interest in the amount of $56 million was charged to the accumulated profits of the Group. In 2018 and 2017, the Group accrued $4 million and $1 million interest on this liability.

Sale of Subsidiaries

In 2018, the group sold Dneprovsk Metallurgical Plant (Note 12).

5. Goodwill

Goodwill relates to the assembled workforce and synergy from integration of the acquired subsidiaries into the Group. The table below presents movements in the carrying amount of goodwill.

US$ million	**Gross amount**	**Impairment losses**	**Carrying amount**
At 31 December 2015	**$ 2,392**	**$ (1,216)**	**$ 1,176**
Impairment	–	(316)	(316)
Flat rolled products	–	(188)	(188)
Seamless pipes	–	(111)	(111)
Oil Country Tubular Goods	–	(17)	(17)
Transfer to disposal groups classified as held for sale	(28)	28	–
Translation difference	3	17	20
At 31 December 2016	**$ 2,367**	**$ (1,487)**	**$ 880**
Sale of subsidiaries (Note 12)	(22)	16	(6)
Translation difference	58	(15)	43
At 31 December 2017	**$ 2,403**	**$ (1,486)**	**$ 917**
Sale of subsidiaries (Note 12)	(112)	112	–
Translation difference	(70)	17	(53)
At 31 December 2018	**$ 2,221**	**$ (1,357)**	**$ 864**

The carrying amount of goodwill was allocated among cash-generating units as follows at 31 December:

US$ million	**2018**	**2017**	**2016**
EVRAZ Inc. NA/EVRAZ Inc. NA Canada	**$ 799**	$ 843	$ 808
Large diameter pipes	**349**	381	355
Oil Country Tubular Goods	**134**	146	137
Long products	**316**	316	316
EVRAZ Vanady-Tula	**29**	35	33
EVRAZ Vametco Holdings	**–**	–	6
EVRAZ Nikom, a.s.	**33**	35	29
Others	**3**	4	4
	$ 864	$ 917	$ 880

6. Impairment of Assets

A summary of impairment losses recognition and reversals is presented below.

Year ended 31 December 2018

US$ million	**Goodwill and intangible assets**	**Property, plant and equipment**	**Taxes receivable**	**Total**
EVRAZ Stratcor Inc.	**$ –**	**$ (12)**	**$ –**	**$ (12)**
Yuzhkuzbassugol	**–**	**(6)**	**–**	**(6)**
Evrazruda	**–**	**(4)**	**–**	**(4)**
Others, net	**–**	**(8)**	**–**	**(8)**
	$ –	**$ (30)**	**$ –**	**$ (30)**
Recognised in profit or loss	**–**	**(30)**	**–**	**(30)**

Year ended 31 December 2017

US$ million	**Goodwill and intangible assets**	**Property, plant and equipment**	**Taxes receivable**	**Total**
EVRAZ Inc. NA	$ (13)	$ 6	$ –	$ (7)
EVRAZ Inc. NA Canada	–	(12)	–	(12)
Raspadskaya	–	9	–	9
EVRAZ Palini e Bertoli	–	20	–	20
Yuzhkuzbassugol	–	(9)	–	(9)
Evrazruda	–	8	–	8
Others, net	–	(2)	5	3
	$ (13)	$ 20	$ 5	$ 12
Recognised in profit or loss	(13)	20	5	12

Year ended 31 December 2016

US$ million	**Goodwill and intangible assets**	**Property, plant and equipment**	**Taxes receivable**	**Total**
EVRAZ Inc. NA	$ (299)	$ (88)	$ –	$ (387)
EVRAZ Inc. NA Canada	(17)	(26)	–	(43)
Raspadskaya	–	(17)	–	(17)
EVRAZ Stratcor Inc.	–	(16)	–	(16)
EVRAZ Palini e Bertoli	–	19	–	19
Yuzhny Stan	–	(5)	–	(5)
Evrazruda	–	(10)	–	(10)
Others, net	–	(8)	2	(6)
	$ (316)	$ (151)	$ 2	$ (465)
Recognised in profit or loss	(316)	(151)	2	(465)

6. Impairment of Assets (continued)

The Group made a write-off of certain functionally obsolete items of property, plant and equipment and recorded an impairment relating to VAT with a long-term recovery. In addition, in 2016 and 2017, the Group recognised impairment losses as a result of the impairment testing at the level of cash-generating units.

For the purpose of the impairment testing the Group assessed the recoverable amount of each cash-generating unit to which goodwill was allocated or where indicators of impairment were identified. In 2016-2018, the impairment tests were performed as of 30 September, the conclusions were reassessed at 31 December and no further impairment triggers were identified.

The recoverable amounts have been determined based on the calculation of value-in-use. This valuation technique uses cash flow projections based on the actual operating results and business plans approved by management and appropriate discount rates reflecting the time value of money and risks associated with respective cash-generating units. For the periods not covered by management business plans, cash flow projections have been estimated by extrapolating the results of the respective business plans using a zero real growth rate.

The key assumptions used by management in the value-in-use calculations with respect to the cash-generating units to which the goodwill was allocated or units containing intangible assets with indefinite useful lives are presented in the table below.

	Commodity	Period of forecast, years		Pre-tax discount rate, %		Average price of commodity per tonne in the next reporting year		Recoverable amount of CGU, US$ million		Carrying amount of CGU before impairment, US$ million	
		2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Steel North America											
Large diameter pipes	steel products	5	5	9.37	11.23	$1,129	$913	903	1,074	900	938
Oil Country Tubular Goods	steel products	5	5	9.96	10.85	$1,245	$1,121	441	547	365	383
Long products	steel products	5	5	9.26	11.02	$745	$647	582	591	501	520
EVRAZ Vanady-Tula	vanadium products	5	5	12.74	13.03	$46,494	$23,403	1,140	986	57	61
EVRAZ Nikom, a.s.	ferrovanadium products	5	5	10.45	11.00	$48,991	$26,576	40	47	36	34

In addition, the Group determined that there were indicators of impairment in other cash generating units, which do not contain goodwill or intangible assets with indefinite useful lives, and tested them for impairment using the following assumptions.

	Period of forecast, years	Pre-tax discount rate, %	Commodity	Average price of commodity per tonne in the next reporting year
Steel North America				
Flat rolled products	5	9.30	steel products	$855
Seamless pipes	5	10.04	steel products	$1,396

The impairment test models take into account the tariffs imposed by the US and Canada against each other on import of steel and steel products, whose effect is expected to last until 2022 (Note 30). The models include the assumption that the tariffs will be removed starting from 2023 and are assumed not to re-occur going forward. This assumption is particularly sensitive for the recoverable amount of Large diameter pipes.

As a result of impairment testing, the Group did not recognise any impairment loss or reversal of previous charges. However, in 2018, the Group recognised a $12 million impairment loss with respect to EVRAZ Stratcor Inc. due to its potential bankruptcy. In 2017, the value in use of this cash-generating unit was $18 million.

6. Impairment of Assets (continued)

The estimations of value in use are most sensitive to the following assumptions:

Discount Rates

Discount rates reflect the current market assessment of the risks specific to each cash-generating unit. The discount rates have been determined using the Capital Asset Pricing Model and analysis of industry peers. Reasonably possible changes in discount rates could lead to impairment EVRAZ Nikom, Large diameter pipes, Flat rolled products and Long products. If discount rates were 10% higher, this would lead to an impairment of $184 million.

Sales Prices

The price assumptions for the products sold by the Group were estimated based on industry research using analysts' views published by Citi, CRU, Goldman Sachs, Morgan Stanley, Renaissance Capital, UBS, VTB Capital, WSD during the period from August to December 2018. The Group expects that the nominal prices will fluctuate with a compound annual growth rate of (14.3)%-4.0% in 2019 – 2023, 2.5% in 2024 and thereafter. Reasonably possible changes in sales prices could lead to impairment at EVRAZ Nikom and Large diameter pipes. If the prices assumed for 2019 and 2020 in the impairment test were 10% lower, this would lead to an impairment of $46 million.

Sales Volumes

Management assumed that the sales volumes of steel products in 2019 will increase by 7-13% and future dynamics will be driven by a gradual market recovery and changes in assets' capacities. Reasonably possible changes in sales volumes could lead to impairment at EVRAZ Nikom and Large diameter pipes. If the sales volumes were 10% lower than those assumed for 2019 and 2020 in the impairment test, this would lead to an impairment of $19 million.

Cost Control Measures

The recoverable amounts of cash-generating units are based on the business plans approved by management. A reasonably possible deviation in cost from these plans could lead to impairment at EVRAZ Nikom, Large diameter pipes, Long products and Flat rolled products. If the actual costs were 10% higher than those assumed for 2019 and 2020 in the impairment test, this would lead to an impairment of $228 million.

Terminal Growth Rate

The recoverable amounts of cash-generating units are based on the terminal growth rate of 2.5% representing a forecast of long-term US CPI rate. A reasonably possible deviation in this rate could lead to impairment at Large diameter pipes. If the terminal growth rate was 10% lower than the rate assumed for 2024 and thereafter in the impairment test, this would lead to an impairment of $46 million.

Sensitivity Analysis

For the cash-generating units, which were not impaired in the reporting period and for which the reasonably possible changes could lead to impairment, the recoverable amounts would become equal to their carrying amounts if the assumptions used to measure the recoverable amounts changed by the following percentages:

	Discount rates	**Sales prices**	**Sales volumes**	**Cost control measures**	**Terminal growth rate**
EVRAZ Nikom	5.9%	(4.9)%	(6.0)%	1.3%	–
EVRAZ Inc NA – Large diameter pipes	0.2%	(0.7)%	(1.6)%	0.2%	(0.6)%
EVRAZ Inc NA – Long products	8.7%	–	–	8.6%	–
EVRAZ Inc NA – Flat rolled products	9.0%	–	–	4.9%	–

7. Income and Expenses

Cost of revenues, selling and distribution costs, general and administrative expenses include the following for the years ended 31 December:

US$ million	**2018**	**2017**	**2016**
Cost of inventories recognised as expense	**$ (4,580)**	$ (4,181)	$ (2,761)
Staff costs, including social security taxes	**(1,326)**	(1,364)	(1,200)
Depreciation, depletion and amortisation	**(542)**	(561)	(521)

In 2018, 2017 and 2016, the Group recognised (expense)/income on allowance or net reversal of the allowance for net realisable value in the amount of $Nil, $(4) million and $2 million, respectively.

Staff costs include the following:

US$ million	**2018**	**2017**	**2016**
Wages and salaries	**$ 968**	$ 1,000	$ 864
Social security costs	**245**	246	212
Net benefit expense	**38**	42	43
Share-based awards	**15**	17	16
Other compensations	**60**	59	65
	$ 1,326	$ 1,364	$ 1,200

The average number of staff employed under contracts of service was as follows:

	2018	**2017**	**2016**
Steel	**45,282**	54,737	56,974
Steel, North America	**3,877**	3,395	3,193
Coal	**13,505**	14,629	14,808
Other operations	**882**	523	896
Unallocated	**2,344**	2,736	2,080
	65,890	76,020	77,951

The major components of other operating expenses were as follows:

US$ million	**2018**	**2017**	**2016**
Idling, reduction and stoppage of production, including termination benefits	**$ (17)**	$ (26)	$ (81)
Restoration works and casualty compensations in connection with accidents	**(3)**	(2)	(1)
Other	**(35)**	(33)	(19)
	$ (55)	$ (61)	$ (101)

7. Income and Expenses (continued)

Interest expense consisted of the following for the years ended 31 December:

US$ million	**2018**	**2017**	**2016**
Bank interest	**$ (74)**	$ (115)	$ (133)
Interest on bonds and notes	**(248)**	(279)	(306)
Net interest expense on employee benefits obligations (Note 23)	**(13)**	(19)	(22)
Discount adjustment on provisions (Note 24)	**(16)**	(16)	(14)
Other	**(8)**	(8)	(6)
	$ (359)	$ (437)	$ (481)

Interest income consisted of the following for the years ended 31 December:

US$ million	**2018**	**2017**	**2016**
Interest on bank accounts and deposits	**$ 9**	$ 8	$ 6
Interest on loans and accounts receivable	**7**	6	2
Other	**2**	–	2
	$ 18	$ 14	$ 10

Gain/(loss) on financial assets and liabilities included the following for the years ended 31 December:

US$ million	**2018**	**2017**	**2016**
Loss on extinguishment of debts (Note 22)	**$ (1)**	$ (78)	$ (50)
Gain/(loss) on derivatives not designated as hedging instruments (Note 25)	**3**	4	23
Gain/(loss) on hedging instruments (Note 25)	**11**	14	14
Other	**–**	3	4
	$ 13	$ (57)	$ (9)

In 2016, other non-operating losses included $39 million relating to the settlement of the Group’s guarantee under a long-term take-or-pay supply contract of the Group’s former subsidiary.

8. Income Taxes

The Group's income was subject to tax at the following tax rates:

	2018	2017	2016
Russia	**20.00% and 16.50%**	20.00%	20.00%
Canada	**26.32%**	26.25%	26.06%
Cyprus	**12.50%**	12.50%	12.50%
Czech Republic	**19.00%**	19.00%	19.00%
Italy	**27.90%**	27.90%	31.40%
Switzerland	**9.18%**	9.43%	9.09%
Ukraine	**18.00%**	18.00%	18.00%
United Kingdom	**19.00%**	–	–
USA	**24.69%**	37.83%	37.72%

In 2018, Nizhny Tagil Metallurgical Plant completed capital construction works, which make it eligible for investment tax credit from the regional government. Income tax rate was reduced from 20% to 16.5% for a period from 2018 to 2022. The Group determined that the investment tax credit is in the scope of IAS 12 "Income taxes". As a result, in 2018, Nizhny Tagil Metallurgical Plant and other subsidiaries included in the group of consolidated taxpayers received a current income tax benefit amounting to $37 million.

In December 2017, new tax legislation has been adopted in the USA, which introduced a reduction in federal income tax rate from 35% to 21% starting from 1 January 2018. The Group's subsidiaries measured the respective deferred tax assets and liabilities at 31 December 2017 using the enacted tax rates.

As a result of the enactment of the Tax Cuts and Jobs Act ("TCJA") in the USA, at 31 December 2017 uncertainty existed as to whether certain unutilised interest expenses incurred on intra-group loans would be deductible against future taxable earnings under the new tax law and, therefore, whether the deferred tax asset would be recoverable. The Group's interpretation of the new legislation at 31 December 2017 was that the deferred tax asset would be recoverable and, consequently, the Group did not create an allowance against this balance. In April 2018, the US Department of Treasury and the Internal Revenue Service released Notice 2018-28, which clarified that the unutilised interest expenses can be carried forward indefinitely.

Major components of income tax expense for the years ended 31 December were as follows:

US$ million	2018	2017	2016
Current income tax expense	**$ (679)**	$ (484)	$ (185)
Adjustment in respect of income tax of previous years	**(4)**	(1)	2
Deferred income tax benefit/(expense) relating to origination and reversal of temporary differences	**(54)**	74	87
Deferred income tax recognised directly in other comprehensive income	**6**	15	–
Income tax (expense)/benefit reported in the consolidated statement of operations	**$ (731)**	$ (396)	$ (96)

8. Income Taxes (continued)

The major part of income taxes is paid in the Russian Federation. A reconciliation of income tax expense applicable to profit before income tax using the Russian statutory tax rate to income tax expense as reported in the Group's consolidated financial statements for the years ended 31 December is as follows:

US$ million	**2018**	**2017**	**2016**
Profit/(loss) before income tax	**$ 3,201**	$ 1,155	$ (92)
At the Russian statutory income tax rate of 20%	**(640)**	(231)	18
Adjustment in respect of income tax of previous years	**(4)**	(1)	2
Current income tax benefit from investment tax credit	**37**	–	–
Deferred income tax expense resulting from the changes in tax rates and laws	**–**	(6)	–
Tax on dividends distributed by the Group's subsidiaries	**(53)**	(26)	–
Tax on undistributed earnings of the Group's subsidiaries	**(35)**	–	–
Deferred income tax expense arising on the adjustment to current income tax of prior periods and the change in tax base of underlying assets	**–**	–	(2)
Effect of non-deductible expenses and other non-temporary differences	**(37)**	(254)	(63)
Unrecognised temporary differences recognition/reversal	**(58)**	100	(157)
Effect of the difference in tax rates in countries other than the Russian Federation	**57**	20	110
Share of profits in joint ventures and associates	**2**	2	(4)
Income tax (expense)/benefit reported in the consolidated statement of operations	**$ (731)**	$ (396)	$ (96)

In 2017, the increase in the amount of non-deductible expenses and unrecognised temporary differences was mostly caused by the significant losses on sale of subsidiaries (Note 12), which either cannot be utilised or cannot be deductible for tax purposes.

8. Income Taxes (continued)

Deferred income tax assets and liabilities and their movements for the years ended 31 December were as follows:

Year ended 31 December 2018

US$ million	2018	Change recognised in statement of operations	Change recognised in other com-prehensive income	Change due to disposal of subsidiaries	Transfer to disposal groups classified as held for sale	Translation difference	2017
Deferred income tax liabilities:							
Valuation and depreciation of property, plant and equipment	**$ 469**	**(4)**	**–**	**–**	**–**	**(73)**	**$ 546**
Valuation and amortisation of intangible assets	**50**	**(8)**	**–**	**–**	**–**	**(4)**	**62**
Other	**96**	**27**	**–**	**–**	**–**	**(11)**	**80**
	615	**15**	**–**		**–**	**(88)**	**688**
Deferred income tax assets:							
Tax losses available for offset	**199**	**(42)**	**–**	**(1)**	**–**	**(25)**	**267**
Accrued liabilities	**95**	**(15)**	**(6)**	**–**	**–**	**(10)**	**126**
Impairment of accounts receivable	**3**	**(7)**	**–**	**–**	**–**	**(2)**	**12**
Other	**152**	**31**	**–**	**–**	**–**	**(7)**	**128**
	449	**(33)**	**(6)**	**(1)**	**–**	**(44)**	**533**
Net deferred income tax asset	**92**	**(65)**	**(4)**	**(1)**	**–**	**(11)**	**173**
Net deferred income tax liability	**$ 258**	**(17)**	**2**	**–**	**–**	**(55)**	**$ 328**

Year ended 31 December 2017

US$ million	2017	Change recognised in statement of operations	Change recognised in other com-prehensive income	Change due to disposal of subsidiaries	Transfer to disposal groups classified as held for sale	Translation difference	2016
Deferred income tax liabilities:							
Valuation and depreciation of property, plant and equipment	$ 546	(36)	–	(10)	–	25	$ 567
Valuation and amortisation of intangible assets	62	(21)	–	(1)	–	3	81
Other	80	19	–	(1)	–	4	58
	688	(38)	–	(12)	–	32	706
Deferred income tax assets:							
Tax losses available for offset	267	55	–	(25)	–	11	226
Accrued liabilities	126	8	(15)	(8)	–	3	138
Impairment of accounts receivable	12	1	–	–	–	1	10
Other	128	(13)	–	–	–	1	140
	533	51	(15)	(33)	–	16	514
Net deferred income tax asset	173	47	(10)	(24)	–	4	156
Net deferred income tax liability	$ 328	(42)	5	(3)	–	20	$ 348

Year ended 31 December 2016

US$ million	2016	Change recognised in statement of operations	Change recognised in other com-prehensive income	Change due to disposal of subsidiaries	Transfer to disposal groups classified as held for sale	Translation difference	2015
Deferred income tax liabilities:							
Valuation and depreciation of property, plant and equipment	$ 567	(62)	–	–	–	66	$ 563
Valuation and amortisation of intangible assets	81	(11)	–	–	–	3	89
Other	58	5	–	–	–	5	48
	706	(68)	–	–	–	74	700
Deferred income tax assets:							
Tax losses available for offset	226	(5)	–	–	–	23	208
Accrued liabilities	138	4			(1)	8	127
Impairment of accounts receivable	10	(1)	–	–	–	2	9
Other	140	21	–	–	(2)	(2)	123
	514	19	–	–	(3)	31	467
Net deferred income tax asset	156	28	–	–	(3)	12	119
Net deferred income tax liability	$ 348	(59)	–	–	–	55	$ 352

8. Income Taxes (continued)

As of 31 December 2018, the Group accrued deferred income taxes in respect of undistributed earnings of the Group's subsidiaries in the amount of $35 million (2017 and 2016: $Nil). The current tax rate on intra-group dividend income varies from 0% to 15%. The temporary differences associated with investments in subsidiaries were not recognised as the Group is able to control the timing of the reversal of these temporary differences and does not intend to reverse them in the foreseeable future. At 31 December 2018, the aggregate amount of such temporary differences, for which deferred tax liabilities have not been recognised, amounted to $101 million (2017: $1,439 million, 2016: $898 million). The decrease in these temporary differences in 2018 was caused by the changes in the Russian tax regulations, which modified the rules for using zero tax rate in relation to capital gains of the Russian parent entities, if certain conditions are met.

In the context of the Group's current structure, tax losses and current tax assets of the different companies may not be set off against current tax liabilities and taxable profits of other companies in the same jurisdiction, except for the companies registered in Cyprus, Russia and the United Kingdom where group relief and tax consolidation can be applied. As of 31 December 2018, the unused tax losses carried forward approximated $9,321 million (2017: $9,893 million, 2016: $9,729 million). The Group recognised deferred tax assets of $199 million (2017: $267 million, 2016: $226 million) in respect of unused tax losses. Deferred tax assets in the amount of $2,287 million (2017: $2,339 million, 2016: $2,329 million) have not been recorded as it is not probable that sufficient taxable profits will be available in the foreseeable future to offset these losses. Tax losses of $8,492 million (2017: $8,711 million, 2016: $8,593 million) for which deferred tax assets were not recognised arose in companies registered in Canada, Cyprus, Italy, Kazakhstan, Luxembourg, Russia, Ukraine, the United Kingdom and the USA. Losses in the amount of $8,399 million (2017: $8,664 million, 2016: $8,549 million) are available indefinitely for offset against future taxable profits of the companies in which the losses arose and $93 million will expire within 10 years (2017: $47 million, 2016: $44 million).

9. Property, Plant and Equipment

Property, plant and equipment consisted of the following as of 31 December:

US$ million	**2018**	**2017**	**2016**
Cost:			
Land	**$ 100**	$ 107	$ 100
Buildings and constructions	**1,752**	1,894	1,755
Machinery and equipment	**4,302**	4,812	4,446
Transport and motor vehicles	**226**	255	223
Mining assets	**2,084**	2,461	2,440
Other assets	**35**	37	38
Assets under construction	**378**	549	424
	8,877	10,115	9,426
Accumulated depreciation, depletion and impairment losses:			
Buildings and constructions	**(857)**	(968)	(872)
Machinery and equipment	**(2,647)**	(2,906)	(2,637)
Transport and motor vehicles	**(145)**	(168)	(144)
Mining assets	**(998)**	(1,112)	(1,093)
Other assets	**(28)**	(28)	(28)
	(4,675)	(5,182)	(4,774)
	$ 4,202	$ 4,933	$ 4,652

9. Property, Plant and Equipment (continued)

The movement in property, plant and equipment for the year ended 31 December 2018 was as follows:

US$ million	**Land**	**Buildings and constructions**	**Machinery and equipment**	**Transport and motor vehicles**	**Mining assets**	**Other assets**	**Assets under construction**	**Total**
At 31 December 2017, cost, net of accumulated depreciation	**$ 107**	**$ 926**	**$ 1,906**	**$ 87**	**$ 1,349**	**$ 9**	**$ 549**	**$ 4,933**
Additions	**–**	**–**		**–**	**–**	**–**	**579**	**579**
Assets put into operation	**–**	**224**	**350**	**31**	**58**	**2**	**(665)**	**–**
Disposals		**(1)**	**(15)**	**(1)**	**(2)**	**–**	**–**	**(19)**
Depreciation and depletion charge	**–**	**(80)**	**(313)**	**(23)**	**(82)**	**(3)**	**–**	**(501)**
Impairment losses recognised in statement of operations		**(4)**	**(10)**	**–**	**(15)**	**–**	**(8)**	**(37)**
Impairment losses reversed through statement of operations			**1**	**–**	**6**	**–**	**–**	**7**
Transfer to assets held for sale	**–**	**(20)**	**(35)**	**–**	**–**	**–**	**(10)**	**(65)**
Change in site restoration and decommissioning provision	**–**	**(5)**	**1**	**–**	**(1)**	**–**	**–**	**(5)**
Translation difference	**(7)**	**(145)**	**(230)**	**(13)**	**(227)**	**(1)**	**(67)**	**(690)**
At 31 December 2018, cost, net of accumulated depreciation	**$ 100**	**$ 895**	**$ 1,655**	**$ 81**	**$ 1,086**	**$ 7**	**$ 378**	**$ 4,202**

The movement in property, plant and equipment for the year ended 31 December 2017 was as follows:

US$ million	**Land**	**Buildings and constructions**	**Machinery and equipment**	**Transport and motor vehicles**	**Mining assets**	**Other assets**	**Assets under construction**	**Total**
At 31 December 2016, cost, net of accumulated depreciation	$ 100	$ 883	$ 1,809	$ 79	$ 1,347	$ 10	$ 424	$ 4,652
Assets acquired in business combinations	3	1	3	–	–	–	–	7
Additions	–	–	7	–	–	–	622	629
Assets put into operation	–	74	344	32	50	2	(502)	–
Disposals	(1)	(3)	(11)	(2)	(3)	–	–	(20)
Depreciation and depletion charge	–	(84)	(325)	(25)	(85)	(3)	–	(522)
Impairment losses recognised in statement of operations	(1)	(2)	(13)	–	(21)	–	(11)	(48)
Impairment losses reversed through statement of operations	3	9	25	–	30	–	1	68
Transfer to assets held for sale	–	(6)	(11)	(1)	(76)	–	(10)	(104)
Change in site restoration and decommissioning provision	–	8	–	–	36	–	–	44
Translation difference	3	46	78	4	71	–	25	227
At 31 December 2017, cost, net of accumulated depreciation	$ 107	$ 926	$ 1,906	$ 87	$ 1,349	$ 9	$ 549	$ 4,933

9. Property, Plant and Equipment (continued)

The movement in property, plant and equipment for the year ended 31 December 2016 was as follows:

US$ million	Land	Buildings and constructions	Machinery and equipment	Transport and motor vehicles	Mining assets	Other assets	Assets under construction	Total
At 31 December 2015, cost, net of accumulated depreciation	$ 97	$ 822	$ 1,798	$ 79	$ 1,192	$ 12	$ 302	$ 4,302
Additions	–	1	5	–	–	2	442	450
Assets put into operation	–	64	209	14	43	3	(333)	–
Disposals	(1)	(5)	(12)	(2)	(9)	(4)	–	(33)
Depreciation and depletion charge	–	(72)	(309)	(21)	(79)	(4)	–	(485)
Impairment losses recognised in statement of operations	(4)	(42)	(90)	(2)	(30)	–	(11)	(179)
Impairment losses reversed through statement of operations	2	5	17	–	3	–	1	28
Transfer to assets held for sale	–	(4)	(10)	–	–	–	(10)	(24)
Change in site restoration and decommissioning provision	–	–	(3)	–	20	–	–	17
Translation difference	6	114	204	11	207	1	33	576
At 31 December 2016, cost, net of accumulated depreciation	$ 100	$ 883	$ 1,809	$ 79	$ 1,347	$ 10	$ 424	$ 4,652

Assets under construction include prepayments to constructors and suppliers of property, plant and equipment in the amount of $36 million, $60 million and $34 million as of 31 December 2018, 2017 and 2016, respectively.

Impairment losses were identified in respect of certain items of property, plant and equipment that were recognised as functionally obsolete or as a result of the testing at the level of cash-generating units (Note 6).

The amount of borrowing costs capitalised during the year ended 31 December 2018 was $1 million (2017: $6 million, 2016: $9 million).

10. Intangible Assets Other Than Goodwill

Intangible assets consisted of the following as of 31 December:

US$ million	2018	2017	2016
Cost:			
Customer relationships	**$ 656**	$ 693	$ 663
Water rights and environmental permits	**57**	57	57
Contract terms	**21**	26	25
Other	**64**	65	90
	798	841	835
Accumulated amortisation and impairment:			
Customer relationships	**(525)**	(513)	(460)
Water rights and environmental permits	**(13)**	(13)	–
Contract terms	**(11)**	(11)	(8)
Other	**(43)**	(45)	(70)
	(592)	(582)	(538)
	$ 206	$ 259	$ 297

10. Intangible Assets Other Than Goodwill (continued)

As of 31 December 2018, 2017 and 2016, water rights and environmental permits with a carrying value of $44 million, $44 million and $57 million, respectively, had an indefinite useful life.

The movement in intangible assets for the year ended 31 December 2018 was as follows:

US$ million	**Customer relationships**	**Water rights and environ-mental permits**	**Contract terms**	**Other**	**Total**
At 31 December 2017, cost, net of accumulated amortisation	**$ 180**	**$ 44**	**$ 15**	**$ 20**	**$ 259**
Additions	**–**	**–**	**–**	**10**	**10**
Amortisation charge	**(36)**	**–**	**(2)**	**(6)**	**(44)**
Translation difference	**(13)**	**–**	**(3)**	**(3)**	**(19)**
At 31 December 2018, cost, net of accumulated amortisation	**$ 131**	**$ 44**	**$ 10**	**$ 21**	**$ 206**

The movement in intangible assets for the year ended 31 December 2017 was as follows:

US$ million	**Customer relationships**	**Water rights and environ-mental permits**	**Contract terms**	**Other**	**Total**
At 31 December 2016, cost, net of accumulated amortisation	$ 203	$ 57	$ 17	$ 20	$ 297
Additions	–	–	–	5	5
Amortisation charge	(36)	–	(3)	(5)	(44)
Impairment losses recognised in statement of operations	–	(13)	–	–	(13)
Translation difference	13	–	1	–	14
At 31 December 2017, cost, net of accumulated amortisation	$ 180	$ 44	$ 15	$ 20	$ 259

The movement in intangible assets for the year ended 31 December 2016 was as follows:

US$ million	**Customer relationships**	**Water rights and environ-mental permits**	**Contract terms**	**Other**	**Total**
At 31 December 2015, cost, net of accumulated amortisation	$ 232	$ 57	$ 16	$ 19	$ 324
Additions	–	–	–	3	3
Amortisation charge	(35)	–	(2)	(4)	(41)
Translation difference	6	–	3	2	11
At 31 December 2016, cost, net of accumulated amortisation	$ 203	$ 57	$ 17	$ 20	$ 297

11. Investments in Joint Ventures and Associates

The Group accounted for investments in joint ventures and associates under the equity method.

The movement in investments in joint ventures and associates was as follows:

US$ million	**Timir**	**Streamcore**	**Other associates**	**Total**
Investment at 31 December 2015	**$ 40**	**$ 26**	**$ 8**	**$ 74**
Share of profit/(loss)	(2)	5	–	3
Impairment of investments	(26)	–	–	(26)
Translation difference	7	6	–	13
Investment at 31 December 2016	**$ 19**	**$ 37**	**$ 8**	**$ 64**
Additional investments	–	–	1	1
Share of profit/(loss)	1	8	2	11
Dividends paid	–	–	(1)	(1)
Translation difference	1	2	1	4
Investment at 31 December 2017	**$ 21**	**$ 47**	**$ 11**	**$ 79**
Share of profit/(loss)	(1)	9	1	9
Dividends paid	–	–	(1)	(1)
Translation difference	(3)	(9)	(1)	(13)
Investment at 31 December 2018	**$ 17**	**$ 47**	**$ 10**	**$ 74**

Share of profit/(loss) of joint ventures and associates which is reported in the statement of operations comprised the following:

US$ million	**2018**	**2017**	**2016**
Share of profit/(loss), net	**$ 9**	$ 11	$ 3
Impairment of investments	**–**	–	(26)
Share of profits/(losses) of joint ventures and associates recognised in the consolidated statement of operations	**$ 9**	$ 11	$ (23)

Timir Iron Ore Project

In April 2013, the Group acquired a 51% ownership interest in the joint venture with Alrosa for the development of 4 iron ore deposits in the southern part of the Yakutia region in Russia. Under the joint venture agreement major operating and financial decisions are made by unanimous consent of the Group and Alrosa, and no single venturer is in a position to control the activity unilaterally. Consequently, the Group accounts for its interest in Timir under the equity method.

The Group's consideration for this stake amounted to 4,950 million roubles ($159 million at the exchange rate as of the date of the transaction) payable in instalments to 15 July 2014. The consideration was measured as the present value of the expected cash outflows.

In 2014 and 2015, the parties amended the payment schedule. The latest schedule provides for an execution of payments of 500 million roubles in each of January 2017 and 2018 and 480 million roubles in 2019. From the dates of the amendments the Group incurs interest charges on the unpaid liability.

In 2018, 2017 and 2016, the Group paid 500 million roubles ($9 million), 500 million roubles ($8 million) and 500 million roubles ($7 million), respectively, of purchase consideration. Previously, the Group paid the principal of 2,970 million roubles ($89 million) in total. In addition, the Group paid interest charges on the liability.

At 31 December 2018, 2017 and 2016, trade and other accounts payable included liabilities relating to this acquisition in the amount of $8 million, $19 million and $27 million, respectively. In January 2019, the liability was fully settled.

11. Investments in Joint Ventures and Associates (continued)

Timir Iron Ore Project (continued)

The table below sets out Timir's assets and liabilities as of 31 December:

US$ million	**2018**	**2017**	**2016**
Mineral reserves and property, plant and equipment	**$ 48**	$ 58	$ 55
Other non-current assets	**6**	7	8
Total assets	**54**	65	63
Non-current liabilities	**–**	23	–
Current liabilities	**21**	–	25
Total liabilities	**21**	23	25
Net assets	**33**	42	38
Net assets attributable to 51% ownership interest	**$ 17**	$ 21	$ 19

In 2018, 2017 and 2016, Timir's statement of operations included only other income and expenses amounting to $(2) million, $2 million and $(4) million, respectively.

Due to the postponement of the major project activities, the Group assessed the recoverability of its investment in Timir at 30 September 2017 and 2016 (in 2018 there were no indicators of impairment). The recoverable amount of the asset was its fair value less costs to sell, which was determined using cash flow projections based on business plans approved by management and an appropriate discount rate reflecting time value of money and risks associated with the asset. The period of the forecast was 23 years. The discount rates were 11.56% and 11.75% in 2017 and 2016, respectively. As a result, in 2016, the Group partially impaired its investment in Timir. The major drivers that led to impairment were the decrease in the expected long-term prices for iron ore, the increase in the amount of the required capital expenditure to maintain production at budgeted capacities and the postponement of the start of production.

At 31 December 2018, 2017 and 2016 Timir owed to the Group $7 million, $8 million and $7 million, respectively, which were included in other non-current financial assets in 2017 and in the receivables from related parties caption in 2018 and 2016. The amounts represent a loan bearing interest of 6.45% per annum (in 2017 and 2016 the interest rate was 0.5% per annum).

11. Investments in Joint Ventures and Associates (continued)

Streamcore

The Group owns a 50% interest in Streamcore (Cyprus), a joint venture established for the purpose of exercising joint control over facilities for scrap procurement and processing in Siberia, Russia.

The table below sets out Streamcore's assets and liabilities as of 31 December:

US$ million	**2018**	**2017**	**2016**
Property, plant and equipment	**$ 21**	$ 24	$ 24
Inventories	**9**	60	4
Accounts receivable	**151**	104	91
Total assets	**181**	188	119
Deferred income tax liabilities	**1**	2	1
Current liabilities	**86**	92	44
Total liabilities	**87**	94	45
Net assets	**$ 94**	$ 94	$ 74
Net assets attributable to 50% ownership interest	**$ 47**	$ 47	$ 37

The table below sets out Streamcore's income and expenses:

US$ million	**2018**	**2017**	**2016**
Revenue	**$ 579**	$ 458	$ 286
Cost of revenue	**(553)**	(432)	(270)
Other expenses, including income taxes	**(8)**	(9)	(6)
Net profit	**$ 18**	$ 17	$ 10
Group's share of profit of the joint venture	**$ 9**	$ 8	$ 5

12. Disposal Groups Held for Sale

The major classes of assets and liabilities of the disposal groups measured at the lower of carrying amount and fair value less costs to sell were as follows as of 31 December:

US$ million	**2018**	**2017**	**2016**
Property, plant and equipment	**$ –**	$ –	$ 15
Other non-current assets	**–**	–	3
Inventories	**–**	–	1
Accounts receivable	**–**	–	6
Cash and cash equivalents	**–**	–	2
Assets classified as held for sale	**–**	–	27
Non-current liabilities	**–**	–	5
Current liabilities	**–**	–	3
Liabilities directly associated with assets classified as held for sale	**–**	–	8
Net assets classified as held for sale	**$ –**	$ –	$ 19

12. Disposal Groups Held for Sale (continued)

The net assets of disposal groups classified as held for sale at 31 December related to the following reportable segments:

US$ million	**2018**	**2017**	**2016**
Assets classified as held for sale	**$ –**	$ –	$ 27
Steel production	**–**	–	27
Liabilities directly associated with assets classified as held for sale	**–**	–	8
Steel production	**–**	–	8

The table below demonstrates the carrying values of assets and liabilities, at the dates of disposal, of the subsidiaries and other business units disposed of during 2016–2018.

US$ million	**2018**	**2017**	**2016**
Property, plant and equipment	**$ 65**	$ 119	$ 9
Goodwill	**–**	6	–
Other non-current assets	**2**	34	–
Inventories	**38**	27	–
Accounts receivable	**46**	38	–
Cash and cash equivalents	**2**	12	–
Total assets	**153**	236	9
Employee benefits	**21**	23	–
Other non-current liabilities	**–**	35	–
Current liabilities	**147**	38	–
Total liabilities	**168**	96	–
Non-controlling interests	**–**	6	–
Net assets	**$ (15)**	$ 134	$ 9

The net assets of disposal groups sold in 2016–2018 related to the following reportable segments:

US$ million	**2018**	**2017**	**2016**
Assets classified as held for sale	**$ 153**	$ 236	$ 9
Steel	**153**	196	9
Coal	**–**	40	–
Liabilities directly associated with assets classified as held for sale	**168**	96	–
Steel	**168**	79	–
Coal	**–**	17	–
Non-controlling interests	**–**	6	–
Steel	**–**	6	–

Cash flows on disposal of subsidiaries and other business units were as follows:

US$ million	**2018**	**2017**	**2016**
Net cash disposed of with subsidiaries	**$ (2)**	$ (12)	$ –
Cash received	**54**	489	27
Tax and transaction costs paid	**–**	(65)	–
Net cash inflow	**$ 52**	$ 412	$ 27

12. Disposal Groups Held for Sale (continued)

The disposal groups sold during 2016–2018 are described below.

Dneprovsk Metallurgical Plant

On 6 March 2018, the Group sold Dneprovsk Metallurgical plant (Ukraine), in which it had a 97.73% ownership interest, to a third party for cash consideration of $35 million. The consideration was payable in 2 instalments: $25 million was received upon signing of the transaction documents and the rest was settled in December 2018. The Group received interest income on deferred consideration in the amount of $1 million.

Prior to disposal the subsidiary was included in the steel segment. The Group recognised a $(10) million loss on sale of the subsidiary, including $(60) million of cumulative exchange losses reclassified from other comprehensive income to the consolidated statement of operations. The result was included in the Gain/(loss) on disposal groups classified as held for sale caption of the consolidated statement of operations. Cash disposed with the subsidiary amounted to $2 million.

Yuzhkoks

On 19 December 2017, the Group sold a Ukrainian coking plant Yuzhkoks, in which it had a 94.96% ownership interest, to a third party for cash consideration of $63 million, including $16 million of prepayment for the sale of this subsidiary received in 2016.

Prior to disposal the subsidiary was included in the steel segment. The Group recognised a $(91) million loss on sale of the subsidiary, including $(132) million of cumulative exchange losses reclassified from other comprehensive income to the consolidated statement of operations. The result was included in the Gain/(loss) on disposal groups classified as held for sale caption of the consolidated statement of operations. Cash disposed with the subsidiary amounted to $Nil.

Nakhodka Trade Sea Port

On 15 June 2017, the Group sold its wholly-owned subsidiary EVRAZ Nakhodka Trade Sea Port (“NMTP”) to a wholly-owned subsidiary of Lanebrook Limited (the ultimate controlling shareholder of the Group) for cash consideration of $332 million.

In connection with the sale transaction the Group entered into an agreement with NMTP pursuant to which the latter will transship cargo of the Group’s coal and metals in specified volumes for 5 years on terms specified in the agreement. The Group received a consideration of $8 million in respect of the transshipment agreement, which was recognised as deferred income with a 5-year period of amortisation.

Prior to disposal the subsidiary was included in the coal segment. The Group recognised a $284 million gain on sale of the subsidiary, including $(5) million of transaction costs and $(20) million of cumulative exchange losses reclassified from other comprehensive income to the consolidated statement of operations. The result was included in the Gain/(loss) on disposal groups classified as held for sale caption of the consolidated statement of operations. Cash disposed with the subsidiary amounted to $Nil. In addition, the Group paid income tax on the sale transaction in the amount of $60 million.

Sukha Balka

On 1 June 2017, the Group sold a Ukrainian iron ore mine Sukha Balka, in which it had a 99.42% ownership interest, to a third party for cash consideration of $109 million. In 2017, the Group received $94 million. At 31 December 2017, the unpaid amount was $15 million plus $3 million of interest accrued relating to the sale of Sukha Balka. This amount was fully received in the first half of 2018.

Prior to disposal the subsidiary was included in the steel segment. The Group recognised a $(555) million loss on sale of the subsidiary, including $(586) million of cumulative exchange losses reclassified from other comprehensive income to the consolidated statement of operations. The result was included in the Gain/(loss) on disposal groups classified as held for sale caption of the consolidated statement of operations. Cash disposed with the subsidiary amounted to $Nil.

12. Disposal Groups Held for Sale (continued)

Strategic Minerals Corporation

Following the sale agreement signed in 2016, on 6 April 2017, the Group sold Strategic Minerals Corporation (USA), in which it had a 78.76% ownership interest, to a third party for cash consideration of $16 million. Strategic Minerals Corporation owns a 75% share in the Vametco vanadium mine and plant located in the Republic of South Africa. Prior to disposal both subsidiaries were included in the steel segment.

The Group recognised a $2 million gain on sale of the subsidiary, including $(3) million of cumulative exchange losses reclassified from other comprehensive income to the consolidated statement of operations. The result was included in the Gain/(loss) on disposal groups classified as held for sale caption of the consolidated statement of operations. Cash disposed with the subsidiary amounted to $12 million.

13. Other Non-current Assets

Other non-current assets consisted of the following as of 31 December:

Non-current Financial Assets

US$ million	**2018**	**2017**	**2016**
Financial assets measured at fair value through other comprehensive income	**$ –**	$ 33	$ 3
Hedging instruments (Note 25)	**–**	4	–
Restricted deposits	**6**	6	11
Receivables from related parties	**1**	8	–
Loans receivable	**1**	20	21
Trade and other receivables	**17**	23	4
Other	**66**	57	52
	$ 91	$ 151	$ 91

Other Non-current Assets

US$ million	**2018**	**2017**	**2016**
Safety stock inventories	**$ 24**	$ 28	$ 24
Defined benefit asset (Note 23)	**3**	–	–
Income tax receivable	**8**	2	7
Input VAT	**1**	1	2
Other	**8**	8	12
	$ 44	$ 39	$ 45

Financial Assets Measured at Fair Value Through Other Comprehensive Income

At 31 December 2017 the Group held approximately 15% in Delong Holdings Limited ("Delong"), a flat steel producer headquartered in Beijing (China). At that date the investments in Delong were classified as available-for-sale and measured at fair value based on market quotations of the Singapore Exchange. At 31 December 2017, the carrying value of these investments amounted to $33 million, including a $30 million increase in the fair value recognised in other comprehensive income in 2017. At 31 December 2017, the carrying value was $3 million.

At 1 January 2018, the Group irrevocably designated these investments as measured at fair value through other comprehensive income. For such financial instruments all subsequent changes in fair value are reported in other comprehensive income, no impairment losses are recognised in profit or loss and no gains or losses are recycled to profit or loss upon derecognition.

13. Other Non-current Assets (continued)

Financial Assets Measured at Fair Value Through Other Comprehensive Income (continued)

In June 2018, the Group sold its ownership interest in Delong to the major shareholder of the entity for cash consideration of $92 million. According to the agreement, if within 12 months from the completion date the purchaser makes an offer to acquire all the remaining shares of Delong on the open market, the Group will be entitled to an additional consideration in the amount of excess of the offer price over $5.283 per share. This additional consideration has not been recognised, as the Group considers such event to be very unlikely.

Market value of the equity instruments at the date of sale was $71 million. Total gain, comprising the change in market value until the sale and the excess of the sale price over the market value of the investments at the sale date, amounting to $59 million was recognised in other comprehensive income. Upon sale the Group transferred the realised gains accumulated in other comprehensive income ($89 million) to accumulated profits.

14. Inventories

Inventories consisted of the following as of 31 December:

US$ million	**2018**	**2017**	**2016**
Raw materials and spare parts	**$ 737**	$ 548	$ 434
Work-in-progress	**292**	245	173
Finished goods	**445**	405	377
	$ 1,474	$ 1,198	$ 984

As of 31 December 2018, 2017 and 2016, the net realisable value allowance was $34 million, $40 million and $34 million, respectively.

As of 31 December 2018, 2017 and 2016, certain items of inventory with an approximate carrying amount of $629 million, $438 million and $315 million, respectively, were pledged to banks as collateral against loans provided to the Group (Note 22).

15. Trade and Other Receivables

Trade and other receivables consisted of the following as of 31 December:

US$ million	**2018**	**2017**	**2016**
Trade accounts receivable	**$ 806**	$ 722	$ 518
Other receivables	**71**	63	31
	877	785	549
Allowance for expected credit losses	**(42)**	(54)	(47)
	$ 835	$ 731	$ 502

Ageing analysis and movement in allowance for expected credit losses are provided in Note 28.

16. Related Party Disclosures

Related parties of the Group include associates and joint venture partners, key management personnel and other entities that are under the control or significant influence of the key management personnel, the Group's ultimate parent or its shareholders. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

Amounts owed by/to related parties at 31 December were as follows:

	Amounts due from related parties			Amounts due torelated parties		
US$ million	**2018**	**2017**	**2016**	**2018**	**2017**	**2016**
Loans						
Timir (Note 11)	**$ 7**	$ –	$ 7	**$ –**	$ –	$ –
Dividends receivable						
Yuzhny GOK	**4**	6	–	**–**	–	–
Trade balances						
Nakhodka Trade Sea Port	**–**	–	–	**10**	6	–
Vtorresource-Pererabotka	**–**	2	1	**95**	52	39
Yuzhny GOK	**–**	4	–	**15**	195	185
Other entities	**–**	–	–	**2**	3	2
	11	12	8	**122**	256	226
Less: allowance for expected credit losses	**–**	–	–	**–**	–	–
	$ 11	$ 12	$ 8	**$ 122**	$ 256	$ 226

At 31 December 2017, the loan receivable from Timir (Note 11) amounting to $8 million, was classified as a non-current financial asset (Note 13).

In 2016–2018, the Group did not recognise any expense or income in relation to the expected credit losses of related parties.

Transactions with related parties were as follows for the years ended 31 December:

	Sales to related parties			Purchases from related parties		
US$ million	**2018**	**2017**	**2016**	**2018**	**2017**	**2016**
Genalta Recycling Inc.	**$ –**	$ –	$ –	**$ 15**	$ 14	$ 8
Interlock Security Services	**–**	–	–	**3**	11	19
Nakhodka Trade Sea Port	**–**	–	–	**73**	36	–
Vtorresource-Pererabotka	**6**	8	7	**569**	452	281
Yuzhny GOK	**32**	37	25	**104**	107	77
Other entities	**1**	–	–	**1**	1	11
	$ 39	$ 45	$ 32	**$ 765**	$ 621	$ 396

In addition to the disclosures presented in this note, some of the balances and transactions with related parties are disclosed in Notes 11, 12, 13 and 25.

Genalta Recycling Inc. is a joint venture of a Canadian subsidiary of the Group. It sells scrap metal to the Group.

Interlock Security Services is a group of entities controlled by a member of the key management personnel, which provide security services to the Russian and Ukrainian subsidiaries of the Group. In August-September 2016, the main businesses of this group were sold by a key person to third parties and they ceased to be related parties to the Group.

Lanebrook Limited ("Lanebrook") was a controlling shareholder of the Company. After the transfer of ownership interests in EVRAZ plc to the shareholders of Lanebrook (Note 1), it represents an entity under common control by the shareholder. At 31 December 2018, the Group had other receivables from Lanebrook, amounting to $32 million, in connection with the acquisition of a 1% ownership interest in Yuzhny GOK in 2008 (Note 18).

16. Related Party Disclosures (continued)

Nakhodka Trade Sea Port ("NTSP") was the Group's subsidiary sold in 2017 (Note 12) and is an entity under common control with the Group. NTSP renders handling services to the Group.

Vtorresource-Pererabotka is a subsidiary of Streamcore, the Group's joint venture, acquired in 2012. It sells scrap metal to the Group and provides scrap processing and other services. In 2018, 2017 and 2016, the purchases of scrap metal from Vtorresource-Pererabotka amounted to $494 million (1,821,380 tonnes), $422 million (1,601,320 tonnes) and $256 million (1,437,411 tonnes), respectively.

Yuzhny GOK, an ore mining and processing plant, is an associate of an entity, which is under common control with one of the major shareholders of EVRAZ plc. The Group sold steel products to Yuzhny GOK and purchased sinter from the entity. In 2018, 2017 and 2016, the volume of purchases was 1,344,277 tonnes, 1,639,306 tonnes and 1,619,745 tonnes, respectively. In 2018 and 2017, the Group recognised dividend income from Yuzhny GOK in the amount of $4 million and $6 million, respectively, within the other non-operating gains/(losses) caption in the consolidated statement of operations. The dividends declared by Yuzhny GOK in 2017 were received in 2018, the rest was unpaid at 31 December 2018.

The transactions with related parties were based on prevailing market terms.

Compensation to Key Management Personnel

Key management personnel include the following positions within the Group:

- directors of the Company,
- vice presidents,
- senior management of major subsidiaries.

In 2018, 2017 and 2016, key management personnel totalled 32, 30 and 34 people, respectively. Total compensation to key management personnel were included in general and administrative expenses in the consolidated statement of operations and consisted of the following:

US$ million	**2018**	**2017**	**2016**
Salary	**$ 14**	$ 15	$ 14
Performance bonuses	**13**	14	9
Social security taxes	**4**	3	3
Share-based payments (Note 21)	**8**	9	8
Termination benefits	**–**	1	–
	$ 39	$ 42	$ 34

Other disclosures on directors' remuneration required by Schedule 8 to the Large and Medium-sized Companies and Groups (Accounts & Reports) regulations 2008 are included in the Directors' Remuneration Report.

17. Other Taxes Recoverable

Taxes recoverable consisted of the following as of 31 December:

US$ million	**2018**	2017	2016
Input VAT	**$ 78**	$ 140	$ 89
Other taxes	**123**	85	103
	$ 201	$ 225	$ 192

Input VAT, representing amounts payable or paid to suppliers, is recoverable from the tax authorities via offset against VAT payable to the tax authorities on the Group's revenue or direct cash receipts from the tax authorities. Management periodically reviews the recoverability of the balance of input value added tax and believes it is fully recoverable within one year.

18. Other Current Financial Assets

Other current assets included the following as of 31 December:

US$ million	**2018**	2017	2016
Other receivables from Lanebrook (Note 16)	**$ 32**	$ 32	$ 32
Restricted deposits at banks	**3**	15	1
	$ 35	$ 47	$ 33

19. Cash and Cash Equivalents

Cash and cash equivalents, mainly consisting of cash at banks, were denominated in the following currencies as of 31 December:

US$ million	**2018**	2017	2016
Euro	**$ 540**	$ 31	$ 14
US dollar	**273**	1,253	1,058
Russian rouble	**215**	163	71
Ukrainian hryvnia	**24**	7	2
Other	**15**	12	12
	$ 1,067	$ 1,466	$ 1,157

At 31 December 2018, 2017 and 2016, the assets of disposal groups classified as held for sale included cash amounting to $Nil, $Nil and $2 million, respectively.

20. Equity

Share Capital

	31 December		
Number of shares	**2018**	**2017**	**2016**
Ordinary shares, issued and fully paid	**1,506,527,294**	1,506,527,294	1,506,527,294

On 10 July 2018, EVRAZ plc reduced the nominal value of its shares from $1 to $0.05 each. The amount of the cancelled share capital ($1,432 million) became distributable reserves.

Treasury Shares

	31 December		
	2018	**2017**	**2016**
Number of treasury shares	**63,177,187**	74,474,663	87,015,878

On 31 March 2015, the Board resolved to announce a return of capital to be effected by a tender offer to shareholders at $3.10 per share in the amount of up to $375 million. In April 2015, EVRAZ plc repurchased 108,458,508 of its own shares ($336 million). The Company incurred $3 million of transaction costs, which were charged to accumulated profits.

Subsequently, in 2018, 2017 and 2016, 11,297,476 shares, 12,541,215 shares and 11,465,371 shares, respectively, were transferred to the participants of Incentive Plans. The cost of treasury shares transferred to the participants of Incentive Plans, amounted to $35 million, $39 million and $35 million in 2018, 2017 and 2016, respectively.

Earnings per Share

Earnings per share are calculated by dividing the net income attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the period. Diluted earnings per share amounts are calculated by dividing the net profit attributable to ordinary equity holders by the weighted average number of ordinary shares outstanding during the period plus the weighted average number of ordinary shares that would be issued on the conversion of all the potential dilutive ordinary shares into ordinary shares.

The following reflects the income and share data used in the basic and diluted earnings per share computations:

	2018	**2017**	**2016**
Weighted average number of ordinary shares outstanding during the period	**1,439,326,349**	1,427,585,897	1,414,906,412
Effect of dilution: share options	**19,462,750**	26,974,433	–
Weighted average number of ordinary shares adjusted for the effect of dilution	**1,458,789,099**	1,454,560,330	1,414,906,412
Profit/(loss) for the year attributable to equity holders of the parent, US$ million	**$ 2,406**	$ 699	$ (215)
Basic earnings/(losses) per share	**$ 1.67**	$ 0.49	$ (0.15)
Diluted earnings/(losses) per share	**$ 1.65**	$ 0.48	$ (0.15)

In 2016, share-based awards (Note 21) were antidilutive as the Group reported net losses.

20. Equity (continued)

Dividends

Dividends declared by EVRAZ plc during 2016–2018 were as follows:

	Date of declaration	To holders registered at	Dividends declared, US$ million	US$ per share
Interim for 2017	09/08/2017	18/08/2017	430	0.30
Second Interim for 2017	28/02/2018	09/03/2018	429.6	0.30
Interim for 2018	24/05/2018	08/06/2018	187.6	0.13
Second Interim for 2018	08/08/2018	17/08/2018	577.3	0.40
Third Interim for 2018	15/11/2018	23/11/2018	361	0.25

21. Share-based Payments

In 2016-2018, the Group had several Incentive Plans under which certain senior executives and employees ("participants") could be gifted shares of the parent company upon vesting. These plans were adopted on 24 September 2013, 8 August 2014, 26 October 2015, 15 September 2016, 25 September 2017 and 26 September 2018.

The vesting under Incentive Plans adopted before 2017 does not depend on the achievement of any performance conditions. The new Plans adopted in 2017 and 2018 provide that the number of shares transferred to participants upon vesting is dependent on the Group's performance versus the selected group of peers. EBITDA and total shareholder return ("TSR") are used as the key performance indicators. If the Group's EBITDA achieves a specific ranking in the peer group, then 50% of the shares of a particular tranche become vested, otherwise they are forfeited. If the Group's TSR achieves a specific ranking in the peer group, then the other 50% of the shares of a particular tranche become vested, otherwise they are forfeited. Subject to the resolution of the Remuneration Committee, EBITDA can become the only metric in the performance evaluation (in case if the net debt to EBITDA ratio is equal to 3 or higher). The TSR-related vesting condition of the Incentive Plans 2017 and 2018 was considered by the Group as a market condition. As such, it was included in the estimation of the fair value of the granted shares and will not be subsequently revised. Vesting condition related to EBITDA was not taken into account when estimating the fair value of the share options at the grant date. Instead, this will be taken into account by adjusting the share-based expense based on the number of share options that eventually vest.

The vesting date for each tranche occurs within the 90-day period after announcement of the annual results. The expected vesting dates of the awards outstanding at 31 December 2018 are presented below:

Number of Shares of EVRAZ plc	Total	Incentive Plan 2018	Incentive Plan 2017	Incentive Plan 2016	Incentive Plan 2015
March 2019	8,562,791	628,747	1,345,901	2,640,256	3,947,887
March 2020	5,287,949	628,747	2,018,840	2,640,362	–
March 2021	2,961,995	943,129	2,018,866	–	–
March 2022	943,242	943,242	–	–	–
	17,755,977	**3,143,865**	**5,383,607**	**5,280,618**	**3,947,887**

The plans are administered by the Board of Directors of EVRAZ plc. The Board of Directors has the right to accelerate vesting of the grant. In the event of a participant's employment termination, unless otherwise determined by the Board or by a decision of the authorised person, a participant loses the entitlement for the shares that were not gifted up to the date of termination.

There have been no modifications or cancellations to the plans during 2016–2018.

21. Share-based Payments (continued)

The Group accounted for share-based compensation at fair value pursuant to the requirements of IFRS 2 “Share-based Payment”. The weighted average fair value of share-based awards granted in 2018, 2017 and 2016 was $5.27, $2.54 and $1.73 per share of EVRAZ plc, respectively. The fair value of these awards was estimated at the date of grant and measured at the market price of the shares of the parent company reduced by the present value of dividends expected to be paid during the vesting period. The following inputs, including assumptions, were used in the valuation of Incentive plans, which were effective during 2016-2018:

	Incentive Plan 2018	Incentive Plan 2017	Incentive Plan 2016	Incentive Plan 2015	Incentive Plan 2014	Incentive Plan 2013
Dividend yield (%)	1.8 – 2.3	2.1 – 2.9	n/a	7.3 – 9.1	3.6 – 4.8	4.0 – 8.8
Expected life (years)	0.5 – 3.5	0.5 – 3.5	0.5 – 3.5	0.6 – 3.6	0.6 – 3.6	0.6 – 3.6
Market prices of the shares of EVRAZ plc at the grant dates	$7.36	$3.86	$1.73	$1.36	$1.68	$2.13

The following table illustrates the number of, and movements in, share-based awards during the years.

	2018	2017	2016
Outstanding at 1 January	**27,912,610**	34,581,349	43,767,553
Granted during the year	**3,143,865**	7,361,166	10,383,528
Forfeited during the year	**(2,003,022)**	(1,488,690)	(8,104,361)
Vested during the year	**(11,297,476)**	(12,541,215)	(11,465,371)
Outstanding at 31 December	**17,755,977**	27,912,610	34,581,349

The weighted average share price at the dates of exercise was $6.82, $2.62 and $1.78 in 2018, 2017 and 2016, respectively.

The weighted average remaining contractual life of the share-based awards outstanding as of 31 December 2018, 2017 and 2016 was 1, 1.2 and 1.2 years, respectively.

In the years ended 31 December 2018, 2017 and 2016, the expense arising from the equity-settled share-based compensations was as follows:

US$ million	2018	2017	2016
Expense arising from equity-settled share-based payment transactions	**$ 15**	$ 17	$ 16

22. Loans and Borrowings

Short-term and long-term loans and borrowings were as follows as of 31 December:

US$ million	2018	Non-current	Current	2017	Non-current	Current	2016	Non-current	Current
Bank loans	**$ 1,370**	**$ 1,290**	**$ 80**	$ 2,113	$ 2,051	$ 62	$ 2,067	$ 1,799	$ 268
US dollar-denominated									
7.75% bonds due 2017	**–**	**–**	**–**	–	–	–	26	–	26
9.5% notes due 2018	**–**	**–**	**–**	–	–	–	125	125	–
6.75% notes due 2018	**–**	**–**	**–**	–	–	–	528	528	–
7.5% senior secured notes due 2019	**–**	**–**	**–**	–	–	–	350	350	–
6.50% notes due 2020	**700**	**700**	**–**	700	700	–	1,000	1,000	–
8.25% notes due 2021	**750**	**750**	**–**	750	750	–	750	750	–
6.75% notes due 2022	**500**	**500**	**–**	500	500	–	500	500	–
5.375% notes due 2023	**750**	**750**	**–**	750	750	–	–	–	–
Rouble-denominated									
12.95% rouble bonds due 2019	**216**	**–**	**216**	260	260	–	247	247	–
12.60% rouble bonds due 2021	**216**	**216**	**–**	260	260	–	247	247	–
Fair value adjustment to liabilities assumed in business combination	**–**	**–**	**–**	–	–	–	1	–	1
Unamortised debt issue costs	**(20)**	**(20)**	**–**	(28)	(28)	–	(44)	(44)	–
Interest payable	**81**	**–**	**81**	86	–	86	97	–	97
	$ 4,563	**$ 4,186**	**$ 377**	$ 5,391	$ 5,243	$ 148	$ 5,894	$ 5,502	$ 392

The average effective annual interest rates were as follows at 31 December:

	Long-term borrowings			Short-term borrowings		
	2018	2017	2016	2018	2017	2016
US dollar	**6.13%**	6.00%	6.85%	**–**	1.85%	3.31%
Russian rouble	**12.84%**	12.78%	12.71%	**–**	–	–
Euro	**3.47%**	3.77%	3.94%	**0.74%**	–	–
Canadian dollars	**3.87%**	3.29%	2.88%	**–**	–	–

The liabilities are denominated in the following currencies at 31 December:

US$ million	2018	2017	2016
US dollar	**$ 3,758**	$ 4,604	$ 4,911
Russian rouble	**440**	530	809
Euro	**238**	242	217
Canadian dollars	**144**	43	1
Other	**3**	–	–
Unamortised debt issue costs	**(20)**	(28)	(44)
	$ 4,563	$ 5,391	$ 5,894

22. Loans and Borrowings (continued)

The movement in loans and borrowings were as follows:

US$ million	**2018**	**2017**	**2016**
1 January	**$ 5,391**	$ 5,894	$ 6,347
Cash changes:			
Cash proceeds from bank loans and notes, net of debt issues costs	**1,412**	2,441	1,301
Repayment of bank loans and notes, including interest	**(2,459)**	(3,344)	(2,428)
Net proceeds from/(repayment of) bank overdrafts and credit lines, including interest	**–**	(139)	(5)
Payments under covenants reset	**–**	–	(4)
Non-cash changes:			
Change in the balance of debt issues costs paid in subsequent reporting period	**–**	(1)	7
Non-cash proceeds (Note 29)	**6**	8	46
Interest and other charges expensed (Note 7)	**322**	394	439
Interest capitalised (Note 9)	**1**	6	9
Accrual of premiums and other charges on early repayment of borrowings (Note 7)	**1**	78	50
Transfer to disposal groups held for sale	**–**	(6)	–
Effect of exchange rate changes	**(111)**	60	132
31 December	**$ 4,563**	$ 5,391	$ 5,894

Pledged Assets

At 31 December 2016, a 100% ownership interest in EVRAZ Inc NA and 51% in EVRAZ Inc NA Canada were pledged against a $350 million liability under 7.5% senior secured notes due 2019. In addition, at 31 December 2016, property, plant and equipment and inventory of these subsidiaries amounting to $1,013 million and $315 million, respectively, were pledged as collateral under the notes. In 2017, these notes were fully repaid *(Repurchase of Notes and Bonds)*.

The Group's pledged assets at carrying value included the following at 31 December:

US$ million	**2018**	**2017**	**2016**
Property, plant and equipment	**$ 67**	$ 66	$ 1,013
Inventory	**629**	438	315

22. Loans and Borrowings (continued)

Issue of Notes and Bonds

In March 2017, the Group issued 5.375% notes due 2023 in the amount of $750 million. The proceeds from the issue of the notes were used to finance the purchase of 9.50% notes due 2018, 6.75% notes due 2018 and 6.50% bonds due 2020 at the tender offers settled in March 2017 and to refinance other current indebtedness of the Group.

In June 2016, the Group issued 6.75% notes due 2022 in the amount of $500 million. The proceeds from the issue of the notes were used to finance the purchase of 7.40% notes due 2017, 9.50% notes due 2018, 6.75% notes due 2018 and 7.75% bonds due 2017 at the tender offer settled on 17 June 2016 and to refinance other current indebtedness of the Group.

In March 2016, the Group completed a placement of bonds in the total amount of 15,000 million Russian roubles ($247 million at 31 December 2016), which bear interest of 12.60% per annum and mature on 23 March 2021. The currency risk exposure of these bonds was not hedged.

Repurchase of Rouble-Denominated Bonds

In 2016, the Group fully settled its 8.40% rouble bonds due 2016, there was no gain or loss on this transaction.

Repurchase of US Dollar-Denominated Notes

In 2017, the Group partially repurchased 9.50% notes due 2018 ($125 million), 6.75% notes due 2018 ($528 million) and 6.50% bonds due 2020 ($300 million). The premium over the carrying value on the repurchase and other costs relating to the transaction in the total amount of $8 million, $23 million and $23 million, respectively, were charged to the Gain/(loss) on financial assets and liabilities caption of the consolidated statement of operations.

In 2017, the Group also fully settled $350 million under 7.5% senior secured notes due 2019. Loss on this transaction amounted to $17 million, including $13 million of premium.

In addition, the Group fully settled its 7.75% bonds due 2017 issued by Raspadskaya ($26 million), there was no gain or loss on this transaction. Previously, in 2015, the Group repurchased through a tender offer and market transactions $206 million at par. The difference between the carrying value of these bonds and the purchase consideration amounting to $7 million was credited to the Gain/(loss) on financial assets and liabilities caption of the consolidated statement of operations.

In 2016, the Group partially repurchased 9.50% notes due 2018 ($228 million), 6.75% notes due 2018 ($268 million) and 7.75% bonds due 2017 ($160 million). The premium over carrying value on the repurchase in the amount of $20 million, $7 million and $5 million, respectively, was charged to the Gain/(loss) on financial assets and liabilities caption of the consolidated statement of operations.

In 2016, the Group fully repurchased 7.40% notes due 2017 ($286 million) paying a premium over the carrying value of $14 million.

22. Loans and Borrowings (continued)

Compliance with Financial Covenants

Some of the loan agreements and terms and conditions of notes provide for certain covenants in respect of EVRAZ plc and its subsidiaries. The covenants impose restrictions in respect of certain transactions and financial ratios, including restrictions in respect of indebtedness and profitability. EBITDA used for covenants compliance calculations is determined based on the definitions of the respective loan agreements and may differ from that used by management for evaluation of performance.

Several bank credit facilities totalling $1,061 million contain certain financial maintenance covenants. These covenants require EVRAZ plc to maintain two key ratios, consolidated net indebtedness to 12month consolidated EBITDA and 12-month consolidated EBITDA to adjusted 12-month consolidated interest expense, within certain limits. A breach of one or both of these ratios or excess of the indebtedness limit would constitute an event of default under the facility which in turn may trigger cross default events under other debt instruments of the Group. The terms of certain facilities also set certain limitations on acquisitions and disposals by EVRAZ plc.

Notes due 2020, 2021, 2022 and 2023, totalling $2,700 million issued by Evraz Group S.A., a holding company directly wholly owned by EVRAZ plc, have covenants restricting the incurrence of indebtedness by the issuer and its consolidated subsidiaries conditional on a gross leverage ratio. While the ratio level itself does not constitute a breach of covenants, exceeding the threshold of 3.5 times triggers a restriction on incurrence of consolidated indebtedness, which is removed once the ratio goes back below the threshold. The effect of the restriction is such that Evraz Group S.A. and its subsidiaries are not allowed to increase the consolidated indebtedness at the level of Evraz Group S.A., but are allowed to refinance existing indebtedness subject to certain conditions. As of 31 December 2018, gross leverage ratio for Evraz Group S.A. was below 3.5.

Several bank credit facilities totalling $293 million provide for certain covenants restricting the incurrence of indebtedness by Evraz North America plc and its subsidiaries conditional on a fixed charge ratio. Once the threshold for the ratio is exceeded, it triggers restrictions on incurrence of additional indebtedness by Evraz North America plc and its subsidiaries.

The incurrence covenants are in line with the Group’s financial strategy and, therefore, do not constitute any excessive restriction on its operations.

During 2018 the Group was in compliance with all financial and non-financial covenants.

Unamortised Debt Issue Costs

Unamortised debt issue costs represent agent commission and transaction costs paid by the Group in relation to the arrangement and reset of loans and notes.

Unutilised Borrowing Facilities

The Group had the following unutilised borrowing facilities as of 31 December:

US$ million	**2018**	**2017**	**2016**
Committed	**$ 377**	$ 131	$ 187
Uncommitted	**1,434**	1,251	883
Total unutilised borrowing facilities	**$ 1,811**	$ 1,382	$ 1,070

23. Employee Benefits

Russian Plans

Certain Russian subsidiaries of the Group provide regular lifetime pension payments and lump-sum amounts payable at retirement date. These benefits generally depend on years of service, level of remuneration and amount of pension payment under the collective bargaining agreements. Other post-employment benefits consist of various compensations and certain non-cash benefits. The Group funds the benefits when the amounts of benefits fall due for payment.

In addition, some subsidiaries have defined benefit plans under which contributions are made to a separately administered non-state pension fund. The Group matches 100% of the employees' contributions to the fund up to 4% of their monthly salary. The Group's contributions become payable at the participants' retirement dates. At the end of the reporting year the benefit obligation was valued based on the terms of the pension plan assuming that all defined benefit plan participants will continue to participate in the plan.

Defined contribution plans represent payments made by the Group to the Russian state pension, social insurance and medical insurance funds at the statutory rates in force, based on gross salary payments. The Group has no legal or constructive obligation to pay further contributions in respect of those benefits.

In October 2018, the Russian pension law was amended introducing a higher retirement age from 1 January 2019. During 2019 – 2023 the retirement age will be gradually increased for women from 55 to 60 and for men from 60 to 65. The Group has accounted for these amendments, when measuring the post-employment benefit obligations as of 31 December 2018 and has recorded the resulting decrease in the obligations in the amount of $2 million as a part of past service costs.

Ukrainian Plans

The Ukrainian companies make regular contributions to the State Pension Fund thereby compensating 100% of preferential pensions paid by the fund to employees who worked under harmful and hard conditions. The amount of such pension depends on years of service and salary. In addition, employees receive lump-sum payments on retirement and other benefits under collective labour agreements. These benefits are based on years of service and level of compensation. All these payments are considered as defined benefit plans.

The Ukrainian pension legislation provides for annual indexation of pensions, at least up to the level of CPI. Starting from 2018 the minimum annual indexation of pensions, which takes into account 50% of CPI and 50% of salary growth, becomes obligatory.The indexation of pensions at a level higher than minimally required depends on the availability of financial resources in the State pension fund. The Group's Ukrainian subsidiaries were obliged to pay indexed preferential pensions. The Group determined the amount of defined benefit obligations based on the assumption that pensions will be indexed at a minimum required level.

23. Employee Benefits (continued)

US and Canadian Plans

The Group's subsidiaries in the USA and Canada have defined benefit pension plans that cover specified eligible employees. Benefits are based on pensionable years of service, pensionable compensation, or a combination of both depending on the individual plan. The subsidiaries also have U.S. and Canadian supplemental retirement plans ("SERP's"), which are non-qualified plans designed to maintain benefits for eligible employees at the plan formula level. The subsidiaries provide other unfunded post-retirement medical and life insurance plans ("OPEB's") for certain of their eligible employees upon retirement after completion of a specified number of years of service. For the pension plans, SERP's and OPEB's, the subsidiaries use a measurement date for plan assets and obligations of 31 December.

Certain employees that were hired after specified dates are no longer eligible to participate in the defined benefit pension plans. Those employees are instead enrolled in defined contribution plans and receive a contribution funded by the Group's subsidiaries equal to 3–7% of annual wages, including applicable bonuses. The defined contribution plans are funded throughout the year and, depending on their work location, participants' benefits vesting dates range from immediate to after three years of service. In addition, the subsidiaries have defined contribution plans available for eligible U.S. and Canadian-based employees in which the subsidiaries generally match a percentage of the participants' contributions.

Some Canadian employees participate in a retirement savings plan. For these employees, the participation may be voluntary, employee contributions are matched by the employer at 1-3% of annual wages, including applicable bonuses, and depending on the group of employees, are funded either annually or throughout the year.

Other Plans

Defined benefit pension plans and defined contribution plans are maintained by the subsidiaries located in Europe.

Defined Contribution Plans

The Group's expenses under defined contribution plans were as follows:

US$ million	**2018**	**2017**	**2016**
Expense under defined contribution plans	**$ 245**	$ 246	$ 212

Defined Benefit Plans

The Russian, Ukrainian and other defined benefit plans are mostly unfunded and the US and Canadian plans are partially funded.

Except as disclosed above, in 2018 there were no significant plan amendments, curtailments or settlements.

The Group's defined benefit plans are exposed to the risks of unexpected growth in benefit payments as a result of increases in life expectancy, inflation, and salaries. As the plan assets include significant investments in quoted and unquoted equity shares, corporate and government bonds and notes, the Group is also exposed to equity market risk.

23. Employee Benefits (continued)

The components of net benefit expense recognised in the consolidated statement of operations for the years ended 31 December 2018, 2017 and 2016 and amounts recognised in the consolidated statement of financial position as of 31 December 2018, 2017 and 2016 for the defined benefit plans were as follows:

Net benefit expense (recognised in the statement of operations within cost of sales and selling, general and administrative expenses and interest expense)

Year ended 31 December 2018

US$ million	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Total
Current service cost	**$ (2)**	**$ –**	**$ (19)**	**$ –**	**$ (21)**
Net interest expense	**(8)**	**–**	**(5)**	**–**	**(13)**
Net actuarial gains/(losses) on other long-term employee benefits obligation	**(1)**	**–**	**–**	**–**	**(1)**
Past service cost	**–**	**–**	**(1)**	**–**	**(1)**
Curtailment/settlement gain	**1**	**–**	**–**	**–**	**1**
Other	**–**	**–**	**(3)**	**–**	**(3)**
Net benefit expense	**$ (10)**	**$ –**	**$ (28)**	**$ –**	**$ (38)**

Year ended 31 December 2017

US$ million	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Total
Current service cost	$ (2)	$ (1)	$ (18)	$ –	$ (21)
Net interest expense	(9)	(4)	(6)	–	(19)
Net actuarial gains/(losses) on other long-term employee benefits obligation	2	–	–	–	2
Past service cost	(3)	3	(3)	–	(3)
Curtailment/settlement gain	–	–	2	–	2
Other	–	–	(3)	–	(3)
Net benefit expense	$ (12)	$ (2)	$ (28)	$ –	$ (42)

Year ended 31 December 2016

US$ million	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Total
Current service cost	$ (2)	$ (2)	$ (19)	$ –	$ (23)
Net interest expense	(9)	(5)	(8)	–	(22)
Net actuarial gains/(losses) on other long-term employee benefits obligation	1	–	–	–	1
Past service cost	(1)	1	–	–	–
Curtailment/settlement gain	1	–	–	–	1
Net benefit expense	$ (10)	$ (6)	$ (27)	$ –	$ (43)

23. Employee Benefits (continued)

Gains/(losses) recognised in other comprehensive income

Year ended 31 December 2018

US$ million	**Russian plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
Return on plan assets, excluding amounts included in net interest expense	**$ –**	**$ –**	**$ (30)**	**$ –**	**$ (30)**
Net actuarial gains/(losses) on post-employment benefit obligation	**2**	**–**	**56**	**–**	**58**
	$ 2	**$ –**	**$ 26**	**$ –**	**$ 28**

Year ended 31 December 2017

US$ million	**Russian plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
Return on plan assets, excluding amounts included in net interest expense	$ –	$ –	$ 48	$ –	$ 48
Net actuarial gains/(losses) on post-employment benefit obligation	6	(4)	(23)	–	(21)
	$ 6	$ (4)	$ 25	$ –	$ 27

In addition to the amounts presented in the table above, actuarial gains/(losses) recognised in other comprehensive income include $(1) million relating to a subsidiary classified as a disposal group held for sale.

Year ended 31 December 2016

US$ million	**Russian plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
Return on plan assets, excluding amounts included in net interest expense	$ (1)	$ –	$ 7	$ –	$ 6
Net actuarial gains/(losses) on post-employment benefit obligation	3	8	(6)	–	5
	$ 2	$ 8	$ 1	$ –	$ 11

23. Employee Benefits (continued)

Actual return on plan assets was as follows:

US$ million	**2018**	**2017**	**2016**
Actual return on plan assets	**$ (10)**	$ 66	$ 25
including:			
US & Canadian plans	**(10)**	66	26
Russian plans	**–**	–	(1)

Net defined benefit liability

31 December 2018

US$ million	**Russian Plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
Benefit obligation	**$ 91**	**$ –**	**$ 687**	**$ –**	**$ 778**
Plan assets	**–**	**–**	**(555)**	**–**	**(555)**
Net defined benefit asset	**–**	**–**	**3**	**–**	**3**
Net defined benefit liability	**91**	**–**	**135**	**–**	**226**

31 December 2017

US$ million	**Russian Plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
Benefit obligation	$ 111	$ 19	$ 765	$ –	$ 895
Plan assets	–	–	(611)	–	(611)
	111	19	154	–	284

31 December 2016

US$ million	**Russian Plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
Benefit obligation	$ 108	$ 31	$ 711	$ 2	$ 852
Plan assets	–	–	(535)	–	(535)
	108	31	176	2	317

23. Employee Benefits (continued)

Movements in net defined benefit liability/(asset)

US$ million	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Total
At 31 December 2015	**$ 89**	**$ 45**	**$ 165**	**$ 2**	**$ 301**
Net benefit expense recognised in the statement of operations	10	6	27	–	43
Contributions by employer	(7)	(3)	(17)	–	(27)
(Gains)/losses recognised in other comprehensive income	(2)	(8)	(1)	–	(11)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	–	(4)	–	–	(4)
Translation difference	18	(5)	2	–	15
At 31 December 2016	**$ 108**	**$ 31**	**$ 176**	**$ 2**	**$ 317**
Net benefit expense recognised in the statement of operations	12	2	28	–	42
Contributions by employer	(8)	(2)	(27)	–	(37)
(Gains)/losses recognised in other comprehensive income	(6)	4	(25)	–	(27)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	–	(16)	–	(2)	(18)
Translation difference	5	–	2	–	7
At 31 December 2017	**$ 111**	**$ 19**	**$ 154**	**$ –**	**$ 284**
Net benefit expense recognised in the statement of operations	10	–	28	–	38
Contributions by employer	(8)	–	(24)	–	(32)
(Gains)/losses recognised in other comprehensive income	(2)	–	(26)	–	(28)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	–	(20)	–	–	(20)
Translation difference	(20)	1	–	–	(19)
At 31 December 2018	**$ 91**	**$ –**	**$ 132**	**$ –**	**$ 223**

23. Employee Benefits (continued)

Movements in benefit obligation

US$ million	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Total
At 31 December 2015	**$ 90**	**$ 45**	**$ 691**	**$ 2**	**$ 828**
Interest cost on benefit obligation	9	5	27	–	41
Current service cost	2	2	19	–	23
Past service cost	1	(1)	–	–	–
Benefits paid	(7)	(3)	(43)	–	(53)
Actuarial (gains)/losses on benefit obligation related to changes in demographic assumptions	–	–	(10)	–	(10)
Actuarial (gains)/losses on benefit obligation related to changes in financial assumptions	(1)	(6)	14	–	7
Actuarial (gains)/losses on benefit obligation related to experience adjustments	(3)	(2)	2	–	(3)
Curtailment/settlement gain	(1)	–	–	–	(1)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	–	(4)	–	–	(4)
Translation difference	18	(5)	11	–	24
At 31 December 2016	**$ 108**	**$ 31**	**$ 711**	**$ 2**	**$ 852**
Interest cost on benefit obligation	9	4	24	–	37
Current service cost	2	1	18	–	21
Past service cost	3	(3)	3	–	3
Benefits paid	(8)	(2)	(37)	–	(47)
Actuarial (gains)/losses on benefit obligation related to changes in demographic assumptions	–	–	(19)	–	(19)
Actuarial (gains)/losses on benefit obligation related to changes in financial assumptions	(11)	4	48	–	41
Actuarial (gains)/losses on benefit obligation related to experience adjustments	3	–	(6)	–	(3)
Curtailment/settlement gain	–	–	(2)	–	(2)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	–	(16)	–	(2)	(18)
Translation difference	5	–	25	–	30
At 31 December 2017	**$ 111**	**$ 19**	**$ 765**	**$ –**	**$ 895**
Interest cost on benefit obligation	8	–	25	–	33
Current service cost	2	–	19	–	21
Past service cost	–	–	1	–	1
Benefits paid	(8)	–	(36)	–	(44)
Actuarial (gains)/losses on benefit obligation related to changes in demographic assumptions	–	–	(7)	–	(7)
Actuarial (gains)/losses on benefit obligation related to changes in financial assumptions	(6)	–	(49)	–	(55)
Actuarial (gains)/losses on benefit obligation related to experience adjustments	5	–	–	–	5
Curtailment/settlement gain	(1)	–	–	–	(1)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	–	(20)	–	–	(20)
Translation difference	(20)	1	(31)	–	(50)
At 31 December 2018	**$ 91**	**$ –**	**$ 687**	**$ –**	**$ 778**

23. Employee Benefits (continued)

The weighted average duration of the defined benefit obligation was as follows:

Years	**2018**	**2017**	**2016**
Russian plans	**9.82**	10.11	11.21
Ukrainian plans	**8.00**	8.00	8.26
US & Canadian plans	**13.48**	13.09	13.79
Other plans	**7.46**	7.46	9.12

Changes in the fair value of plan assets

US$ million	**Russian plans**	**Ukrainian plans**	**US & Canadian plans**	**Other plans**	**Total**
At 31 December 2015	**$ 1**	**$ –**	**$ 526**	**$ –**	**$ 527**
Interest income on plan assets	–	–	19	–	19
Return on plan assets (excluding amounts included in net interest expense)	(1)	–	7	–	6
Contributions of employer	7	3	17	–	27
Benefits paid	(7)	(3)	(43)	–	(53)
Translation difference	–	–	9	–	9
At 31 December 2016	**$ –**	**$ –**	**$ 535**	**$ –**	**$ 535**
Interest income on plan assets	–	–	18	–	18
Return on plan assets (excluding amounts included in net interest expense)	–	–	48	–	48
Contributions of employer	8	2	27	–	37
Benefits paid	(8)	(2)	(37)	–	(47)
Other	–	–	(3)	–	(3)
Translation difference	–	–	23	–	23
At 31 December 2017	**$ –**	**$ –**	**$ 611**	**$ –**	**$ 611**
Interest income on plan assets	–	–	20	–	20
Return on plan assets (excluding amounts included in net interest expense)	–	–	(30)	–	(30)
Contributions of employer	8	–	24	–	32
Benefits paid	(8)	–	(36)	–	(44)
Other	–	–	(3)	–	(3)
Translation difference	–	–	(31)	–	(31)
At 31 December 2018	**$ –**	**$ –**	**$ 555**	**$ –**	**$ 555**

The amount of contributions expected to be paid to the defined benefit plans during 2019 approximates $41 million.

The major categories of plan assets as a percentage of total plan assets were as follows at 31 December:

	2018		**2017**		**2016**	
	Quoted	**Unquoted**	**Quoted**	**Unquoted**	**Quoted**	**Unquoted**
US & Canadian plans:						
Equity funds and investment trusts	**51%**	**35%**	47%	39%	45%	40%
Corporate bonds and notes	**12%**	**–**	12%	–	13%	–
Property	**–**	**–**	–	–	–	–
Cash	**2%**	**–**	2%	–	2%	–
	65%	**35%**	61%	39%	60%	40%

23. Employee Benefits (continued)

The principal assumptions used in determining pension obligations for the Group's plans are shown below:

	2018			2017				2016			
	Russian plans	US & Canadian plans	Other plans	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Russian plans	Ukrainian plans	US & Canadian plans	Other plans
Discount rate	**8.6%**	**3.3-4.3%**	**3%**	7.6%	11.6%	3.6-4.0%	3%	8.2%	17.5%	3.9-4.2%	2.8-9.1%
Future benefits increases	**5%-9%**	**–**	**3%**	5%	6%	–	3%	7%	11%	–	3%
Future salary increase	**5%-9%**	**3%**	**–**	5%	6%	3%	–	7%	11%	3%	–
Average life expectation, male, years	**69**	**86**	**81**	69	65	85-87	81	69	66	86-87	77-81
Average life expectation, female, years	**79**	**88-89**	**87**	79	75	88-89	87	79	76	89	77-87
Healthcare costs increase rate	**–**	**5-7%**	**–**	–	–	6.7%	–	–	–	5-7%	8.6%

The following table demonstrates the sensitivity analysis of reasonable changes in the significant assumptions used for the measurement of the defined benefit obligations, with all other variables held constant.

		Impact on the defined benefit obligation at 31 December 2018, US$ million			Impact on the defined benefit obligation at 31 December 2017, US$ million				Impact on the defined benefit obligation at 31 December 2016, US$ million			
	Reasonable change in assumption	Russian plans	US & Canadian plans	Other plans	Russian plans	Ukrainian plans	US & Canadian plans	Other plans	Russian plans	Ukrainian plans	US & Canadian plans	Other plans
Discount rate	10%	**$(7)**	**$(38)**	**$–**	$(7)	$(2)	$(37)	$–	$(8)	$(4)	$(41)	$–
	(10%)	**8**	**40**	**–**	8	2	40	–	10	5	44	–
Future benefits increases	10%	**5**	**–**	**–**	5	–	–	–	7	1	–	–
	(10%)	**(4)**	**–**	**–**	(4)	–	–	–	(7)	(1)	–	–
Future salary increase	10%	**1**	**1**	**–**	–	1	1	–	1	1	1	–
	(10%)	**(1)**	**(1)**	**–**	–	(1)	(1)	–	(1)	(1)	(1)	–
Average life expectation, male, years	1	**–**	**11**	**–**	1	–	12	–	1	–	13	–
	(1)	**(2)**	**(11)**	**–**	(1)	–	(12)	–	(1)	–	(13)	–
Average life expectation, female, years	1	**–**	**6**	**–**	1	–	6	–	1	–	5	–
	(1)	**(2)**	**(6)**	**–**	(1)	–	(6)	–	(1)	–	(5)	–
Healthcare costs increase rate	10%	**–**	**1**	**–**	–	–	1	–	–	–	1	–
	(10%)	**–**	**(1)**	**–**	–	–	(1)	–	–	–	(1)	–

24. Provisions

At 31 December the provisions were as follows:

	2018		2017		2016	
US$ million	**Non-current**	**Current**	**Non-current**	**Current**	**Non-current**	**Current**
Site restoration and decommissioning costs	**$ 221**	**$ 23**	$ 260	$ 29	$ 204	$ 20
Other provisions	**1**	**12**	9	3	1	6
	$ 222	**$ 35**	$ 269	$ 32	$ 205	$ 26

In the years ended 31 December 2018, 2017 and 2016, the movement in provisions was as follows:

US$ million	**Site restoration and decommissioning costs**	**Other provisions**	**Total**
At 31 December 2015	**$ 165**	**$ 4**	**$ 169**
Additional provisions	15	13	28
Increase from passage of time	14	–	14
Effect of change in the discount rate	17	–	17
Effect of changes in estimated costs and timing	5	–	5
Utilised in the year	(9)	(6)	(15)
Unused amounts reversed	(9)	(4)	(13)
Translation difference	26	–	26
At 31 December 2016	**$ 224**	**$ 7**	**$ 231**
Additional provisions	11	14	25
Increase from passage of time	16	–	16
Effect of change in the discount rate	33	–	33
Effect of changes in estimated costs and timing	15	–	15
Utilised in the year	(11)	(5)	(16)
Unused amounts reversed	(1)	(4)	(5)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	(9)	–	(9)
Translation difference	11	–	11
At 31 December 2017	**$ 289**	**$ 12**	**$ 301**
Additional provisions	4	14	18
Increase from passage of time	16	–	16
Effect of change in the discount rate	(38)	–	(38)
Effect of changes in estimated costs and timing	29	–	29
Utilised in the year	(13)	(12)	(25)
Reclassification to liabilities directly associated with disposal groups classified as held for sale	(1)	–	(1)
Translation difference	(42)	(1)	(43)
At 31 December 2018	**$ 244**	**$ 13**	**$ 257**

24. Provisions (continued)

Site Restoration Costs

Under the legislation, mining companies and steel mills have obligations to restore mining sites and contaminated land. The majority of costs are expected to be paid after 2061.

At 31 December the respective liabilities were measured based on estimates of restoration costs, which are expected to be incurred in the future discounted at the following annual rates:

	2018	2017	2016
Russia	**9%**	8%	9%
Ukraine	**13.2%**	13.2%	13.2%
USA	**3.0%**	2.2%	1.5%
Others	**4.7%**	5%	4.9-7.4%

25. Other Long-Term Liabilities

Other long-term liabilities consisted of the following as of 31 December:

US$ million	2018	2017	2016
Financial liabilities			
Derivatives not designated as hedging instruments	**$ 5**	$ –	$ –
Hedging instruments	**46**	3	22
Long-term trade and other payables	**30**	45	62
Long-term accounts payable to related parties	**2**	1	1
Finance lease liabilities	**6**	8	5
Dividends payable under cumulative preference shares of a subsidiary to a related party	**–**	–	18
	89	57	108
Less: current portion (Note 26)	**(68)**	(18)	(22)
	21	39	86
Non-financial liabilities			
Employee income participation plans and compensations	**6**	5	5
Tax liabilities	**8**	1	3
Other non-financial liabilities	**6**	11	4
	20	17	12
Less: current portion (Note 26)	**(3)**	(2)	(4)
	17	15	8
	$ 38	$ 54	$ 94

Derivatives Not Designated as Hedging Instruments

To manage the currency exposure on the rouble-denominated bonds, the Group partially economically hedged these transactions: in 2010-2013, the Group concluded currency and interest rate swap contracts under which it agreed to deliver US dollar-denominated interest payments at the rates ranging from 3.06% to 8.90% per annum plus the US dollar notional amount, in exchange for rouble-denominated interest payments plus the rouble notional amount. The exchange is exercised on approximately the same dates as the payments under the bonds.

The swap contracts, which were effective at 31 December 2016, are summarised in the table below.

	Year of issue	Bonds principal, millions of roubles	Hedged amount, millions of roubles	Swap amount, US$ million	Interest rates on the swap amount
8.40 per cent bonds due 2016	2011	20,000	19,996	711	4.45% – 4.60%

25. Other Long-Term Liabilities (continued)

Derivatives Not Designated as Hedging Instruments (continued)

In 2017, one of the swaps with a notional amount of $26 million did not meet the criteria for hedging and ceased to be classified as a hedging instrument. This swap was reclassified into Derivatives Not Designated as Hedging Instruments.

The aggregate amounts under swap contracts translated at the year end exchange rates are summarised in the table below.

US$ million	**2018**	**2017**	**2016**
Bonds principal	**$ 24**	$ 28	$ –
Hedged amount	**24**	28	–
Swap amount	**26**	26	–

These swap contracts were not designated as cash flow or fair value hedges or excluded from such hedging instruments due to hedge inefficiency. The Group accounted for these derivatives at fair value which was determined using valuation techniques. The fair value was calculated as the present value of the expected cashflows under the contracts at the reporting dates. Future rouble-denominated cashflows were translated into US dollars using the USD/RUB implied yield forward curve. The discount rates used in the valuation were the non-deliverable forward rate curve and the interest rate swap curve for US dollar at the reporting dates.

In 2018, 2017 and 2016, a change in fair value of the derivatives of $(6) million, $2 million and $273 million, respectively, together with a realised gain/(loss) on the swap transactions, amounting to $2 million, $2 million and $(250) million, respectively, was recognised within gain/(loss) on financial assets and liabilities in the consolidated statement of operations (Note 7).

In 2016, upon repayment of the 8.40% bonds, the related swap contracts matured.

In 2018, the Group concluded EUR/USD forward contracts, which were accounted for at fair value. The change in fair value of the derivatives $(2) million, together with a realised gain/(loss) on the currency forward transactions, amounting to $9 million, was recognised within gain/(loss) on financial assets and liabilities in the consolidated statement of operations (Note 7).

Hedging Instruments

In July 2015, the Group completed a placement of bonds in the total amount of 15,000 million Russian roubles ($216 million at 31 December 2018), which bear interest of 12.95% per annum and have the next put date on 26 June 2019. The Group used an intercompany loan to transfer the proceeds from the bonds within the Group. To manage the currency exposure, the Group entered into a series of cross currency swap contracts with several banks under which it agreed to deliver US-dollar denominated interest payments at rates ranging from 5.90% to 6.55% per annum plus the notional amount, totaling approximately $265 million, in exchange for rouble-denominated interest payments at the rate of 12.95% per annum plus notional, totaling 14,948 million roubles ($215 million at 31 December 2018).

	Year of issue	**Bonds principal, millions of roubles**	**Hedged amount, millions of roubles**	**Swap amount, US$ million**	**Interest rates on the swap amount**
12.95 per cent bonds due 2019	2015	15,000	13,310	239	5.90% – 6.55%

The Group accounted for these swap contracts as cash flow hedges. In 2017, one of these swap contracts with the notional amount of $26 million did not meet the criteria for efficiency and ceased to be classified as hedging instruments. In 2018, 2017 and 2016, the change in fair value of these derivatives amounted to $(44) million, $20 million and $37 million, respectively. The realised gain on the swap transactions amounting to $11 million, $14 million and $14 million, respectively, was related to the interest portion of the change in fair value of the swap.

25. Other Long-Term Liabilities (continued)

Hedging Instruments (continued)

Under IFRS the lesser of the cumulative gain or loss on the hedging instrument from inception of the hedge and the cumulative change in present value of the expected future cash flows on the hedged item from inception of the hedge is recognised in other comprehensive income and the remaining loss on the hedging instrument is recorded through the statement of operations. In 2018, 2017 and 2016, the Group recognised a gain/(loss) in other comprehensive income amounting to $(3) million, $9 million and $Nil, respectively. Most of the swaps were assessed as effective. Those swaps, which ceased to be effective, were reclassified into Derivatives Not Designated as Hedging Instruments. In 2018, 2017 and 2016, $(41) million, $11 million and $37 million, respectively, were recorded in the Foreign exchange gains/(losses) caption in the consolidated statement of operations.

26. Trade and Other Payables

Trade and other payables consisted of the following as of 31 December:

US$ million	**2018**	**2017**	**2016**
Trade accounts payable	**$ 877**	$ 822	$ 664
Liabilities for purchases of property, plant and equipment, including VAT	**98**	89	73
Accrued payroll	**140**	158	134
Other payables	**30**	39	38
Other long-term obligations with current maturities (Note 25)	**71**	20	26
	$ 1,216	$ 1,128	$ 935

The maturity profile of the accounts payable is shown in Note 28.

27. Other Taxes Payable

Taxes payable were mainly denominated in roubles and consisted of the following as of 31 December:

US$ million	**2018**	**2017**	**2016**
VAT	**$ 124**	$ 129	$ 104
Social insurance taxes	**40**	42	39
Property tax	**10**	12	9
Land tax	**5**	6	4
Personal income tax	**6**	7	7
Import/export tariffs	**74**	–	–
Other taxes, fines and penalties	**7**	16	6
	$ 266	$ 212	$ 169

28. Financial Risk Management Objectives and Policies

Credit Risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. Financial instruments that potentially expose the Group to concentrations of credit risk consist primarily of cash and trade accounts receivable.

To manage credit risk related to cash, the Group maintains its available cash, mainly in US dollars and euros, in reputable international banks and major Russian banks. Management periodically reviews the creditworthiness of the banks in which it deposits cash.

The Group's trade receivables consist of a large number of customers, spread across diverse industries and geographical areas. There are no significant concentrations of credit risk within the Group. The Group defines counterparties as having similar characteristics if they are related entities. In 2018, the major customers were Russian Railways (3.8% of total sales), Sibuglemet Trading (2.1%), Steel Asia Manufacturing Corporation (1.8%) and Treibacher Industrie AG (1.8%).

Part of the Group's sales is made on terms of letter of credit. In addition, the Group requires prepayments from certain customers. The Group does not require collateral in respect of trade and other receivables, except when a customer applies for credit terms which are longer than normal. In this case, the Group requires bank guarantees or other collateral. The Group has developed standard credit terms and constantly monitors the status of accounts receivable collection and the creditworthiness of the customers.

Certain of the Group's long-standing Russian customers for auxiliary products, such as heat and electricity, represent municipal enterprises and governmental organisations that experience financial difficulties. The significant part of allowance for expected credit losses consists of receivables from such customers. The Group has no practical ability to terminate the supply to these customers and negotiates with regional and municipal authorities the terms of recovery of these receivables.

At 31 December the maximum exposure to credit risk is equal to the carrying amount of financial assets, which is disclosed below.

US$ million	**2018**	**2017**	**2016**
Restricted deposits at banks (Notes 13 and 18)	**$ 9**	$ 21	$ 12
Financial instruments included in other non-current and current assets (Notes 13 and 18)	**66**	61	52
Long-term and short-term investments (Notes 13 and 18)	**32**	65	35
Trade and other receivables (Notes 13 and 15)	**852**	754	506
Loans receivable	**30**	31	34
Receivables from related parties (Notes 13 and 16)	**12**	19	8
Cash and cash equivalents (Note 19)	**1,067**	1,466	1,157
	$ 2,068	$ 2,417	$ 1,804

Receivables from related parties in the table above do not include prepayments in the amount of $Nil, $1 million and $Nil as of 31 December 2018, 2017 and 2016, respectively.

28. Financial Risk Management Objectives and Policies (continued)

Credit Risk (continued)

The ageing analysis of trade and other receivables, loans receivable and receivables from related parties at 31 December is presented in the table below.

	2018		2017		2016	
US$ million	**Gross amount**	**Impairment**	**Gross amount**	**Impairment**	**Gross amount**	**Impairment**
Not past due	**$ 770**	**$ (1)**	$ 671	$ (1)	$ 408	$ (1)
Past due	**166**	**(41)**	187	(53)	187	(46)
less than six months	**109**	**–**	114	(2)	130	(2)
between six months and one year	**9**	**–**	20	(10)	7	(2)
over one year	**48**	**(41)**	53	(41)	50	(42)
	$ 936	**$ (42)**	$ 858	$ (54)	$ 595	$ (47)

In the years ended 31 December 2018, 2017 and 2016, the movement in allowance for expected credit losses was as follows:

US$ million	**2018**	**2017**	**2016**
At 1 January	**$ (54)**	$ (47)	$ (48)
Charge for the year	**1**	(10)	(1)
Utilised	**3**	4	5
Disposal of subsidiaries	**–**	1	5
Translation difference	**8**	(2)	(8)
At 31 December	**$ (42)**	$ (54)	$ (47)

Liquidity Risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group’s approach to managing liquidity is to ensure that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group’s reputation.

The Group manages liquidity risk by maintaining adequate cash reserves and borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

28. Financial Risk Management Objectives and Policies (continued)

Liquidity Risk (continued)

The Group prepares a rolling 12-month financial plan which ensures that the Group has sufficient cash on demand to meet expected operational expenses, financial obligations and investing activities as they arise. The Group exercises a daily monitoring of cash proceeds and payments. The Group maintains credit lines and overdraft facilities that can be drawn down to meet short-term financing needs. If necessary, the Group refinances its short-term debt by long-term borrowings. The Group also uses forecasts to monitor potential and actual financial covenants compliance issues (Note 22). Where compliance is at risk, the Group considers options including debt repayment, refinancing or covenant reset. The Group has developed standard payment periods in respect of trade accounts payable and monitors the timeliness of payments to its suppliers and contractors.

The following tables summarise the maturity profile of the Group's financial liabilities based on contractual undiscounted payments, including interest payments.

31 December 2018

US$ million	On demand	Less than 3 months	3 to 12 months	1 to 2 years	2 to 5 years	After 5 years	Total
Fixed-rate debt							
Loans and borrowings							
Principal	$ –	$ –	$ 226	$ 710	$ 2,452	$ 17	$ 3,405
Interest	–	84	148	194	211	–	637
Finance lease liabilities	–	–	3	–	1	5	9
Financial instruments included in long-term liabilities	–	13	53	9	8	3	86
Amounts payable under put options for shares in subsidiaries							
Principal	–	–	60	–	–	–	60
Interest	–	–	9	–	–	–	9
Total fixed-rate debt	–	97	499	913	2,672	25	4,206
Variable-rate debt							
Loans and borrowings							
Principal	3	2	65	13	1,014	–	1,097
Interest	–	15	45	59	107	–	226
Total variable-rate debt	3	17	110	72	1,121	–	1,323
Non-interest bearing debt							
Trade and other payables	129	864	12	–	–	–	1,005
Payables to related parties	94	26	–	–	–	–	120
Total non-interest bearing debt	223	890	12	–	–	–	1,125
	$ 226	$ 1,004	$ 621	$ 985	$ 3,793	$ 25	$ 6,654

28. Financial Risk Management Objectives and Policies (continued)

Liquidity Risk (continued)

31 December 2017

US$ million	On demand	Less than 3 months	3 to 12 months	1 to 2 years	2 to 5 years	After 5 years	Total
Fixed-rate debt							
Loans and borrowings							
Principal	$ –	$ –	$ 4	$ 269	$ 2,580	$ 799	$ 3,652
Interest	–	90	179	252	416	22	959
Finance lease liabilities	–	–	1	4	1	6	12
Financial instruments included in long-term liabilities	–	14	3	20	15	4	56
Amounts payable under put options for shares in subsidiaries							
Principal	–	–	–	60	–	–	60
Interest	–	–	–	4	–	–	4
Total fixed-rate debt	–	104	187	609	3,012	831	4,743
Variable-rate debt							
Loans and borrowings							
Principal	–	1	57	408	1,013	202	1,681
Interest	–	19	57	64	113	4	257
Total variable-rate debt	–	20	114	472	1,126	206	1,938
Non-interest bearing debt							
Financial instruments included in long-term liabilities	–	–	1	–	1	–	2
Trade and other payables	143	770	37	–	–	–	950
Payables to related parties	237	18	–	–	–	–	255
Total non-interest bearing debt	380	788	38	–	1	–	1,207
	$ 380	$ 912	$ 339	$ 1,081	$ 4,139	$ 1,037	$ 7,888

28. Financial Risk Management Objectives and Policies (continued)

Liquidity Risk (continued)

31 December 2016

US$ million	On demand	Less than 3 months	3 to 12 months	1 to 2 years	2 to 5 years	After 5 years	Total
Fixed-rate debt							
Loans and borrowings							
Principal	$ –	$ –	$ 26	$ 656	$ 2,763	$ 726	$ 4,171
Interest	–	74	250	295	563	28	1,210
Finance lease liabilities	–	–	–	–	1	5	6
Financial instruments included in long-term liabilities	–	17	5	19	58	19	118
Total fixed-rate debt	–	91	281	970	3,385	778	5,505
Variable-rate debt							
Loans and borrowings							
Principal	142	12	114	196	893	312	1,669
Interest	1	25	74	91	154	21	366
Finance lease liabilities	–	–	1	–	–	–	1
Total variable-rate debt	143	37	189	287	1,047	333	2,036
Non-interest bearing debt							
Financial instruments included in other liabilities	2	–	–	1	1	1	5
Trade and other payables	118	650	7	–	–	–	775
Payables to related parties	209	13	–	–	–	–	222
Total non-interest bearing debt	329	663	7	1	1	1	1,002
	$ 472	$ 791	$ 477	$ 1,258	$ 4,433	$ 1,112	$ 8,543

Payables to related parties in the tables above do not include contract liabilities in the amount of $2 million, $1 million and $4 million as of 31 December 2018, 2017 and 2016, respectively.

28. Financial Risk Management Objectives and Policies (continued)

Market Risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures, while optimising the return on risk.

Interest Rate Risk

The Group borrows on both a fixed and variable rate basis and has other interest-bearing liabilities, such as finance lease liabilities and other obligations.

The Group incurs interest rate risk on liabilities with variable interest rates. The Group's treasury function performs analysis of current interest rates. In case of changes in market fixed or variable interest rates management may consider the refinancing of a particular debt on more favourable terms.

The Group does not have any financial assets with variable interest rates.

Fair Value Sensitivity Analysis for Fixed Rate Instruments

The Group does not account for any fixed rate financial assets or liabilities at fair value through profit or loss. Therefore, a change in interest rates at the reporting date would not affect the Group's profits.

The Group does not account for any fixed rate financial assets as assets available for sale. Therefore, a change in interest rates at the reporting date would not affect the Group's equity.

Cash Flow Sensitivity Analysis for Variable Rate Instruments

Based on the analysis of exposure during the years presented, reasonably possible changes in floating interest rates at the reporting date would affect profit before tax ("PBT") by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant.

In estimating reasonably possible changes the Group assessed the volatility of interest rates during the reporting periods.

	2018		**2017**		**2016**	
	Basis points	**Effect on PBT**	**Basis points**	**Effect on PBT**	**Basis points**	**Effect on PBT**
		US$ millions		*US$ millions*		*US$ millions*
Liabilities denominated in US dollars						
Decrease in LIBOR	**(17)**	**$ 2**	(11)	$ 2	(11)	$ 1
Increase in LIBOR	**17**	**(2)**	11	(2)	11	(1)
Liabilities denominated in euro						
Decrease in EURIBOR	**(1)**	**–**	(1)	–	(4)	–
Increase in EURIBOR	**1**	**$ –**	1	$ –	4	$ –
Liabilities denominated in roubles						
Decrease in Bank of Russia key rate	**(100)**	**–**	(225)	–	(200)	6
Increase in Bank of Russia key rate	**50**	**$ –**	300	$ –	700	$ (21)

Currency Risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in currencies other than the functional currencies of the respective Group's subsidiaries. The currencies in which these transactions are denominated are primarily US dollars, Canadian dollars and euro. The Group does not have formal arrangements to mitigate currency risks of the Group's operations. However, management believes that the Group is partly secured from currency risks as foreign currency denominated sales are used to cover repayment of foreign currency denominated borrowings.

28. Financial Risk Management Objectives and Policies (continued)

Market Risk (continued)

Currency Risk (continued)

The Group's exposure to currency risk determined as the net monetary position in the respective currencies was as follows at 31 December:

US$ million	**2018**	2017	2016
USD/RUB	**$ 2,886**	$ 2,589	$ 1,242
EUR/RUB	**265**	(276)	(75)
CAD/RUB	**–**	–	335
EUR/USD	**7**	(11)	(116)
USD/CAD	**(723)**	(892)	(672)
EUR/CZK	**(12)**	(6)	(1)
USD/CZK	**(20)**	5	6
USD/ZAR	**–**	–	(4)
USD/UAH	**(119)**	(199)	(136)
RUB/UAH	**–**	(4)	4
USD/KZT	**(170)**	(163)	(161)

Sensitivity Analysis

The following table demonstrates the sensitivity to reasonably possible changes in the respective currencies, with all other variables held constant, of the Group's profit before tax. In estimating reasonably possible changes the Group assessed the volatility of foreign exchange rates during the reporting periods.

	2018		2017		2016	
	Change in exchange rate	**Effect on PBT**	**Change in exchange rate**	**Effect on PBT**	**Change in exchange rate**	**Effect on PBT**
	%	*US$ millions*	*%*	*US$ millions*	*%*	*US$ millions*
USD/RUB	**(13.87)**	**(468)**	(10.01)	(282)	(20.02)	(325)
	13.87	**350**	10.01	241	20.02	198
EUR/RUB	**(13.54)**	**(36)**	(11.35)	31	(20.68)	16
	13.54	**36**	11.35	(31)	20.68	(16)
CAD/RUB	**(16.08)**	**–**	(12.03)	–	(22.38)	(75)
	16.08	**–**	12.03	–	22.38	75
EUR/USD	**(7.35)**	**(1)**	(7.36)	1	(9.16)	10
	7.35	**1**	7.36	(1)	9.16	(11)
USD/CAD	**(6.76)**	**49**	(6.76)	61	(9.16)	62
	6.76	**(49)**	6.76	(60)	9.16	(61)
EUR/CZK	**(2.96)**	**–**	(3.08)	–	(0.65)	–
	2.96	**–**	3.08	–	0.65	–
USD/CZK	**(8.54)**	**2**	(7.95)	–	(9.17)	(1)
	8.54	**(2)**	7.95	–	9.17	1
USD/ZAR	**–**	**–**	–	–	(21.23)	1
	–	**–**	–	–	21.23	(1)
EUR/ZAR	**–**	**–**	–	–	(19.62)	–
	–	**–**	–	–	19.62	–
USD/UAH	**(5.86)**	**7**	(5.78)	12	(9.88)	13
	5.86	**(7)**	5.78	(11)	9.88	(13)
RUB/UAH	**(15.04)**	**–**	(11.99)	–	(22.29)	(1)
	15.04	**–**	11.99	–	22.29	1
USD/KZT	**(8.43)**	**14**	(6.30)	10	(12.13)	20
	8.43	**(14)**	6.30	(10)	12.13	(20)

28. Financial Risk Management Objectives and Policies (continued)

Market Risk (continued)

Currency Risk (continued)

Sensitivity Analysis (continued)

In addition to the effects of changes in the exchange rates disclosed above, the Group is exposed to currency risk on derivatives (Note 25). The impact of currency risk on the fair value of these derivatives is disclosed below.

	2018		2017		2016	
	Change in exchange rate	Effect on PBT	Change in exchange rate	Effect on PBT	Change in exchange rate	Effect on PBT
	%	US$ millions	%	US$ millions	%	US$ millions
USD/RUB	**(13.87)**	**36**	(10.01)	66	(20.02)	65
	13.87	**(27)**	10.01	(49)	20.02	(43)

Fair Value of Financial Instruments

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly; and
- Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data (unobservable inputs).

The carrying amounts of financial instruments, such as cash, short-term and long-term investments, short-term accounts receivable and payable, short-term loans receivable and payable and promissory notes, approximate their fair value.

At 31 December the Group held the following financial instruments measured at fair value:

	2018			2017			2016		
US$ million	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets measured at fair value									
Derivatives not designated as hedging instruments (Note 25)	**–**	**–**	**–**	–	3	–	–	–	–
Hedging instruments (Note 25)	**–**	**–**	**–**	–	1	–	–	–	–
Financial assets measured at fair value through other comprehensive income (Note 13)	**–**	**–**	**–**	33	–	–	3	–	–
Liabilities measured at fair value									
Derivatives not designated as hedging instruments (Note 25)	**–**	**5**	**–**	–	–	–	–	–	–
Hedging instruments (Note 25)	**–**	**46**	**–**	–	3	–	–	22	–

28. Financial Risk Management Objectives and Policies (continued)

Fair Value of Financial Instruments (continued)

During the reporting period, there were no transfers between Level 1 and Level 2 fair value measurements, and no transfers into and out of Level 3 fair value measurements.

The following table shows financial instruments for which carrying amounts differ from fair values at 31 December.

	2018		2017		2016	
US$ million	**Carrying amount**	**Fair value**	**Carrying amount**	**Fair value**	**Carrying amount**	**Fair value**
Long-term fixed-rate bank loans	**$ 269**	**$ 266**	$ 427	$ 442	$ 390	$ 402
Long-term variable-rate bank loans	**1,084**	**1,092**	1,668	1,665	1,516	1,528
USD-denominated						
7.75% bonds due 2017	**–**	**–**	–	–	27	26
9.50% notes due 2018	**–**	**–**	–	–	126	137
6.75% notes due 2018	**–**	**–**	–	–	533	554
7.50% bonds due 2019	**–**	**–**	–	–	349	359
6.50% notes due 2020	**708**	**723**	707	752	1,010	1,066
8.25% notes due 2021	**777**	**826**	774	873	772	856
6.75% notes due 2022	**513**	**535**	512	560	515	544
5.375% notes due 2023	**759**	**754**	757	792	–	–
Rouble-denominated						
12.95% rouble bonds due 2019	**216**	**222**	260	280	247	260
12.60% rouble bonds due 2021	**223**	**241**	269	302	255	269
	–	**–**	–	–	–	–
	$ 4,549	**$ 4,659**	$ 5,374	$ 5,666	$ 5,740	$ 6,001

The fair value of the non-convertible bonds and notes was determined based on market quotations (Level 1). The fair value of long-term bank loans was calculated based on the present value of future principal and interest cash flows, discounted at the Group's market rates of interest at the reporting dates (Level 3). The discount rates used for valuation of financial instruments were as follows:

Currency in which financial instruments are denominated	2018	2017	2016
USD	**4.9 – 5.7%**	3.6 – 4.5%	3.7 – 6.4%
EUR	**1.7 – 3.4%**	1.7 – 3.9%	1.8 – 4.0%
RUB	**8.13%**	7.97%	11.03%

28. Financial Risk Management Objectives and Policies (continued)

Capital Management

Capital includes equity attributable to the equity holders of the parent entity. Revaluation surplus which is included in capital is not subject to capital management because of its nature.

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximise the return to shareholders. The Board of Directors reviews the Group's performance and establishes key performance indicators. There were no changes in the objectives, policies and processes during 2018.

The Group manages its capital structure and makes adjustments to it by the issue of new shares, dividend payments to shareholders, and the purchase of treasury shares. In addition, the Group monitors distributable profits on a regular basis and determines the amounts and timing of dividend payments taking into account cashflow and other constraints.

29. Non-cash Transactions

Transactions that did not require the use of cash or cash equivalents, not disclosed in the notes above, were as follows in the years ended 31 December:

US$ million	**2018**	**2017**	**2016**
Liabilities for purchases of property, plant and equipment, excluding VAT	**$ 92**	$ 80	$ 71
Loans provided in the form of payments by banks for property, plant and equipment	**6**	8	46

30. Commitments and Contingencies

Operating Environment of the Group

The Group is one of the largest vertically integrated steel producers globally and the largest steel producer in Russia. The Group's major subsidiaries are located in Russia, the USA and Canada. Russia is considered to be a developing market with higher economic and political risks.

The unrest in the Southeastern region of Ukraine and the economic sanctions imposed by the USA and the European Union on Russia in 2014 and later on caused economic slowdown in Russia and reduced access to international capital markets. Further sanctions imposed on Russia could have an adverse impact on the Group's business.

Steel consumption is affected by the cyclical nature of demand for steel products and the sensitivity of that demand to worldwide general economic conditions. During the first half of 2018, growing global demand and supply optimisation in China supported positive steel and raw material price growth but markets remain volatile.

In March 2018 the United States placed 25% tariffs on imports of most steel products from several countries, including Russia, while granting temporary exemptions for others, including Canada, Mexico, and the European Union. On 31 May 2018, the U.S. announced the end of temporary exemptions for Canada, Mexico, and the European Union, putting 25% tariffs on imports from those jurisdictions effective 1 June 2018. In response, the government of Canada introduced 25% tariffs effective 1 July 2018 on selected steel products from the U.S., but not including rail steel. In addition, effective 25 October 2018, the Canadian government imposed provisional safeguard measures on certain categories of steel products by adding a 25% surtax in cases, where the level of imports from trading partners exceeds historical norms. The provisional safeguards will be in place for 200 days, during which the Canadian International Trade Tribunal will conduct an inquiry and determine whether final safeguards are warranted.

30. Commitments and Contingencies (continued)

Operating Environment of the Group (continued)

The Group has cross-border transactions between U.S. and Canadian subsidiaries. The entities of the Steel North America segment import steel for further processing and final products for selling to domestic customers. After the introduction of the tariffs, U.S. and Canadian subsidiaries must pay tariffs on imported steel and final products. The Group has applied for "product exclusions" for imports to exempt from tariffs with the governments of the United States and Canada where justified and possible. The Group has received an exclusion from the Canadian retaliatory tariffs for one of the products. No outcomes have been decided on for other product exclusions by either government as of the date of authorisation of these consolidated financial statements for issue.

Management believes it is taking appropriate measures to support the sustainability of the Group's business in the current circumstances.

The global economic climate continues to be unstable and this may negatively affect the Group's results and financial position in a manner not currently determinable.

Taxation

Russian and Ukrainian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Further, the interpretation of tax legislation by tax authorities as applied to the transactions and activity of the Group's entities may not coincide with that of management. As a result, tax authorities may challenge transactions and the Group's entities may be assessed for additional taxes, penalties and interest. In Russia and Ukraine the periods remain open to review by the tax and customs authorities with respect to tax liabilities for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

Management believes that it has paid or accrued all taxes that are applicable. Where uncertainty exists, the Group has accrued tax liabilities based on its best estimate of the probable outflow of resources embodying economic benefits, which will be required to settle these liabilities. Possible liabilities which were identified by management at the end of the reporting period as those that can be subject to different interpretations of the tax laws and other regulations and are not accrued in these financial statements could be up to approximately $58 million.

Contractual Commitments

At 31 December 2018, the Group had contractual commitments for the purchase of production equipment and construction works for an approximate amount of $250 million.

In 2010, the Group concluded a contract with PraxAir (Note 2, Accounting Judgements) for the construction of an air separation plant and for the supply of oxygen and other gases produced by PraxAir at this plant for a period of 20 years (extended to 25 years in 2015, when the construction was completed). This supply contract does not fall within the scope of IFRIC 4 "Determining whether an Arrangement Contains a Lease". At 31 December 2018, the Group has committed expenditure of $530 million over the life of the contract.

30. Commitments and Contingencies (continued)

Contractual Commitments (continued)

In 2018, the Group concluded a contract with Air Liquide for the construction of an air separation plant and for the supply of oxygen and other gases produced by Air Liquide at this plant for a period of 20 years. The contractual price comprises a fixed component and a variable component. The total amount of the fixed component approximates $373 million, which is payable within 20 years starting upon commencement of production in 2021 in proportion to the amounts of the variable component. The variable component is determined based on the actual purchase of gases and is estimated at $339 million during the life of the contract. Based on management's assessment this supply contract does not fall within the scope of IFRIC 4 "Determining whether an Arrangement Contains a Lease" as the Group has no access to the equipment and has no rights either to operate the assets, or to design them in order to predetermine the way of their usage. Also it is expected that more than an insignificant amount of the assets' output will be sold to the parties unrelated to the Group. In addition, Air Liquide will construct the system of trunk and auxiliary pipelines, distribution stations and other equipment for products delivery, which will be leased by the Group for a period of 20 years and accounted for under IFRS 16. The cost of construction of the products delivery system is estimated at $102 million.

In 2018, the Group entered into an agreement with Brunswick Rail, according to which it will lease gondola cars for 4 years. The Group classified this contract as an operating lease under IAS 17. In 2019, upon adoption of IFRS 16, the Group will recognise a right-of-use asset and the related lease liabilities amounting to $60 million in respect of this contract.

Social Commitments

The Group is involved in a number of social programmes aimed to support education, healthcare and social infrastructure development in towns where the Group's assets are located. The Group budgeted to spend approximately $27 million under these programmes in 2019.

Environmental Protection

In the course of its operations, the Group may be subject to environmental claims and legal proceedings. The quantification of environmental exposures requires an assessment of many factors, including changing laws and regulations, improvements in environmental technologies, the quality of information available related to specific sites, the assessment stage of each site investigation, preliminary findings and the length of time involved in remediation or settlement.

The Group has a number of environmental claims and proceedings which are at a stage of investigation. Environmental provisions in relation to these proceedings that were recognised at 31 December 2018 amounted to $18 million. Preliminary estimates available of the incremental costs indicate that such costs could be up to $186 million. The Group has insurance agreements, which will provide reimbursement of the costs to be actually incurred up to $228 million, of which $18 million relate to the accrued environmental provisions and have been recognised in receivables at 31 December 2018. Management believes that an economic outflow of the additional costs is not probable and any pending environmental claims or proceedings will not have a material adverse effect on its financial position and results of operations.

In addition, the Group has committed to various environmental protection programmes covering periods from 2019 to 2024, under which the Group will perform works aimed at reductions in environmental pollution and contamination. As of 31 December 2018, the costs of implementing these programmes are estimated at $121 million.

30. Commitments and Contingencies (continued)

Legal Proceedings

The Group has been and continues to be the subject of legal proceedings, none of which has had, individually or in aggregate, a significant effect on its operations or financial position.

The Group exercises judgement in measuring and recognising provisions and the exposure to contingent liabilities related to pending litigations or other outstanding claims subject to negotiated settlement, mediation, arbitration or government regulation, as well as other contingent liabilities. Judgement is necessary in assessing the likelihood that a pending claim will succeed, or a liability will arise, and to quantify the possible range of the final settlement. Because of the inherent uncertainties in this evaluation process, actual losses may be different from the originally estimated provision. These estimates are subject to change as new information becomes available, primarily with the support of internal specialists or with the support of outside consultants. As of 31 December 2018, possible legal risks approximate $20 million.

Issued Guarantees

In June 2018, EVRAZ plc and EVRAZ West-Siberian Metallurgical Plant issued a joint guarantee in the amount of up to 30 billion roubles ($432 million at the exchange rate as of 31 December 2018) to nine companies owned by Sibuglemet to compensate any direct losses caused by the failure to perform the agreed management services provided by one the Group's subsidiaries to these entities. Sibuglemet is a producer of coking coal and operator of coal refineries in the Kemerovo region of Russia.

The management company committed to perform all management functions including, inter alia, all the decisions required to carry out the day-to-day operations of these coal companies, their investment and procurement activities. The guarantee expires on 31 December 2025.

31. Auditor's Remuneration

The remuneration of the Group's auditor in respect of the services provided to the Group was as follows.

US$ million	**2018**	**2017**	**2016**
Audit of the parent company of the Group	**$ 1**	$ 1	$ 2
Audit of the subsidiaries	**2**	2	2
Total audit fees	**3**	3	4
Other services	**1**	1	–
	$ 4	$ 4	$ 4

32. Material Partly-Owned Subsidiaries

Financial information of subsidiaries that have material non-controlling interests is provided below.

		Non-controlling interests		
Subsidiary	**Country of incorporation**	**2018**	**2017**	**2016**
Raspadskaya	Russia	**16.16%**	18.05%	18.05%
New CF&I (subsidiary of EVRAZ Inc NA)	USA	**10.00%**	10.00%	10.00%

US$ million	**2018**	**2017**	**2016**
Accumulated balances of material non-controlling interests			
Raspadskaya	**$ 170**	$ 149	$ 92
New CF&I (subsidiary of EVRAZ Inc NA)	**103**	99	98
Others	**(16)**	(6)	(4)
	257	242	186
Profit allocated to material non-controlling interests			
Raspadskaya	**74**	51	23
New CF&I (subsidiary of EVRAZ Inc NA)	**4**	1	(3)
Others	**(14)**	8	7
	$ 64	$ 60	$ 27

The summarised financial information regarding these subsidiaries is provided below. This information is based on amounts before inter-company eliminations.

Summarised statement of profit or loss

Raspadskaya

US$ million	**2018**	**2017**	**2016**
Revenue	**$ 1,086**	$ 868	$ 503
Cost of revenue	**(493)**	(430)	(306)
Gross profit/(loss)	**593**	438	197
Operating costs	**(76)**	(74)	(67)
Impairment of assets	**(4)**	9	(17)
Foreign exchange gains/(losses), net	**23**	13	77
Profit/(loss) from operations	**536**	386	190
Non-operating gains/(losses)	**5**	(21)	(31)
Profit/(loss) before tax	**541**	365	159
Income tax benefit/(expense)	**(113)**	(75)	(33)
Net profit/(loss)	**$ 428**	$ 290	$ 126
Other comprehensive income/(loss)	**(204)**	36	90
Total comprehensive income/(loss)	**224**	326	216
attributable to non-controlling interests	**42**	57	36
dividends paid to non-controlling interests	**–**	–	–

32. Material Partly-Owned Subsidiaries (continued)

Summarised statement of profit or loss (continued)

New CF&I

US$ million	2018	2017	2016
Revenue	**$ 808**	$ 558	$ 384
Cost of revenue	**(690)**	(533)	(391)
Gross profit/(loss)	**118**	25	(7)
Operating costs	**(88)**	(54)	(48)
Impairment of assets	**(1)**	(2)	–
Profit/(loss) from operations	**29**	(31)	(55)
Non-operating gains/(losses)	**19**	18	21
Profit/(loss) before tax	**48**	(13)	(34)
Income tax benefit/(expense)	**(11)**	21	9
Net profit/(loss)	**$ 37**	$ 8	$ (25)
Other comprehensive income/(loss)	**7**	(3)	(4)
Total comprehensive income/(loss)	**44**	5	(29)
attributable to non-controlling interests	**4**	1	(3)
dividends paid to non-controlling interests	**–**	–	–

Summarised statement of financial position as at 31 December

Raspadskaya

US$ million	2018	2017	2016
Property, plant and equipment	**$ 831**	$ 1,047	$ 1,004
Other non-current assets	**113**	11	30
Current assets	**858**	590	655
Total assets	**1,802**	1,648	1,689
Deferred income tax liabilities	**71**	72	65
Non-current liabilities	**23**	31	52
Current liabilities	**545**	599	952
Total liabilities	**639**	702	1,069
Total equity	**1,163**	946	620
attributable to:			
equity holders of parent	**993**	797	528
non-controlling interests	**170**	149	92

32. Material Partly-Owned Subsidiaries (continued)

Summarised statement of financial position as at 31 December (continued)

New CF&I

US$ million	**2018**	**2017**	**2016**
Property, plant and equipment	**$ 173**	$ 167	$ 184
Other non-current assets	**982**	921	957
Current assets	**199**	155	117
Total assets	**1,354**	1,243	1,258
Deferred income tax liabilities	**12**	12	30
Non-current liabilities	**81**	89	81
Current liabilities	**231**	156	166
Total liabilities	**324**	257	277
Total equity	**1,030**	986	981
attributable to:			
equity holders of parent	**927**	887	883
non-controlling interests	**103**	99	98

Summarised cash flow information

Raspadskaya

US$ million	**2018**	**2017**	**2016**
Operating activities	**$ 345**	$ 406	$ 176
Investing activities	**(285)**	19	(100)
Financing activities	**(37)**	(413)	(89)

New CF&I

US$ million	**2018**	**2017**	**2016**
Operating activities	**$ 80**	$ (16)	$ 5
Investing activities	**(80)**	16	(5)
Financing activities	**–**	–	–

33. Subsequent Events

Dividends

On 27 February 2019, the Board of directors of EVRAZ plc declared an interim dividend for 2019 in the amount of $577 million, which represents $0.40 per share.

34. List of Subsidiaries and Other Significant Holdings

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Canada	Canadian National Steel Corporation	indirect subsidiary	100.00%	3300 TD Canada Trust Tower, 421-7 Avenue SW, Calgary Alberta T2P 4K9	
Canada	Evraz Inc. NA Canada	indirect subsidiary	100.00%	160 Elgin Street, Suite 2600, Ottawa, Ontario K1P 1C3	
Canada	EVRAZ Materials Recycling Inc.	indirect subsidiary	100.00%	160 Elgin Street, Suite 2600, Ottawa, Ontario K1P 1C3	
Canada	General Scrap Partnership	indirect subsidiary	100.00%	387 Broadway, Winnipeg, Manitoba R3C 0V5	
Canada	Genlandco Inc.	indirect subsidiary	100.00%	387 Broadway, Winnipeg, Manitoba R3C 0V5	
Canada	Kar-basher of Alberta Ltd	indirect subsidiary	100.00%	3300 TD Canada Trust Tower, 421-7 Avenue SW, Calgary, Alberta T2P 4K9	
Canada	New Gensubco Inc.	indirect subsidiary	100.00%	387 Broadway, Winnipeg, Manitoba R3C 0V5	
Canada	Sametco Auto Inc.	indirect subsidiary	100.00%	160 Elgin Street, Suite 2600, Ottawa, Ontario K1P 1C3	
Canada	Evraz Wasco Pipe Protection Corporation	indirect subsidiary	51.00%	181 Bay Street, Suite 2100, Toronto, Ontario M5J 2T3	
Canada	Genalta Recycling Inc.	joint venture	50.00%	2400, 525 8th Avenue SW Calgary, Alberta T2P 1G1	
Canada	Kar-basher Manitoba Ltd	joint venture	50.00%	387 Broadway, Winnipeg, Manitoba R3C 0V5	
Canada	King Crusher Inc.	joint venture	50.00%	3300 TD Canada Trust Tower, 421-7 Avenue SW, Calgary, Alberta T2P 4K9	
Cyprus	Actionfield Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Drampisco Limited	indirect subsidiary	100.00%	Themistokli Dervi, 3, Julia House, P.C. 1066, Nicosia, Cyprus	sold
Cyprus	East Metals (Cyprus) Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Fegilton Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Laybridge Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Malvero Holdings Limited	indirect subsidiary	–	3 Themistokli Dervi, Julia House, 1066, Nicosia	100% controlled through put option for the purchase of shares
Cyprus	Mastercroft Finance Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Nafkratos Limited	indirect subsidiary	100.00%	Themistokli Dervi, 3, Julia House, P.C. 1066, Nicosia, Cyprus	
Cyprus	Sinano Shipmanagement Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	

34. List of Subsidiaries and Other Significant Holdings (continued)

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Cyprus	Steeltrade Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Unicroft Limited	indirect subsidiary	100.00%	Leoforos Archiepiskopou Makariou III, 135, EMELLE Building, flat/office 22, 3021, Limassol	
Cyprus	Velcast Limited	indirect subsidiary	100.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	Streamcore Limited	joint venture	50.00%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Cyprus	RVK Invest Limited	associate	42.61%	3 Themistokli Dervi, Julia House, 1066, Nicosia	
Czech Republic	EVRAZ Nikom, a.s.	indirect subsidiary	100.00%	Czech Republic, Mnisek pod Brdy, Prazska 900, 25210	
Italy	Evraz Palini e Bertoli S.r.l	indirect subsidiary	100.00%	via E. Fermi 28, 33058 San Giorgio di Nogaro (UD)	
Kazakhstan	EvrazMetall Kazakhstan	indirect subsidiary	100.00%	office 201, 9, shosse Alash, Saryarkinskiy raion, Astana	
Kazakhstan	Evraz Caspian Steel	indirect subsidiary	65.00%	41, ul. Promyshlennaya, Kostanai, 110000	
Luxembourg	Evraz Group S.A.	direct subsidiary	100.00%	13, avenue Monterey, L2163, Luxembourg	
Mexico	Evraz NA Mexico	indirect subsidiary	100.00%	Frida Kahlo 195-709, Valle Oriente, San Pedro Garza Garcia, Nuevo Leon, 66269	
Netherlands	Palmrose B.V.i.l.	indirect subsidiary	100.00%	Hoogoorddreef 15, 1101 BA Amsterdam	liquidated
Netherlands	ECS Holdings Europe B.V.	indirect subsidiary	65.00%	Hoogoorddreef 15, 1101 BA Amsterdam	
Republic of S.Africa	Evraz Highveld Steel and Vanadium Limited	indirect subsidiary	85.11%	Old Pretoria Road, Portion 93 of the Farm Schoongezicht 308 JS eMalahleni (Witbank)	deconsolidated in 2015
Republic of S.Africa	Mapochs Mine (Proprietary) Limited	indirect subsidiary	62.98%	Old Pretoria Road, Portion 93 of the Farm Schoongezicht 308 JS eMalahleni (Witbank)	deconsolidated in 2015
Republic of S.Africa	Mapochs Mine Community Trust	indirect subsidiary	–	Portion 93 of the farm Schoongezicht No.308 JS, eMalahleni	deconsolidated in 2015
Russia	Blagotvoritelniy fond Evraza - Sibir	indirect subsidiary – non-commercial	–	1, ul. Ploshad Pobedy, Novokuznetsk, Kemerovskaya obl., 654010	
Russia	Blagotvoritelniy fond Evraza - Ural	indirect subsidiary – non-commercial	–	office 4, 39, ul. Karl Marks, Nizhny Tagil, Sverdlovskaya obl., 622001	
Russia	Centr kultury i iskusstva NTMK	indirect subsidiary – non-commercial	–	1, ul. Metallurgov, Nizhny Tagil, Sverdlovskaya obl., 622025	
Russia	Centr podgotovki personala Evraz-Ural	indirect subsidiary – non-commercial	–	1, ul. Metallurgov, Nizhny Tagil, Sverdlovskaya obl., 622025	
Russia	Kulturno-sportivniy centr metallurgov	indirect subsidiary – non-commercial	–	20, Prospect Metallurgov, Novokuznetsk, Kemerovskaya obl., 654007	
Russia	Magnit	indirect subsidiary	–	1, ul. Turgeneva, Kachkanar, Sverdlovskaya obl., 624351	
Russia	Nizhny Tagil Telecompany Telecon	indirect subsidiary	–	74, ul. Industrialnaya, Nizhny Tagil, Sverdlovskaya obl., 622025	
Russia	Ohothichie hozyaistvo	indirect subsidiary – non-commercial	–	1, ul. Metallurgov, Nizhny Tagil, Sverdlovskaya obl., 622025	

34. List of Subsidiaries and Other Significant Holdings (continued)

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Russia	Regional Media Company	indirect subsidiary	–	4, ul. Belovezhskaya, Moscow, 121353	
Russia	Regionalniy Centr podgotovki personala Evraz-Sibir	indirect subsidiary - non-commercial	–	4, ul. Nevskogo, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Sanatoriy-porfilactory Lenevka	indirect subsidiary - non-commercial	–	Lenevka, Prigorodny raion, Sverdlovskaya obl., 622911	
Russia	Sportivniy complex Uralets	indirect subsidiary - non-commercial	–	36, Gvardeisky bulvar, Nizhny Tagil, Sverdlovskaya obl, 622005	
Russia	Sportivno-Ozdorovitelny complex Metallurg-Forum	indirect subsidiary - non-commercial	–	office 26; 61, ul. Krasnogvardeiskaya, Nizhny Tagil, Sverdlovskaya obl., 622013	
Russia	TV-Most	indirect subsidiary	–	office 164, 31, Moscovsky prospect, Kemerovo, 650065	
Russia	TVN	indirect subsidiary	–	35, ul. Ordzhonikidze, Novokuznetsk, Kemerovskaya obl., 654007	
Russia	Aktiv-Media	indirect subsidiary	100.00%	Office 6, 35, ul. Ordzhonikidze, Novokuznetsk, Kemerovskaya obl., 654007	
Russia	ATP Yuzhkuzbassugol	indirect subsidiary	100.00%	20, Silikatnaya, Novokuznetsk, Kemerovskaya obl., 654086	
Russia	Centr Servisnykh Resheniy	indirect subsidiary	100.00%	1, ul. Rudokoprovaya, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Centralnaya Obogatitelnaya Fabrika Kuznetskaya	indirect subsidiary	100.00%	16, Shosse Severnoe, Novokuznetsk, Kemerovskaya obl., 654000	
Russia	Consortium Tuvinskie dorogi	indirect subsidiary	100.00%	4, ul. Belovezhskaya, Moscow, 121353	merged
Russia	Evraz Consolidated West-Siberian metallurgical Plant	indirect subsidiary	100.00%	16, ul. Shosse Kosmicheskoe, Novokuznetsk, Kemerovskaya obl., 654043	
Russia	EVRAZ Kachkanarsky Ore Mining and Processing Plant	indirect subsidiary	100.00%	2, ul. Sverdlova, Kachkanar, Sverdlovskaya obl., 624351	
Russia	Evraz Nizhny Tagil Metallurgical Plant	indirect subsidiary	100.00%	1, ul. Metallurgov, Nizhny Tagil, Sverdlovskaya obl., 622025	
Russia	EVRAZ Uzlovaya	indirect subsidiary	100.00%	4, ul.Entuziastov, kvartal 5 Pyatiletka, Uzlovaya, Tulskaya obl., 301600	
Russia	EVRAZ Vanady Tula	indirect subsidiary	100.00%	1, ul. Przhevalskogo, Tula, 300016	
Russia	EvrazEK	indirect subsidiary	100.00%	2B, ul. Khlebozavodskaya, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Evrazenergotrans	indirect subsidiary	50.00%	4, ul. Rudokoprovaya, Novokuznetsk, Kemerovskaya obl., 654006	controlled through put option for the purchase of shares of Malvero Holdings Limited
Russia	EvrazHolding Finance	indirect subsidiary	100.00%	62, ul. Internationalnaya, Kyzyl, Tyva Republic, 667000	
Russia	EvrazHolding LLC	indirect subsidiary	100.00%	4, ul. Belovezhskaya, Moscow, 121353	
Russia	EvrazMetall Sibir	indirect subsidiary	100.00%	30, Shosse Severnoe, Novokuznetsk, Kemerovskaya obl., 654043	
Russia	Evrazruda	indirect subsidiary	100.00%	21, ul. Lenina, Tashtagol, Kemerovskaya obl., 652990	merged

34. List of Subsidiaries and Other Significant Holdings (continued)

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Russia	EvrazService	indirect subsidiary	100.00%	4, ul. Belovezhskaya, Moscow, 121353	
Russia	Evraztekhnika	indirect subsidiary	100.00%	4, ul. Belovezhskaya, Moscow, 121353	
Russia	Gurievsky rudnik	indirect subsidiary	100.00%	1, ul. Zhdanova, Gurievsk, Kemerovskaya obl., 652780	
Russia	Industrialnaya Vostochno-Evropeiskaya company	indirect subsidiary	100.00%	9, ul. Khimicheskaya, Taganrog, Rostovskaya obl., 347913	
Russia	Kachkanarskaya teplosnabzhauschaya company	indirect subsidiary	100.00%	17, 8 microraion, Kachkanar, Sverdlovskaya obl., 624350	
Russia	Kuznetskteplosbyt	indirect subsidiary	100.00%	4, ul. Rudokoprovaya, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Managing Company EVRAZ Mezhdurechensk	indirect subsidiary	100.00%	69, ul. Kirova, Novokuznetsk, Kemerovskaya obl., 654080	
Russia	Medsanchast Vanady	indirect subsidiary	100.00%	1, Zeleny Mys district, Kachkanar, Sverdlovskaya obl., 624350	
Russia	Metallenergofinance	indirect subsidiary	100.00%	4, ul. Rudokoprovaya, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Mezhegeyugol Coal Company	indirect subsidiary	100.00%	62, ul. Internationalnaya, Kyzyl, Tyva Republic, 667000	
Russia	Mine Abashevskaya	indirect subsidiary	100.00%	5, ul. Kavkazskaya, Novokuznetsk, Kemerovskaya obl., 654013	
Russia	Mine Alardinskaya	indirect subsidiary	100.00%	56, ul. Ugolnaya, Malinovka, Kaltan, Kemerovskaya obl., 652831	
Russia	Mine Esaulskaya	indirect subsidiary	100.00%	33, Prospect Kurako, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Mine Osinnikovskaya	indirect subsidiary	100.00%	3, ul. Shakhtovaya, Osinniki, Kemerovskaya obl., 654006	
Russia	Mine Uskovskaya	indirect subsidiary	100.00%	33, Prospect Kurako, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Parus	indirect subsidiary	100.00%	office 3; 51, ul. Industrialnaya, Nizhny Tagil, Sverdlovskaya obl., 622025	
Russia	Promuglepoject	indirect subsidiary	100.00%	4, ul. Nevskogo, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Rembytcomplex	indirect subsidiary	100.00%	8, 8 microraion, Kachkanar, Sverdlovskaya obl., 624351	
Russia	Sfera	indirect subsidiary	100.00%	office 315; 205, ul. 8 Marta, Ekaterinburg, Sverdlovskaya obl., 620085	
Russia	Sibmetinvest	indirect subsidiary	100.00%	Office 10; 1, 1st km of Rublevo-Uspenskoye shosse, der. Razdory, Odintsovo area, Moscow region, 143082	
Russia	Tagilteplosbyt	indirect subsidiary	100.00%	67, Prospect Lenina, Nizhny Tagil, Sverdlovskaya obl., 622034	

34. List of Subsidiaries and Other Significant Holdings (continued)

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Russia	Trade Company EvrazHolding	indirect subsidiary	100.00%	4, ul. Belovezhskaya, Moscow, 121353	
Russia	Trade House EvrazHolding	indirect subsidiary	100.00%	4, ul. Belovezhskaya, Moscow, 121353	merged
Russia	United accounting systems	indirect subsidiary	100.00%	office 205; 1, ul. Rudokoprovaya, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	United Coal Company Yuzhkuzbassugol	indirect subsidiary	100.00%	33, Prospect Kurako, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Upravlenie po montazhu, demontazhu i remontu gornoshakhtnogo oborudovaniya	indirect subsidiary	100.00%	3, ul. Shakhtovaya, Osinniki, Kemerovskaya obl., 652807	
Russia	Vanadyservice	indirect subsidiary	100.00%	11a, 10 microraion, Kachkanar, Sverdlovskaya obl., 624351	
Russia	Vanady-transport	indirect subsidiary	100.00%	2, ul. Sverdlova, Kachkanar, Sverdlovskaya obl., 624351	
Russia	Yuzhno-Kuzbasskoye geologorazvedochnoye upravlenie	indirect subsidiary	100.00%	33, Prospect Kurako, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Evraz Yuzhny Stan	indirect subsidiary	100.00%	1, ul. Zarechnaya, rabochy poselok Ust-Donetsky, Ust-Donetsky raion, Rostovskaya obl., 346550	
Russia	Evraz Metall Inprom	indirect subsidiary	100.00%	2-a, ul. Marshala Zhukova, Taganrog, Rostovskaya obl., 347942	
Russia	Brianskmetallresursy	indirect subsidiary	99.96%	14, ul. Staleliteinaya, Bryansk, 241035	
Russia	Mordovmetallotorg	indirect subsidiary	99.90%	39, Aleksandrovskoe Shosse, Saransk, Respublica Mordovia, 430006	
Russia	Uliyanovskmetall	indirect subsidiary	99.37%	20, 11 proezd Inzhenerny, Ulyanovsk, 432072	
Russia	Vladimirmetallopttorg	indirect subsidiary	95.63%	57, ul. P. Osipenko, Vladimir, 600009	
Russia	Kuznetskpogruztrans	indirect subsidiary	94.50%	18, ul. Promyshlennaya, Novokuznetsk, Kemerovskaya obl., 654029	
Russia	Centralnaya Obogatitelnaya Fabrika Abashevskaya	indirect subsidiary	92.10%	12, Tupik Strelochny, Novokuznetsk, Kemerovskaya obl., 654086	
Russia	Elekrosvyaz YKU	indirect subsidiary	87.20%	33, Prospect Kurako, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Metallurg-Forum	indirect subsidiary	85.23%	1, ul. Metallurgov, Nizhny Tagil, Sverdlovskaya obl., 622025	liquidated
Russia	Osinnikovsky remontno-mekhanichesky zavod	indirect subsidiary	84.43%	1/2, ul. Pervogornaya, Osinniki, Kemerovskaya obl., 652804	
Russia	Montazhnik Raspadskoy	indirect subsidiary	83.84%	office 408; 106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	
Russia	Olzherasskoye shakhtoprokhodcheskoye upravlenie	indirect subsidiary	83.84%	office 331; 106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	

34. List of Subsidiaries and Other Significant Holdings (continued)

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Russia	Raspadskaya	indirect subsidiary	83.84%	106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	
Russia	Raspadskaya Coal Company	indirect subsidiary	83.84%	office 201; 33, Prospect Kurako, Novokuznetsk, Kemerovskaya obl., 654006	
Russia	Raspadskaya Preparation Plant	indirect subsidiary	83.84%	office 203; 106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	
Russia	Raspadskaya-Koksovaya	indirect subsidiary	83.84%	office 424; 106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	
Russia	Razrez Raspadskiy	indirect subsidiary	83.84%	office 213; 106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	
Russia	Specializirovannoye Shakhtomontazhno-naladochnoye upravlenie	indirect subsidiary	49.64%	28, proezd Zaschitny, Novokuznetsk, Kemerovskaya obl., 654034	controlled through put option for the purchase of shares of Malvero Holdings Limited
Russia	Mining Metallurgical Company “Timir”	joint venture	51.00%	4, Prospect Geologov, Neryungri, Republic of Saha (Yakutia), 678960	
Russia	AVT-Ural	indirect subsidiary	51.00%	2, ul. Sverdlova, Kachkanar, Sverdlovskaya obl., 624351	
Russia	Sibir-VK	joint venture	50.00%	37A, ul. Kutuzova, Novokuznetsk, Kemerovskaya obl., 654041	
Russia	Vtorresurs-Pererabotka	joint venture	50.00%	37A, ul. Kutuzova, Novokuznetsk, Kemerovskaya obl., 654041	
Russia	Zavod metallurgicheskih reagentov	associate	50.00%	1, ul. Metallurgov, Nizhny Tagil, Sverdlovskaya obl., 622025	
Russia	Novokuznetskmetallopttorg	associate	48.51%	16, ul. Chaikinoi, Novokuznetsk, Kemerovskaya obl., 654005	
Russia	Tomusinskoye pogruzochno-transportnoye upravlenie	indirect subsidiary	49.12%	office 209; 106, ul. Mira, Mezhdurechensk, Kemerovskaya obl.,652870	
Russia	ZAO Irkutskvtorchermet	associate	42.61%	office 212, bld. ZAO Vtorchermet, ul. Severny Promuzel, Irkutsk, 664053	
Russia	ZAO Vtorchermet	associate	42.61%	office 211, bld. ZAO Vtorchermet, ul. Severny promuzel, Irkutsk, 664053	
Russia	Sibirskaya registratsionnaya company	investment	10.30%	57, Prospect Stroiteley, Novokuznetsk, Kemerovskaya obl., 654005	
Singapore	Delong Holdings Limited	investment	15.04%	55 Market Street Level 10 Singapore 048941	sold
Switzerland	East Metals A.G.	indirect subsidiary	100.00%	Baarerstrasse 131, 6300 Zug	
Switzerland	East Metals Shipping A.G.	indirect subsidiary	100.00%	Baarerstrasse 131, 6300 Zug	
Ukraine	Evraz Ukraine	indirect subsidiary	100.00%	31, ul. Udarnikov, Dnepr, Dnepropetrovskaya obl., 49064	
Ukraine	Evraztrans Ukraine	indirect subsidiary	100.00%	office 512, 93, ul. Yavornitskogo, Dnepr, Dnepropetrovskaya obl., 49000	
Ukraine	LK Adzhalyk	indirect subsidiary	100.00%	kv.97, 1, Prospekt Pravdy, Kharkov, 61022	sold
Ukraine	United accounting systems Ukraine	indirect subsidiary	100.00%	3, ul. Mayakovskogo, Dnepr, Dnepropetrovskaya obl., 49064	

34. List of Subsidiaries and Other Significant Holdings (continued)

Country of incorporation	Name	Relationship	effective ownership in 2018, %	Registered address	Notes
Ukraine	Evraz Dneprovsky Metallurgical Plant	indirect subsidiary	97.73%	3, ul. Mayakovskogo, Dnepr, Dnepropetrovskaya obl., 49064	sold
Ukraine	Trade House Evraz Ukraine	indirect subsidiary	97.73%	31, ul. Udarnikov, Dnepr, Dnepropetrovskaya obl., 49064	sold
United Kingdom	Evraz North America plc	indirect subsidiary	100.00%	Suite 1, 3rd Floor, 11-12 St James's Square London SW1 4LB	
USA	Camrose Pipe Corporation	indirect subsidiary	100.00%	9040 N.Burgard Way, Portland, OR 97203	
USA	East Metals North America, LLC	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	East Metals Services Inc.	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	Evraz Claymont Steel, Inc.	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	Evraz Inc. NA	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	Evraz Stratcor, Inc.	indirect subsidiary	100.00%	4285 Malvern Road, Hot Springs, AR 71901	
USA	Evraz Trade NA LLC	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	General Scrap Inc.	indirect subsidiary	100.00%	3101 Valley Street Minot, ND 58702	
USA	Oregon Steel Mills Processing Inc.	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	OSM Distribution Inc.	indirect subsidiary	100.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	CF&I Steel LP	indirect subsidiary	90.00%	1612 E Abriendo Pueblo, CO 81004	
USA	Palmer North America LLC	indirect subsidiary	90.00%	200 East Randolph Drive Suite 7800 Chicago, IL 60601	
USA	Colorado and Wyoming Railway Company	indirect subsidiary	90.00%	2100 S. Freeway Pueblo, CO 81004	
USA	New CF&I Inc.	indirect subsidiary	90.00%	1612 E Abriendo Pueblo, CO 81004	
USA	Oregon Ferroalloy Partners	indirect subsidiary	60.00%	14400 Rivergate Blvd. Portland, OR 97203	
USA	Union Ditch and Water Co.	indirect subsidiary	57.59%	113 W. 5th Street Florence, CO 81226	
USA	Fremont County Irrigating Ditch Co.	investment	13.50%	113 W. 5th Street Florence, CO 81226	