PSC “Corporation VSMPO-AVISMA”

Consolidated Financial Statements for 2018 and Independent Auditors’ Report

Contents

Statement of management's responsibilities for the preparation and approval of the consolidated financial statements for 2018

The following statement, which should be read in conjunction with the auditors' responsibilities stated in the independent auditors' report set out on page 4, is made with a view to distinguishing the responsibilities of management and those of the auditors in relation to the consolidated financial statements of Public Stock Company "Corporation VSMPO-AVISMA" and its subsidiaries (the "Group").

Management is responsible for the preparation of the consolidated financial statements that present fairly in all material respects, the consolidated financial position of the Group as at 31 December 2018, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

In preparing the consolidated financial statements, management is responsible for:

- selecting suitable accounting principles and applying them consistently;
- making judgements and estimates that are reasonable and prudent;
- stating whether IFRS have been followed, subject to any material departures disclosed and explained in the consolidated financial statements; and
- preparing the consolidated financial statements on a going concern basis, unless it is inappropriate to presume that the Group will continue in business for the foreseeable future.

Management, within its competencies, is also responsible:

- designing, implementing and maintaining an effective system of internal controls throughout the Group;
- maintaining statutory accounting records in compliance with local legislation and accounting standards in the respective jurisdictions in which the Group operates;
- taking steps to safeguard the assets of the Group; and
- detecting and preventing fraud and other irregularities.

The consolidated financial statements for the year ended 31 December 2018 were approved by:

M.V. Voevodin
General Director
Verkhnyaya Salda, Russia
24 April 2019

ПАО «Корпорация ВСМПО-АВИСМА» * ОГРН 1026600784011
ВСМПО АВИСМА
ИНН 6607000556

D.Yu. Sannikov
Chief Accountant

KPMG

Independent Auditors' Report

To the Shareholders of Public stock company "Corporation VSMPO-AVISMA"

Opinion

We have audited the consolidated financial statements of Public stock company "Corporation VSMPO-AVISMA" (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2018, the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2018, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the independence requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation and with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the requirements in the Russian Federation and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Fair value of property, plant and equipment	
Please refer to the Note 15 in the consolidated financial statements.	
The key audit matter	**How the matter was addressed in our audit**
The Group accounts for its property, plant and equipment at fair value. To determine the fair value of its property, plant and equipment the Group involved an independent appraiser. Most of the Group's property, plant and equipment items are specialized that requires significant degree of judgement application in calculation of depreciated replacement cost. Due to the significance of property, plant and equipment and the inherent uncertainty involved in forecasting and discounting future cash flows and determination of property, plant and equipment depreciated replacement cost this is a key audit matter.	We involved our internal valuation specialists to analyze key assumptions used by the Group to determine fair value of property, plant and equipment and perform economic obsolescence test. We tested depreciated replacement cost of property, plant and equipment on sample basis through analysis of calculations made and comparing of input data to available market information. We analyzed property, plant and equipment remaining useful lives for reasonableness, justification and comparability within similar groups of fixed assets. With respect to the discounted cash flows model used to determine economic obsolescence we compared key assumptions applied in the model to externally derived data as well as our own assessments. This included: — comparison of the Groups' products sales prices forecasts with expected sales prices growth rate based on internal and external sources; — comparison of EBITDA margins and production volumes forecasts with actual historic results of the Group and comparable companies; — comparison of key macroeconomic factors projections used, like inflation rates, exchange rates and other with consensus forecasts developed by recognized external sources; — recalculation of discount rate. We used alternative assumptions related to forecasts of EBITDA margin, sales growth, production volumes, discount rate and working capital to perform our own sensitivity analysis. We also compared actual financial performance results of the Group in 2018 with forecasts that were developed by the Group in previous periods for the purposes of impairment tests. We considered the accuracy and completeness of the disclosures in the consolidated financial statements.

Tax issues	
Please refer to the Note 13 and 31 in the consolidated financial statements.	
The key audit matter	**How the matter was addressed in our audit**
The taxation system in the Russian Federation and in the world continues to evolve and is characterised by frequent changes in legislation, official pronouncements and court decisions. Therefore the current position of the Group management regarding the accepted accounting principles for the tax purposes may be challenged by the by the tax authorities in different countries of the Group operations. The Group management evaluates compliance of the existing tax accounting policies with current practice of tax legislation application. Estimate of potential tax risks requires significant degree of judgement application by the Group management and the effect of this estimate has significant impact on the consolidated financial statement of the Group, therefore we have paid particular attention to this key audit matter.	As a part of our audit we involved KPMG tax specialists specializing in transfer pricing, international taxation, corporate income tax, VAT, and other areas, including those jurisdictions where Group's operations are material. We performed the following procedures with involvement of KPMG tax specialists: — analysis of key tax accounting policies of the Group; — analysis of key management's assumptions used in determination of pricing methods in controlled transactions; — analysis of controlled transactions actual profitability with comparison to market intervals; — analysis of the controlled foreign companies tax base completeness; — analysis of the Group's compliance with the conditions of tax benefits used; — analysis of the current tax disputes court practice; — analysis of disclosures made by the Group in the consolidated financial statements related to contingent liabilities regarding tax risks.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

— identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

— obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;

— evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;

— conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern;

— evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;

— obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditors' report is:

Adamov N.A.

JSC "KPMG"

Moscow, Russia

24 April 2019

	Note	2018 ’000 USD	2017 ’000 USD	2018 ’000 RUB	2017 ’000 RUB
Revenue	6, 7	1 617 059	1 507 721	101 402 164	87 979 946
Cost of sales	8	(926 533)	(956 560)	(58 100 790)	(55 818 106)
Gross profit		**690 526**	**551 161**	**43 301 374**	**32 161 840**
Distribution expenses	8	(34 223)	(35 192)	(2 146 023)	(2 053 553)
General and administrative expenses	8	(203 166)	(207 966)	(12 740 098)	(12 135 421)
Operating profit before loss on disposal of property, plant and equipment		**453 137**	**308 003**	**28 415 253**	**17 972 866**
Loss on disposal of property, plant and equipment	15	(16 798)	(8 492)	(1 053 336)	(495 533)
Operating profit		**436 339**	**299 511**	**27 361 917**	**17 477 333**
Impairment loss on intangible assets and property, plant and equipment	15,16	(13 987)	(13 594)	(877 118)	(793 246)
Finance income	9	45 487	57 958	2 852 387	3 382 060
Share in income of equity accounted investees	18	2 629	1 449	164 907	84 549
Finance costs	9	(172 243)	(41 842)	(10 800 939)	(2 441 590)
Profit before income tax		**298 225**	**303 482**	**18 701 154**	**17 709 106**
Income tax expense	13	(53 677)	(83 680)	(3 365 959)	(4 882 979)
Profit for the period		**244 548**	**219 802**	**15 335 195**	**12 826 127**
Other comprehensive (loss)/income					
Items that will never be reclassified to profit or loss					
Revaluation of property, plant and equipment	15	347 909	741 463	24 169 458	42 708 423
Equity investments at FVOCI – net change in fair value	19	(106 613)	-	(6 685 453)	-
Translation to presentation currency		(503 569)	137 055	-	-
Remeasurement of defined benefit obligations		172	99	10 767	5 800
Related income tax		(91 836)	(136 511)	(6 379 953)	(7 863 080)
		(353 937)	**742 106**	**11 114 819**	**34 851 143**
Items that are or may be reclassified to profit or loss					
Foreign currency translation differences - foreing operations		(1 756)	223	(110 143)	12 998
Net change in fair value of available-for-sale financial assets		-	(14 381)	-	(839 194)
Equity-accounted investees – share of other comprehensive income		(2 915)	(1 248)	(182 786)	(72 830)
Related income tax	13	583	250	36 557	14 566
		(4 088)	**(15 156)**	**(256 372)**	**(884 460)**
Other comprehensive (loss)/income for the period, net of income tax		**(358 025)**	**726 950**	**10 858 447**	**33 966 683**
Total comprehensive (loss)/income for the period		**(113 477)**	**946 752**	**26 193 642**	**46 792 810**
Profit / (loss) attributable to:					
Shareholders of the Company		246 690	220 163	15 469 455	12 847 193
Non-controlling interests		(2 142)	(361)	(134 260)	(21 066)
Profit for the period		**244 548**	**219 802**	**15 335 195**	**12 826 127**
Total comprehensive (loss)/income attributable to:					
Shareholders of the Company		(110 589)	946 893	26 374 655	46 801 017
Non-controlling interests		(2 888)	(141)	(181 013)	(8 207)
Total comprehensive (loss)/income		**(113 477)**	**946 752**	**26 193 642**	**46 792 810**
Earnings per share attributable to shareholders of the Company, basic and diluted (expressed in USD/RUB per share)	10	21,407	19,105	1 342,392	1 114,840

The consolidated statement of profit or loss and other comprehensive income is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

		’000 USD		’000 RUB	
	Note	31 December 2018	31 December 2017	31 December 2018	31 December 2017
ASSETS					
Non-current assets					
Property, plant and equipment	15	2 783 009	3 066 677	193 337 336	176 641 226
Goodwill	17	28 815	34 754	2 001 817	2 001 817
Intangible assets	16	12 663	19 578	879 692	1 127 748
Equity-accounted investees	18	36 664	42 487	2 547 068	2 447 257
Long-term trade and other receivables	21	-	1 590	-	91 567
Other investments	19	244 598	182 949	16 992 387	10 537 882
Deferred tax assets	13	5 248	2 403	364 561	138 401
Other non-current assets		1 329	2 604	92 338	150 016
Total non-current assets		**3 112 326**	**3 353 042**	**216 215 199**	**193 135 914**
Current assets					
Inventories	20	650 505	645 294	45 190 941	37 169 040
Other investments	19	8 449	108 574	586 917	6 253 911
Short-term trade and other receivables	21	244 354	239 119	16 975 395	13 773 274
Current income tax receivable		3 496	1 755	242 869	101 093
Cash and cash equivalents	22	760 666	806 527	52 843 936	46 456 130
Other current assets		8 676	3 161	602 773	182 089
Total current assets		**1 676 146**	**1 804 430**	**116 442 831**	**103 935 537**
Total assets		**4 788 472**	**5 157 472**	**332 658 030**	**297 071 451**
EQUITY AND LIABILITIES					
Equity	23				
Share capital		22 785	22 785	596 313	596 313
Share premium		153 924	153 924	4 594 608	4 594 608
Treasury shares		(1 407)	(1 407)	(47 842)	(47 842)
Retained earnings		1 879 068	1 766 435	68 288 224	61 591 124
Reserves		1 559 467	1 578 260	106 748 810	106 195 563
Cumulative currency translation difference		(1 020 568)	(515 989)	211 043	274 433
Total equity attributable to shareholders of the Company		**2 593 269**	**3 004 008**	**180 391 156**	**173 204 199**
Non-controlling interests		4 035	6 923	44 935	225 948
Total equity		**2 597 304**	**3 010 931**	**180 436 091**	**173 430 147**
Non-current liabilities					
Long-term borrowings	25	1 245 780	1 177 636	86 545 092	67 832 093
Long-term advances received from customers		-	8 490	-	489 052
Defined benefit pension plan	11	27 447	35 699	1 906 768	2 056 269
Other long-term liabilities		15 106	9 236	1 049 419	531 995
Deferred tax liabilities	13	430 969	445 620	29 939 680	25 667 791
Total non-current liabilities		**1 719 302**	**1 676 681**	**119 440 959**	**96 577 200**
Current liabilities					
Trade and other payables	26	95 413	93 339	6 628 346	5 376 394
Current income tax payable		19 756	6 064	1 372 472	349 263
Other taxes payable		4 860	6 863	337 783	395 428
Short-term borrowings	25	227 201	223 117	15 783 820	12 851 559
Advances received from customers		123 454	139 206	8 576 454	8 018 272
Dividends payable	23	1 182	1 271	82 105	73 188
Total current liabilities		**471 866**	**469 860**	**32 780 980**	**27 064 104**
Total liabilities		**2 191 168**	**2 146 541**	**152 221 939**	**123 641 304**
Total equity and liabilities		**4 788 472**	**5 157 472**	**332 658 030**	**297 071 451**

The consolidated statement of financial position is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

’000 USD	Attributable to equity holders of the Company								
	Share capital	Share premium	Treasury share reserve	Retained earnings	Reserves	Cumulative translation reserve	Total	Non-controlling interests	Total equity
Balance at 1 January 2017	**22 785**	**153 924**	**(1 407)**	**1 852 295**	**1 098 236**	**(653 047)**	**2 472 786**	**3 630**	**2 476 416**
Total comprehensive income for the period									
Profit for the period	-	-	-	220 163	-	-	220 163	(361)	219 802
Other comprehensive income									
Foreign currency translation difference - foreing operation	-	-	-	-	-	3	3	220	223
Translation to presentation currency	-	-	-	-	-	137 055	137 055	-	137 055
Net change in fair value of available-for-sale financial assets	-	-	-	-	(14 381)	-	(14 381)	-	(14 381)
Revaluation of property, plant and equipment	-	-	-	-	741 463	-	741 463	-	741 463
Defined benefit plan revaluation	-	-	-	-	99	-	99	-	99
Equity-accounted investees – share of other comprehensive income	-	-	-	-	(1 248)	-	(1 248)	-	(1 248)
Income tax on other comprehensive income	-	-	-	-	(136 261)	-	(136 261)	-	(136 261)
Total other comprehensive income	-	-	-	-	589 672	137 058	726 730	220	726 950
Total comprehensive income for the period	**-**	**-**	**-**	**220 163**	**589 672**	**137 058**	**946 893**	**(141)**	**946 752**
Dividends	-	-	-	(415 671)	-	-	(415 671)	-	(415 671)
Establishment of subsidiary with non-controlling interest	-	-	-	-	-	-	-	3 434	3 434
Total transactions with owners	**-**	**-**	**-**	**(415 671)**	**-**	**-**	**(415 671)**	**3 434**	**(412 237)**
Write-off of revaluation reserve of property, plant and equipment due to disposal and depreciation	-	-	-	109 648	(109 648)	-	-	-	-
Balance at 31 December 2017	**22 785**	**153 924**	**(1 407)**	**1 766 435**	**1 578 260**	**(515 989)**	**3 004 008**	**6 923**	**3 010 931**

The consolidated statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

'000 USD	Attributable to equity holders of the Company								
	Share capital	**Share premium**	**Treasury share reserve**	**Retained earnings**	**Reserves**	**Cumulative translation reserve**	**Total**	**Non-controlling interests**	**Total equity**
Balance at 1 January 2018, as previously reported	**22 785**	**153 924**	**(1 407)**	**1 766 435**	**1 578 260**	**(515 989)**	**3 004 008**	**6 923**	**3 010 931**
Adjustment on initial application of IFRS 9 (net of tax)	-	-	-	(3 760)	-	-	(3 760)	-	(3 760)
Adjusted balance at 1 January 2018	**22 785**	**153 924**	**(1 407)**	**1 762 675**	**1 578 260**	**(515 989)**	**3 000 248**	**6 923**	**3 007 171**
Total comprehensive income for the period									
Profit for the period	-	-	-	246 690	-	-	246 690	(2 142)	244 548
Other comprehensive loss									
Foreign currency translation difference - foreing operation	-	-	-	-	-	(1 010)	(1 010)	(746)	(1 756)
Translation to presentation currency	-	-	-	-	-	(503 569)	(503 569)	-	(503 569)
Equity investments at FVOCI – net change in fair value	-	-	-	-	(106 613)	-	(106 613)	-	(106 613)
Revaluation of property, plant and equipment	-	-	-	-	347 909	-	347 909	-	347 909
Defined benefit plan revaluation	-	-	-	-	172	-	172	-	172
Equity-accounted investees – share of other comprehensive income	-	-	-	-	(2 915)	-	(2 915)	-	(2 915)
Income tax on other comprehensive income	-	-	-	-	(91 253)	-	(91 253)	-	(91 253)
Total other comprehensive loss	-	-	-	-	147 300	(504 579)	(357 279)	(746)	(358 025)
Total comprehensive loss for the period	**-**	**-**	**-**	**246 690**	**147 300**	**(504 579)**	**(110 589)**	**(2 888)**	**(113 477)**
Dividends	-	-	-	(296 390)	-	-	(296 390)	-	(296 390)
Total transactions with owners	**-**	**-**	**-**	**(296 390)**	**-**	**-**	**(296 390)**	**-**	**(296 390)**
Write-off of revaluation reserve of property, plant and equipment due to disposal and depreciation	-	-	-	166 093	(166 093)	-	-	-	-
Balance at 31 December 2018	**22 785**	**153 924**	**(1 407)**	**1 879 068**	**1 559 467**	**(1 020 568)**	**2 593 269**	**4 035**	**2 597 304**

The consolidated statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

’000 RUB	**Attributable to equity holders of the Company**								
	Share capital	**Share premium**	**Treasury share reserve**	**Retained earnings**	**Reserves**	**Cumulative translation reserve**	**Total**	**Non-controlling interests**	**Total equity**
Balance at 1 January 2017	**596 313**	**4 594 608**	**(47 842)**	**66 120 455**	**78 640 142**	**274 294**	**150 177 970**	**33 746**	**150 211 716**
Total comprehensive income for the period									
Profit for the period	-	-	-	12 847 193	-	-	12 847 193	(21 066)	12 826 127
Other comprehensive income									
Foreign currency translation difference - foreing operation	-	-	-	-	-	139	139	12 859	12 998
Net change in fair value of available-for-sale financial assets	-	-	-	-	(839 194)	-	(839 194)	-	(839 194)
Revaluation of property, plant and equipment	-	-	-	-	42 708 423	-	42 708 423	-	42 708 423
Defined benefit plan revaluation	-	-	-	-	5 800	-	5 800	-	5 800
Equity-accounted investees – share of other comprehensive income	-	-	-	-	(72 830)	-	(72 830)	-	(72 830)
Income tax on other comprehensive income	-	-	-	-	(7 848 514)	-	(7 848 514)	-	(7 848 514)
Total other comprehensive income	-	-	-	-	33 953 685	139	33 953 824	12 859	33 966 683
Total comprehensive income for the period	**-**	**-**	**-**	**12 847 193**	**33 953 685**	**139**	**46 801 017**	**(8 207)**	**46 792 810**
Dividends	-	-	-	(23 774 788)	-	-	(23 774 788)	-	(23 774 788)
Establishment of subsidiary with non-controlling interest	-	-	-	-	-	-	-	200 409	200 409
Total transactions with owners	**-**	**-**	**-**	**(23 774 788)**	**-**	**-**	**(23 774 788)**	**200 409**	**(23 574 379)**
Write-off of revaluation of property, plant and equipment due to disposal and depreciation	-	-	-	6 398 264	(6 398 264)	-	-	-	-
Balance at 31 December 2017	**596 313**	**4 594 608**	**(47 842)**	**61 591 124**	**106 195 563**	**274 433**	**173 204 199**	**225 948**	**173 430 147**

The consolidated statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

’000 RUB	Attributable to equity holders of the Company								
	Share capital	Share premium	Treasury share reserve	Retained earnings	Reserves	Cumulative translation reserve	Total	Non-controlling interests	Total equity
Balance at 1 January 2018, as previously reported	**596 313**	**4 594 608**	**(47 842)**	**61 591 124**	**106 195 563**	**274 433**	**173 204 199**	**225 948**	**173 430 147**
Adjustment on initial application of IFRS 9 (net of tax)	-	-	-	(216 581)	-	-	(216 581)	-	(216 581)
Balance at 1 January 2018	**596 313**	**4 594 608**	**(47 842)**	**61 374 543**	**106 195 563**	**274 433**	**172 987 618**	**225 948**	**173 213 566**
Total comprehensive income for the period									
Profit for the period	-	-	-	15 469 455	-	-	15 469 455	(134 260)	15 335 195
Other comprehensive income									
Foreign currency translation difference - foreing operation	-	-	-	-	-	(63 390)	(63 390)	(46 753)	(110 143)
Equity investments at FVOCI – net change in fair value	-	-	-	-	(6 685 453)	-	(6 685 453)	-	(6 685 453)
Revaluation of property, plant and equipment	-	-	-	-	24 169 458	-	24 169 458	-	24 169 458
Defined benefit plan revaluation	-	-	-	-	10 767	-	10 767	-	10 767
Equity-accounted investees – share of other comprehensive income	-	-	-	-	(182 786)	-	(182 786)	-	(182 786)
Income tax on other comprehensive income	-	-	-	-	(6 343 396)	-	(6 343 396)	-	(6 343 396)
Total other comprehensive income	-	-	-	-	10 968 590	(63 390)	10 905 200	(46 753)	10 858 447
Total comprehensive income for the period	**-**	**-**	**-**	**15 469 455**	**10 968 590**	**(63 390)**	**26 374 655**	**(181 013)**	**26 193 642**
Dividends	-	-	-	(18 971 117)	-	-	(18 971 117)	-	(18 971 117)
Total transactions with owners	**-**	**-**	**-**	**(18 971 117)**	**-**	**-**	**(18 971 117)**	**-**	**(18 971 117)**
Write-off of revaluation reserve of property, plant and equipment due to disposal and depreciation	-	-	-	10 415 343	(10 415 343)	-	-	-	-
Balance at 31 December 2018	**596 313**	**4 594 608**	**(47 842)**	**68 288 224**	**106 748 810**	**211 043**	**180 391 156**	**44 935**	**180 436 091**

The consolidated statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

	Note	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Cash flows from operating activities					
Profit before income tax		298 225	303 482	18 701 154	17 709 106
Adjustments for:					
Depreciation and amortization	8	213 817	286 818	13 407 894	16 736 667
Impairment loss of property, plant and equipment	15	8 856	6 106	555 355	356 304
Impairment loss of accounts receivable	8	5 784	3 322	362 723	193 873
Impairment loss of intangible assets	16	5 131	7 488	321 763	436 942
Impairment loss of investments		1 222	-	76 615	-
Share in profit of equity accounted investees		(2 629)	(1 449)	(164 907)	(84 549)
Interest income	9	(34 663)	(39 902)	(2 173 620)	(2 328 403)
Dividend income	9	(10 824)	-	(678 767)	-
Foreign currency translation loss/(gain)		108 079	(9 291)	6 523 753	(606 818)
Interest expenses	9	56 366	41 842	3 534 566	2 441 590
Reversal of loss of inventory obsolescence	8	(5 751)	(2 164)	(360 654)	(126 286)
Loss on disposal of property, plant and equipment		16 798	8 492	1 053 336	495 533
Pension cost	8	819	4 124	51 361	240 623
Operating profit before changes in working capital and other long-term liabilities		**661 230**	**608 868**	**41 210 572**	**35 464 582**
Changes in:					
Trade and other receivables		(35 271)	28 373	(2 211 870)	1 653 039
Advances to suppliers		(7 791)	8 975	(488 523)	523 724
Inventories		(104 130)	8 035	(6 415 503)	468 851
Trade and other payables, advances received and other taxes payable		20 061	(3 978)	1 258 018	(232 173)
Other current assets		(4 010)	736	(251 377)	42 932
Other long-term liabilities		6 308	(844)	395 552	(49 265)
Cash flows from operations before income taxes and interest paid		**536 397**	**650 165**	**33 496 869**	**37 871 690**
Income taxes paid		(75 476)	(82 508)	(4 732 967)	(4 814 588)
Interest paid		(54 235)	(40 689)	(3 439 195)	(2 374 332)
Net cash from operating activities		**406 686**	**526 968**	**25 324 707**	**30 682 770**

The consolidated statement of cash flows is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

	Note	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Cash flows from investing activities					
Purchases of property, plant and equipment, including advances	15	(143 477)	(145 679)	(8 997 180)	(8 498 259)
Purchases of intangible assets		(49)	(2 634)	(3 092)	(153 716)
Proceeds from disposal of property, plant and equipment		5 955	13 476	373 431	786 348
Loans provided and acquisition of other investments		(209 253)	(364 861)	(13 121 789)	(21 290 739)
Proceeds from disposal of investments		100 634	139 048	6 310 557	8 113 857
Interest and dividends received		51 066	37 884	3 202 237	2 210 657
Net cash used in investing activities		**(195 124)**	**(322 766)**	**(12 235 836)**	**(18 831 852)**
Cash flows from financing activities					
Dividends paid to shareholders		(302 390)	(407 035)	(18 962 200)	(23 751 698)
Proceeds from treasury shares disposal		9 901	1 600	671 996	93 365
Proceeds from borrowings		838 014	1 219 411	52 550 015	71 156 204
Repayment of borrowings		(764 028)	(856 193)	(47 910 502)	(49 961 368)
Net cash used in financing activities		**(218 503)**	**(42 217)**	**(13 650 691)**	**(2 463 497)**
Effect of exchange rate changes on cash and cash equivalents		(38 920)	6 513	6 949 626	(1 632 136)
Net (decrease)/increase in cash and cash equivalents		**(45 861)**	**168 498**	**6 387 806**	**7 755 285**
Cash and cash equivalents at the beginning of the period		**806 527**	**638 029**	**46 456 130**	**38 700 845**
Cash and cash equivalents at the end of the period		**760 666**	**806 527**	**52 843 936**	**46 456 130**

The consolidated statement of cash flows is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 17 to 77.

1. Reporting entity

(a) Organisation and operations

Public Stock Company "Corporation VSMPO-AVISMA" (the "Company") and its subsidiaries (together referred to as the "Group") comprise Russian joint stock companies and limited liability companies as defined in the Civil Code of the Russian Federation and companies located abroad. The Group is one of the world's leading titanium producers. The Company was originally established as a state owned enterprise in 1933 in the Moscow region and moved to Verkhnyaya Salda (Sverdlovsk region) in 1941. The Company was privatized in the form of a joint stock company in 1992 and registered as an open joint stock company "Verkhnesaldinskoye Metallurgicheskoe Proizvodstvennoe Obyedinenie" ("VSMPO") in accordance with the Law on Joint Stock Companies of the Russian Federation.

In 1998, VSMPO acquired a controlling interest in open joint stock company "AVISMA" ("AVISMA"). In January 2005, VSMPO was renamed to open joint stock company "Corporation VSMPO-AVISMA". In July 2005, following the acquisition of the outstanding non-controlling interest AVISMA was reorganized in the form of a merger into the Company.

The Company's legal organizational form was changed from "Open joint stock company (OJSC)" to "Public stock company (PSC)" in 2015.

The Company's main operations are based on two production sites located in Verkhnaya Salda (Sverdlovsk region) and in Berezniki (Perm region) in the Russian Federation. The production site at Berezniki (referred to as AVISMA) produces titanium sponge and primary magnesium. Titanium sponge is then used in the production of titanium products at the Verkhnaya Salda site. The Group's final products are titanium melted and mill products; as well as forgings and press forming for aerospace, industrial and other applications. It also produces ferrotitanium, aluminium extrusions and specialty steel mill products and forgings. These products are sold both in the Russian Federation and abroad. There is no seasonality in the Group operations.

The Company and its subsidiaries form a vertically integrated group.

As at 31 December 2018, the ultimate parent of the Group is CJSC "BUSINESS ALLIANCE COMPANY" that controls 65,27% share of the Company. CJSC "BUSINESS ALLIANCE COMPANY" is controlled by the management of the Group, in particular majority shares of CJSC "BUSINESS ALLIANCE COMPANY" is controlled by Shelkov M. E., who is the ultimate beneficiary of the Group.

The Company's registered address is: Parkovaya St. 1, Verkhnyaya Salda, Sverdlovsk Region, Russia, 624760.

(b) Russian business environment

The Group's operations are primarily located in the Russian Federation. Consequently, the Group is exposed to the economic and financial markets of the Russian Federation, which display the characteristics of an emerging market. The legal, tax and regulatory frameworks continue development, but are subject to varying interpretations and frequent changes which contribute together with other legal and fiscal impediments to the challenges faced by entities operating in the Russian Federation.

Starting in 2014, the United States of America, the European Union and some other countries have imposed and gradually expanded economic sanctions against a number of Russian individuals and legal entities. The imposition of the sanctions has led to increased economic uncertainty, including more volatile equity markets, a depreciation of the Russian rouble, a reduction in both local and foreign direct investment inflows and a significant tightening in the availability of credit. As a result, some Russian entities may experience difficulties accessing the international equity and debt markets and may become increasingly dependent on state support for their operations. The longer-term effects of the imposed and possible additional sanctions are difficult to determine.

The consolidated financial statements reflect management’s assessment of the impact of the Russian business environment on the operations and the financial position of the Group. The future business environment may differ from management’s assessment.

2. Basis of accounting

Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRSs”).

3. Functional and presentation currency

The functional currency of the Company and the majority of its subsidiaries is considered to be the Russian Rouble (“RUB”). The functional currency of Cyprus based company “Limpieza” Ltd and Ukrainian based companies LLC “Demurinsky Ore-dressing Plant” and LLC “VSMPO Titan Ukraine” is the Ukrainian Hryvna.

The results and financial position of subsidiaries whose functional currency is different from the presentation currency are translated into presentation currency using the following procedures:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- income and expenses for each statement of comprehensive income presented are translated at average exchange rates; and
- all resulting exchange differences shall be recognised in other comprehensive income.

The accompanying consolidated financial statements have been prepared using the US Dollar (“USD”) and Russian Ruble (“RUB”) as the Group’s presentation currencies. All amounts in the consolidated financial statements are presented in thousands of USD and thousands of RUB, unless otherwise stated.

4. Use of estimates and judgments

The preparation of consolidated financial statements in conformity with IFRSs requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from those estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements is included in the following notes:

- Note 15 – Property, plant and equipment;

- Note 16 – Intangible assets;
- Note 27(b)(i) – Credit risk.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year is included in the following notes:

- Note 15 – Property, plant and equipment (related to fair value of property, plant and equipment and useful lives);
- Note 16 – Intangible assets (related to impairment of intangible assets).

Measurement of fair values

A number of the Group’s accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

The Group involves independent appraiser if complex calculations of fair value are required. Key assumptions used in valuations are agreed with by the management of the Group.

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following notes:

- Note 15 – Property, plant and equipment;
- Note 27 – Financial instruments.

5. Changes in significant accounting policies

The Group has initially applied IFRS 15 and IFRS 9 from 1 January 2018. A number of other new standards are also effective from 1 January 2018 but they do not have a material effect on the Group’s financial statements.

IFRS 15 *Revenue from Contracts with Customers*

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaced IAS 18 Revenue, IAS 11 Construction Contracts and related interpretations. Under IFRS 15, revenue is recognised when a customer obtains control of the goods or services. Determining the timing of the transfer of control – at a point in time or over time – requires judgement.

The Group has adopted IFRS 15 since 1 January 2018. Application of the standart did not require significant changes to the method of revenue recognition.

IFRS 9 ***Financial Instruments***

IFRS 9 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 Financial Instruments: Recognition and Measurement.

The following table summarises the impact, net of tax, of transition to IFRS 9 on the opening balance of reserves, retained earnings and NCI (for a description of the transition method, see (iii)).

	Impact of adopting IFRS 9 on 1 January 2018	
Retained earnings	**’000 USD**	**’000 RUB**
Recognition of expected credit losses under IFRS 9	4 648	267 714
Related tax	(888)	(51 133)
Impact at 1 January 2018	**3 760**	**216 581**

The details of new significant accounting policies and the nature and effect of the changes to previous accounting policies are set out below.

(i) Classification and measurement of financial assets and financial liabilities

IFRS 9 contains three principal classification categories for financial assets: measured at amortised cost, FVOCI and FVTPL. The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. IFRS 9 eliminates the previous IAS 39 categories of held to maturity, loans and receivables and available for sale. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never separated. Instead, the hybrid financial instrument as a whole is assessed for classification.

IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities.

The adoption of IFRS 9 has not had a significant effect on the Group’s accounting policies related to financial liabilities.

For an explanation of how the Group classifies and measures financial instruments, treats modifications and accounts for related gains and losses under IFRS 9, see Note 35(j).

The effect of adopting IFRS 9 on the carrying amounts of financial assets at 1 January 2018 relates solely to the new impairment requirements.

Equity securities designated as available-for-sale in accordance with IFRS (IAS) 39, represent investments that the Group intends to hold for the long term for strategic purposes. As permitted by IFRS 9, the Group continued to consider these investments at the date of initial application as measured at FVOCI. Unlike IAS 39, the accumulated fair value reserve related to these investments will never be reclassified to profit or loss.

Trade, other receivables and other investments that were classified as receivables under and loans IAS 39 are now classified at amortised cost. An increase of USD 4 648 thousand or RUB 267 714 thousand (excluding taxes) in the allowance for impairment over these receivables was recognised in opening retained earnings at 1 January 2018 on transition to IFRS 9.

(ii) Impairment of financial assets

IFRS 9 replaces the ‘incurred loss’ model in IAS 39 with an ‘expected credit loss’ (ECL) model. The new impairment model applies to financial assets measured at amortised cost, contract assets and debt investments at FVOCI, but not to investments in equity instruments. Under IFRS 9, credit losses are recognised earlier than under IAS 39.

For assets in the scope of the IFRS 9 impairment model, impairment losses are generally expected to increase and become more volatile. The Group has determined that the application of IFRS 9’s impairment requirements at 1 January 2018 results in an additional allowance for impairment as follows:

	’000 USD	’000 RUB
Loss allowance at 31 December 2017 under IAS 39	**17 326**	**998 004**
Additional impairment recognised at 1 January 2018 on:	4 648	267 714
Trade and other receivables	1 921	110 650
Other investments	1 605	92 451
Cash and cash equivalents	1 122	64 613
Loss allowance at 1 January 2018 under IFRS 9	**21 974**	**1 265 718**

There is no material impact on the Group’s basic or diluted EPS for the years ended 31 December 2018 and 2017.

(iii) Transition

Changes in accounting policies resulting from the adoption of IFRS 9 have been not applied retrospectively, as described below, due to the fact that, the Group has taken an exemption not to restate comparative information for prior periods with respect to classification and measurement (including impairment) requirements. Therefore, comparative periods have not been restated. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of IFRS 9 are recognised in retained earnings and reserves as at 1 January 2018. Accordingly, the information presented for 2017 does not generally reflect the requirements of IFRS 9 but rather those of IAS 39.

The following assessments have been made on the basis of the facts and circumstances that existed at the date of initial application:

- The determination of the business model within which a financial asset is held.
- The designation and revocation of previous designations of certain financial assets and financial liabilities as measured at FVTPL.
- The designation of certain investments in equity instruments not held for trading as at FVOCI.
- If an investment in a debt security had low credit risk at the date of initial application of IFRS 9, then the Group has assumed that the credit risk on the asset had not increased significantly since its initial recognition.

6. Segment reporting

The Group has one primary reportable segment: the manufacturing and sale of titanium products. The Group evaluates performance and makes investment and strategic decisions based upon a review of profitability for the Group as a whole. In 2018, the Group revised the presentation of geographical segment in the financial statements by aggregating them, and the Group identified the main market segment in terms of sales management and concentration of market risk.

Revenue	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Europe	536 065	483 664	33 615 456	28 223 228
North America	469 112	443 315	29 416 945	25 868 731
Russia	462 208	424 394	28 984 055	24 764 633
Asia	132 205	144 109	8 290 302	8 409 212
Other CIS countries	17 469	12 239	1 095 406	714 142
	1 617 059	**1 507 721**	**101 402 164**	**87 979 946**

Revenue	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Foreign countries other than CIS, including:	1 137 382	1 071 088	71 322 703	62 501 171
Aerospace industry	*997 789*	*938 955*	*62 569 099*	*54 790 798*
Other industries	*139 593*	*132 133*	*8 753 604*	*7 710 373*
Russia and CIS, including:	479 677	436 633	30 079 461	25 478 775
Aerospace industry	*206 430*	*212 744*	*12 944 776*	*12 414 223*
Other industries	*273 247*	*223 889*	*17 134 685*	*13 064 552*
	1 617 059	**1 507 721**	**101 402 164**	**87 979 946**

The Group has revenue from one customer amounting to 10% or more of total revenue in the amount of approximately USD 270 million or RUB 16 902 million (2017: USD 276 million or RUB 16 078 million). Furthermore, revenue to parties under Government control is disclosed in Note 32.

7. Revenue

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Revenue from sales of goods	1 595 885	1 477 720	100 074 411	86 229 283
Revenue from services provided	20 602	29 771	1 291 888	1 737 206
Other revenue	572	230	35 865	13 457
	1 617 059	**1 507 721**	**101 402 164**	**87 979 946**

The main share of revenue is recognised under contracts with customers.

8. Income and expenses

(a) Cost of sales

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Materials and consumables used	(374 585)	(322 343)	(23 489 391)	(18 809 659)
Depreciation property, plant and equipment	(194 603)	(266 934)	(12 203 093)	(15 576 388)
Personnel cost	(144 309)	(145 860)	(9 049 274)	(8 511 334)
Utilities	(111 055)	(116 380)	(6 964 004)	(6 791 137)
Social insuarance costs	(42 911)	(43 954)	(2 690 880)	(2 564 871)
Repairs and maintenance	(23 386)	(24 709)	(1 466 502)	(1 441 814)
Semi-product processing services	(12 911)	(13 909)	(809 624)	(811 699)
Pension cost	(819)	(4 124)	(51 361)	(240 623)
Depreciation intangible assets	(23)	(21)	(1 427)	(1 225)
Provision for inventory obsolescence	5 751	2 164	360 654	126 286
Other costs	(27 682)	(20 490)	(1 735 888)	(1 195 642)
	(926 533)	**(956 560)**	**(58 100 790)**	**(55 818 106)**

(b) Distribution expenses

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Personnel cost	(9 616)	(9 377)	(602 996)	(547 184)
Transport	(7 201)	(7 874)	(451 573)	(459 473)
Materials	(5 899)	(6 299)	(369 909)	(367 551)
Certification expenses	(2 364)	(3 105)	(148 269)	(181 214)
Advertising expenses	(1 401)	(1 544)	(87 825)	(90 079)
Social insuarance costs	(1 166)	(1 166)	(73 139)	(68 022)
Customs	(131)	(133)	(8 243)	(7 768)
Other	(6 445)	(5 694)	(404 069)	(332 262)
	(34 223)	**(35 192)**	**(2 146 023)**	**(2 053 553)**

(c) General and administrative expenses

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Personnel cost	(81 749)	(82 382)	(5 126 277)	(4 807 233)
Insurance	(20 419)	(23 284)	(1 280 458)	(1 358 683)
Social insuarance costs	(19 684)	(17 720)	(1 234 370)	(1 034 023)
Depreciation property, plant and equipment	(18 887)	(19 583)	(1 184 337)	(1 142 690)
Taxes other than income tax	(9 190)	(8 667)	(576 304)	(505 732)
Charity expenses	(9 034)	(10 069)	(566 521)	(587 554)
Repair and maintenance	(6 462)	(6 259)	(405 204)	(365 232)
Materials	(6 421)	(2 503)	(402 667)	(146 034)
Impairment loss on trade and other receivables	(5 784)	(3 322)	(362 723)	(193 873)
Consulting expenses	(4 811)	(4 706)	(301 711)	(274 603)
Depreciation intangible assets	(304)	(280)	(19 037)	(16 364)
Other expenses	(20 421)	(29 191)	(1 280 489)	(1 703 400)
	(203 166)	**(207 966)**	**(12 740 098)**	**(12 135 421)**

9. Net finance (costs)/income

Finance income	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Interest income	34 663	39 902	2 173 620	2 328 403
Dividend income	10 824	-	678 767	-
Foreign currency exchange gain, net	-	18 056	-	1 053 657
Finance income	**45 487**	**57 958**	**2 852 387**	**3 382 060**
Finance costs				
Interest expenses	(56 366)	(41 842)	(3 534 566)	(2 441 590)
Foreign currency exchange loss, net	(115 877)	-	(7 266 373)	-
Finance costs	**(172 243)**	**(41 842)**	**(10 800 939)**	**(2 441 590)**

10. Earnings per share

The calculation of earnings per share is based on the profit for the year and weighted average number of ordinary shares outstanding during the year, calculated as shown below. The Company has no dilutive potential ordinary shares, thus diluted earning per share is equal to base earning per share.

In units of shares	**2018**	**2017**
Issued shares as at 1 January	11 523 801	11 523 801
Effect of treasury shares owned	-	-
Weighted average number of shares for the year ended 31 December	11 523 801	11 523 801

	2018	**2017**
Weighted average number of shares for the year ended 31 December	11 523 801	11 523 801
Profit attributable to the equity holders of the Company ('000 USD)	246 690	220 163
Basic earnings per share (USD per 1 share)	21,407	19,105

	2018	**2017**
Weighted average number of shares for the year ended 31 December	11 523 801	11 523 801
Profit attributable to the equity holders of the Company ('000 RUB)	15 469 455	12 847 193
Basic earnings per share (RUB per 1 share)	1 342,392	1 114,840

11. Employee benefits

The post employment and post retirement programs of some Group companies consists of lump-sum benefits upon death and retirement, an occupational pension plan and additional support provided by the Group to its retired employees. The pension benefits are dependent on participants’ past service. The lump sum benefits upon retirement are based on the monthly base wage and are further dependent on a participant’s past service at retirement.

The defined benefit pension plan provides an old age retirement pension and disability pension.

Such post employment, post retirement and pension plans are not tax deductible under Russian tax rules and the Group does not recognize any deferred tax assets related to defined benefit obligation.

The last independent actuarial valuation of pension and other post employment and post retirement benefits for the purpose of IFRS financial statements preparation was performed in March 2019 with a valuation date of 31 December 2018. For the purposes of that valuation, census data as at the valuation date was collected for the Group.

(a) Movement in net defined benefit liability

The following table shows a reconciliation from the opening balances to the closing balances for net defined benefit liability and its components.

	Defined benefit obligation	
'000 USD	**2018**	**2017**
Balance as at 1 January	**35 699**	**33 013**
Included in profit or loss		
Current service cost	(1 640)	1 207
Interest cost	2 459	2 917
	819	**4 124**
Included in other comprehensive income		
Remeasurements loss:		
- Actuarial loss	(172)	(99)
	(172)	**(99)**
Other		
Benefits paid	(3 253)	(3 102)
Cumulative translation adjustment	(5 646)	1 763
	(8 899)	**(1 339)**
Balance as at 31 December	**27 447**	**35 699**

	Defined benefit obligation	
'000 RUB	**2018**	**2017**
Balance as at 1 January	**2 056 269**	**2 002 446**
Included in profit or loss		
Current service cost	(102 860)	70 415
Interest cost	154 221	170 208
	51 361	**240 623**
Included in other comprehensive income		
Remeasurements loss:		
- Actuarial loss	(10 767)	(5 800)
	(10 767)	**(5 800)**
Other		
Benefits paid	(204 000)	(181 000)
Cumulative translation adjustment	13 905	-
	(190 095)	**(181 000)**
Balance as at 31 December	**1 906 768**	**2 056 269**

(b) Actuarial assumptions

The following were the principal actuarial assumptions used to estimate for net defined benefit liability and its components of the Company at the reporting date (expressed as weighted averages).

	2018	2017
Discount rate	8,60%	7,50%
Future salary growth	5,00%	5,00%
Future pension growth	4,00%	4,00%
Staff turnover	the probability of dismissal depends on gender and age, calculated on the basis of statistical data	up to age 49: 5% p.a. from age 50: 0% p.a.
Mortality	Sverdlovsk region population 2016 with correction*	Sverdlovsk region population 2016

*The probability of mortality at each age has been reduced by 20% for men and women.

Assumptions regarding future mortality have been based on published statistics and mortality tables.

Due to the fact that the amount of net defined benefit liability of the other Group's subsidiaries is not significant, the actuarial assumptions are not disclosed.

(c) Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts are provided below:

31 December 2018	Defined benefit obligation	
'000 USD	**Increase**	**Decrease**
Discount rate (1% movement)	(2 111)	2 511
Future salary (1% movement)	2 594	(2 207)

31 December 2018	Defined benefit obligation	
'000 RUB	**Increase**	**Decrease**
Discount rate (1% movement)	(146 652)	174 459
Future salary (1% movement)	180 201	(153 338)

12. Employee benefit expenses

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Wages and salaries, social insuarance costs	(299 435)	(300 459)	(18 776 936)	(17 532 667)
Pension cost	(819)	(4 124)	(51 361)	(240 623)
	(300 254)	**(304 583)**	**(18 828 297)**	**(17 773 290)**

13. Income tax expense

The Company applied 18,25% tax rate for income tax in 2018 (2017: 18,37%). Other Russian subsidiaries applied 20% tax rate for income tax in 2018 (2017: 20%).

(a) Amounts recognised in profit or loss

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Current tax expense				
Current period	(83 853)	(85 644)	(5 258 215)	(4 997 651)
(Under)/over provided in prior periods	(5 889)	(318)	(369 347)	(18 529)
	(89 742)	**(85 962)**	**(5 627 562)**	**(5 016 180)**
Deferred tax expense				
Origination and reversal of temporary differences	36 065	2 282	2 261 603	133 201
	(53 677)	**(83 680)**	**(3 365 959)**	**(4 882 979)**

(b) Amounts recognised in other comprehensive income

’000 USD	**2018**			**2017**		
	Before tax	**Tax**	**Net of tax**	**Before tax**	**Tax**	**Net of tax**
Translation to presentation currency	(503 569)	-	(503 569)	137 055	-	137 055
Foreign currency translation differences	(1 756)	-	(1 756)	223	-	223
Equity investments at FVOCI – net change in fair value	(106 613)	-	(106 613)	(14 381)	-	(14 381)
Revaluation of property, plant and equipment	347 909	(91 836)	256 073	741 463	(136 511)	604 952
Defined benefit plan revaluation	172	-	172	99	-	99
Equity-accounted investees – share of other comprehensive income	(2 915)	583	(2 332)	(1 248)	250	(998)
	(266 772)	**(91 253)**	**(358 025)**	**863 211**	**(136 261)**	**726 950**

	2018			**2017**		
’000 RUB	**Before tax**	**Tax**	**Net of tax**	**Before tax**	**Tax**	**Net of tax**
Foreign currency translation differences	(110 143)	-	(110 143)	12 998	-	12 998
Equity investments at FVOCI – net change in fair value	(6 685 453)	-	(6 685 453)	(839 194)	-	(839 194)
Revaluation of property, plant and equipment	24 169 458	(6 379 953)	17 789 505	42 708 423	(7 863 080)	34 845 343
Defined benefit plan revaluation	10 767	-	10 767	5 800	-	5 800
Equity-accounted investees – share of other comprehensive income	(182 786)	36 557	(146 229)	(72 830)	14 566	(58 264)
	17 201 843	**(6 343 396)**	**10 858 447**	**41 815 197**	**(7 848 514)**	**33 966 683**

Reconciliation of effective tax rate:

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Profit before income tax	298 225	303 482	18 701 154	17 709 106
Income tax at applicable tax rate	(54 426)	(55 750)	(3 412 961)	(3 253 163)
Effect of income taxed at different rates	3 525	(4 108)	234 744	(239 751)
Effect of non-taxable income/(non-deductible expenses)	3 113	(8 817)	181 605	(514 503)
Write-off of previously recognized deferred tax assets	-	(14 687)	-	(857 033)
(Under)/over provided in prior years	(5 889)	(318)	(369 347)	(18 529)
	(53 677)	**(83 680)**	**(3 365 959)**	**(4 882 979)**

(c) Movement in deferred tax balances

						31 December 2018		
'000 USD	**1 January 2018**	**Adjustment on initial application of IFRS 9**	**Recognized in profit or loss**	**Recognized in other comprehen-sive income**	**Translation difference**	**Net deferred balances**	**Deferred tax asset**	**Deferred tax liability**
Property, plant and equipment	(448 889)	-	25 915	(91 836)	74 188	(440 622)	2 123	(442 745)
Intangible assets	(1 411)	-	512	-	(36)	(935)	36	(971)
Inventories	15 708	-	5 091	-	(3 180)	17 619	35 589	(17 970)
Trade and other receivables	2 150	367	483	-	(477)	2 523	2 546	(23)
Trade and other payables	994	-	250	-	(195)	1 049	1 080	(31)
Investments	(9 570)	521	4 176	583	1 084	(3 206)	883	(4 089)
Tax loss carry-forwards	28	-	(89)	-	4	(57)	29	(86)
Borrowings	(2 217)	-	(92)	-	388	(1 921)	-	(1 921)
Other items	(10)	-	(181)	-	20	(171)	392	(563)
Total deferred tax balances	**(443 217)**	**888**	**36 065**	**(91 253)**	**71 796**	**(425 721)**	**42 678**	**(468 399)**
Set-off of tax						**-**	**(37 430)**	**37 430**
Net deferred tax balances						**(425 721)**	**5 248**	**(430 969)**

					31 December 2017		
'000 USD	**1 January 2017**	**Recognized in profit or loss**	**Recognized in other comprehen-sive income**	**Translation difference**	**Net deferred balances**	**Deferred tax asset**	**Deferred tax liability**
Property, plant and equipment	(304 003)	7 662	(136 511)	(16 037)	(448 889)	796	(449 685)
Intangible assets	2 040	(3 660)	-	209	(1 411)	202	(1 613)
Inventories	7 270	7 948	-	490	15 708	36 650	(20 942)
Trade and other receivables	4 284	(2 331)	-	197	2 150	2 269	(119)
Trade and other payables	933	11	-	50	994	1 021	(27)
Investments	3 138	(12 957)	250	(1)	(9 570)	13	(9 583)
Tax loss carry-forwards	23	3	-	2	28	28	-
Borrowings	(1 903)	(210)	-	(104)	(2 217)	-	(2 217)
Other items	(5 605)	5 816	-	(221)	(10)	265	(275)
Total deferred tax balances	**(293 823)**	**2 282**	**(136 261)**	**(15 415)**	**(443 217)**	**41 244**	**(484 461)**
Set-off of tax					**-**	**(38 841)**	**38 841**
Net deferred tax balances					**(443 217)**	**2 403**	**(445 620)**

'000 RUB	1 January 2018	Adjustment on initial application of IFRS 9	Recognized in profit or loss	Recognized in other comprehen-sive income	Translation difference	31 December 2018 Net deferred balances	31 December 2018 Deferred tax asset	31 December 2018 Deferred tax liability
Property, plant and equipment	(25 856 114)	-	1 625 056	(6 379 953)	737	(30 610 274)	147 490	(30 757 764)
Intangible assets	(81 260)	-	32 081	-	(15 806)	(64 985)	2 493	(67 478)
Inventories	904 758	-	319 250	-	-	1 224 008	2 472 392	(1 248 384)
Trade and other receivables	123 847	21 134	30 272	-	-	175 253	176 845	(1 592)
Trade and other payables	57 222	-	15 667	-	-	72 889	75 071	(2 182)
Investments	(551 193)	29 999	261 870	36 557	-	(222 767)	61 362	(284 129)
Tax loss carry-forwards	1 615	-	(5 608)	-	-	(3 993)	1 948	(5 941)
Borrowings	(127 694)	-	(5 788)	-	-	(133 482)	-	(133 482)
Other items	(571)	-	(11 197)	-	-	(11 768)	27 217	(38 985)
Total deferred tax balances	**(25 529 390)**	**51 133**	**2 261 603**	**(6 343 396)**	**(15 069)**	**(29 575 119)**	**2 964 818**	**(32 539 937)**
Set-off of tax						**-**	**(2 600 257)**	**2 600 257**
Net deferred tax balances						**(29 575 119)**	**364 561**	**(29 939 680)**

'000 RUB	1 January 2017	Recognized in profit or loss	Recognized in other comprehen-sive income	Translation difference	31 December 2017 Net deferred balances	31 December 2017 Deferred tax asset	31 December 2017 Deferred tax liability
Property, plant and equipment	(18 439 891)	447 117	(7 863 080)	(260)	(25 856 114)	45 850	(25 901 964)
Intangible assets	123 754	(213 567)	-	8 553	(81 260)	11 661	(92 921)
Inventories	440 977	463 781	-	-	904 758	2 111 020	(1 206 262)
Trade and other receivables	259 848	(136 001)	-	-	123 847	130 709	(6 862)
Trade and other payables	56 577	645	-	-	57 222	58 785	(1 563)
Investments	190 315	(756 074)	14 566	-	(551 193)	776	(551 969)
Tax loss carry-forwards	1 421	194	-	-	1 615	1 615	-
Borrowings	(115 426)	(12 268)	-	-	(127 694)	-	(127 694)
Other items	(339 945)	339 374	-	-	(571)	15 254	(15 825)
Total deferred tax balances	**(17 822 370)**	**133 201**	**(7 848 514)**	**8 293**	**(25 529 390)**	**2 375 670**	**(27 905 060)**
Set-off of tax					**-**	**(2 237 269)**	**2 237 269**
Net deferred tax balances					**(25 529 390)**	**138 401**	**(25 667 791)**

As at 31 December 2018, deferred tax liabilities for temporary differences (before calculating tax effect) of USD 593 774 thousand or RUB 41 249 870 thousand (2017: USD 463 294 thousand or RUB 26 685 836 thousand) related to investments in subsidiaries were not recognized because the Group controls whether the liability will be incurred and it is satisfied that it will not be incurred in the foreseeable future.

As at 31 December 2018, the Group didn't recognize deferred tax assets related to losses of USD 108 414 thousand or RUB 7 531 576 thousand (2017: USD 15 020 thousand or RUB 865 170 thousand) due to the low probability of earning taxable profit to use these losses.

14. Earnings before interest, tax, depreciation and amortisation (EBITDA)

The management of the Group have presented the performance measure EBITDA as management monitors this performance measure at consolidated level and management believes this measure is relevant for understanding of the Group's financial performance. EBITDA is calculated by adjusting operating profit to exclude the impact of depreciation and amortisation.

EBITDA is not a defined performance measure in IFRS. The Group’s definition of EBITDA may not be comparable with similarly titled performance measures and disclosures by other entities.

Reconciliation of EBITDA

	Note	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Operating profit		436 339	299 511	27 361 917	17 477 333
Adjustments for:					
- Depreciation	15	213 490	286 517	13 387 430	16 719 078
- Amortisation	16	327	301	20 464	17 589
EBITDA		**650 156**	**586 329**	**40 769 811**	**34 214 000**

15. Property, plant and equipment

’000 USD	Buildings and construc-tions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Cost							
Balance at 1 January 2017	973 112	3 801 856	117 910	157 791	49 636	210 288	5 310 593
Additions	1 619	20 168	1 500	3	1 330	121 093	145 713
Transfers	36 406	75 000	4 234	6 015	3 112	(124 767)	-
Disposals	(2 095)	(64 916)	(3 091)	(936)	(1 935)	(11 160)	(84 133)
Revaluation	18 152	133 733	27	4 221	(500)	10 705	166 338
Translation to presentation currency	51 630	201 222	6 243	8 440	2 604	10 687	280 826
Balance at 31 December 2017	**1 078 824**	**4 167 063**	**126 823**	**175 534**	**54 247**	**216 846**	**5 819 337**
Accumulated depreciation							
Balance at 1 January 2017	(634 025)	(2 217 011)	(36 174)	(99 575)	(33 513)	(2 345)	(3 022 643)
Depreciation charge	(23 779)	(153 994)	(8 751)	(6 859)	(5 876)	-	(199 259)
Impairment losses	(1 943)	(4 313)	(12)	(84)	(411)	657	(6 106)
Disposals	1 068	56 933	1 821	671	1 672	-	62 165
Revaluation	139 584	426 759	2 654	2 230	3 898	-	575 125
Translation to presentation currency	(33 856)	(118 813)	(1 993)	(5 366)	(1 802)	(112)	(161 942)
Balance at 31 December 2017	**(552 951)**	**(2 010 439)**	**(42 455)**	**(108 983)**	**(36 032)**	**(1 800)**	**(2 752 660)**
Net book value							
Balance at 1 January 2017	**339 087**	**1 584 845**	**81 736**	**58 216**	**16 123**	**207 943**	**2 287 950**
Balance at 31 December 2017	**525 873**	**2 156 624**	**84 368**	**66 551**	**18 215**	**215 046**	**3 066 677**
Cost							
Balance at 1 January 2018	1 078 824	4 167 063	126 823	175 534	54 247	216 846	5 819 337
Additions	264	45 270	1 407	-	1 982	92 556	141 479
Transfers	15 643	97 017	1 350	4 006	4 278	(122 294)	-
Disposals	(13 269)	(52 811)	(4 068)	(564)	(1 845)	-	(72 557)
Revaluation	66 572	345 439	7 870	11 803	3 959	3 617	439 260
Translation to presentation currency	(183 627)	(719 060)	(21 439)	(30 328)	(9 265)	(33 486)	(997 205)
Balance at 31 December 2018	**964 407**	**3 882 918**	**111 943**	**160 451**	**53 356**	**157 239**	**5 330 314**
Accumulated depreciation							
Balance at 1 January 2018	(552 951)	(2 010 439)	(42 455)	(108 983)	(36 032)	(1 800)	(2 752 660)
Depreciation charge	(21 426)	(191 899)	(6 062)	(6 237)	(5 909)	-	(231 533)
Impairment losses	(6 025)	(4 566)	(185)	(65)	(561)	2 546	(8 856)
Disposals	6 162	39 009	2 561	526	1 546	-	49 804
Revaluation	(15 624)	(77 780)	4 524	(1 567)	(904)	-	(91 351)
Translation to presentation currency	96 018	358 176	7 566	19 185	6 290	56	487 291
Balance at 31 December 2018	**(493 846)**	**(1 887 499)**	**(34 051)**	**(97 141)**	**(35 570)**	**802**	**(2 547 305)**
Net book value							
Balance at 1 January 2018	**525 873**	**2 156 624**	**84 368**	**66 551**	**18 215**	**215 046**	**3 066 677**
Balance at 31 December 2018	**470 561**	**1 995 419**	**77 892**	**63 310**	**17 786**	**158 041**	**2 783 009**

'000 RUB	Buildings and constructions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Cost							
Balance at 1 January 2017	59 025 980	230 608 816	7 152 064	9 571 085	3 010 789	12 755 349	322 124 083
Additions	94 454	1 176 890	87 526	179	77 604	7 066 154	8 502 807
Transfers	2 124 393	4 376 492	247 079	350 983	181 588	(7 280 535)	-
Disposals	(122 259)	(3 788 030)	(180 384)	(54 540)	(112 917)	(651 246)	(4 909 376)
Revaluation	1 045 558	7 703 130	1 529	243 112	(28 787)	616 591	9 581 133
Translation to presentation currency	(27 658)	(53 462)	(2 704)	-	(3 620)	(15 962)	(103 406)
Balance at 31 December 2017	**62 140 468**	**240 023 836**	**7 305 110**	**10 110 819**	**3 124 657**	**12 490 351**	**335 195 241**
Accumulated depreciation							
Balance at 1 January 2017	(38 457 987)	(134 476 998)	(2 194 184)	(6 039 932)	(2 032 785)	(142 268)	(183 344 154)
Depreciation charge	(1 387 598)	(8 986 021)	(510 629)	(400 233)	(342 816)	-	(11 627 297)
Impairment losses	(113 399)	(251 712)	(684)	(4 889)	(23 976)	38 356	(356 304)
Disposals	62 338	3 322 197	106 232	39 183	97 545	-	3 627 495
Revaluation	8 040 046	24 581 381	152 869	128 470	224 524	-	33 127 290
Translation to presentation currency	6 496	9 409	1 004	-	2 046	-	18 955
Balance at 31 December 2017	**(31 850 104)**	**(115 801 744)**	**(2 445 392)**	**(6 277 401)**	**(2 075 462)**	**(103 912)**	**(158 554 015)**
Net book value							
Balance at 1 January 2017	**20 567 993**	**96 131 818**	**4 957 880**	**3 531 153**	**978 004**	**12 613 081**	**138 779 929**
Balance at 31 December 2017	**30 290 364**	**124 222 092**	**4 859 718**	**3 833 418**	**1 049 195**	**12 386 439**	**176 641 226**
Cost							
Balance at 1 January 2018	62 140 468	240 023 836	7 305 110	10 110 819	3 124 657	12 490 351	335 195 241
Additions	16 552	2 838 795	88 259	-	124 270	5 803 984	8 871 860
Transfers	980 905	6 083 736	84 681	251 193	268 272	(7 668 787)	-
Disposals	(832 098)	(3 311 635)	(255 077)	(35 355)	(115 683)	-	(4 549 848)
Revaluation	4 624 831	23 997 858	546 714	819 981	275 051	251 264	30 515 699
Translation to presentation currency	67 300	116 075	7 029	-	30 118	46 654	267 176
Balance at 31 December 2018	**66 997 958**	**269 748 665**	**7 776 716**	**11 146 638**	**3 706 685**	**10 923 466**	**370 300 128**
Accumulated depreciation							
Balance at 1 January 2018	(31 850 104)	(115 801 744)	(2 445 392)	(6 277 401)	(2 075 462)	(103 912)	(158 554 015)
Depreciation charge	(1 343 592)	(12 033 535)	(380 122)	(391 135)	(370 541)	-	(14 518 925)
Impairment losses	(377 864)	(286 346)	(11 591)	(4 067)	(35 150)	159 663	(555 355)
Disposals	386 356	2 446 159	160 626	33 016	96 924	-	3 123 081
Revaluation	(1 085 426)	(5 403 430)	314 256	(108 873)	(62 768)	-	(6 346 241)
Translation to presentation currency	(37 157)	(46 820)	(3 320)	-	(24 040)	-	(111 337)
Balance at 31 December 2018	**(34 307 787)**	**(131 125 716)**	**(2 365 543)**	**(6 748 460)**	**(2 471 037)**	**55 751**	**(176 962 792)**
Net book value							
Balance at 1 January 2018	**30 290 364**	**124 222 092**	**4 859 718**	**3 833 418**	**1 049 195**	**12 386 439**	**176 641 226**
Balance at 31 December 2018	**32 690 171**	**138 622 949**	**5 411 173**	**4 398 178**	**1 235 648**	**10 979 217**	**193 337 336**

Depreciation expense of USD 194 603 thousand or RUB 12 203 093 thousand (2017: USD 266 955 thousand or RUB 15 577 613 thousand) has been charged to cost of sales and USD 18 887 thousand or RUB 1 184 337 thousand (2017: USD 19 562 thousand or RUB 1 141 465 thousand) to general and administrative expenses. The amount of depreciation recognized as expense is provided in Note 8 including change in depreciation charged to inventories (as at 31 December 2018 in the amount of USD 124 749 thousand or RUB 8 666 403 thousand (2017: USD 127 780 thousand or RUB 7 534 908 thousand).

(a) Revaluation of property, plant and equipment

The Group's management employed independent appraiser to determine fair value of property, plant and equipment except for land as at 31 December 2018.

The majority of the Group's property, plant and equipment is specialised in nature and is rarely sold on the open market other than as part of a continuing business. The market for similar property, plant and equipment is not active in the Russian Federation and does not provide a sufficient number of sales of comparable property, plant and equipment for using a market-based approach for determining fair value.

Consequently the fair value of property, plant and equipment was primarily determined using depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical, functional or economical depreciation, and obsolescence.

Depreciated replacement cost was estimated based on internal sources and analysis of the Russian and international markets for similar property, plant and equipment. Various market data were collected from published information, catalogues, statistical data, etc. and industry experts and suppliers of property, plant and equipment were contacted both in the Russian Federation and abroad.

In addition to the determination of the depreciated replacement cost, cash flow testing was conducted. As a result depreciated replacement cost values were not decreased.

The following key assumptions were used in performing the cash flow testing:

- Cash flows were projected based on actual operating results for 2018 and budgets for 2019-2023. Budgets for 2019 – 2023 are based on concluded contracts, which allow forecast for a period of five years. During the mentioned period the Group's management plans to increase volume of titanium production through higher utilization of current production assets, implementing efficiency improvement program. It is expected that production volume will increase by 21% by 2022 and further will be stable;
- EBITDA was projected at the level historically achieved by the Group;
- Capital expenditures for 2019 were projected based on the Group's investment program. Capital expenditures for 2019-2023 ranged from 3,06% to 7,99% of the Group's forecasted revenue. In the terminal period the amount of capital expenditures equalled to 5,02% of the terminal period forecasted revenue, which is comparable with the annual physical depreciation calculated on the basis of replacement cost;
- The forecasted USD exchange rates ranged from 66,8 roubles per dollar in 2019 to 65 roubles per dollar in 2023. In the terminal period the forecasted USD exchange rate equalled to 66,3 roubles per dollar;
- The forecasted rates of rouble inflation were: in 2019 – 4,5%; in 2020 – 2023 – range from 4,0% to 4,3%, in the terminal period – 4,0%;
- The forecasted rates of dollar inflation were: in 2019 – 2,4%; in 2020 – 1,6%; in 2021 – 1,8%; in 2022 – 1,7%; in 2023 – 1,8%; in the terminal period – 1,9%;
- The after-tax discount rate of 11,5% was applied to discount projected cash flows for the whole period;
- Discount rate was estimated based on an industry weighted average cost of capital, which applied a possible debt leveraging of 34% at a market borrowing rate of 5,6%;
- A terminal rate of 4,0% was considered in estimating the terminal value.

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

The amount of discounted cash flows exceeded the carrying value of property, plant and equipment and goodwill as at 31 December 2018.

Decrease of the carrying amount of certain fixed assets in the amount of USD 8 856 thousand or RUB 555 355 thousand was recognized in the current year loss (2017: USD 6 106 thousand or RUB 356 304 thousand).

Increase of the carrying amount of property, plant and equipment in the amount of USD 347 909 thousand or RUB 24 169 458 thousand was recognized in other comprehensive income (2017: USD 741 463 thousand or RUB 42 708 423 thousand). The revaluation surplus is not subject to distribution to shareholders of the Group.

Information on net book value of property, plant and equipment as at 31 December 2018 should the Group continue accounting using cost model is provided below. Actual depreciation charge for 2018 is higher by USD 145 116 thousand or RUB 9 099 851 thousand (2017: USD 113 676 thousand or RUB 6 633 326 thousand) comparing to depreciation charge that would have been charged under cost model.

’000 USD	Buildings and construc-tions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Balance at 31 December 2018	111 103	429 982	44 466	27 006	11 972	143 486	768 015

’000 RUB	Buildings and construc-tions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Balance at 31 December 2018	7 718 398	29 871 018	3 089 041	1 876 116	831 713	9 967 974	53 354 260

(b) Security

At 31 December 2018, properties with a net book value of USD 11 823 thousand or RUB 821 349 thousand (2017: USD 13 133 thousand or RUB 756 455 thousand) are pledged to secure bank loans (see Note 25).

(c) Property, plant and equipment under construction

Advances given to suppliers for capital construction in the amount of USD 22 356 thousand or RUB 1 553 093 thousand (31 December 2017: USD 26 026 thousand or RUB 1 499 083 thousand) are included in the balance of assets under construction.

In 2018, capitalized borrowing costs related to the construction of new property, plant and equipment amounted to USD 3 508 thousand or RUB 219 961 thousand (2017: USD 4 785 thousand or RUB 279 228 thousand) with an average capitalization rate of 4,23% (2017: 4,00%).

16. Intangible assets

'000 USD	Mining rights	Land lease rights	Other	Total
Cost				
Balance at 1 January 2017	37 753	9 632	1 111	48 496
Acquisitions	1	2 314	319	2 634
Effect of the movement of exchange rates	807	543	(139)	1 211
Balance at 31 December 2017	**38 561**	**12 489**	**1 291**	**52 341**
Accumulated amortization and impairment losses				
Balance at 1 January 2017	(21 835)	(1 060)	(853)	(23 748)
Amortization for the period	(11)	(265)	(25)	(301)
Impairment losses	(6 614)	(874)	-	(7 488)
Effect of the movement of exchange rates	(887)	(72)	(267)	(1 226)
Balance at 31 December 2017	**(29 347)**	**(2 271)**	**(1 145)**	**(32 763)**
Carrying amounts				
Balance at 1 January 2017	**15 918**	**8 572**	**258**	**24 748**
Balance at 31 December 2017	**9 214**	**10 218**	**146**	**19 578**
Cost				
Balance at 1 January 2018	38 561	12 489	1 291	52 341
Acquisitions	14	-	35	49
Disposals	(23 495)	-	(9)	(23 504)
Effect of the movement of exchange rates	(1 901)	(2 134)	(32)	(4 067)
Balance at 31 December 2018	**13 179**	**10 355**	**1 285**	**24 819**
Accumulated amortization and impairment losses				
Balance at 1 January 2018	(29 347)	(2 271)	(1 145)	(32 763)
Amortization for the period	(13)	(272)	(42)	(327)
Disposals	23 495	-	9	23 504
Impairment losses	(5 022)	(109)	-	(5 131)
Effect of the movement of exchange rates	2 104	426	31	2 561
Balance at 31 December 2018	**(8 783)**	**(2 226)**	**(1 147)**	**(12 156)**
Carrying amounts				
Balance at 1 January 2018	**9 214**	**10 218**	**146**	**19 578**
Balance at 31 December 2018	**4 396**	**8 129**	**138**	**12 663**

’000 RUB	**Mining rights**	**Land lease rights**	**Other**	**Total**
Cost				
Balance at 1 January 2017	2 289 890	584 309	67 399	2 941 598
Acquisitions	64	135 053	18 599	153 716
Effect of the movement of exchange rates	(68 851)	-	(11 647)	(80 498)
Balance at 31 December 2017	**2 221 103**	**719 362**	**74 351**	**3 014 816**
Accumulated amortization and impairment losses				
Amortization for the period	(671)	(15 459)	(1 459)	(17 589)
Impairment losses	(385 926)	(51 016)	-	(436 942)
Effect of the movement of exchange rates	20 657	-	(12 704)	7 953
Balance at 31 December 2017	**(1 690 381)**	**(130 758)**	**(65 929)**	**(1 887 068)**
Carrying amounts				
Balance at 1 January 2017	**965 449**	**520 026**	**15 633**	**1 501 108**
Balance at 31 December 2017	**530 722**	**588 604**	**8 422**	**1 127 748**
Cost				
Balance at 1 January 2018	2 221 103	719 362	74 351	3 014 816
Acquisitions	904	-	2 188	3 092
Disposals	(1 473 317)	-	(577)	(1 473 894)
Effect of the movement of exchange rates	166 850	(5)	13 283	180 128
Balance at 31 December 2018	**915 540**	**719 357**	**89 245**	**1 724 142**
Accumulated amortization and impairment losses				
Balance at 1 January 2018	(1 690 381)	(130 758)	(65 929)	(1 887 068)
Amortization for the period	(784)	(17 032)	(2 648)	(20 464)
Disposals	1 473 317	-	577	1 473 894
Impairment losses	(314 912)	(6 851)	-	(321 763)
Effect of the movement of exchange rates	(77 398)	9	(11 660)	(89 049)
Balance at 31 December 2018	**(610 158)**	**(154 632)**	**(79 660)**	**(844 450)**
Carrying amounts				
Balance at 1 January 2018	**530 722**	**588 604**	**8 422**	**1 127 748**
Balance at 31 December 2018	**305 382**	**564 725**	**9 585**	**879 692**

Amortization expense for intangible assets of USD 327 thousand or RUB 20 464 thousand (2017: USD 301 thousand or RUB 17 589 thousand) has been charged to administrative expenses and cost of sales.

(a) “Tsentralnoe” deposit mining rights

In July 2011, the Group acquired mining rights for the development of the Northern part of the Eastern field of the “Tsentralnoe” deposit located in the Tambov region of Russia.

This license gives the right to explore the deposits and mine ilmenite-rutile-zircon sands, which serve as the main raw material for the production of titanium sponge. The Group carried out a complex of experimental and scientific works to determine the feasibility of developing “Tsentralnoe” deposit as a source of titanium raw materials. As a result of the analysis of the work carried out, the Group concluded that the minimum possible volume of extraction of sands and the production of commercial concentrates (ilmenite, rutile, and zirconium) from which the deposit is economically feasible significantly exceeds the market demand. Overproduction of concentrates was identified as the most significant risk in the implementation of the project.

Therefore, in 2017, the Group recognized the project for the extraction of ilmenite-rutile-zircon sands of “Tsentralnoe” deposit as unprofitable and decided to close the project. Therefore, the cost of the license was fully impaired, the impairment loss in 2017 amounted to USD 6 614 thousand or USD 385 926 thousand.

In 2018, the mining rights for the development were sold.

(b) **“Volchanskoe” deposit mining rights**

In July 2012, the Group acquired 75% share in Limpieza Group, which holds a license on extraction of ilmenite-zircon sands in “Volchanskoe” field in the Dnepropetrovsk region of Ukraine. The total amount of the field’s reserves are assessed at the level of 5 million tonnes of ilmenite, rutil, zircon and other minerals. The Group acquired these mining rights for USD 44 380 thousand or RUB 1 456 420 thousand. The Group commenced mining in 2016.

Before 2018, the Group recognized impairment loss in the amount of USD 18 321 thousand or RUB 520 794 thousand due to the delay in project realisation and increase of discount rate due to increased country risks.

In 2018, the Group recognized additional impairment loss in the amount of USD 5 022 thousand or RUB 314 912 thousand.

As at 31 December 2018, the Group performed assessment of the recoverable amount of the mining rights for development of the “Volchanskoe” deposit in the Dnepropetrovsk region and respective property, plant and equipment. The recoverable amount was determined based on value in use calculations as determined by discounting the future cash flows generated from the continuing use of the assets. The following key assumptions were used in determining the recoverable amount:

- Cash flows were projected based on plans to mining production of ilmenite, rutile and zirconium concentrate in the amount of 21 thousand tons in 2019; in 2020 – 40 thousand tons and an average of 34 thousand tons per year further until 2031;
- The after-tax discount rates of 30,40% and 28,14% were applied to discount projected cash flows in 2019 and 2020, respectively. For the remaining period the after-tax discount rates ranged from 21,21% to 26,92%;
- The discount rates were estimated based on an industry weighted average cost of capital, which applied a possible debt leveraging of 38% and a market borrowing rates 15,0% for 2019, 13,0% for 2020, 12,0% for 2021, 11,0% for 2022 and 10,5% for the remaining period;
- The cash flows were forecasted until the moment of effective mining life, therefore, the terminal value was not calculated.

The values assigned to the key assumptions represent management’s assessment of future trends in the industry and are based on both external sources and internal sources.

Based on the result of the above test the value in use of the mining rights as at 31 December 2018 was lower than its carrying amount as at reporting date. Therefore, in 2018, recognized additional impairment loss in the amount of USD 5 022 thousand or RUB 314 912 thousand.

17. Goodwill

	’000 USD	’000 RUB
Balance as at 1 January 2017	**33 002**	**2 001 817**
Cumulative translation adjustment	1 752	-
Balance as at 31 December 2017	**34 754**	**2 001 817**
Balance as at 1 January 2018	**34 754**	**2 001 817**
Cumulative translation adjustment	(5 939)	-
Balance as at 31 December 2018	**28 815**	**2 001 817**

Impairment testing of goodwill

Goodwill was originally determined as a result of VSMPO’s acquisition of AVISMA.VSMPO’s main objectives when acquiring AVISMA were to further expand vertically as well as to ensure full control over its main provider of raw materials. The goodwill relates not only to the specifics of the business of AVISMA but largely to the synergies VSMPO, and the Group as a whole, would benefit from as a result of the business combination. Correspondingly, the goodwill is allocated to VSMPO-AVISMA, as this represents the lowest level within the Group at which the goodwill is monitored by management.

Goodwill related to acquisition of Limpieza Group was initially recognized in July 2012. The goodwill relates to the developed production technology of LLC “Demurinskiy GOK”, high quality of the ilmenite-zircon sands extracted by LLC “Demurinskiy GOK”. The Group as a whole is expected to benefit from this vertical integration and the synergies of the business combination. Correspondingly, the goodwill is allocated to VSMPO-AVISMA, as this represents the lowest level within the Group at which the goodwill is monitored by management.

The recoverable amount was determined based on value in use calculations as determined by discounting the future cash flows generated from the continuing use of the plants (Note 15).

18. Equity-accounted investees and joint operation

The Group has the following investments in equity-accounted investees:

		2018			2017		
	Country	**Carrying value '000 USD**	**Carrying value '000 RUB**	**Interest**	**Carrying value '000 USD**	**Carrying value '000 RUB**	**Interest**
LLC “Uniti”	USA	10 055	698 533	50%	9 463	545 086	50%
OJSC “Uralredmet”	Russia	15 329	1 064 926	25%	15 998	921 463	25%
LLC “Aviacapital Service”	Russia	11 280	783 609	27%	17 026	980 708	27%
		36 664	**2 547 068**		**42 487**	**2 447 257**	

(a) Joint ventures

LLC “Uniti”

On 29 April 2003, the Group entered into the joint arrangement with Allegheny Technologies Incorporated (ATI) to form a joint venture to engage in the marketing and sale of titanium products and conversion services. The joint venture is organized in the form of LLC “Uniti” (“Uniti”), a company registered in the United States of America. The Group’s share in net assets 2018 – 50% (2017 – 50%).

In accordance with the agreement, income or losses are allocated based on the percentage interest in the goods and services provided by the partners that were included in Uniti’s sales. Percentage interest is defined as the ratio of each partner’s transfer price charged for all goods and services included in Uniti’s cost of goods sold for reporting period.

The following is summarised financial information of Uniti as at and for 2018 and 2017:

	2018 '000 USD	**2017 '000 USD**	**2018 '000 RUB**	**2017 '000 RUB**
Non-current assets	49	70	3 404	4 032
Current assets	26 804	22 015	1 862 090	1 268 068
Current liabilities	(3 792)	(2 345)	(263 433)	(135 072)
Net assets (100%)	**23 061**	**19 740**	**1 602 061**	**1 137 028**

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Revenue	79 394	56 247	4 978 621	3 282 178
Profit and total comprehensive income for the year (100%)	**3 321**	**253**	**215 863**	**14 810**
Group's share of income/(loss) for the year	592	(317)	37 123	(18 444)
Dividends received by the Group	-	-	-	-

In 2018, the Group had sales to Uniti of USD 29 469 thousand or RUB 1 847 935 thousand (2017: USD 15 046 thousand or RUB 877 968 thousand).

(b) Associates

OJSC "Uralredmet"

In September 2010, the Group acquired 18,98% of shares in OJSC "Uralredmet", which is one of the key suppliers of alloys to the Group. In April 2011, the Group acquired a further 6,03% of shares in OJSC "Uralredmet" for USD 6 168 thousand or RUB 181 261 thousand. After this acquisition the Group's share in OJSC "Uralredmet" increased to 25% + 1 share and resulted in obtaining significant influence over the operating and financial activities of the company. Investments in OJSC "Uralredmet" were made by the Group to secure supplies of one of the key raw materials used in production of titanium products.

The following is summarized financial information of OJSC "Uralredmet" as at and for the year ended 31 December 2018 and 31 December 2017:

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Revenue	142 083	82 335	8 909 723	4 804 505
Profit for the year (100%)	**9 151**	**2 122**	**573 850**	**123 819**
Group's share of profit for the year	2 288	531	143 463	30 955
Non-current assets	20 132	24 646	1 398 577	1 419 587
Current assets	46 159	32 321	3 206 682	1 861 699
Non-current liabilities	(2 765)	(3 489)	(192 073)	(200 949)
Current liabilities	(17 079)	(7 421)	(1 186 462)	(427 463)
Net assets (100%)	**46 447**	**46 057**	**3 226 724**	**2 652 874**
Group's share of net assets (25%)	11 612	11 514	806 681	663 219

Purchases of the Group for the year ended 31 December 2018 were USD 109 196 thousand or RUB 6 847 469 thousand (2017: USD 68 018 thousand or RUB 3 969 060 thousand).

LLC "Aviacapital-Service"

In September 2014, the Group acquired 27,02% share in statutory capital of LLC "Aviacaptal-Service". The Group converted loan issued to this company in 2012 in the amount of RUB 465 000 thousand or USD 8 265 thousand to the share in statutory capital. After this transaction, the Group obtained significant influence over the operating and financial activities of the company. LLC "Aviacapital-Service" is involved in aircraft leasing business.

The following is summarized financial information of LLC "Aviacapital-Service" as at 31 December 2018 and 31 December 2017:

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Revenue	-	-	-	-
Profit for the period (100%)	**(845)**	**4 569**	**(52 971)**	**266 610**
Other comprehensive loss for the period (100%)	**(10 788)**	**(4 619)**	**(676 484)**	**(269 540)**
Group's share in change of net assets for the year	(3 143)	(14)	(197 099)	(792)

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Non-current assets	50 753	35 964	3 525 812	2 071 561
Current assets	38 660	60 190	2 685 709	3 466 979
Non-current liabilities	(3 169)	(7 415)	(220 165)	(427 093)
Current liabilities	(42 724)	(23 588)	(2 968 056)	(1 358 692)
Net assets (100%)	**43 519**	**65 152**	**3 023 300**	**3 752 755**
Group’s share of net assets (27%)	11 759	17 604	816 895	1 013 994

(c) Joint operation

The Group is a 50% partner in JSC “Ural Boeing Manufacturing” (located in Verkhnyaya Salda, Russia) a joint arrangement formed with the Boeing Company to perform titanium forgings machining services. JSC “Ural Boeing Manufacturing” is separated from the parties in a legal entity. The activity of the arrangement is designed to provide the parties with substantially all output of the joint arrangement. The Group classifies the joint arrangement as a joint operation and consolidates 50% of assets and liabilities of the arrangement.

The Group is a 4,8% partner in “AlTi Forge” Sarl (Switzerland), which in turn owns 100% shares in the capital of JSC “AlTi Forge” (Samara, Russia). In accordance with shareholders agreement with JSC “ARKONIK SMZ” the parties have joint control over the activities of these companies, since decisions on all significant activities of this joint operation require consent of both parties. The activity of this joint operation is designed to provide the parties with substantially all output of the joint arrangement. The purpose of this joint operation for the Group is to secure additional pressing facilities to increase production volumes and ensure continuity of the production process. The Group classifies the joint arrangement as a joint operation and consolidates 4,8% of assets and liabilities of the arrangement.

19. Other investments

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Non-current				
Loans receivable	62 709	67 798	4 356 422	3 905 171
Equity investments at FVOCI	181 554	114 664	12 612 671	6 604 669
Other investments	335	487	23 294	28 042
	244 598	**182 949**	**16 992 387**	**10 537 882**
Current				
Loans receivable	8 335	108 317	579 028	6 239 094
Bank deposits	114	257	7 889	14 817
	8 449	**108 574**	**586 917**	**6 253 911**

In December 2014, the Group issued a subordinated loan to JSC “AKB Novikombank”, which is controlled by State Corporation “Rostec”, in the amount of RUB 2 800 000 thousand or USD 59 155 thousand at the exchange rate at the date of transaction. The loan is payable in 2020. Interest rate equals to 14% fixed per annum. Interest is payable on a monthly basis. The loan is not secured. The Group estimates risks of default on this loan as low.

In addition to shares purchased as at 31 December 2017 of PSC “RusHydro”, in 2018, the Group acquired shares in the amount of USD 209 465 thousand or RUR 12 693 455 thousand. The shares were purchased at market quotes. These investments were classified in the category of equity investments at FVOCI. The group plans to hold shares of PSC “RusHydro” to receive income from dividends and growth of quotations.

As at 31 December 2018, fair value of PSC “RusHydro” shares owned by the Group, amounted to USD 180 247 thousand or RUB 12 521 879 thousand (2017: USD 112 757 thousand or RUB 6 494

830 thousand). Fair value has been determined based on share prices as at 31 December 2018 (level 1 of the fair value hierarchy). Loss on the fair value of shares in the amount of USD 106 309 thousand or RUB 6 666 406 thousand (2017: USD 12 796 thousand or RUB 865 170 thousand) was included in other comprehensive income.

20. Inventories

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Raw materials and consumables	200 081	183 469	13 899 750	10 567 845
Work in progress	140 693	131 283	9 774 035	7 561 950
Finished goods and goods for resale	309 731	330 542	21 517 156	19 039 245
	650 505	**645 294**	**45 190 941**	**37 169 040**

Inventories are shown net of provision of USD 10 722 thousand or RUB 744 839 thousand (2017: USD 19 193 thousand or RUB 1 105 493 thousand).

At 31 December 2018, there are no pledged inventories.

21. Trade and other receivables

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Long-term trade accounts receivable	-	1 590	-	91 567
Short-term trade accounts receivable from contracts with customers	187 590	173 731	13 031 995	10 006 968
Other accounts receivable	16 619	38 818	1 154 480	2 235 904
Less: provision	(21 386)	(17 326)	(1 485 689)	(998 004)
	182 823	**196 813**	**12 700 786**	**11 336 435**
Advances to suppliers	20 189	15 869	1 402 576	914 053
Less: provision	(584)	(714)	(40 542)	(41 102)
Value-added tax recoverable	5 478	18 489	380 503	1 064 952
Other taxes receivable	36 448	10 252	2 532 072	590 503
	244 354	**240 709**	**16 975 395**	**13 864 841**

At 31 December 2018, there are no pledged receivables.

The Group’s exposure to credit and currency risks and impairment losses related to trade and other receivables are disclosed in Note 27.

22. Cash and cash equivalents

	2018 ’000 USD	2017 ’000 USD	2018 ’000 RUB	2017 ’000 RUB
Petty cash	33	64	2 320	3 667
Bank balances	128 424	46 730	8 921 723	2 691 726
Deposits	631 986	759 498	43 904 445	43 747 221
Other cash and cash equivalents	223	235	15 448	13 516
	760 666	**806 527**	**52 843 936**	**46 456 130**

Bank deposits were classified as cash equivalents as their maturity does not exceed three months.

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Cash on hand and bank balances denominated in RUB	50 709	26 109	3 522 774	1 503 883
Cash on hand and bank balances denominated in USD	74 333	17 165	5 163 985	988 735
Cash on hand and bank balances denominated in other currencies	3 415	3 520	237 284	202 775
Short-term bank deposits, denominated in RUB	141 019	192 144	9 796 656	11 067 532
Short-term bank deposits, denominated in USD	490 745	567 141	34 092 323	32 667 452
Short-term bank deposits, denominated in other currencies	222	213	15 466	12 237
Other cash equivalents	223	235	15 448	13 516
	760 666	**806 527**	**52 843 936**	**46 456 130**

The fair value of cash and cash equivalents is equal to their carrying amount. All bank balances and term deposits are neither past due nor impaired. Analysis of the credit quality of the Group's cash and cash equivalents is as follows:

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Cash on hand	33	64	2 320	3 667
Rated Ba2 and above*	716 595	323 669	49 782 270	18 643 372
Rated B1*	10 544	479 391	732 504	27 613 057
Rated B2*	18 941	6	1 315 848	346
Rated Caa1*	1 859	-	129 136	-
Unrated	12 694	3 397	881 858	195 688
	760 666	**806 527**	**52 843 936**	**46 456 130**

* Based on the credit ratings of independent rating agency Moody's.

The Group's exposure to interest rate risk and a sensitivity analysis for financial assets and liabilities are disclosed in Note 27.

As part of its operations, the Group receives cash from customers in order to fulfil government contracts. In accordance with the legislation requirements, funds received under government contracts should be used only for the purposes related to their fulfilment. Thus, funds received under government contracts are restricted in use. At 31 December 2018, restricted funds amounted to USD 148 332 thousand or RUB 10 304 738 thousand (2017: USD 143 751 thousand or RUB 8 280 102 thousand).

23. Capital and reserves

(a) Share capital and additional paid-in capital

Number of shares unless otherwise stated	Ordinary shares 2018	Ordinary shares 2017
Authorised shares	11 529 538	11 529 538
Par value	1 RUB	1 RUB
On issue at the beginning of year	11 529 538	11 529 538
On issue at the end of year, fully paid	**11 529 538**	**11 529 538**

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at general shareholders' meetings of the Company.

Dividends were declared in May 2018 in respect of 2017 to the holders of ordinary shares in the amount of RUB 890,45 per ordinary share (equivalent to USD 14,24 per share translated at the exchange rate at the date of declaration), for the total amount of USD 164 178 thousand or RUB 10 266 478 thousand.

Dividends were declared in September 2018 in respect of first half of 2018 to the holders of ordinary shares in the amount of RUB 756,00 per ordinary share (equivalent to USD 11,48 per share translated at the exchange rate at the date of declaration), for the total amount of USD 132 395 thousand or RUB 8 716 331 thousand.

Dividends were declared in May 2017 in respect of 2016 to the holders of ordinary shares in the amount of RUB 1 300,00 per ordinary share (equivalent to USD 23,01 per share translated at the exchange rate at the date of declaration), for the total amount of USD 265 287 thousand or RUB 14 988 399 thousand.

Dividends were declared in September 2017 in respect of first half of 2017 to the holders of ordinary shares in the amount of RUB 762,68 per ordinary share (equivalent to USD 13,05 per share translated at the exchange rate at the date of declaration), for the total amount of USD 150 505 thousand or RUB 8 793 349 thousand.

In 2018, the Group recovered dividends for previous years that were not received by shareholders in the amount of USD 183 thousand or RUB 11 692 thousand (2017: USD 121 thousand or RUB 6 960 thousand).

In accordance with Russian legislation the Company’s distributable reserves are limited to the balance of retained earnings as recorded in the Company’s statutory financial statements prepared in accordance with Russian Accounting Principles. For 2018, the net statutory profit of the Company as reported in the published annual statutory financial statements amounted to RUB 18 788 910 thousand (equivalent to USD 299 626 thousand translated at the average exchange rate for 2018) (2017: RUB 19 138 279 thousand (equivalent to USD 327 975 thousand translated at the average exchange rate for 2017)) and the closing balance of the retained earnings including the current year net statutory profit amounted toUSD 580 690 thousand or RUB 40 340 865 thousand (2017: USD 704 337 thousand or RUB 40 569 956 thousand).

(b) Treasury shares

As at 31 December 2018, 5 737 shares are recorded as treasury shares (2017: 5 737).

(c) Translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

(d) Fair value reserve

The fair value reserve comprises the cumulative net change in the fair value of equity investments at FVOCI.

(e) Revaluation surplus

The revaluation surplus relates to the revaluation of property, plant and equipment.

24. Capital management

The Group’s objectives when managing capital are to safeguard the Group’s ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, as well as to maintain the required level of financial resources for investing activities and to maintain an optimal capital structure to reduce the cost of capital.

The Group’s capital management includes compliance with externally imposed minimum capital requirements arising from the Group’s borrowings (see Note 25).

The Group monitors capital using a ratio of net debt to equity. For this purpose, net debt is defined as total liabilities, comprising interest-bearing loans and borrowings, less cash and cash equivalents. The Group considers total capital under management to be equity as shown in the IFRS consolidated statement of financial position. The Group’s strategy is to keep the ratio below 1.

	'000 USD		'000 RUB	
	31 December 2018	**31 December 2017**	**31 December 2018**	**31 December 2017**
Total loans and borrowings	1 472 981	1 400 753	102 328 912	80 683 652
Less: cash and cash equivalents	(760 666)	(806 527)	(52 843 936)	(46 456 130)
Net debt	**712 315**	**594 226**	**49 484 976**	**34 227 522**
Total equity	2 597 304	3 010 931	180 436 091	173 430 147
Net debt to equity ratio at 31 December	**0,27**	**0,20**	**0,27**	**0,20**

25. Loans and borrowings

This note provides information about the contractual terms of the Group’s interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group’s exposure to interest rate, foreign currency and liquidity risk, see Note 27.

	2018 ’000 USD	**2017 ’000 USD**	**2018 ’000 RUB**	**2017 ’000 RUB**
Non-current liabilities				
Secured bank loans and borrowings	54 677	16 817	3 798 467	968 670
Unsecured bank loans	1 191 103	1 160 819	82 746 625	66 863 423
	1 245 780	**1 177 636**	**86 545 092**	**67 832 093**
Current liabilities				
Secured bank loans	10 000	-	694 706	-
Unsecured bank loans	217 201	223 117	15 089 114	12 851 559
	227 201	**223 117**	**15 783 820**	**12 851 559**

Terms and debt repayment schedule

Terms and conditions of outstanding loans and borrowings were as follows:

’000 USD			2018		2017	
	Currency	Year maturity	Face value	Carrying amount	Face value	Carrying amount
Long-term loans and borrowings						
Secured bank loans and borrowings						
Russian Commercial Bank	USD	2023	32 500	32 500	-	-
Citibank, N.A.	USD	2023	15 000	15 000	9 000	9 000
The Boeing Company	RUB	2037	7 177	7 177	7 817	7 817
			54 677	***54 677***	***16 817***	***16 817***
Unsecured bank loans						
UniCredit Bank	USD	2020-2023	420 270	418 147	251 226	248 872
Sberbank	USD	2021-2022	287 500	285 396	379 167	375 914
Nordea Bank	USD	2020-2022	147 388	145 944	176 154	174 376
ING Bank	USD	2022-2023	125 000	124 388	125 000	123 723
AKB Novikombank	USD	2022	100 000	100 000	100 000	100 000
Raiffeisen Bank	USD	2019	40 000	39 433	18 000	17 857
Crédit Agricole CIB	USD	2022	38 462	38 134	50 000	49 487
Commerzbank AG	EUR	2024-2025	17 555	17 425	21 577	21 415
AKB Rosbank	USD	2020	12 500	12 500	37 500	37 500
UniCredit Bank AG	EUR	2022-2024	8 357	8 296	11 751	11 675
Russian Technological Development Fund	RUB	2023	1 439	1 439	-	-
Sberbank	RUB	2022	1	1	-	-
			1 198 472	***1 191 103***	***1 170 375***	***1 160 819***
			1 253 149	**1 245 780**	**1 187 192**	**1 177 636**

’000 USD			2018		2017	
	Currency	Year maturity	Face value	Carrying amount	Face value	Carrying amount
Short-term loans						
Secured bank loans						
Russian Commercial Bank	USD	2019	10 000	10 000	-	-
			10 000	***10 000***	***-***	***-***
Unsecured bank loans						
Nordea Bank	USD	2019	66 999	66 344	3 846	3 804
Sberbank	USD	2019	65 618	65 154	54 213	53 693
UniCredit Bank	USD	2019	46 116	45 418	31 935	31 627
AKB Rosbank	USD	2019	12 551	12 551	23 409	23 409
Crédit Agricole CIB	USD	2019	12 167	12 069	-	-
Raiffeisen Bank	USD	2019	9 325	9 048	24 000	23 809
Commerzbank AG	EUR	2019	3 279	3 255	3 226	3 201
UniCredit Bank AG	EUR	2019	2 961	2 939	3 016	2 996
ING Bank	USD	2019	397	397	-	-
Sberbank	RUB	2019	25	25	-	-
Russian Technological Development Fund	RUB	2019	1	1	-	-
Alfa-Bank	USD	2019	-	-	70 000	70 000
Credi Agricole	USD	2019	-	-	11 000	10 578
			219 439	***217 201***	***224 645***	***223 117***
			229 439	**227 201**	**224 645**	**223 117**

’000 RUB			2018		2017	
	Currency	Year maturity	Face value	Carrying amount	Face value	Carrying amount
Long-term loans and borrowings						
Secured bank loans and borrowings						
Russian Commercial Bank	USD	2023	2 257 795	2 257 795	-	-
Citibank, N.A.	USD	2023	1 042 059	1 042 059	518 402	518 402
The Boeing Company	RUB	2037	498 613	498 613	450 268	450 268
			3 798 467	***3 798 467***	***968 670***	***968 670***
Unsecured bank loans						
UniCredit Bank	USD	2020-2023	29 196 428	29 048 898	14 470 657	14 335 074
Sberbank	USD	2021-2022	19 972 797	19 826 623	21 840 113	21 652 697
Nordea Bank	USD	2020-2022	10 239 106	10 138 788	10 146 497	10 044 103
ING Bank	USD	2022-2023	8 683 825	8 641 297	7 200 025	7 126 468
AKB Novikombank	USD	2022	6 947 060	6 947 060	5 760 020	5 760 020
Raiffeisen Bank	USD	2019	2 778 824	2 739 446	1 036 804	1 028 556
Crédit Agricole CIB	USD	2022	2 671 946	2 649 221	2 880 010	2 850 467
Commerzbank AG	EUR	2024-2025	1 219 585	1 210 512	1 242 815	1 233 519
AKB Rosbank	USD	2020	868 383	868 383	2 160 008	2 160 008
UniCredit Bank AG	EUR	2022-2024	580 548	576 360	676 867	672 511
Russian Technological Development Fund	RUB	2023	100 000	100 000	-	-
Sberbank	RUB	2022	37	37	-	-
			83 258 539	***82 746 625***	***67 413 816***	***66 863 423***
			87 057 006	**86 545 092**	**68 382 486**	**67 832 093**

’000 RUB			2018		2017	
	Currency	Year maturity	Face value	Carrying amount	Face value	Carrying amount
Short-term loans						
Secured bank loans						
Russian Commercial Bank	USD	2019	694 706	694 706	-	-
			694 706	***694 706***	***-***	***-***
Unsecured bank loans						
Nordea Bank	USD	2019	4 654 429	4 608 954	221 539	219 120
Sberbank	USD	2019	4 558 520	4 526 270	3 122 674	3 092 685
UniCredit Bank	USD	2019	3 203 737	3 155 206	1 839 490	1 821 735
AKB Rosbank	USD	2019	871 925	871 925	1 348 368	1 348 368
Crédit Agricole CIB	USD	2019	845 274	838 456	-	-
Raiffeisen Bank	USD	2019	647 790	628 544	1 382 405	1 371 408
Commerzbank AG	EUR	2019	227 776	226 123	185 826	184 396
UniCredit Bank AG	EUR	2019	205 732	204 208	173 718	172 556
ING Bank	USD	2019	27 589	27 589	-	-
Sberbank	RUB	2019	1 754	1 754	-	-
Russian Technological Development Fund	RUB	2019	85	85	-	-
Alfa-Bank	USD	2019	-	-	4 032 014	4 032 014
Credi Agricole	USD	2019	-	-	633 602	609 277
			15 244 611	***15 089 114***	***12 939 636***	***12 851 559***
			15 939 317	**15 783 820**	**12 939 636**	**12 851 559**

Exchange differences for 2018 amounted to USD 262 790 thousand or RUB 16 478 967 thousand (2017: USD 51 420 thousand or RUB 3 000 534 thousand), other movements were cash settled.

As at 31 December 2018, bank loans are secured with property, plant and equipment with carrying amount of USD 11 823 thousand and RUB 821 349 thousand (2017: USD 13 133 thousand or RUB 756 455 thousand) and guarantee issued by the Boeing Company.

As at 31 December 2018, the Group had undrawn credit line facilities for the total amount of USD 403 508 thousand or RUB 28 031 975 thousand (2017: USD 406 076 thousand or RUB 23 390 080 thousand).

A number of loans outstanding at the year end contain certain restrictive covenants in relation to unauthorized use of credit facilities, sales and purchases of assets, total amount of borrowings, change of controlling shareholders and management, defaults on liabilities, including tax liabilities, bankruptcy initiation, commencement of significant court proceedings, deterioration of financial position of the Group, improper execution of obligations and certain financial ratios.

In 2017 and 2018, the Group breached one of the covenants under the loan agreements with certain banks in terms of level of loans issued. The Group informed the banks on the breach in 2017 and 2018 and the banks agreed not to demand early repayment of the loan. Therefore the loan was classified in accordance with contractual payment terms.

26. Trade and other payables

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Trade accounts payable	48 707	43 542	3 383 727	2 508 042
Accrued liabilities and other creditors	32 750	36 542	2 275 104	2 104 827
Payroll and social tax payable	13 956	13 255	969 515	763 525
Total accounts payable and accrued expenses	**95 413**	**93 339**	**6 628 346**	**5 376 394**

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in Note 27.

27. Fair values and risk management

(a) Fair value and fair value hierarchy

The Group doesn't have any financial assets or liabilities measured at fair value except for equity investments at FVOCI (see Note 19). Investments are classified as Level 1. Their fair value is determined based on quoted market prices.

As at 31 December 2018 and 31 December 2017, carrying amount of the Group's financial assets and liabilities did not differ significantly from their fair value.

As at 31 December 2018 and 31 December 2017, fair value of financial assets (except for investments listed above) and liabilities was calculated by applying discounted cash flows technique using market discount rate and relates to Level 3 in the fair value hierarchy.

Financial instruments not measured at fair value

Type of financial instrument	Valuation technique
Trade and other receivables	Discounted cash flows
Other investments and loans receivable except for equity investments	Discounted cash flows
Cash and cash equivalents	Discounted cash flows
Trade and other payables	Discounted cash flows
Loans and borrowings	Discounted cash flows

(b) Financial risk management

The Group's activities expose it to a variety of financial risks: market risk (including foreign currency exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The overall risk management procedures seek to minimize potential adverse effects on the financial performance of the Group.

(i) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group’s receivables from customers, deposits and investments.

Credit risk management is aimed at preventing losses of liquid assets placed on deposit or invested into financial institutions or decreasing value of accounts receivable.

The maximum exposure to credit risk related to the financial assets equals the carrying value of the Group's financial assets including loans receivable. The Group’s most significant customer represents 10% (2017: 10%) of trade accounts receivable at respective reporting dates.

The treasury department of the Group monitors and controls credit risk.

The credit quality of customers and borrowers is measured taking into account their financial position, prior experience and other factors. The Group deals with new customers and clients with creditworthiness concerns only on prepayment basis. Standard payment terms for delivered goods may be changed where there is a good history with the customer.

Although the collection of receivables could be influenced by economic factors, management believes that there is no significant risk of loss to the Group beyond the provision already recorded, see Note 21.

Trade and other receivables

The Group’s exposure to credit risk is influenced mainly by the individual characteristics of each individual customer. The concentration of credit risk geographically relates to the USA and Europe where the most significant customers are located.

The Group provides credit in the normal course of business to its customers and performs ongoing credit evaluations of those customers. Credit losses, when realized, have been within the range of the Group’s expectations and, historically, have not been significant.

Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit at the reporting date was:

	Carrying amount		**Carrying amount**	
	2018 '000 USD	**2017 '000 USD**	**2018 '000 RUB**	**2017 '000 RUB**
Loans receivable	71 044	176 115	4 935 450	10 144 265
Bank deposits, current	114	257	7 889	14 817
Trade accounts receivable	171 782	163 666	11 933 737	9 427 170
Other account receivable	11 041	33 147	767 049	1 909 265
Cash and cash equivalents	760 666	806 527	52 843 936	46 456 130
	1 014 647	**1 179 712**	**70 488 061**	**67 951 647**

Impairment losses

The ageing of trade receivables at the reporting date was as follows:

'000 USD	**Weighted-average loss rate**	**Gross carrying amount***	**Loss allowance**	**Credit-impaired**
Current (not past due)	0,00%	143 194	-	No
Past due less than 3 months	0,09%	25 488	(24)	No
Past due less from 3 to 6 months	2,49%	814	(20)	Yes
Past due less from 6 to 12 months	8,17%	61	(5)	Yes
Past due over 12 months	13,53%	8 658	(4 517)	Yes
		178 215	**(4 566)**	

*these amounts do not include fully impaired balances receivable from one of the counterparties in the amount USD 9 375 thousand.

'000 RUB	**Weighted-average loss rate**	**Gross carrying amount***	**Loss allowance**	**Credit-impaired**
Current (not past due)	0,00%	9 947 684	-	No
Past due less than 3 months	0,09%	1 770 667	(1 675)	No
Past due less from 3 to 6 months	2,49%	56 560	(1 411)	Yes
Past due less from 6 to 12 months	8,17%	4 224	(345)	Yes
Past due over 12 months	13,53%	601 496	(313 804)	Yes
		12 380 631	**(317 235)**	

*these amounts do not include fully impaired balances receivable from one of the counterparties in the amount RUB 651 364 thousand.

The movement in the allowance for impairment in respect of trade and other receivables during the year was as follows:

	2018		**2017**	
'000 USD	**Trade receivables**	**Other receivables**	**Trade receivables**	**Other receivables**
Provision for impairment as at 1 January	**12 266**	**6 825**	**10 776**	**5 986**
Impairment loss recognised	6 603	770	6 024	1 050
Provision reversed	(487)	(1 097)	(3 252)	(226)
Provision used	(2)	(80)	(2 467)	(1 449)
Cumulative translation adjustment	(2 571)	(841)	574	310
Provision for impairment as at 31 December	**15 809**	**5 577**	**11 655**	**5 671**

	2018		**2017**	
'000 RUB	**Trade receivables**	**Other receivables**	**Trade receivables**	**Other receivables**
Provision for impairment as at 1 January	**709 666**	**398 988**	**653 629**	**363 080**
Impairment loss recognised	414 090	48 250	351 512	61 294
Provision reversed	(30 519)	(68 817)	(189 791)	(13 131)
Provision used	(126)	(5 017)	(141 920)	(78 626)
Cumulative translation adjustment	5 147	14 027	(2 065)	(5 978)
Provision for impairment as at 31 December	**1 098 258**	**387 431**	**671 365**	**326 639**

(ii) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, 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 treasury department conducts liquidity planning on a weekly basis and reports to the management. Beyond cash management, the Group mitigates liquidity risk by keeping committed credit lines available, see Note 25.

The management ensures that sufficient liquidity is available to the Group to meet its short-term payment obligations. Such cash balances include current balances in bank accounts and bank deposits. The Group’s policy as regards working capital funding is aimed at maximum utilisation of the Group’s operating cash flows including obtaining short-term bank loans, borrowings and other external funding sources to maintain adequate level of liquidity.

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements. It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

Exposure to liquidity risk

The following are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted, and include estimated interest payments and exclude the impact of netting agreements.

’000 USD	Carrying amount	Contractual cash flows	0-12 mths	1-2 yrs	2-3 yrs	Over 3 yrs
As at 31 December 2018						
Unsecured loans and borrowings	1 408 304	1 547 289	267 746	427 266	428 749	423 528
Secured loans and borrowings	64 677	78 191	10 983	20 986	13 483	32 739
Trade and other accounts payable	95 413	95 413	95 413	-	-	-
Total current and non-current liabilities	**1 568 394**	**1 720 893**	**374 142**	**448 252**	**442 232**	**456 267**
As at 31 December 2017						
Unsecured loans and borrowings	1 383 936	1 546 442	281 175	348 501	369 941	546 825
Secured loans and borrowings	16 817	33 652	960	960	963	30 769
Trade and other accounts payable	93 339	93 339	93 339	-	-	-
Total current and non-current liabilities	**1 494 092**	**1 673 433**	**375 474**	**349 461**	**370 904**	**577 594**

’000 RUB	Carrying amount	Contractual cash flows	0-12 mths	1-2 yrs	2-3 yrs	Over 3 yrs
As at 31 December 2018						
Unsecured loans and borrowings	97 835 739	107 491 156	18 600 509	29 682 460	29 785 431	29 422 756
Secured loans and borrowings	4 493 173	5 432 007	763 003	1 457 896	936 680	2 274 428
Trade and other accounts payable	6 628 346	6 628 346	6 628 346	-	-	-
Total current and non-current liabilities	**108 957 258**	**119 551 509**	**25 991 858**	**31 140 356**	**30 722 111**	**31 697 184**
As at 31 December 2017						
Unsecured loans and borrowings	79 714 982	89 075 368	16 195 738	20 073 734	21 308 687	31 497 209
Secured loans and borrowings	968 670	1 938 387	55 320	55 320	55 472	1 772 275
Trade and other accounts payable	5 376 394	5 376 394	5 376 394	-	-	-
Total current and non-current liabilities	**86 060 046**	**96 390 149**	**21 627 452**	**20 129 054**	**21 364 159**	**33 269 484**

(iii) 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 within acceptable parameters, while optimising the return.

Currency risk

Foreign currency risk is the risk of losses resulting from adverse movements in different currency exchange rates against the functional currency of the Group companies. Foreign currency risk arises from the international operations of the Group, future commercial transactions in foreign currencies, including repayment of foreign currency denominated borrowings and recognition of assets and liabilities denominated in a currency which is not a functional currency of the Group companies.

The objective of the Group’s foreign exchange risk management activities is to minimise the volatility of the Group’s financial results by matching the same foreign currency denominated assets and liabilities. The Group does not currently hedge foreign exchange exposure using financial instruments. Group entities are prohibited from borrowing and investing in foreign currencies on a speculative basis.

The Group’s policies for attracting foreign exchange denominated borrowings depend on current and forward rates of foreign currencies to Russian rouble. Funds borrowed are mainly nominated in USD, being the currency of general export trade contracts.

The Group relies on export sales to generate foreign currency earnings. As the Group’s sales outside the Russian Federation form a significant portion of its production, it is exposed to foreign currency risk arising primarily on the volatility of the US dollar rate, in which major export sales are denominated.

Exposure to currency risk

The tables below summarises the Group’s exposure to foreign currency exchange rate risk at the reporting date:

As at 31 December 2018

’000 USD	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	565 078	1 372	2 266
Accounts receivable	167 966	1 096	108
Bank deposits	-	-	114
Loans receivable	22 476	-	12
Accounts payable and other liabilities	(15 463)	(4 673)	(1 183)
Loans and borrowings	(1 432 423)	(31 915)	-
Net exposure	**(692 366)**	**(34 120)**	**1 317**

As at 31 December 2017

’000 USD	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	584 306	1 543	2 190
Accounts receivable	167 853	1 614	476
Bank deposits	-	-	118
Loans receivable	17 637	100 174	-
Accounts payable and other liabilities	(12 896)	(4 818)	(1 395)
Loans and borrowings	(1 353 649)	(39 287)	-
Net exposure	**(596 749)**	**59 226**	**1 389**

As at 31 December 2018

’000 RUB	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	39 256 308	95 314	157 436
Accounts receivable	11 668 718	76 170	7 503
Bank deposits	-	-	7 889
Loans receivable	1 561 398	-	855
Accounts payable and other liabilities	(1 074 215)	(324 605)	(82 156)
Loans and borrowings	(99 511 220)	(2 217 203)	-
Net exposure	**(48 099 011)**	**(2 370 324)**	**91 527**

As at 31 December 2017

'000 RUB	USD	EUR	Other foreign currencies
Cash and cash equivalents	33 656 187	88 869	126 143
Accounts receivable	9 668 388	92 965	27 430
Bank deposits	-	-	6 817
Loans receivable	1 015 877	5 770 070	-
Accounts payable and other liabilities	(742 772)	(277 508)	(80 343)
Loans and borrowings	(77 970 402)	(2 262 982)	-
Net exposure	**(34 372 722)**	**3 411 414**	**80 047**

The following significant exchange rates have been applied during the year:

	As at 31 December 2018	Average for 2018	As at 31 December 2017	Average for 2017
USD	69,4706	62,7078	57,6002	58,3529
EUR	79,4605	73,9546	68,8668	65,9014

Sensitivity analysis

A 10% weakening of the RUB against USD and Euro at 31 December 2018 would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant. The analysis is performed on the same basis for 2017.

Sensitivity analysis

2018	Equity '000 USD	Profit or loss '000 USD
USD strengthening 10%	(69 237)	(69 237)
Euro strengthening 10%	(3 412)	(3 412)
2017		
USD strengthening 10%	(59 675)	(59 675)
Euro strengthening 10%	5 923	5 923

2018	Equity '000 RUB	Profit or loss '000 RUB
USD strengthening 10%	(4 809 901)	(4 809 901)
Euro strengthening 10%	(237 032)	(237 032)
2017		
USD strengthening 10%	(3 437 272)	(3 437 272)
Euro strengthening 10%	341 141	341 141

(iv) Interest rate risk

Interest rate risk arises from movements in interest rates which could affect the Group's financial results or the value of the Group's equity. A change in interest rates may cause variations in interest income and expense.

The Group's objective when managing interest rate risk is to protect net results as regards interest. Interest rate risk management function is performed by the finance and treasury department of the Group.

Market interest rates are monitored and the Group's positions as regards interest bearing borrowings are analysed by the treasury and finance departments of the Group under the interest rate risk management framework. The monitoring is performed taking into account current terms of refinancing, renewal of existing positions and alternative funding. The Group does not apply interest hedging.

The Group's interest rate risk arises from various debt facilities. Borrowings at variable rates expose the Group to the risk of future cash flows changes.

Exposure to interest rate risk

At the reporting date the interest rate profile of the Group’s interest-bearing financial instruments was as follows:

	2018 ’000 USD	2017 ’000 USD	2018 ’000 RUB	2017 ’000 RUB
Fixed rate instruments				
Loans receivable	71 044	176 115	4 935 450	10 144 265
Bank deposits classified as cash equivalents	631 986	759 498	43 904 445	43 747 221
Bank deposits	114	257	7 889	14 817
Current loans and borrowings	(12 552)	(23 409)	(872 010)	(1 348 368)
Non-current loans and borrowings	(21 117)	(45 317)	(1 466 995)	(2 610 276)
	669 475	**867 144**	**46 508 779**	**49 947 659**
Variable rate instruments				
Current loans and borrowings	(214 649)	(199 708)	(14 911 810)	(11 503 191)
Non-current loans and borrowings	(1 224 663)	(1 132 319)	(85 078 097)	(65 221 817)
	(1 439 312)	**(1 332 027)**	**(99 989 907)**	**(76 725 008)**

Fair value sensitivity analysis for fixed rate instruments

The Group does not account for any financial assets and liabilities at fair value through profit or loss, and the Group does not designate derivatives (interest rate swaps) as hedging instruments under a fair value hedge accounting model. Therefore a change in interest rates at the reporting date would not affect profit or loss.

Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates at the reporting date would have increased (decreased) equity and profit by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant:

	Profit or loss ’000 USD	Equity ’000 USD	Profit or loss ’000 RUB	Equity ’000 RUB
2018				
100 bp parallel fall	14 393	14 393	999 899	999 899
100 bp parallel rise	(14 393)	(14 393)	(999 899)	(999 899)
2017				
100 bp parallel fall	13 320	13 320	767 250	767 250
100 bp parallel rise	(13 320)	(13 320)	(767 250)	(767 250)

(c) Master netting or similar agreements

The Group may enter into sales and purchase agreements with the same counterparty in the normal course of business. The related amount receivable and payable do not always meet the criteria for offsetting in the statement of financial position. This is because the Group may not have any currently legally enforceable right to offset recognised amounts, because the right to offset may be enforceable only on the occurrence of future events. In particular, in accordance with the Russian civil law an obligation can be settled by offsetting against a similar claim if it is due, has no maturity or is payable on demand.

As at 31 December 2018 and 2017, the Group does not have financial instruments, which can be offset.

28. Significant subsidiaries

	Country of incorporation	2018 Ownership voting	2017 Ownership voting
VSMPO-TIRUS, U.S., Ins	USA	100%	100%
VSMPO-TIRUS GmbH	Germany	100%	100%
Tirus International SA	Switzerland	100%	100%
GRIFOLDO LTD	Cyprus	100%	100%
VSMPO-TIRUS LIMITED	Cyprus	100%	100%
VSMPO-TIRUS LIMITED	UK	100%	100%
VSMPO-Tirus (Bejing) Metallic Materials Ltd.	China	100%	100%
LIMPIEZA LIMITED	Cyprus	75%	75%
VSMPO Titan Ukraine	Ukraine	100%	100%
LLC Demurinskiy gorno-obogatitelny kombinat	Ukraine	75%	75%
NORVEX LIMITED	British Virgin Islands	100%	100%
LLC Sanatorny complex	Russia	100%	100%
JSC Upravlenie gostinits	Russia	100%	100%
LLC Torgovy Dom VSMPO-AVISMA Corporation	Russia	100%	100%

29. Operating leases

The future minimum lease payments under non-cancellable leases were payable as follows:

	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Less than 1 year	5 887	5 238	408 942	301 686
1 to 5 years	19 552	15 749	1 358 265	907 124
Over 5 years	5 785	7 947	401 918	457 734
	31 224	**28 934**	**2 169 125**	**1 666 544**

The Group leases a number of warehouse and factory facilities under operating leases. The leases typically run for an initial period of five to ten years, with an option to renew the lease after that date. Lease payments are usually increased annually to reflect market rentals.

During the year ended 31 December 2018, USD 3 106 thousand or RUB 194 792 thousand (2017: USD 3 670 thousand or RUB 214 154 thousand) were recognised as operating lease expense in the consolidated statement of profit or loss and other comprehensive income in respect of operating leases.

30. Commitments

(a) Capital commitments

As at 31 December 2018, the Group has entered into contracts to purchase plant and equipment for USD 102 654 thousand or RUB 7 131 406 thousand (2017: USD 100 546 thousand or RUB 5 791 446 thousand).

(b) Long term sales contracts

In the normal course of business group companies enter into long term framework sales contracts. These contracts allow for periodic adjustments in prices dependent on prevailing market conditions.

31. Contingencies

(a) Taxation contingencies in the Russian Federation

The taxation system in the Russian Federation continues to evolve and is characterised by frequent changes in legislation, official pronouncements and court decisions, which are sometimes contradictory and subject to varying interpretation by different tax authorities.

Taxes are subject to review and investigation by a number of authorities, which have the authority to impose severe fines, penalties and interest charges. A tax year generally remains open for review by the tax authorities during the three subsequent calendar years. Recent events within the Russian Federation suggest that the tax authorities are taking a more assertive and substance-based position in their interpretation and enforcement of tax legislation.

Transfer pricing legislation enacted in the Russian Federation starting from 1 January 2012 provides for major modifications making local transfer pricing rules closer to OECD guidelines, but creating additional uncertainty in practical application of tax legislation in certain circumstances.

These transfer pricing rules provide for an obligation for the taxpayers to prepare transfer pricing documentation with respect to controlled transactions and prescribe the basis and mechanisms for accruing additional taxes and interest in case prices in the controlled transactions differ from the market level.

The transfer pricing rules apply to cross-border transactions between related parties, as well as to certain cross-border transactions between independent parties, as determined under the Russian Tax Code (no threshold is set for the purposes of prices control in such transactions). In addition, the rules apply to in-country transactions between related parties if the accumulated annual volume of the transactions between the same parties exceeds a particular threshold (RUB 1 billion in 2014 and thereon).

The compliance of prices with the arm's length level could be as well subject to scrutiny on the basis of unjustified tax benefit concept.

In addition, a number of new laws introducing changes to the Russian tax legislation have been recently adopted. In particular, starting from 1 January 2016 changes aimed at regulating tax consequences of transactions with foreign companies and their activities were introduced, such as concept of beneficial ownership of income, taxation of controlled foreign companies, tax residency rules, etc. These changes may potentially impact the Group's tax position and create additional tax risks going forward. This legislation and practice of its application is still evolving and the impact of legislative changes should be considered based on the actual circumstances.

Specifics of the Group's operations assume significant amount of transactions with subsidiaries registered in foreign jurisdictions, including issuance of loans. The terms of specific transactions (interest rate, currency, terms) are analyzed by the Group's management at the date of the transactions. Subsequently, the terms of transactions can be reviewed depending on the current market situation, as well as the needs of the Group and subsidiaries in financial resources. The Group's management believes that, based on management's understanding of applicable Russian tax legislation, official explanations and court decisions, the Group satisfies completely with tax legislation. Nevertheless, the interpretation of the Group's position by the tax and judicial authorities may be different and, if the tax authorities can prove the legitimacy of their position, this could have significant impact on these consolidated financial statements.

The Group purchases works, services and raw materials from various suppliers who are fully responsible for compliance with tax legislation and established accounting rules (standards). At the same time, with regard to the exicting practice of the tax authorities, in case of the tax authorities make claims to the suppliers for non-compliance with tax legislation, this may lead to additional tax risks for the Group. If the tax authorities prove the legitimacy of their claims against suppliers, the

Group may be charged an additional taxes payble, despite the fact that the main responsibility for the completeness and timeliness of tax payments lies with the management of these suppliers.

In course of its operating activities, the Group conducts regular maintenance of fixed assets. These expenses are accounted for income tax purposes in accordance with the Group's accounting policy. Management of the Group believes that the Group complies in all material aspects with the tax legislation, based on its interpretation of applicable tax legislation, official pronouncements and court decisions. Nevertheless, the interpretations by the tax authorities and courts may differ from the management’s assesment.

All these facts have significant influence on the Group's tax position and may lead to additional tax risks in the future. Management did not accure provisions for these liabilities in the consolidated financial statements because it assesses that the risk of cash outflows to settle those liabilities as possible, but not probable. According to management opinion, it is impossible to determine the financial implications of the potential tax liabilities that may arise for the Group with respect to the mentioned above operations, due to the variety of approaches to determine the value of potential liabilities due to different interpretations of tax legislation. Management believes that the Group complies in all material aspects with the tax legislation, based on its interpretation of applicable tax legislation, official pronouncements and court decisions. However, the interpretations of the tax authorities and courts, could differ and the effect could be significant.

32. Related parties

(a) Government

The Government of the Russian Federation controls the State Corporation “Rostech” (SC “Rostech”), which has significant influence over the Company. The Government does not prepare financial statements for public use. Governmental economic and social policies affect the Group’s financial position, results of operations and cash flows.

(b) Transactions and balances with related parties

In the normal course of business, the Group enters into transactions with related parties and other entities under Government control. Taxes are accrued and settled in accordance with Russian tax legislation. The Group uses excemption provided in clause 25 of IAS 24 and does not disclose information related to transactions with different authorities of Russian Federation. The following turnovers and balances arise from transactions with related parties except for settlements with tax authorities and other government structures of Russian Federation.

Transactions with related parties:

Relationship	2018 '000 USD	2017 '000 USD	2018 '000 RUB	2017 '000 RUB
Revenue				
Parties under Government control	216 279	141 225	13 562 387	8 240 868
Entities under Rostech control	140 516	153 959	8 811 450	8 983 962
Joint arrangement	29 524	15 094	1 851 404	880 771
Associates	2 745	1 578	172 133	92 080
Purchases				
Parties under Government control	(26 919)	(37 059)	(1 688 042)	(2 162 517)
Entities under Rostech control	(190)	(712)	(11 915)	(41 543)
Joint arrangement	(12 066)	(12 354)	(756 659)	(720 888)
Associates	(109 196)	(68 018)	(6 847 469)	(3 969 060)
Purchases of property, plant and equipment				
Parties under Government control	(314)	(309)	(19 720)	(18 008)
Entities under Rostech control	(36)	-	(2 250)	-
Sales of property, plant and equipment				
Joint arrangement	-	12 752	-	744 091
Loans provided				
Joint venture	(5 600)	(9 382)	(351 164)	(547 468)
Associates	(120)	-	(7 500)	-
Entities under ultimate beneficiary's control	-	(223 456)	-	(13 039 332)
Proceeds from borrowings				
Parties under Government control	1 595	247 055	100 000	14 416 380
Entities under Rostech control	-	100 932	-	5 813 680
Interest income				
Parties under Government control	428	16 883	26 858	985 198
Entities under Rostech control	6 251	6 718	392 000	392 000
Joint venture	757	207	47 487	12 081
Associates	279	275	17 478	16 033
Entities under ultimate beneficiary's control	1 428	7 205	89 521	420 415
Interest expenses				
Parties under Government control	(16 517)	(14 606)	(1 035 737)	(852 313)
Entities under Rostech control	(4 191)	(577)	(262 818)	(33 666)

Revenue from related parties refers to sales of titanium products. The Group does not have significant sales (over 5% from total group sales) to any individual related party.

Related party purchases mainly refer to electricity and gas which are made under standard short term agreements.

Balances with related parties:

	’000 USD		’000 RUB	
Relationship	**31 December 2018**	**31 December 2017**	**31 December 2018**	**31 December 2017**
Bank balances				
Parties under Government control	33 845	24 501	2 351 219	1 411 295
Entities under Rostech control	10 527	6	731 289	346
Trade and other receivables				
Parties under Government control	3 577	2 730	248 462	157 222
Entities under Rostech control	9 189	3 401	638 359	195 900
Joint arrangement	1 197	390	83 137	22 457
Associates	545	589	37 828	33 925
Entities under ultimate beneficiary's control	3 627	8 619	252 000	496 472
Ultimate beneficiary	-	11 036	-	635 681
Advances to suppliers				
Parties under Government control	779	618	54 143	35 618
Associates	61	84	4 239	4 840
Bank deposits, classified as cash and cash equivalents				
Parties under Government control	104 337	137 469	7 248 362	7 918 241
Equity investments at FVOCI				
Parties under Government control	181 554	114 664	12 612 671	6 604 669
Loans issued				
Entities under Rostech control	40 305	48 611	2 800 000	2 800 000
Associates	4 150	3 942	288 317	227 076
Top management	271	132	18 853	7 629
Joint arrangement	18 476	13 513	1 283 569	778 344
Entities under ultimate beneficiary's control	-	100 174	-	5 770 070
Loans and borrowings				
Parties under Government control	(352 017)	(429 607)	(24 454 768)	(24 745 382)
Entities under Rostech control	(99 988)	(100 000)	(6 946 222)	(5 760 020)
Trade and other payables				
Parties under Government control	(3 333)	(2 612)	(231 563)	(150 457)
Entities under Rostech control	(4)	(299)	(256)	(17 225)
Joint arrangement	(2 287)	(4 168)	(158 899)	(240 067)
Associates	(8 671)	(4 625)	(602 351)	(266 391)
Advances received				
Parties under Government control	(25 592)	(37 593)	(1 777 878)	(2 165 381)
Entities under Rostech control	(75 929)	(76 169)	(5 274 803)	(4 387 374)
Joint arrangement	(105)	(138)	(7 272)	(7 952)

All outstanding balances with related parties are expected to be settled within twelve months of the reporting date except for loans issued. Loan issued to entity under Rostech control in the amount of USD 40 305 thousand or RUB 2 800 000 thousand is long-term and is not past due and was granted with the interest rate of 14%. The balance is not secured.

Loans and borrowing obtained from the related parties under Government control are nominated in USD and were received with the interest rate of LIBOR 3M + variable margin of 2,25% to 3,82%.

Loans and borrowing obtained from the related parties under Rostech control are nominated in USD and were received with the interest rate of LIBOR 1M + variable margin of 1,95% to 2,25%.

Bank deposits in USD and RUB, classified as cash and cash equivalents, in banks under Government control have interest rate from 0,5% to 7,2%.

As at 31 December 2017, the balance of loans issued to entities under ultimate beneficiary's control amounted to USD 100 174 thousand or RUB 5 770 070 thousand. The interest rate on these loans was 5% in 2017. Loans are not overdue and were repaid in 2018.

Key management personnel compensation

Compensation of key management personnel consists of remuneration paid to the members of the Management Boards of the Group's main subsidiaries and to members of Boards of Directors of the Company and its main subsidiaries. Compensation is made up of an annual remuneration and a performance bonus depending on the operating results.

Total key management personnel short-term benefits included in genneral and administrative expenses in the consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2018 amounted to USD 11 710 thousand or RUB 734 302 thousand (2017: USD 11 904 thousand or RUB 694 619 thousand). Related state pension and social security costs for the year ended 31 December 2018 amounted to USD 2 580 thousand or RUB 161 813 thousand (2017: USD 2 601 thousand or RUB 151 802 thousand). There were no significant post-employment or other long-term benefits.

33. Subsequent events

There were no significant subsequent events after the reporting date for the purposes of dislosure in these consolidated financial statements.

34. Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for the equity investments at FVOCI and property, plant and equipment (except for land), which are measured on fair value basis.

35. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements except changes disclosed in Note 5, and have been applied consistently by the Group entities. Certain comparative amounts were reclassified to correspond with the current year presentation.

(a) Basis of consolidation

(i) Business combinations

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group (see Note 35(a)(iii)).

The Group measures goodwill at the acquisition date as:

- The fair value of the consideration transferred; plus
- The recognised amount of any non-controlling interests in the acquiree; plus
- If the business combination is achieved in stages, the fair value of the pre-existing equity interest in the acquire; less
- The net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a bargain purchase gain is recognised immediately in profit or loss.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss for period.

Transaction costs, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, other contingent consideration is remeasured at fair value at each reporting date and subsequent changes in the fair value of the contingent consideration are recognised in profit or loss for period.

(ii) Non-controlling interests

Non-controlling interests are measured at their proportionate share of the acquiree’s identifiable net assets at the acquisition date.

Changes in the Group’s interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

(iii) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

(iv) Loss of control

Upon the loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently it is accounted for as an equity-accounted investee or as a financial asset depending on the level of influence retained.

(v) Interests in equity-accounted investees

The Group’s interests in equity-accounted investees comprise interests in associates and a joint venture.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20% and 50% of the voting power of another entity. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and joint ventures are accounted for using the equity method and are recognised initially at cost. The cost of the investment includes transaction costs.

The consolidated financial statements include the Group’s share of the profit or loss and other comprehensive income of equity accounted investees, after adjustments to align the accounting policies with those of the Group, from the date that significant influence or joint control commences until the date that significant influence or joint control ceases.

When the Group’s share of losses exceeds its interest in an equity-accounted investee, the carrying amount of that interest including any long-term investments, is reduced to zero, and the recognition of further losses is discontinued, except to the extent that the Group has an obligation or has made payments on behalf of the investee.

(vi) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group’s interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

(b) Revenue

The Group has initially applied IFRS 15 from 1 January 2018. Information about the Group’s accounting policies relating to contracts with customers is provided in Note 6 and Note 7. The effect of initially applying IFRS 15 is described in Note 5.

(i) Goods sold

The main part of the Group’s revenue related to the sales of titanium products. Other revenue includes revenue from the sales of services and other finished products (see Note 6 and Note 7).

The Group recognizes revenue generally at the moment when pervasive evidence exists, usually in the form of an executed sales agreement, that the control over the goods have been transferred to the customer. The timing of the controls transfer, payment terms vary depending on the individual terms of the sales agreements and customer. Usually settlements under specific contract are completed within 1 year, therefore the Group applies practical exemption and does not calculate significant financing component for such agreements.

The Group does not provide discounts and bonuses to its customers.

The Group provides standard warranty conditions for the quality of its products. Therefore, warranty is not considered as separate pefomance obligation.

(ii) Services

Revenue from services rendered is recognised in proportion to the stage of completion of the transaction at the reporting date. The stage of completion is assessed by reference to surveys of work performed.

(c) Finance income and costs

The Group’s finance income and finance costs include:

- interest income;
- interest expense;
- dividend income;
- the net foreign currency exchange gain or loss.

Interest income or expense is recognised using the effective interest method.

(d) Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of the Group entities at average exchange rates.

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortised cost in foreign currency translated at the exchange rate at the end of the reporting period.

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated to the functional currency at the exchange rate at the date that the fair value was determined. Non-monetary items in a foreign currency that are measured based on historical cost are translated using the exchange rate at the date of the transaction.

Foreign currency differences arising in translation are recognised in profit or loss.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to the presentation currency at the exchange rates at the reporting date. The income and expenses of foreign operations are translated to the presentation currency at average exchange rates.

Foreign currency differences are recognised in other comprehensive income, and presented in the foreign currency translation reserve in equity. However, if the operation is a non-wholly owned subsidiary, then the relevant proportionate share of the translation difference is allocated to non-controlling interests. When a foreign operation is disposed of such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. When the Group disposes of only part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative amount is reattributed to non-controlling interests. When the Group disposes of only part of its investment in an associate or joint venture that includes a foreign operation while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely to occur in the foreseeable future, foreign exchange gains and losses arising from such item form part of a net investment in a foreign operation and are recognised in other comprehensive income, and presented in the translation reserve in equity.

(e) Employee benefits

(i) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

(ii) Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts.

Obligations for contributions to defined contribution pension plans, including Russia's State pension fund, are recognised as an employee benefit expense in profit or loss in the periods during which services are rendered by employees. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available. Contributions to a defined contribution plan that are due more than 12 months after the end of the period in which the employees render the service are discounted to their present value.

(iii) Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods, discounting that amount and deducting the fair value of any plan assets. The discount rate is the yield at the reporting date on government bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid.

The calculation is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. In order to calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in the Group. An economic benefit is available to the Group if it is realisable during the life of the plan, or on settlement of the plan liabilities.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in OCI. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(f) **Income tax**

Income tax expense comprises current and deferred tax. It is recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

(i) Current tax

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Current tax payable also includes any tax liability arising from dividends.

(ii) *Deferred tax*

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for:

- temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss;
- temporary differences related to investments in subsidiaries, associates and joint arrangements to the extent that the Group is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future; and
- taxable temporary differences arising on the initial recognition of goodwill.

A deferred tax asset is recognised for unused tax losses, unused tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

In accordance with the tax legislation of the Russian Federation, tax losses and current tax assets of a company in the Group may not be set off against taxable profits and current tax liabilities of other Group companies. In addition, the tax base is determined separately for each of the Group’s main activities and, therefore, tax losses and taxable profits related to different activities cannot be offset.

In determining the amount of current and deferred tax the Group takes into account the impact of uncertain tax positions and whether additional taxes, penalties and late-payment interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes the Group to change its judgment regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact the tax expense in the period that such a determination is made.

(g) **Inventories**

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the weighted average method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(h) Property, plant and equipment

(i) *Recognition and measurement*

Items of property, plant and equipment, are initially measured at cost.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

After initial recognition items of property, plant and equipment (except for land) are measured at fair value based on periodic valuation by external independent appraisers. Revaluation increase is recognised directly in other comprehensive income. However, the increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.

A revaluation decrease is recognised in profit or loss. However, the decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus.

If significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and is recognised net within "Loss on disposal of property, plant and equipment" in the consolidated statement of profit or loss and other comprehensive income. When revalued assets are disposed, any related amount included in the revaluation reserve as revaluation surplus is transferred to retained earnings. Also the revaluation reserve is transferred to retained earnings while revalued fixed assets are depreciated.

(ii) *Subsequent expenditure*

Subsequent expenditure is capitalised only if it is probable that the future economic benefits associated with the expenditure will flow to the Group.

The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

(iii) *Depreciation*

Items of property, plant and equipment are depreciated from the date that they are installed and are ready for use, or in respect of internally constructed assets, from the date that the asset is completed and ready for use. Depreciation is based on the cost of an asset less its estimated residual value.

Depreciation is generally recognised in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of the lease term. Land is not depreciated.

The estimated useful lives of significant items of property, plant and equipment for the current and comparative periods are as follows:

	31 Decemder 2017	31 Decemder 2018
Buildings and constructions	23 years	23 years
Plant and equipment	13 years	13 years
Transport	11 years	11 years
Transfer devices	11 years	11 years
Other	5 years	4 years

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(i) Intangible assets

(i) Goodwill

Goodwill arising on the acquisition of subsidiaries is measured at cost less accumulated impairment losses.

(ii) Other intangible assets

Other intangible assets that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses.

(iii) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in the profit or loss as incurred.

(iv) Amortisation

Amortisation is based on the cost of the asset less its estimated residual value.

Amortisation is generally recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill and mining rights, from the date that they are available for use since this most closely reflects the expected pattern of consumption of future economic benefits embodied in the asset.

The estimated useful lives of intangible assets are from 3 to 20 years. Amortisation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate. Mining rights are amortized using the units-of-production method.

(j) Financial instruments

(i) Recognition and initial measurement

Trade receivables and debt securities issued are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(ii) Classification and subsequent measurement

Financial assets – Policy applicable from 1 January 2018

On initial recognition, a financial asset is classified as measured at: amortised cost; FVOCI – debt investment; FVOCI – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets – Business model assessment: Policy applicable from 1 January 2018

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realising cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Group's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

Financial assets – Assessment whether contractual cash flows are solely payments of principal and interest: Policy applicable from 1 January 2018

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable-rate features;
- prepayment and extension features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

Financial assets – Subsequent measurement and gains and losses: Policy applicable from 1 January 2018

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.
Financial assets at amortised cost	These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

Financial assets – Policy applicable before 1 January 2018

The Group classified its financial assets into one of the following categories:

- loans and receivables;
- held to maturity;
- available for sale; and
- at FVTPL, and within this category as:
  - held for trading;
  - derivative hedging instruments; or
  - designated as at FVTPL.

Financial assets – Subsequent measurement and gains and losses: Policy applicable before 1 January 2018

Financial assets at FVTPL	Measured at fair value and changes therein, including any interest or dividend income, were recognised in profit or loss.
Held-to-maturity financial assets	Measured at amortised cost using the effective interest method.
Loans and receivables	Measured at amortised cost using the effective interest method.
Available-for-sale financial assets	Measured at fair value and changes therein, other than impairment losses, interest income and foreign currency differences on debt instruments, were recognised in OCI and accumulated in the fair value reserve. When these assets were derecognised, the gain or loss accumulated in equity was reclassified to profit or loss.

Financial liabilities – Classification, subsequent measurement and gains and losses

Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. Any gain or loss on derecognition is also recognised in profit or loss.

The Group has fixed rate bank loans for which the banks have the option to revise the interest rate following the change of key rate set by the CBR. The Group have an option to either accept the revised rate or redeem the loan at par without penalty. The Group considers these loans as in essence floating rate loans.

(iii) Modification of financial assets and financial liabilities

Financial assets

If the terms of a financial asset are modified, the Group evaluates whether the cash flows of the modified asset are substantially different. If the cash flows are substantially different (referred to as substantial modification), then the contractual rights to cash flows from the original financial asset are deemed to have expired. In this case, the original financial asset is derecognised and a new financial asset is recognised at fair value.

The Group performs a quantitative and qualitative evaluation of whether the modification is substantial, i.e. whether the cash flows of the original financial asset and the modified or replaced financial asset are substantially different. The Group assesses whether the modification is substantial based on quantitative and qualitative factors in the following order: qualitative factors, quantitative factors, combined effect of qualitative and quantitative factors. If the cash flows are substantially different, then the contractual rights to cash flows from the original financial asset deemed to have expired. In making this evaluation the Group analogizes to the guidance on the derecognition of financial liabilities.

The Group concludes that the modification is substantial as a result of the following qualitative factors:

- change the currency of the financial asset;
- change in collateral or other credit enhancement;
- change of terms of financial asset that lead to non-compliance with SPPI criterion (e.g. inclusion of conversion feature).

If the cash flows of the modified asset carried at amortised cost are not substantially different, then the modification does not result in derecognition of the financial asset. In this case, the Group recalculates the gross carrying amount of the financial asset and recognises the amount arising from adjusting the gross carrying amount as a modification gain or loss in profit or loss. The gross carrying amount of the financial asset is recalculated as the present value of the renegotiated or modified contractual cash flows that are discounted at the financial asset's original effective interest rate. Any costs or fees incurred adjust the carrying amount of the modified financial asset and are amortised over the remaining term of the modified financial asset.

Financial liabilities

The Group derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different. In this case, a new financial liability based on the modified terms is recognised at fair value. The difference between the carrying amount of the financial liability extinguished and the new financial liability with modified terms is recognised in profit or loss.

If a modification (or exchange) does not result in the derecognition of the financial liability the Group applies accounting policy consistent with the requirements for adjusting the gross carrying amount of a financial asset when a modification does not result in the derecognition of the financial asset, i.e. the Group recognises any adjustment to the amortised cost of the financial liability arising from such a modification (or exchange) in profit or loss at the date of the modification (or exchange).

Changes in cash flows on existing financial liabilities are not considered as modification, if they result from existing contractual terms, e.g. changes in fixed interest rates initiated by banks due to changes in the CBR key rate, if the loan contract entitles banks to do so and and the Group have an option to either accept the revised rate or redeem the loan at par without penalty. The Group treats the modification of an interest rate to a current market rate using the guidance on floating-rate financial instruments. This means that the effective interest rate is adjusted prospectively.

The Group performs a quantitative and qualitative evaluation of whether the modification is substantial considering qualitative factors, quantitative factors and combined effect of qualitative and quantitative factors. The Group concludes that the modification is substantial as a result of the following qualitative factors:

- change the currency of the financial liability;
- change in collateral or other credit enhancement;

- inclusion of conversion option;
- change in the subordination of the financial liability.

For the quantitative assessment the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10 per cent different from the discounted present value of the remaining cash flows of the original financial liability. If an exchange of debt instruments or modification of terms is accounted for as an extinguishment, any costs or fees incurred are recognised as part of the gain or loss on the extinguishment. If the exchange or modification is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

(iv) Derecognition

Financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognised.

Financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

(v) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(k) Share capital

Ordinary shares

Ordinary shares are classified as equity. Incremental costs directly attributable to issue of ordinary shares and share options are recognised as a deduction from equity, net of any tax effects.

(l) Impairment

(i) Non-derivative financial assets

Policy applicable from 1 January 2018

Financial instruments and contract assets

The Group recognises loss allowances for ECLs on:

- financial assets measured at amortised cost;
- debt investments measured at FVOCI; and
- contract assets.

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs:

- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group’s historical experience and informed credit assessment and including forward-looking information.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 90 days past due.

The Group considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset is more than 90 days past due.

The Group considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of ‘investment grade’. The Group considers this to be Baa3 or higher per Moody’s.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive).

ECLs are discounted at the effective interest rate of the financial asset.

Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortised cost and debt securities at FVOCI are credit-impaired. A financial asset is ‘credit-impaired’ when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 90 days past due;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

Presentation of allowance for ECL in the statement of financial position

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets.

For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognised in OCI.

Write-off

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. For individual customers, the Group has a policy of writing off the gross carrying amount when the financial asset is 365 days past due based on historical experience of recoveries of similar assets. For corporate customers, the Group individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group’s procedures for recovery of amounts due.

Policy applicable before 1 January 2018

Non-derivative financial assets

Financial assets not classified as at FVTPL were assessed at each reporting date to determine whether there was objective evidence of impairment.

Objective evidence that financial assets were impaired included:

- default or delinquency by a debtor;
- restructuring of an amount due to the Group on terms that the Group would not consider otherwise;
- indications that a debtor or issuer would enter bankruptcy;
- adverse changes in the payment status of borrowers or issuers;
- the disappearance of an active market for a security because of financial difficulties; or
- observable data indicating that there was a measurable decrease in the expected cash flows from a group of financial assets.

For an investment in an equity instrument, objective evidence of impairment included a significant or prolonged decline in its fair value below its cost. The Group considered a decline of 20% to be significant and a period of nine months to be prolonged.

Financial assets measured at amortised cost	The Group considered evidence of impairment for these assets at both an individual asset and a collective level. All individually significant assets were individually assessed for impairment. Those found not to be impaired were then collectively assessed for any impairment that had been incurred but not yet individually identified. Assets that were not individually significant were collectively assessed for impairment. Collective assessment was carried out by grouping together assets with similar risk characteristics.
	In assessing collective impairment, the Group used historical information on the timing of recoveries and the amount of loss incurred, and made an adjustment if current economic and credit conditions were such that the actual losses were likely to be greater or lesser than suggested by historical trends.
	An impairment loss was calculated as the difference between an asset's carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses were recognised in profit or loss and reflected in an allowance account. When the Group considered that there were no realistic prospects of recovery of the asset, the relevant amounts were written off. If the amount of impairment loss subsequently decreased and the decrease was related objectively to an event occurring after the impairment was recognised, then the previously recognised impairment loss was reversed through profit or loss.
Available-for-sale financial assets	Impairment losses on available-for-sale financial assets were recognised by reclassifying the losses accumulated in the fair value reserve to profit or loss. The amount reclassified was the difference between the acquisition cost (net of any principal repayment and amortisation) and the current fair value, less any impairment loss previously recognised in profit or loss. If the fair value of an impaired available-for-sale debt security subsequently increased and the increase was related objectively to an event occurring after the impairment loss was recognised, then the impairment loss was reversed through profit or loss. Impairment losses recognised in profit or loss for an investment in an equity instrument classified as available-for-sale were not reversed through profit or loss.

A financial asset not carried at fair value through profit or loss, including an interest in an equity-accounted investee, is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

Objective evidence that financial assets (including equity securities) are impaired can include:

- default or delinquency by a debtor;
- restructuring of an amount due to the Group on terms that the Group would not consider otherwise;
- indications that a debtor or issuer will enter bankruptcy;
- adverse changes in the payment status of borrowers or issuers in the Group;
- economic conditions that correlate with defaults;
- the disappearance of an active market for a security; or

- observable data indicating that there is measurable decrease in expected cash flows from a group of financial assets.

In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.

(ii) Non-financial assets

The carrying amounts of the Group's non-financial assets, other inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill and intangible assets that have indefinite lives or that are not yet available for use, the recoverable amount is estimated each year at the same time.

For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGU. Subject to an operating segment ceiling test, for the purposes of goodwill impairment testing, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal reporting purposes. Goodwill acquired in a business combination is allocated to groups of CGUs that are expected to benefit from the synergies of the combination.

The Group's corporate assets do not generate separate cash inflows and are utilised by more than one CGU. Corporate assets are allocated to CGUs on a reasonable and consistent basis and tested for impairment as part of the testing of the CGU to which the corporate asset is allocated.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. 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 assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit (CGU) exceeds its estimated recoverable amount.

Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (group of CGUs) on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(m) Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. 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 the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

_(n)_ Leases

_(i)_ _Determining whether an arrangement contains a lease_

At inception of an arrangement, the Group determines whether such an arrangement is or contains a lease. This will be the case if the fulfilment of the arrangement is dependent on the use of a specific asset and the arrangement conveys a right to use the asset.

At inception or upon reassessment of an arrangement, the Group separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset. Subsequently the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the Group's incremental borrowing rate.

_(ii)_ _Leased assets_

Assets held by the Group under leases that transfer to the Group substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Other leases are operating leases and the leased assets are not recognised on the Group's statement of financial position.

(iii) _Lease payments_

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

_(iv)_ _Other expenses_

To the extent that the Group's contributions to social programs benefit the community at large and are not restricted to the Group's employees, they are recognised in profit or loss as incurred.

_(o)_ Earnings per share

The Group presents basic and diluted earnings per share ("EPS") data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which comprise convertible notes and share options granted to employees.

36. New standards and interpretations not yet adopted

Some new standards are effective for annual periods beginning after 1 January 2019 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.

Of those standards that are not yet effective, IFRS 16 is expected to have a material impact on the Group’s financial statements in the period of initial application.

(a) IFRS 16 Leases

The Group is required to adopt IFRS 16 Leases from 1 January 2019. The Group has assessed the estimated impact that initial application of IFRS 16 will have on its consolidated financial statements, as described below. The actual impacts of adopting the standard on 1 January 2019 may change because:

– the Group has not finalised the testing and assessment of controls over its new IT systems; and

– the new accounting policies are subject to change until the Group presents its first financial statements that include the date of initial application.

IFRS 16 introduces a single, on-balance sheet lease accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low-value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases.

IFRS 16 replaces existing leases guidance, including IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases – Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

(i) Leases in which the Group is a lessee

The Group will recognise new assets and liabilities for its operating leases. The nature of expenses related to those leases will now change because the Group will recognise a depreciation charge for right-of-use assets and interest expense on lease liabilities.

Previously, the Group recognised operating lease expense on a straight-line basis over the term of the lease, and recognised assets and liabilities only to the extent that there was a timing difference between actual lease payments and the expense recognised.

The Group will include the payments due under the lease in its lease liability.

No significant impact is expected for the Group’s finance leases.

(ii) Leases in which the Group is a lessor

The Group will reassess the classification of sub-leases in which the Group is a lessor. No significant impact is expected for leases in which the Group is a lessor.

(iii) Transition

The Group plans to apply IFRS 16 initially on 1 January 2019, using the modified retrospective approach. Therefore, the cumulative effect of adopting IFRS 16 will be recognised as an adjustment to the opening balance of retained earnings at 1 January 2019, with no restatement of comparative information.

The Group plans to apply the practical expedient to grandfather the definition of a lease on transition. This means that it will apply IFRS 16 to all contracts entered into before 1 January 2019 and identified as leases in accordance with IAS 17 and IFRIC 4.

(b) Other standards and interpetations

Other amended standards and are not expected to have a significant impact on the Group’s consolidated financial statements.