PSC “Corporation VSMPO-AVISMA”

Consolidated Financial Statements
for 2016
and Independent Auditors’ Report

Contents

Statement of management's responsibilities for the preparation and approval of the consolidated financial statements for the year ended 2016

The following statement, which should be read in conjunction with the auditors' responsibilities stated in the 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 the fairly in all aspects the financial position of the Group at 31 December 2016, and consolidated statements of income, comprehensive income, cash flows and changes in equity 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 prevenring fraud and other irregularities.

The consolidated financial statements for the year ended 31 December 2016 were approved by:

M.V. Voevodin
General Director
Verkhnyaya Salda, Russia
17 April 2017

D.Yu. Sannikov
Chief Accountant

JSC "KPMG"
10 Presnenskaya Naberezhnaya
Moscow, Russia 123112
Telephone +7 (495) 937 4477
Fax +7 (495) 937 4400/99
Internet www.kpmg.ru

Independent Auditors' Report

To the Board of Directors of PSC "Corporation VSMPO-AVISMA"

Opinion

We have audited the consolidated financial statements of PSC "Corporation VSMPO-AVISMA" (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2016, 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 2016, 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 (ISAs). 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 for 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.

Audited entity: PSC "Corporation VSMPO-AVISMA".

Registration No. in the Unified State Register of Legal Entities 1026600784011.

Verkhnyaya Salda, Sverdlovsk region, Russia.

Independent auditor: JSC "KPMG", a company incorporated under the Laws of the Russian Federation, a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Registration No. in the Unified State Register of Legal Entities 1027700125628.

Member of the Self-regulated organization of auditors "Russian Union of auditors" (Association). The Principal Registration Number of the Entry in the Register of Auditors and Audit Organisations: No. 11603053203.

<table>
<tr><th colspan="2">Fair value of property, plant and equipment</th></tr>
<tr><td colspan="2">Please refer to the Note 14 in the consolidated financial statements.</td></tr>
<tr><th>The key audit matter</th><th>How the matter was addressed in our audit</th></tr>
<tr><td>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 objects have specialized nature that requires significant degree of judgement application in calculation of depreciated replacement cost as well as determination of economic obsolescence based on discounted cash flows model.

Due to the significance of property, plant and equipment (representing 56% of total assets) and the inherent uncertainty involved in forecasting and discounting future cash flows, which are the basis of the assessment of economic obsolescence, fair value of property, plant and equipment is a key audit matter.</td><td>We tested depreciated replacement cost of property, plant and equipment on sample basis through analysis of appropriateness of analogues used and comparing to available market information.

With respect to the discounted cash flows model used to determine economic obsolescence we with involvement of our internal valuation specialists compared key assumptions applied in the model to externally derived data as well as our own assessments. This included:
— comparison of sales prices forecasts with expected sales prices growth rate based on internal and external sources;
— comparison of EBITDA margins forecasts with actual historic results of the Group and comparable companies;
— comparison of key macroeconomic factors projections used with consensus forecasts developed by recognized external sources;
— recalculation of discount rate;
— comparison of forecasted capital expenditures with approved investment program;
— comparison of projected production volumes with historically achieved results.
We used alternative assumptions related to forecasts of EBITDA margin, sales growth, production volumes, discount rate and capital expenditures to perform our own sensitivity analysis of the discounted cash flows model.

We considered the accuracy and completeness of the disclosures in the consolidated financial statements.</td></tr>
</table>

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 skepticism 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 for 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:

Акционерное общество ОГРН 1027700125628 * МОСКВА *
КПМГ
KPMG

Adamov N.A.

JSC "KPMG"

Moscow, Russia

17 April 2017

	Note	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Revenue	6	1 333 755	1 294 241	89 408 116	78 894 124
Cost of sales	7	(685 720)	(617 136)	(45 967 136)	(37 619 288)
Gross profit		**648 035**	**677 105**	**43 440 980**	**41 274 836**
Distribution expenses	7	(33 048)	(33 950)	(2 215 342)	(2 069 531)
General and administrative expenses	7	(176 297)	(179 958)	(11 818 032)	(10 969 847)
Operating profit before loss on disposal of property, plant and equipment		**438 690**	**463 197**	**29 407 606**	**28 235 458**
Loss on disposal of property, plant and equipment	14	(17 150)	(1 230)	(1 149 644)	(74 972)
Operating profit		**421 540**	**461 967**	**28 257 962**	**28 160 486**
Impairment loss on intangible assets and property, plant and equipment	14,15	(11 089)	(36 964)	(743 325)	(2 533 543)
Finance income	8	75 316	32 367	5 048 754	1 973 045
Share in income of equity-accounted investees	17	54	120	3 622	7 319
Finance costs	8	(35 673)	(144 165)	(2 391 330)	(8 787 988)
Profit before income tax		**450 148**	**313 325**	**30 175 683**	**18 819 319**
Income tax expense	12	(69 992)	(36 294)	(4 691 937)	(2 212 421)
Profit for the period		**380 156**	**277 031**	**25 483 746**	**16 606 898**
Other comprehensive income/(loss)					
Items that will never be reclassified to profit or loss					
Revaluation of property, plant and equipment		70 397	1 446 163	4 270 055	105 107 677
Translation to presentation currency		399 407	(188 587)	-	-
Remeasurement of defined benefit obligations		(1 361)	(5 689)	(91 257)	(346 770)
Related income tax		(7 587)	(260 901)	(460 220)	(19 015 143)
		460 856	**990 986**	**3 718 578**	**85 745 764**
Items that are or may be reclassified to profit or loss					
Foreign currency translation differences - foreign operations		(3 201)	9 149	(214 594)	557 721
Net change in fair value of available-for-sale financial assets		514	378	34 487	23 068
Equity-accounted investees – share of other comprehensive income	17	7 127	1 929	477 734	117 558
Related income tax	12	2 113	(4 103)	119 532	(250 102)
		6 553	**7 353**	**417 159**	**448 245**
Other comprehensive income for the period, net of income tax		**467 409**	**998 339**	**4 135 737**	**86 194 009**
Total comprehensive income for the period		**847 565**	**1 275 370**	**29 619 483**	**102 800 907**
Profit/(loss) attributable to:					
Shareholders of the Company		381 701	280 182	25 587 319	16 798 975
Non-controlling interests		(1 545)	(3 151)	(103 573)	(192 077)
Profit for the period		**380 156**	**277 031**	**25 483 746**	**16 606 898**
Total comprehensive income/(loss) attributable to:					
Shareholders of the Company		848 252	1 278 510	29 665 532	102 992 290
Non-controlling interests		(687)	(3 140)	(46 049)	(191 383)
Total comprehensive income for the period		**847 565**	**1 275 370**	**29 619 483**	**102 800 907**
Earnings per share attributable to shareholders of the Company, basic and diluted (expressed in USD/RUB per share)	9	33,123	24,419	2 220,389	1 464,107

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 16 to 72.

		’000 USD		’000 RUB	
	Note	**31 December 2016**	**31 December 2015**	**31 December 2016**	**31 December 2015**
ASSETS					
Non-current assets					
Property, plant and equipment	14	2 287 950	2 050 372	138 779 929	149 436 666
Goodwill	16	33 002	27 466	2 001 817	2 001 817
Intangible assets	15	24 748	15 735	1 501 108	1 146 812
Equity-accounted investees	17	40 642	32 111	2 465 210	2 340 334
Long-term trade and other receivables	20	14 157	16 254	858 741	1 184 671
Other investments	18	52 535	40 533	3 186 594	2 954 210
Deferred tax assets	12	300	4 529	18 216	330 061
Other non-current assets		3 441	2 468	208 747	179 882
Total non-current assets		**2 456 775**	**2 189 468**	**149 020 362**	**159 574 453**
Current assets					
Inventories	19	702 367	428 999	42 603 386	31 266 620
Other investments	18	22 792	12 897	1 382 527	939 988
Short-term trade and other receivables	20	258 734	254 130	15 694 079	18 521 591
Current tax assets		4 912	2 949	297 938	214 913
Cash and cash equivalents	21	638 029	509 120	38 700 845	37 106 057
Other current assets		3 845	4 131	233 222	301 055
Total current assets		**1 630 679**	**1 212 226**	**98 911 997**	**88 350 224**
Total assets		**4 087 454**	**3 401 694**	**247 932 359**	**247 924 677**
EQUITY AND LIABILITIES					
Equity	22				
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		1 852 295	1 501 740	66 120 455	42 071 355
Reserves		1 098 236	1 226 899	78 640 142	87 665 749
Cumulative currency translation reserve		(653 047)	(1 052 036)	274 294	324 436
Total equity attributable to shareholders of the Company		**2 472 786**	**1 851 905**	**150 177 970**	**135 204 619**
Non-controlling interests		3 630	3 958	33 746	55 731
Total equity		**2 476 416**	**1 855 863**	**150 211 716**	**135 260 350**
Non-current liabilities					
Long-term loans and borrowings	24	639 616	643 784	38 797 107	46 920 707
Defined benefit pension plan	10	33 013	25 456	2 002 446	1 855 268
Other long-term liabilities		10 055	10 277	609 889	749 003
Deferred tax liabilities	12	294 123	267 593	17 840 586	19 502 908
Total non-current liabilities		**976 807**	**947 110**	**59 250 028**	**69 027 886**
Current liabilities					
Trade and other payables	25	98 964	72 820	6 002 853	5 307 305
Current income tax payable		6 258	4 589	379 597	334 423
Other taxes payable		12 902	4 877	782 701	355 536
Short-term loans and borrowings	24	390 594	466 047	23 692 243	33 966 773
Advances received from customers		124 687	49 670	7 563 123	3 620 060
Dividends payable		826	718	50 098	52 344
Total current liabilities		**634 231**	**598 721**	**38 470 615**	**43 636 441**
Total liabilities		**1 611 038**	**1 545 831**	**97 720 643**	**112 664 327**
Total equity and liabilities		**4 087 454**	**3 401 694**	**247 932 359**	**247 924 677**

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 16 to 72.

’000 USD	Attributable to equity holders of the Company								
	Share capital	**Share premium**	**Treasury share reserve**	**Retained earnings**	**Reserves**	**Cumulative currency translation reserve**	**Total**	**Non-controlling interests**	**Total equity**
Balance at 1 January 2015	**22 785**	**158 054**	**(29 365)**	**1 548 483**	**45 481**	**(868 946)**	**876 492**	**6 419**	**882 911**
Total comprehensive income									
Profit for the period	-	-	-	280 182	-	-	280 182	(3 151)	277 031
Other comprehensive income/(loss)									
Foreign currency translation difference – foreign operations	-	-	-	-	-	9 138	9 138	11	9 149
Translation to presentation currency	-	-	-	-	-	(188 587)	(188 587)	-	(188 587)
Net change in fair value of available-for-sale financial assets	-	-	-	-	378	-	378	-	378
Revaluation of property, plant and equipment	-	-	-	-	1 446 163	-	1 446 163	-	1 446 163
Defined benefit plan actuarial losses	-	-	-	-	(5 689)	-	(5 689)	-	(5 689)
Equity-accounted investees – share of other comprehensive income	-	-	-	-	1 929	-	1 929	-	1 929
Income tax on other comprehensive income	-	-	-	-	(261 363)	(3 641)	(265 004)	-	(265 004)
Total other comprehensive income	-	-	-	-	1 181 418	(183 090)	998 328	11	998 339
Total comprehensive income for the period	**-**	**-**	**-**	**280 182**	**1 181 418**	**(183 090)**	**1 278 510**	**(3 140)**	**1 275 370**
Dividends	-	-	-	(327 135)	-	-	(327 135)	-	(327 135)
Treasury shares sold	-	(4 130)	27 958	-	-	-	23 828	-	23 828
Establishment of subsidiary with non-controlling interest	-	-	-	-	-	-	-	679	679
Equity-accounted investees – change in capital	-	-	-	210	-	-	210	-	210
Total transactions with owners	**-**	**(4 130)**	**27 958**	**(326 925)**	**-**	**-**	**(303 097)**	**679**	**(302 418)**
Balance at 31 December 2015	**22 785**	**153 924**	**(1 407)**	**1 501 740**	**1 226 899**	**(1 052 036)**	**1 851 905**	**3 958**	**1 855 863**

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 16 to 72.

'000 USD	Attributable to equity holders of the Company								
	Share capital	Share premium	Treasury share reserve	Retained earnings	Reserves	Cumulative currency translation reserve	Total	Non-controlling interests	Total equity
Balance at 1 January 2016	**22 785**	**153 924**	**(1 407)**	**1 501 740**	**1 226 899**	**(1 052 036)**	**1 851 905**	**3 958**	**1 855 863**
Total comprehensive income									
Profit for the period	-	-	-	381 701	-	-	381 701	(1 545)	380 156
Other comprehensive income/(loss)									
Foreign currency translation difference – foreign operations	-	-	-	-	-	(4 059)	(4 059)	858	(3 201)
Translation to presentation currency	-	-	-	-	-	399 407	399 407	-	399 407
Net change in fair value of available-for-sale financial assets	-	-	-	-	514	-	514	-	514
Revaluation of property, plant and equipment	-	-	-	-	70 397	-	70 397	-	70 397
Defined benefit plan actuarial losses	-	-	-	-	(1 361)	-	(1 361)	-	(1 361)
Equity-accounted investees – share of other comprehensive income	-	-	-	-	7 127	-	7 127	-	7 127
Income tax on other comprehensive income	-	-	-	-	(9 115)	3 641	(5 474)	-	(5 474)
Total other comprehensive income	-	-	-	-	67 562	398 989	466 551	858	467 409
Total comprehensive income for the period	**-**	**-**	**-**	**381 701**	**67 562**	**398 989**	**848 252**	**(687)**	**847 565**
Dividends	-	-		(227 279)	-	-	(227 279)	-	(227 279)
Establishment of subsidiary with non-controlling interest	-	-	-	-	-	-	-	359	359
Write-off of revaluation of property, plant and equipment due to disposal and depreciation	-	-	-	196 225	(196 225)	-	-	-	-
Equity-accounted investees – change in capital	-	-	-	(92)	-	-	(92)	-	(92)
Total transactions with owners	**-**	**-**	**-**	**(31 146)**	**(196 225)**	**-**	**(227 371)**	**359**	**(227 012)**
Balance at 31 December 2016	**22 785**	**153 924**	**(1 407)**	**1 852 295**	**1 098 236**	**(653 047)**	**2 472 786**	**3 630**	**2 476 416**

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 16 to 72.

’000 RUB	Attributable to equity holders of the Company								
	Share capital	Share premium	Treasury share reserve	Retained earnings	Reserves	Cumulative currency translation reserve	Total	Non-controlling interests	Total
Balance at 1 January 2015	**596 313**	**4 800 527**	**(1 654 690)**	**43 926 218**	**1 807 485**	**(10 615)**	**49 465 238**	**205 795**	**49 671 033**
Total comprehensive income									
Profit for the period	-	-	-	16 798 975	-	-	16 798 975	(192 077)	16 606 898
Other comprehensive income/(loss)									
Foreign currency translation difference – foreign operations	-	-	-	-	-	557 027	557 027	694	557 721
Net change in fair value of available-for-sale financial assets	-	-	-	-	23 068	-	23 068	-	23 068
Revaluation of property, plant and equipment	-	-	-	-	105 107 677	-	105 107 677	-	105 107 677
Defined benefit plan actuarial losses	-	-	-	-	(346 770)	-	(346 770)	-	(346 770)
Equity-accounted investees – share of other comprehensive income	-	-	-	-	117 558	-	117 558	-	117 558
Income tax on other comprehensive income	-	-	-	-	(19 043 269)	(221 976)	(19 265 245)	-	(19 265 245)
Total other comprehensive income	-	-	-	-	85 858 264	335 051	86 193 315	694	86 194 009
Total comprehensive income for the period	**-**	**-**	**-**	**16 798 975**	**85 858 264**	**335 051**	**102 992 290**	**(191 383)**	**102 800 907**
Dividends	-	-	-	(18 666 616)	-	-	(18 666 616)	-	(18 666 616)
Treasury shares sold	-	(205 919)	1 606 848	-	-	-	1 400 929	-	1 400 929
Establishment of subsidiary with non-controlling interest	-	-	-	-	-	-	-	41 319	41 319
Equity-accounted investees – change in capital	-	-	-	12 778	-	-	12 778	-	12 778
Total transactions with owners	**-**	**(205 919)**	**1 606 848**	**(18 653 838)**	**-**	**-**	**(17 252 909)**	**41 319**	**(17 211 590)**
Balance at 31 December 2015	**596 313**	**4 594 608**	**(47 842)**	**42 071 355**	**87 665 749**	**324 436**	**135 204 619**	**55 731**	**135 260 350**

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 16 to 72.

’000 RUB	Attributable to equity holders of the Company								
	Share capital	Share premium	Treasury share reserve	Retained earnings	Reserves	Cumulative currency translation reserve	Total	Non-controlling interests	Total equity
Balance at 1 January 2016	**596 313**	**4 594 608**	**(47 842)**	**42 071 355**	**87 665 749**	**324 436**	**135 204 619**	**55 731**	**135 260 350**
Total comprehensive income									
Profit for the period	-	-	-	25 587 319	-	-	25 587 319	(103 573)	25 483 746
Other comprehensive income/(loss)									
Foreign currency translation difference – foreign operations	-	-	-	-	-	(272 118)	(272 118)	57 524	(214 594)
Net change in fair value of available-for-sale financial assets	-	-	-	-	34 487	-	34 487	-	34 487
Revaluation of property, plant and equipment	-	-	-	-	4 270 055	-	4 270 055	-	4 270 055
Defined benefit plan actuarial losses	-	-	-	-	(91 257)	-	(91 257)	-	(91 257)
Equity-accounted investees – share of other comprehensive income	-	-	-	-	477 734	-	477 734	-	477 734
Income tax on other comprehensive income	-	-	-	-	(562 664)	221 976	(340 688)	-	(340 688)
Total other comprehensive income/(loss)	-	-	-	-	4 128 355	(50 142)	4 078 213	57 524	4 135 737
Total comprehensive income for the period	**-**	**-**	**-**	**25 587 319**	**4 128 355**	**(50 142)**	**29 665 532**	**(46 049)**	**29 619 483**
Dividends	-	-	-	(14 686 004)	-	-	(14 686 004)	-	(14 686 004)
Establishment of subsidiary with non-controlling interest	-	-	-	-	-	-	-	24 064	24 064
Write-off of revaluation of property, plant and equipment due to disposal and depreciation	-	-	-	13 153 962	(13 153 962)	-	-	-	-
Equity-accounted investees – change in capital	-	-	-	(6 177)	-	-	(6 177)	-	(6 177)
Total transactions with owners	**-**	**-**	**-**	**(1 538 219)**	**(13 153 962)**	**-**	**(14 692 181)**	**24 064**	**(14 668 117)**
Balance at 31 December 2016	**596 313**	**4 594 608**	**(47 842)**	**66 120 455**	**78 640 142**	**274 294**	**150 177 970**	**33 746**	**150 211 716**

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 16 to 72.

	Note	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Cash flows from operating activities					
Profit before income tax		450 148	313 325	30 175 683	18 819 319
Adjustments for:					
Depreciation and amortization	7	172 802	78 831	11 583 743	4 805 431
Impairment loss of property, plant and equipment	14	18 471	26 610	1 238 195	1 902 402
(Reversal)/impairment loss of trade receivables	7(c)	(2 684)	7 510	(179 942)	457 769
(Reversal)/impairment loss of intangible assets	15	(7 382)	10 354	(494 870)	631 141
Reversal of accrued investments impairment	18	-	(2 641)	-	(161 000)
Share in profit of equity accounted investees	17	(54)	(120)	(3 622)	(7 319)
Interest income	8	(27 049)	(32 367)	(1 813 200)	(1 973 045)
Foreign currency translation (gain)/loss		(48 178)	137 566	(3 609 055)	8 740 547
Interest expenses	8	35 673	30 072	2 391 330	1 833 072
Provision for inventory obsolescence	7(a)	1 058	1 116	70 893	68 056
Loss on disposal of property, plant and equipment		17 150	1 230	1 149 644	74 972
Pension cost	7(a)	3 460	3 800	231 921	231 661
Operating profit before changes in working capital and other long-term liabilities		**613 415**	**575 286**	**40 740 720**	**35 423 006**
Changes in:					
Trade and other receivables		10 828	(3 888)	725 854	(236 974)
Advances to suppliers		3 899	(664)	261 428	(40 479)
Inventories		(32 471)	(59 218)	(2 176 629)	(3 609 832)
Trade and other payables, advances received and other taxes payable		75 624	11 915	5 069 424	726 344
Other current assets		464	2 153	31 104	131 215
Other long-term liabilities		(272)	7 982	(18 222)	486 595
Cash flows from operations before income taxes and interest paid		**671 487**	**533 566**	**44 633 679**	**32 879 875**
Income taxes paid		(94 840)	(46 380)	(6 357 612)	(2 827 223)
Interest paid		(37 847)	(34 132)	(2 537 089)	(2 080 609)
Net cash from operating activities		**538 800**	**453 054**	**35 738 978**	**27 972 043**

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 16 to 72.

	Note	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Cash flows from investing activities					
Purchases of property, plant and equipment, including advances given	14	(134 341)	(166 176)	(9 005 416)	(10 129 767)
Purchases of intangible assets	15	(24)	(6)	(1 589)	(357)
Proceeds from disposal of property, plant and equipment		8 717	1 393	584 214	84 815
Loans provided and acquisition of other investments		(15 339)	(5 490)	(1 028 255)	(334 658)
Proceeds from disposal of investments		7 120	2 437	477 344	148 555
Interest received		24 051	32 078	1 641 497	1 943 017
Net cash used in investing activities		**(109 816)**	**(135 764)**	**(7 332 205)**	**(8 288 395)**
Cash flows from financing activities					
Dividends paid to shareholders		(219 113)	(305 897)	(14 688 250)	(18 646 810)
Proceeds from treasury shares sale		1 562	12 733	104 704	776 179
Proceeds from borrowings		956 869	1 244 271	64 143 634	75 848 067
Repayment of borrowings		(1 049 962)	(1 249 472)	(70 384 106)	(76 165 102)
Net cash used in financing activities		**(310 644)**	**(298 365)**	**(20 824 018)**	**(18 187 666)**
Effect of exchange rate changes on cash and cash equivalents		10 569	(6 425)	(5 987 967)	7 671 009
Net increase in cash and cash equivalents		**128 909**	**12 500**	**1 594 788**	**9 166 991**
Cash and cash equivalents at the beginning of the year	21	**509 120**	**496 620**	**37 106 057**	**27 939 066**
Cash and cash equivalents at the end of the year	21	**638 029**	**509 120**	**38 700 845**	**37 106 057**

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 16 to 72.

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.

The Company and its subsidiaries form a vertically integrated operation.

As at 31 December 2016, 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 characteristics of an emerging market. The legal, tax and regulatory frameworks continue development, but are subject to varying interpretations and frequent changes which together with other legal and fiscal impediments contribute to the challenges faced by entities operating in the Russian Federation.

The conflict in Ukraine and related events has increased the perceived risks of doing business in the Russian Federation. The imposition of economic sanctions on Russian individuals and legal entities by the European Union, the United States of America, Japan, Canada, Australia and others, as well as retaliatory sanctions imposed by the Russian government, has resulted in 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. In particular, some Russian entities may be experiencing difficulties in accessing international equity and debt markets and may become increasingly dependent on Russian state banks to finance their operations. The longer term effects of recently implemented sanctions, as well as the threat of additional future 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.

Ukrainian business environment

Ukraine's political and economic situation has deteriorated significantly since 2014. Following political and social unrest in early 2014, in March 2014, various events in Crimea led to the accession of the Republic of Crimea to the Russian Federation, which was not recognised by Ukraine and many other countries. This event resulted in a significant deterioration of the relationship between Ukraine and the Russian Federation. Following the instability in Crimea, regional tensions have spread to the Eastern regions of Ukraine, primarily Donetsk and Lugansk regions. In May 2014, protests in those regions escalated into military clashes and armed conflict between supporters of the self-declared republics of the Donetsk and Lugansk regions and the Ukrainian forces, which continued through the date of these consolidated financial statements. As a result of this conflict, part of the Donetsk and Lugansk regions remains under control of the self-proclaimed republics, and Ukrainian authorities are not currently able to fully enforce Ukrainian laws on this territory.

Political and social unrest combined with the military conflict in the Donetsk and Lugansk regions has deepened the ongoing economic crisis, caused a fall in the country's gross domestic product and foreign trade, deterioration in state finances, depletion of the National Bank of Ukraine's foreign currency reserves, significant devaluation of the national currency and a further downgrading of the Ukrainian sovereign debt credit ratings. Following the devaluation of the national currency, the National Bank of Ukraine introduced certain administrative restrictions on currency conversion transactions, which among others included restrictions on purchases of foreign currency by individuals and companies, the requirement to convert large part of foreign currency proceeds to local currency, restrictions on payment of dividends abroad, a ban on early repayment of foreign loans and restrictions on cash withdrawals from banks. These events had a negative effect on Ukrainian companies and banks, significantly limiting their ability to obtain financing on domestic and international markets.

The final resolution and the effects of the political and economic crisis are difficult to predict but may have further severe effects on the Ukrainian economy.

Whilst management believes it is taking appropriate measures to support the sustainability of the Group's business in the current circumstances, a continuation of the current unstable business environment could negatively affect the Group's results and financial position in a manner not currently determinable. These consolidated financial statements reflect management's current assessment of the impact of the Ukrainian business environment on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

The following is summarized financial information of Ukrainian subsidiaries as at and for the years ended 31 December 2016 and 31 December 2015:

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Revenue	25 545	48 410	1 712 388	2 950 949
Net loss	(4 369)	(27 777)	(292 888)	(1 693 221)
Non-current assets	25 740	24 822	1 561 282	1 809 073
Current assets	18 155	19 902	1 101 252	1 450 479
Non-current liabilities	(1 639)	(411)	(99 439)	(29 966)
Current liabilities	(55 952)	(51 132)	(3 393 892)	(3 726 666)
Net assets	**(13 696)**	**(6 819)**	**(830 797)**	**(497 080)**

The Group includes a subsidiary LLC “VSMPO Titan Ukraine”, which produces and sells titanium products. In 2016, the Group performed an assessment of the recoverable amount of the property, plant and equipment of the subsidiary. The recoverable amount was determined based on value in use calculations determined by discounting the future cash flows generated from the continuing use of the assets. As a result of the impairment test as at 31 December 2016, no impairment of property, plant and equipment was identified.

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 14 – Property, plant and equipment;
- Note 15 – Intangible assets;
- Note 26(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 14 – Property, plant and equipment (related to fair value of property, plant and equipment and useful lives);
- Note 15 – 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 14 – Property, plant and equipment;
- Note 26 – financial instruments.

5. 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. Sales are based on the geographical area in which the customer is located. Production assets and the majority of assets and liabilities of the Group are located in the Russian Federation.

Revenue	**2016 '000 USD**	**2015 '000 USD**	**2016 '000 RUB**	**2015 '000 RUB**
Russia	345 342	414 888	23 149 961	25 290 699
Europe	433 795	358 938	29 079 392	21 880 107
North America	420 211	380 695	28 168 805	23 206 365
Asia	121 370	105 376	8 136 026	6 423 469
Other CIS countries	13 037	34 344	873 932	2 093 484
	1 333 755	**1 294 241**	**89 408 116**	**78 894 124**

The Group has revenue from one customer amounting to 10% or more of total revenue in the amount of approximately USD 222 million or RUB 14 898 million (2015: USD 195 million or RUB 11 911 million). Furthermore, revenue to parties under Government control is disclosed in Note 31.

6. Revenue

	2016 '000 USD	**2015 '000 USD**	**2016 '000 RUB**	**2015 '000 RUB**
Revenue from sales of goods	1 316 220	1 275 452	88 232 642	77 748 804
Revenue from services provided	16 604	15 988	1 113 028	974 611
Other revenue	931	2 801	62 446	170 709
	1 333 755	**1 294 241**	**89 408 116**	**78 894 124**

7. Income and expenses

(a) Cost of sales

	2016 '000 USD	**2015 '000 USD**	**2016 '000 RUB**	**2015 '000 RUB**
Materials and consumables used	(233 596)	(249 008)	(15 659 077)	(15 178 942)
Depreciation	(146 708)	(71 491)	(9 834 525)	(4 357 967)
Personnel cost	(122 130)	(122 703)	(8 186 990)	(7 479 670)
Utilities	(88 461)	(93 911)	(5 929 993)	(5 724 610)
Social insurance costs	(36 463)	(38 483)	(2 444 275)	(2 345 857)
Repairs and maintenance	(20 814)	(15 784)	(1 395 252)	(962 186)
Semi-product processing services	(13 019)	(6 108)	(872 722)	(372 316)
Pension cost	(3 460)	(3 800)	(231 921)	(231 661)
Provision for inventory obsolescence	(1 058)	(1 116)	(70 893)	(68 056)
Other costs	(20 011)	(14 732)	(1 341 488)	(898 023)
	(685 720)	**(617 136)**	**(45 967 136)**	**(37 619 288)**

(b) Distribution expenses

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Transport	(9 288)	(11 649)	(622 604)	(710 055)
Personnel cost	(8 289)	(7 429)	(555 639)	(452 871)
Materials	(5 045)	(4 506)	(338 171)	(274 652)
Certification expenses	(1 536)	(2 919)	(102 964)	(177 963)
Advertising expenses	(1 293)	(642)	(86 675)	(39 161)
Social insurance costs	(887)	(808)	(59 480)	(49 266)
Customs	(535)	(1 585)	(35 854)	(96 616)
Other	(6 175)	(4 412)	(413 955)	(268 947)
	(33 048)	**(33 950)**	**(2 215 342)**	**(2 069 531)**

(c) General and administrative expenses

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Personnel cost	(67 878)	(64 391)	(4 550 185)	(3 925 184)
Depreciation	(26 094)	(7 340)	(1 749 218)	(447 464)
Insurance	(21 451)	(23 026)	(1 437 980)	(1 403 606)
Social insurance costs	(14 188)	(14 215)	(951 119)	(866 546)
Charity expenses	(9 886)	(9 057)	(662 688)	(552 110)
Repair and maintenance	(6 528)	(6 854)	(437 579)	(417 832)
Taxes other than income tax	(5 241)	(7 155)	(351 313)	(436 148)
Materials	(4 885)	(1 566)	(327 456)	(95 435)
Consulting expenses	(4 833)	(2 961)	(323 963)	(180 495)
Accrual of provisions	(93)	(2 950)	(6 238)	(179 819)
Change in provision for impaired accounts receivable	2 684	(7 510)	179 942	(457 769)
Other expenses	(17 904)	(32 933)	(1 200 235)	(2 007 439)
	(176 297)	**(179 958)**	**(11 818 032)**	**(10 969 847)**

8. Net finance costs

Finance income	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Interest income	27 049	32 367	1 813 200	1 973 045
Foreign currency exchange gain, net	48 267	-	3 235 554	-
Finance income	**75 316**	**32 367**	**5 048 754**	**1 973 045**
Finance costs				
Interest expenses	(35 673)	(30 072)	(2 391 330)	(1 833 072)
Foreign currency exchange loss, net	-	(114 093)	-	(6 954 916)
Finance costs	**(35 673)**	**(144 165)**	**(2 391 330)**	**(8 787 988)**

9. Earnings per share

The calculation of earnings per share is based upon the profit for the year and the 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	**2016**	**2015**
Issued shares as at 1 January	11 523 801	11 398 987
Effect of treasury shares owned	-	74 888
Weighted average number of shares for the year ended 31 December	11 523 801	11 473 875

	2016	**2015**
Weighted average number of shares for the year ended 31 December	11 523 801	11 473 875
Profit attributable to the equity holders of the Company (’000 USD)	381 701	280 182
Basic earnings per share (USD per 1 share)	33,123	24,419

	2016	**2015**
Weighted average number of shares for the year ended 31 December	11 523 801	11 473 875
Profit attributable to the equity holders of the Company (’000 RUB)	25 587 319	16 798 975
Basic earnings per share (RUB per 1 share)	2 220,389	1 464,107

10. Employee benefits

The post employment and post retirement program of the Company consists of lump-sum benefits upon death and retirement, an occupational pension plan and additional support provided by the Company 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 Company 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 2017 with a valuation date of 31 December 2016. For the purposes of that valuation, census data as at the valuation date was collected for the Company.

(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	**2016**	**2015**
Balance as at 1 January	**25 456**	**25 007**
Included in profit or loss		
Current service cost	830	800
Interest expense	2 630	3 000
	3 460	**3 800**
Included in other comprehensive income		
Remeasurements loss/(gain):		
- Actuarial loss/(gain)	1 361	5 689
	1 361	**5 689**
Other		
Benefits paid	(2 625)	(2 133)
Cumulative translation adjustment	5 361	(6 907)
	2 736	**(9 040)**
Balance as at 31 December	**33 013**	**25 456**

	Defined benefit obligation	
'000 RUB	**2016**	**2015**
Balance as at 1 January	**1 855 268**	**1 406 837**
Included in profit or loss		
Current service cost	55 670	48 772
Interest expense	176 251	182 889
	231 921	**231 661**
Included in other comprehensive income		
Remeasurements loss/(gain):		
- Actuarial loss/(gain)	91 257	346 770
	91 257	**346 770**
Other		
Benefits paid	(176 000)	(130 000)
	(176 000)	**(130 000)**
Balance as at 31 December	**2 002 446**	**1 855 268**

(b) Actuarial assumptions

The following were the principal actuarial assumptions at the reporting date (expressed as weighted averages).

	2016	**2015**
Discount rate	8,50%	9,50%
Future salary growth	5,00%	5,40%
Future pension growth	5,00%	5,40%
Staff turnover	up to age 49: 5% p.a. from age 50: 0% p.a.	up to age 49: 5% p.a. from age 50: 0% p.a.
Mortality	Sverdlovsk region population 2015	Sverdlovsk region population 2014

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

(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 2016	**Defined benefit obligation**	
'000 USD	**Increase**	**Decrease**
Discount rate (1% movement)	(2 503)	2 976
Future salary (1% movement)	3 052	(2 603)

31 December 2016	**Defined benefit obligation**	
'000 RUB	**Increase**	**Decrease**
Discount rate (1% movement)	(151 831)	180 505
Future salary (1% movement)	185 168	(157 850)

11. Employee benefit expenses

	2016 '000 USD	**2015 '000 USD**	**2016 '000 RUB**	**2015 '000 RUB**
Wages and salaries and social insurance costs	(249 835)	(248 029)	(16 747 688)	(15 119 394)
Pension cost	(3 460)	(3 800)	(231 921)	(231 661)
	(253 295)	**(251 829)**	**(16 979 609)**	**(15 351 055)**

12. Income taxes expense

The Company applied 17,46% tax rate for income tax in 2016 (2015: 18,45%). Other Russian subsidiaries applied 20% tax rate for income tax in 2016 (2015: 20%).

(a) Amounts recognised in profit or loss

	2016 '000 USD	**2015 '000 USD**	**2016 '000 RUB**	**2015 '000 RUB**
Current tax expense				
Current period	(95 375)	(61 348)	(6 393 495)	(3 739 649)
Over provided in prior periods	533	760	35 718	46 287
	(94 842)	**(60 588)**	**(6 357 777)**	**(3 693 362)**
Deferred tax expense				
Origination and reversal of temporary differences	24 850	24 294	1 665 840	1 480 941
	(69 992)	**(36 294)**	**(4 691 937)**	**(2 212 421)**

(b) Amounts recognised in other comprehensive income

'000 USD	2016			2015		
	Before tax	Tax	Net of tax	Before tax	Tax	Net of tax
Translation to presentation currency	399 407	-	399 407	(188 587)	-	(188 587)
Foreign currency translation differences – foreign operations	(3 201)	3 641	440	(9 149)	(3 641)	(5 508)
Net change in fair value of available-for-sale financial assets	514	(103)	411	378	(76)	302
Revaluation of property, plant and equipment	70 397	(7 587)	62 810	1 446 163	(260 901)	1 185 262
Defined benefit plan actuarial losses	(1 361)	-	(1 361)	(5 689)	-	(5 689)
Equity-accounted investees – share of other comprehensive income	7 127	(1 425)	5 702	1 929	(386)	1 543
	472 883	**(5 474)**	**467 409**	**1 263 343**	**(265 004)**	**998 339**

'000 RUB	2016			2015		
	Before tax	Tax	Net of tax	Before tax	Tax	Net of tax
Foreign currency translation differences – foreign operations	(214 594)	221 976	7 382	557 721	(221 976)	335 745
Net change in fair value of available-for-sale financial assets	34 487	(6 897)	27 590	23 068	(4 614)	18 454
Revaluation of property, plant and equipment	4 270 055	(460 220)	3 809 835	105 107 677	(19 015 143)	86 092 534
Defined benefit plan actuarial losses	(91 257)	-	(91 257)	(346 770)	-	(346 770)
Equity-accounted investees – share of other comprehensive income	477 734	(95 547)	382 187	117 558	(23 512)	94 046
	4 476 425	**(340 688)**	**4 135 737**	**105 459 254**	**(19 265 245)**	**86 194 009**

Reconciliation of effective tax rate:

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Profit before income tax	450 148	313 325	30 175 683	18 819 319
Income tax at applicable tax rate	(78 596)	(57 808)	(5 268 674)	(3 472 164)
Effect of income taxed at different rates	248	4 449	16 599	275 558
Effect of non-taxable income/(non-deductible expenses)	7 823	16 305	524 420	937 898
Over provided in prior years	533	760	35 718	46 287
	(69 992)	**(36 294)**	**(4 691 937)**	**(2 212 421)**

(c) Movement in deferred tax balances

’000 USD	1 January 2016	Recognized in profit or loss	Recognized in other comprehensive income	Translation difference	31 December 2016 Net deferred balances	31 December 2016 Deferred tax assets	31 December 2016 Deferred tax liabilities
Property, plant and equipment	(285 081)	41 739	(7 587)	(53 074)	(304 003)	1 026	(305 029)
Intangible assets	2 657	(1 364)	-	747	2 040	3 713	(1 673)
Inventories	28 551	(24 463)	-	3 182	7 270	40 343	(33 073)
Trade and other receivables	2 785	848	-	651	4 284	4 596	(312)
Trade and other payables	4 089	(3 602)	-	446	933	949	(16)
Investments	(4 141)	5 559	2 113	(393)	3 138	9 267	(6 129)
Tax loss carry-forwards	249	(249)	-	23	23	23	-
Loans and borrowings	(1 072)	(556)	-	(275)	(1 903)	-	(1 903)
Other items	(11 101)	6 938	-	(1 442)	(5 605)	4 467	(10 072)
Total deferred tax balances	**(263 064)**	**24 850**	**(5 474)**	**(50 135)**	**(293 823)**	**64 384**	**(358 207)**
Set-off of tax					**-**	**(64 084)**	**64 084**
Net deferred tax balances					**(293 823)**	**300**	**(294 123)**

’000 USD	1 January 2015	Recognized in profit or loss	Recognized in other comprehensive income	Translation difference	31 December 2015 Net deferred balances	31 December 2015 Deferred tax assets	31 December 2015 Deferred tax liabilities
Property, plant and equipment	(31 463)	112	(260 901)	7 171	(285 081)	436	(285 517)
Intangible assets	1 124	1 774	-	(241)	2 657	3 047	(390)
Inventories	13 976	21 238	-	(6 663)	28 551	33 417	(4 866)
Trade and other receivables	3 655	(44)	-	(826)	2 785	2 946	(161)
Trade and other payables	4 755	501	-	(1 167)	4 089	4 089	-
Investments	403	(1 220)	(4 103)	779	(4 141)	2 719	(6 860)
Tax loss carry-forwards	1 579	(1 160)	-	(170)	249	249	-
Loans and borrowings	(909)	(443)	-	280	(1 072)	-	(1 072)
Other items	(18 238)	3 536	-	3 601	(11 101)	2 606	(13 707)
Total deferred tax balances	**(25 118)**	**24 294**	**(265 004)**	**2 764**	**(263 064)**	**49 509**	**(312 573)**
Set-off of tax					**-**	**(44 980)**	**44 980**
Net deferred tax balances					**(263 064)**	**4 529**	**(267 593)**

					31 December 2016		
’000 RUB	**1 January 2016**	**Recognized in profit or loss**	**Recognized in other comprehen-sive income**	**Translation difference**	**Net deferred balances**	**Deferred tax assets**	**Deferred tax liabilities**
Property, plant and equipment	(20 777 490)	2 797 962	(460 220)	(143)	(18 439 891)	62 240	(18 502 131)
Intangible assets	193 631	(91 407)	-	21 530	123 754	225 228	(101 474)
Inventories	2 080 882	(1 639 905)	-	-	440 977	2 447 090	(2 006 113)
Trade and other receivables	202 986	56 862	-	-	259 848	278 775	(18 927)
Trade and other payables	298 045	(241 468)	-	-	56 577	57 562	(985)
Investments	(301 841)	372 624	119 532	-	190 315	562 104	(371 789)
Tax loss carry-forwards	18 115	(16 694)	-	-	1 421	1 421	-
Loans and borrowings	(78 154)	(37 272)	-	-	(115 426)	-	(115 426)
Other items	(809 021)	465 138	-	3 938	(339 945)	270 912	(610 857)
Total deferred tax balances	**(19 172 847)**	**1 665 840**	**(340 688)**	**25 325**	**(17 822 370)**	**3 905 332**	**(21 727 702)**
Set-off of tax					**-**	**(3 887 116)**	**3 887 116**
Net deferred tax balances					**(17 822 370)**	**18 216**	**(17 840 586)**

					31 December 2015		
’000 RUB	**1 January 2015**	**Recognized in profit or loss**	**Recognized in other comprehen-sive income**	**Translation difference**	**Net deferred balances**	**Deferred tax assets**	**Deferred tax liabilities**
Property, plant and equipment	(1 770 048)	6 816	(19 015 143)	885	(20 777 490)	31 742	(20 809 232)
Intangible assets	63 211	108 151	-	22 269	193 631	222 072	(28 441)
Inventories	786 243	1 294 639	-	-	2 080 882	2 435 515	(354 633)
Trade and other receivables	205 642	(2 656)	-	-	202 986	214 728	(11 742)
Trade and other payables	267 485	30 560	-	-	298 045	298 045	-
Investments	22 654	(74 393)	(250 102)	-	(301 841)	198 155	(499 996)
Tax loss carry-forwards	88 843	(70 728)	-	-	18 115	18 115	-
Loans and borrowings	(51 164)	(26 990)	-	-	(78 154)	-	(78 154)
Other items	(1 025 977)	215 542	-	1 414	(809 021)	189 947	(998 968)
Total deferred tax balances	**(1 413 111)**	**1 480 941**	**(19 265 245)**	**24 568**	**(19 172 847)**	**3 608 319**	**(22 781 166)**
Set-off of tax					**-**	**(3 278 258)**	**3 278 258**
Net deferred tax balances					**(19 172 847)**	**330 061**	**(19 502 908)**

As at 31 December 2016, deferred tax liabilities for temporary differences (before calculating tax effect) of USD 422 148 thousand or RUB 25 606 185 thousand (2015: USD 383 823 thousand or RUB 27 974 022 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.

13. 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	2016 '000 USD	2015 '000 USD	2016 ’000 RUB	2015 ’000 RUB
Operating profit		421 540	461 967	28 257 962	28 160 486
Adjustments for:					
- Depreciation	14	172 553	78 546	11 567 022	4 788 002
- Amortisation	15	249	285	16 721	17 429
EBITDA		**594 342**	**540 798**	**39 841 705**	**32 965 917**

14. Property, plant and equipment

'000 USD	Buildings and constructions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Cost							
Balance at 1 January 2015	184 454	693 682	102 194	55 591	23 518	227 158	1 286 597
Additions	1 337	39 709	2 263	189	2 256	126 402	172 156
Transfers	3 783	98 952	456	5 273	1 571	(110 035)	-
Disposals	(496)	(25 108)	(2 337)	(34)	(1 200)	(378)	(29 553)
Revaluation	613 934	2 697 243	42 724	79 059	21 478	18 484	3 472 922
Translation to presentation currency	(42 999)	(177 069)	(27 421)	(13 567)	(5 798)	(54 459)	(321 313)
Balance at 31 December 2015	**760 013**	**3 327 409**	**117 879**	**126 511**	**41 825**	**207 172**	**4 580 809**
Accumulated depreciation							
Balance at 1 January 2015	(99 786)	(412 064)	(11 923)	(25 230)	(13 910)	-	(562 913)
Depreciation charge	(1 184)	(67 670)	(5 217)	(2 628)	(1 847)	-	(78 546)
Impairment losses	(6 073)	(17 995)	(2 285)	(11)	(246)	-	(26 610)
Disposals	313	24 727	1 818	7	65	-	26 930
Revaluation	(419 377)	(1 531 107)	(7 330)	(54 973)	(13 972)	-	(2 026 759)
Translation to presentation currency	22 951	101 575	3 287	6 183	3 465	-	137 461
Balance at 31 December 2015	**(503 156)**	**(1 902 534)**	**(21 650)**	**(76 652)**	**(26 445)**	**-**	**(2 530 437)**
Net book value							
Balance at 1 January 2015	**84 668**	**281 618**	**90 271**	**30 361**	**9 608**	**227 158**	**723 684**
Balance at 31 December 2015	**256 857**	**1 424 875**	**96 229**	**49 859**	**15 380**	**207 172**	**2 050 372**
Cost							
Balance at 1 January 2016	760 013	3 327 409	117 879	126 511	41 825	207 172	4 580 809
Additions	75	23 147	266	13	840	114 886	139 227
Transfers	31 638	113 762	1 072	287	3 093	(149 852)	-
Disposals	(965)	(65 500)	(2 465)	(452)	(1 146)	(586)	(71 114)
Revaluation	28 548	(269 086)	(22 423)	5 947	(2 852)	590	(259 276)
Translation to presentation currency	153 803	672 124	23 581	25 485	7 876	38 078	920 947
Balance at 31 December 2016	**973 112**	**3 801 856**	**117 910**	**157 791**	**49 636**	**210 288**	**5 310 593**
Accumulated depreciation							
Balance at 1 January 2016	(503 156)	(1 902 534)	(21 650)	(76 652)	(26 445)	-	(2 530 437)
Depreciation charge	(20 298)	(268 158)	(8 472)	(7 266)	(6 063)	-	(310 257)
Impairment losses	(4 302)	(10 899)	(89)	(83)	(976)	(2 122)	(18 471)
Disposals	719	41 900	1 601	241	786	-	45 247
Revaluation	(3 027)	330 100	(2 493)	382	4 711	-	329 673
Translation to presentation currency	(103 961)	(407 420)	(5 071)	(16 197)	(5 526)	(223)	(538 398)
Balance at 31 December 2016	**(634 025)**	**(2 217 011)**	**(36 174)**	**(99 575)**	**(33 513)**	**(2 345)**	**(3 022 643)**
Net book value							
Balance at 1 January 2016	**256 857**	**1 424 875**	**96 229**	**49 859**	**15 380**	**207 172**	**2 050 372**
Balance at 31 December 2016	**339 087**	**1 584 845**	**81 736**	**58 216**	**16 123**	**207 943**	**2 287 950**

'000 RUB	Buildings and constructions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Cost							
Balance at 1 January 2015	10 377 091	39 025 470	5 749 236	3 127 457	1 323 156	12 779 512	72 381 922
Additions	81 511	2 420 547	137 957	11 544	137 523	7 705 168	10 494 250
Transfers	230 638	6 031 924	27 810	321 440	95 656	(6 707 468)	-
Disposals	(30 265)	(1 530 545)	(142 424)	(2 060)	(73 086)	(23 013)	(1 801 393)
Revaluation	44 745 224	196 582 334	2 821 227	5 762 088	1 565 405	1 347 216	252 823 494
Translation to presentation currency	(12 344)	(19 186)	(2 441)	-	(336)	(2 164)	(36 471)
Balance at 31 December 2015	**55 391 855**	**242 510 544**	**8 591 365**	**9 220 469**	**3 048 318**	**15 099 251**	**333 861 802**
Accumulated depreciation							
Balance at 1 January 2015	(5 613 774)	(23 182 039)	(670 777)	(1 419 408)	(782 613)	-	(31 668 611)
Depreciation charge	(72 166)	(4 124 974)	(318 100)	(160 219)	(112 543)	-	(4 788 002)
Impairment losses	(442 622)	(1 274 557)	(166 536)	(791)	(17 896)	-	(1 902 402)
Disposals	19 100	1 507 301	110 823	434	3 948	-	1 641 606
Revaluation	(30 565 343)	(111 591 179)	(534 292)	(4 006 639)	(1 018 364)	-	(147 715 817)
Translation to presentation currency	3 447	3 642	936	-	65	-	8 090
Balance at 31 December 2015	**(36 671 358)**	**(138 661 806)**	**(1 577 946)**	**(5 586 623)**	**(1 927 403)**	**-**	**(184 425 136)**
Net book value							
Balance at 1 January 2015	**4 763 317**	**15 843 431**	**5 078 459**	**1 708 049**	**540 543**	**12 779 512**	**40 713 311**
Balance at 31 December 2015	**18 720 497**	**103 848 738**	**7 013 419**	**3 633 846**	**1 120 915**	**15 099 251**	**149 436 666**
Cost							
Balance at 1 January 2016	55 391 855	242 510 544	8 591 365	9 220 469	3 048 318	15 099 251	333 861 802
Additions	5 053	1 551 611	17 812	897	56 290	7 701 309	9 332 972
Transfers	2 120 864	7 625 994	71 889	19 271	207 326	(10 045 344)	-
Disposals	(64 633)	(4 390 756)	(165 241)	(30 270)	(76 810)	(39 291)	(4 767 001)
Revaluation	1 731 644	(16 321 905)	(1 360 133)	360 718	(173 018)	35 759	(15 726 935)
Translation to presentation currency	(158 803)	(366 672)	(3 628)	-	(51 317)	3 665	(576 755)
Balance at 31 December 2016	**59 025 980**	**230 608 816**	**7 152 064**	**9 571 085**	**3 010 789**	**12 755 349**	**322 124 083**
Accumulated depreciation							
Balance at 1 January 2016	(36 671 358)	(138 661 806)	(1 577 946)	(5 586 623)	(1 927 403)	-	(184 425 136)
Depreciation charge	(1 360 663)	(17 975 961)	(567 905)	(487 098)	(406 425)	-	(20 798 052)
Impairment losses	(288 404)	(730 576)	(5 954)	(5 561)	(65 432)	(142 268)	(1 238 195)
Disposals	48 218	2 808 776	107 331	16 153	52 665	-	3 033 143
Revaluation	(183 602)	20 022 817	(151 195)	23 197	285 773	-	19 996 990
Translation to presentation currency	(2 178)	59 752	1 485	-	28 037	-	87 096
Balance at 31 December 2016	**(38 457 987)**	**(134 476 998)**	**(2 194 184)**	**(6 039 932)**	**(2 032 785)**	**(142 268)**	**(183 344 154)**
Net book value							
Balance at 1 January 2016	**18 720 497**	**103 848 738**	**7 013 419**	**3 633 846**	**1 120 915**	**15 099 251**	**149 436 666**
Balance at 31 December 2016	**20 567 993**	**96 131 818**	**4 957 880**	**3 531 153**	**978 004**	**12 613 081**	**138 779 929**

Depreciation expense of USD 146 708 thousand or RUB 9 834 525 thousand (2015: USD 71 491 thousand or RUB 4 357 967 thousand) has been charged to cost of sales and USD 25 845 thousand or RUB 1 732 497 thousand (2015: USD 7 055 thousand or RUB 430 035 thousand) to general and administrative expenses and USD 188 374 thousand or RUB 12 626 689 thousand (2015: USD 55 705 thousand or RUB 3 395 659 thousand) to inventories.

(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 2016.

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 2016 and budgets for 2017-2022. Budgets for 2017 – 2022 are based on concluded contracts, which allow forecast for a period of more than five years. During the mentioned period the Group’s management plans to maintain levels of titan production at the level of previous years;
- EBITDA was projected at the level historically achieved by the Group;
- Capital expenditures for 2017 were projected based on Group’s investment program. Capital expenditures for 2018-2022 ranged from 4,19% to 4,47% of the Group’s forecasted revenue. In the terminal period the amount of capital expenditures equalled to 8,04% 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 ranges from 62,3 roubles per dollar in 2017 to 70,4 roubles per dollar in 2022;
- The forecasted rates of ruble inflation were: in 2017 – 5,4%; in 2018 – 2021 – range from 4,4% to 4,7%; in 2022 – 4,0%;
- The forecasted rates of dollar inflation were: in 2017 – 2,1%; in 2018 – 2,2%; in 2019 – 1,3%; in 2020 – 1,7%; in 2021 – 1,9%; in 2022 – 2,0%;
- A pre-tax discount rate of 14,9% 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 46% at a market borrowing rate of 6,7%;
- A terminal rate of 4% 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 2016.

Decrease of the carrying amount of certain fixed assets in the amount of USD 18 471 thousand or RUB 1 238 195 thousand was recognized in the current year loss.

Increase of the carrying amount of property, plant and equipment in the amount of USD 70 397 thousand or RUB 4 270 055 thousand was recognized in other comprehensive income. 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 2016 should the Group continue accounting using cost model is provided below. The effect on depreciation charge for 2016 amounted to USD 223 515 thousand or RUB 14 983 306 thousand.

’000 USD	Buildings and construc-tions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Balance at 31 December 2016 before revaluation	101 990	384 725	52 121	27 822	9 912	189 411	765 981

’000 RUB	Buildings and construc-tions	Plant and equipment	Transport	Transfer devices	Other	Assets under construction	Total
Balance at 31 December 2016 before revaluation	6 186 391	23 336 151	3 161 466	1 687 581	601 221	11 489 076	46 461 886

(b) Security

Properties with a net book value of USD 2 986 thousand or RUB 181 144 thousand (2015: USD 9 846 thousand or RUB 717 593 thousand) are pledged to secure bank loans (see Note 24).

(c) Property, plant and equipment under construction

Advances given to suppliers for capital construction in the amount of USD 17 896 thousand or RUB 1 085 488 thousand (31 December 2015: USD 24 035 thousand or RUB 1 751 715 thousand) are included in the balance of assets under construction.

In 2016, capitalized borrowing costs related to the construction of new property, plant and equipment amounted to USD 4 527 thousand or RUB 303 492 thousand (2015: USD 5 301 thousand or RUB 323 162 thousand) with an average capitalization rate of 4,2% (2015: 3,5%).

15. Intangible assets

’000 USD	Mining rights	Land lease rights	Other	Total
Cost				
Balance at 1 January 2015	49 218	10 386	1 245	60 849
Additions	-	-	6	6
Disposals	-	-	(2)	(2)
Effect of the movement of exchange rates	(13 776)	(2 369)	(147)	(16 292)
Balance at 31 December 2015	**35 442**	**8 017**	**1 102**	**44 561**
Accumulated amortization and impairment losses				
Balance at 1 January 2015	(25 420)	(99)	(870)	(26 389)
Amortization for the period	-	(231)	(54)	(285)
Impairment losses	(10 354)	-	-	(10 354)
Effect of the movement of exchange rates	8 068	60	74	8 202
Balance at 31 December 2015	**(27 706)**	**(270)**	**(850)**	**(28 826)**
Carrying amount				
Balance at 1 January 2015	**23 798**	**10 287**	**375**	**34 460**
Balance at 31 December 2015	**7 736**	**7 747**	**252**	**15 735**
Cost				
Balance at 1 January 2016	35 442	8 017	1 102	44 561
Additions	21	-	3	24
Disposals	-	-	(33)	(33)
Effect of the movement of exchange rates	2 290	1 615	39	3 944
Balance at 31 December 2016	**37 753**	**9 632**	**1 111**	**48 496**
Accumulated amortization and impairment losses				
Balance at 1 January 2016	(27 706)	(270)	(850)	(28 826)
Amortization for the period	(9)	(210)	(30)	(249)
Disposals	-	-	35	35
Reversal of/(impairment losses)	7 837	(455)	-	7 382
Effect of the movement of exchange rates	(1 957)	(125)	(8)	(2 090)
Balance at 31 December 2016	**(21 835)**	**(1 060)**	**(853)**	**(23 748)**
Carrying amount				
Balance at 1 January 2016	**7 736**	**7 747**	**252**	**15 735**
Balance at 31 December 2016	**15 918**	**8 572**	**258**	**24 748**

’000 RUB	**Mining rights**	**Land lease rights**	**Other**	**Total**
Cost				
Balance at 1 January 2015	2 768 906	584 309	70 038	3 423 253
Additions	-	-	357	357
Disposals	-	-	(133)	(133)
Effect of the movement of exchange rates	(185 823)	-	10 053	(175 770)
Balance at 31 December 2015	**2 583 083**	**584 309**	**80 315**	**3 247 707**
Accumulated amortization and impairment losses				
Balance at 1 January 2015	(1 430 070)	(5 590)	(48 904)	(1 484 564)
Amortization for the period	-	(14 108)	(3 321)	(17 429)
Impairment losses	(631 141)	-	-	(631 141)
Effect of the movement of exchange rates	41 934	-	(9 695)	32 239
Balance at 31 December 2015	**(2 019 277)**	**(19 698)**	**(61 920)**	**(2 100 895)**
Carrying amount				
Balance at 1 January 2015	**1 338 836**	**578 719**	**21 134**	**1 938 689**
Balance at 31 December 2015	**563 806**	**564 611**	**18 395**	**1 146 812**
Cost				
Balance at 1 January 2016	2 583 083	584 309	80 315	3 247 707
Additions	1 379	-	210	1 589
Disposals	-	-	(2 234)	(2 234)
Effect of the movement of exchange rates	(294 572)	-	(10 892)	(305 464)
Balance at 31 December 2016	**2 289 890**	**584 309**	**67 399**	**2 941 598**
Accumulated amortization and impairment losses				
Balance at 1 January 2016	(2 019 277)	(19 698)	(61 920)	(2 100 895)
Amortization for the period	(626)	(14 108)	(1 987)	(16 721)
Disposals	-	-	2 337	2 337
Reversal of/(impairment losses)	525 347	(30 477)	-	494 870
Effect of the movement of exchange rates	170 115	-	9 804	179 919
Balance at 31 December 2016	**(1 324 441)**	**(64 283)**	**(51 766)**	**(1 440 490)**
Carrying amount				
Balance at 1 January 2016	**563 806**	**564 611**	**18 395**	**1 146 812**
Balance at 31 December 2016	**965 449**	**520 026**	**15 633**	**1 501 108**

Amortization expense for intangible assets of USD 249 thousand or RUB 16 721 thousand (2015: USD 285 thousand or RUB 17 429 thousand) has been charged to administrative expenses.

(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 for the amount of USD 50 134 thousand or RUB 1 473 317 thousand. The Group extended term of the license till 2029. The license provides access to mining ilmenite-rutile-zircon sands that are the main raw materials in the production of titanium sponge. The purchase price was determined with reference to the net present value of cash flows expected to be generated from the extraction of ilmenite-rutile-zircon sands from the whole Eastern field of the “Tsentralnoe” deposit. The Group intends to extend the current license to the whole Eastern field of the “Tsentralnoe” deposit. Currently the Group is not able to estimate the approximate cost of such extension.

Before 2015, the Group recognized impairment loss in amount of USD 27 811 thousand or RUB 902 391 thousand due to the overall decrease in prices for titanium raw materials, lower than expected quality of titanium sands of the deposit, delays in realization of the project, as well as change in the discount rate.

In 2015, the Group recognized additional impairment loss in the amount of USD 3 035 thousand or RUB 185 000 thousand due to decrease in prices for ilmenite concentrate.

In 2016, there were no indicators for reversal of previously accrued impairment or accrual of additional impairment.

(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 acquired entity is in a start up phase of extraction and dressing of ilmenite-zircon sands that are the main raw materials in production of titanium sponge. The Group commenced extraction in 2016.

Before 2015, the Group recognized impairment loss in the amount of USD 18 839 thousand or RUB 600 000 thousand due to the delay in project realisation and increase of discount rate due to increased country risks.

In 2015, the Group recognized additional impairment loss in the amount of USD 7 319 thousand or RUB 446 141 thousand due to decrease in prices for ilmenite concentrate.

As at 31 December 2016, the Group performed assessment of the recoverable amount of the mining rights for development of the “Volchanskoe” deposit in the Dnepropetrovsk region. 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 management plans to start active production of ilmenite concentrate in 2017 and reach planned capacity of 25 thousand tons in 2030. The production will remain stable for the rest of the projection period till 2050 when management expects to complete exploration of the deposit;
- A after-tax discount rates of 29,5% and 30,3% were applied to discount projected cash flows in 2017 and 2018, respectively. For the remaining period after-tax discount rates ranged from 22,9% to 27,1% were used to discount projected cash flows;
- The discount rates were estimated based on an industry weighted average cost of capital, which applied a possible debt leveraging of 32,11% at a market borrowing rates 16,44% for 2017-2018, 14,39% for 2019, 13,36% for 2020, and 14,39% for the remaining period;
- A terminal forecasted growth rate at the level of 4,6% was considered in estimating the terminal value from 2032.

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 2016 exceeded its carrying amount as at reporting date. Impairment loss in amount of USD 7 837 thousand or RUB 525 347 thousand was reversed as at 31 December 2016.

16. Goodwill

	’000 RUB	’000 USD
Balance as at 1 January 2015	**2 001 817**	**35 583**
Cumulative translation adjustment	-	(8 117)
Balance as at 31 December 2015	**2 001 817**	**27 466**
Balance as at 1 January 2016	**2 001 817**	**27 466**
Cumulative translation adjustment	-	5 536
Balance as at 31 December 2016	**2 001 817**	**33 002**

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 14).

17. Equity-accounted investees and joint operation

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

		2016			2015		
	Country	**Carrying value ’000 USD**	**Carrying value ’000 RUB**	**Interest**	**Carrying value ’000 USD**	**Carrying value ’000 RUB**	**Interest**
LLC “Uniti”	USA	9 780	593 202	50%	13 527	985 911	50%
OJSC “Uralredmet”	Russia	14 681	890 508	25%	11 705	853 064	25%
LLC “Aviacapital-Service”	Russia	16 181	981 500	27%	6 879	501 359	27%
		40 642	**2 465 210**		**32 111**	**2 340 334**	

(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 2016 – 50,2% (2015 – 53,4%).

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 2016 and 2015:

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Non-current assets	104	102	6 308	7 434
Current assets	22 959	26 682	1 392 622	1 944 656
Current liabilities	(3 576)	(1 465)	(216 909)	(106 773)
Net assets (100%)	**19 487**	**25 319**	**1 182 021**	**1 845 317**

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Revenue	45 356	60 577	3 040 435	3 692 644
Profit and total comprehensive income for the year (100%)	**37**	**247**	**2 328**	**15 057**
Group's share of profit/(loss) for the year	(633)	16	(42 406)	975
Dividends received by the Group	(3 114)	-	(208 774)	-

In 2016, the Group had sales to Uniti of USD 15 296 thousand or RUB 1 025 366 thousand (2015: USD 17 924 thousand or RUB 1 092 609 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 2016 and 31 December 2015:

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Revenue	61 623	61 176	4 130 883	3 729 156
Profit for the year (100%)	**2 234**	**2 633**	**149 775**	**160 488**
Group's share of profit	559	658	37 444	40 122
Non-current assets	23 375	20 340	1 417 859	1 482 404
Current assets	29 294	20 718	1 776 885	1 509 964
Non-current liabilities	(3 430)	(2 920)	(208 052)	(212 787)
Current liabilities	(7 545)	(5 492)	(457 637)	(400 301)
Net assets (100%)	**41 694**	**32 646**	**2 529 055**	**2 379 280**
Group's share of net assets (25%)	10 424	8 162	632 264	594 820

Purchases of the Group for the year ended 31 December 2016 were USD 55 562 thousand or RUB 3 724 593 thousand (2015: USD 53 822 thousand or RUB 3 280 871 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 and currently holds two active agreements for delivery of new airplanes: Boeing 737 (deliveries scheduled in 2018 – 2020) and MC-21 (deliveries scheduled in 2018 – 2024).

The following is summarized financial information of LLC “Aviacapital-Service” as at 31 December 2016 and 31 December 2015:

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Revenue	-	-	-	-
Profit/(loss) for the period (100%)	**474**	**(1 902)**	**31 768**	**(115 926)**
Other comprehensive income for the year (100%)	**26 375**	**7 137**	**1 768 077**	**435 077**
Movement of additional capital for the year (100%)	**(341)**	**776**	**(22 861)**	**47 291**
Group’s share in change of net assets for the year	7 162	1 624	480 141	99 013
Non-current assets	34 143	15 097	2 071 027	1 100 287
Current assets	59 649	25 718	3 618 102	1 874 387
Non-current liabilities	(8 115)	(574)	(492 222)	(41 828)
Current liabilities	(23 760)	(13 092)	(1 441 222)	(954 145)
Net assets (100%)	**61 917**	**27 149**	**3 755 685**	**1 978 701**
Group’s share of net assets (27%)	16 730	7 336	1 014 786	534 645

(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.

18. Other investments

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Non-current				
Loans receivable	50 525	39 334	3 064 705	2 866 770
Investments available-for-sale measured at fair value	1 383	677	83 863	49 376
Other investments	627	522	38 026	38 064
	52 535	**40 533**	**3 186 594**	**2 954 210**
Current				
Loans receivable	22 679	11 185	1 375 645	815 213
Bank deposits	113	861	6 882	62 775
Investments held-to-maturity	-	851	-	62 000
	22 792	**12 897**	**1 382 527**	**939 988**

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.

19. Inventories

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Raw materials and consumables	183 926	166 947	11 156 396	12 167 539
Work in progress	167 639	82 800	10 168 472	6 034 658
Finished goods and goods for resale	350 802	179 252	21 278 518	13 064 423
	702 367	**428 999**	**42 603 386**	**31 266 620**

Inventories are shown net of provision of USD 20 307 thousand or RUB 1 231 779 thousand (31 December 2015: USD 15 928 thousand or RUB 1 160 886 thousand).

At 31 December 2016, inventories with a net book value of USD 76 480 thousand or RUB 4 639 017 thousand (31 December 2015: USD 48 334 thousand or RUB 3 522 740 thousand) had been pledged as security for certain bank loans of the Group, see Note 24.

20. Trade and other receivables

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Long-term trade receivable	3 378	3 866	204 910	281 788
Short-term trade receivable	183 291	189 257	11 117 838	13 793 593
Other receivable	39 161	33 248	2 375 399	2 423 206
Provision for impairment	(16 762)	(21 737)	(1 016 709)	(1 584 244)
	209 068	**204 634**	**12 681 438**	**14 914 343**
Advances to suppliers	23 703	23 315	1 437 777	1 699 205
Provision for impairment	(1 125)	(943)	(68 242)	(68 754)
Value-added tax recoverable	21 847	25 390	1 325 198	1 850 477
Other taxes receivable	19 398	17 988	1 176 649	1 310 991
	272 891	**270 384**	**16 552 820**	**19 706 262**

At 31 December 2016, receivables with a carrying amount of USD 56 235 thousand or RUB 3 411 039 thousand (2015: USD 75 062 thousand or RUB 5 470 689 thousand) had been pledged as security for certain bank loans of the Group, see Note 24.

The Group’s exposure to credit and currency risks and impairment losses related to trade and other receivables are disclosed in Note 26.

21. Cash and cash equivalents

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Petty cash	33	44	1 979	3 211
Bank balances	57 210	27 675	3 470 191	2 017 043
Deposits	580 541	481 188	35 213 843	35 070 291
Other cash and cash equivalents	245	213	14 832	15 512
	638 029	**509 120**	**38 700 845**	**37 106 057**

Bank deposits were classified as cash equivalents as the Group has the right to withdraw the deposits before their contractual maturities at any time without any bank approvals.

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Cash on hand and bank balances denominated in RUB	34 242	1 787	2 077 029	130 216
Cash on hand and bank balances denominated in USD	15 573	21 591	944 611	1 573 641
Cash on hand and bank balances denominated in other currencies	7 428	4 341	450 530	316 397
Short-term bank deposits, denominated in RUB	56 047	16 133	3 399 661	1 175 832
Short-term bank deposits, denominated in USD	524 389	464 806	31 807 788	33 876 320
Short-term bank deposits, denominated in other currencies	105	249	6 394	18 139
Other cash equivalents	245	213	14 832	15 512
	638 029	**509 120**	**38 700 845**	**37 106 057**

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:

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Cash on hand	33	44	1 979	3 211
Rated Ba2 and above*	141 273	52 333	8 569 188	3 814 220
Rated Ba3*	-	20	-	1 458
Rated B1*	20 013	13	1 213 941	929
Rated B2*	3 302	460	200 272	33 515
Rated B3*	471 389	455 663	28 593 025	33 209 950
Unrated	2 019	587	122 440	42 774
	638 029	**509 120**	**38 700 845**	**37 106 057**

* 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 26**.**

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 2016, restricted funds amounted to USD 53 622 thousand or RUB 3 252 520 thousand (2015: nil).

22. Capital and reserves

(a) Share capital and additional paid-in capital

Number of shares unless otherwise stated	**Ordinary shares 2016**	**Ordinary shares 2015**
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 2016 in respect of 2015 to the holders of ordinary shares in the amount of RUB 458,22 per ordinary share (equivalent to USD 7,06 per share translated at the exchange rate at the date of declaration), for the total amount of USD 81 365 thousand or RUB 5 283 065 thousand.

Dividends were declared in September 2016 in respect of first half of 2016 to the holders of ordinary shares in the amount of RUB 816,00 per ordinary share (equivalent to USD 12,66 per share translated at the exchange rate at the date of declaration), for the total amount of USD 145 992 thousand or RUB 9 408 103 thousand.

Dividends were declared in May 2015 in respect of 2014 to the holders of ordinary shares in the amount of RUB 831,07 per ordinary share (equivalent to USD 16,38 per share translated at the exchange rate at the date of declaration), for the total amount of USD 188 801 thousand or RUB 9 581 853 thousand.

Dividends were declared in September 2015 in respect of first half of 2015 to the holders of ordinary shares in the amount of RUB 788,00 per ordinary share (equivalent to USD 12,00 per share translated at the exchange rate at the date of declaration), for the total amount of USD 138 342 thousand or RUB 9 085 276 thousand.

In 2016, the Group recovered dividends for previous years that were not received by shareholders in the amount of USD 78 thousand or RUB 5 164 thousand (2015: USD 8 thousand or RUB 513 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 2016, the net statutory profit of the Company as reported in the published annual statutory financial statements amounted to RUB 26 633 million (equivalent to USD 397 298 thousand translated at the average exchange rate for 2016) (2015: RUB 14 859 million (equivalent to USD 243 761 thousand translated at the average exchange rate for 2015)) and the closing balance of the retained earnings including the current year net statutory profit amounted to RUB 45 311 million (equivalent to USD 747 005 thousand translated at the closing exchange rate for 2016) (2015: RUB 33 392 million (equivalent to USD 458 159 thousand translated at the closing exchange rate for 2015).

(b) Treasury shares

In May 2015, the Group companies sold 124 814 Company’s shares for the total amount of USD 23 828 thousand or RUB 1 400 929 thousand. As at 31 December 2016, 5 737 shares are recorded as treasury shares (2015: 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 available-for-sale financial assets until the investments are derecognised or impaired.

(e) Revaluation surplus

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

23. 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 24).

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 2016	**31 December 2015**	**31 December 2016**	**31 December 2015**
Total loans and borrowings	1 030 210	1 109 831	62 489 350	80 887 480
Less: cash and cash equivalents	(638 029)	(509 120)	(38 700 845)	(37 106 057)
Net debt	**392 181**	**600 711**	**23 788 505**	**43 781 423**
Total equity	2 480 586	1 855 863	150 464 656	135 260 350
Net debt to equity ratio at 31 December	**0,16**	**0,32**	**0,16**	**0,32**

24. 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 26.

	2016 '000 USD	**2015 '000 USD**	**2016 '000 RUB**	**2015 '000 RUB**
Non-current liabilities				
Secured bank loans	2 500	-	151 642	-
Unsecured bank loans	637 116	643 784	38 645 465	46 920 707
	639 616	**643 784**	**38 797 107**	**46 920 707**
Current liabilities				
Secured bank loans	19 894	23 544	1 206 685	1 715 957
Unsecured bank loans	370 700	442 503	22 485 558	32 250 816
	390 594	**466 047**	**23 692 243**	**33 966 773**

Terms and debt repayment schedule

Terms and conditions of outstanding loans were as follows:

’000 USD			**2016**		**2015**	
	Currency	**Year maturity**	**Face value**	**Carrying amount**	**Face value**	**Carrying amount**
Long-term loans						
Secured bank loans						
Citibank, N.A.	USD	2023	2 500	2 500	-	-
			2 500	***2 500***	***-***	***-***
Unsecured bank loans						
UniCredit Bank	USD	2018-2021	216 443	214 630	257 368	256 037
Sberbank	USD	2018-2021	183 337	179 269	66 734	66 525
Nordea Bank	USD	2018-2021	83 108	82 199	89 865	89 381
ING Bank (Eurasia)	USD	2018	55 556	55 147	111 111	110 507
Raiffeisen Bank	USD	2019	42 000	41 733	21 250	21 162
Credi Agricole	USD	2018	22 000	21 808	46 000	45 693
Commerzbank AG	EUR	2024-2025	19 657	19 501	23 101	22 967
UniCredit Bank AG	EUR	2018-2022	11 992	11 920	6 090	6 057
AKB Rosbank	USD	2018	10 909	10 909	25 455	25 455
			645 002	**637 116**	**646 974**	**643 784**
			647 502	**639 616**	**646 974**	**643 784**

’000 USD			**2016**		**2015**	
	Currency	**Year maturity**	**Face value**	**Carrying amount**	**Face value**	**Carrying amount**
Short-term loans						
Secured bank loans						
Bank of America	USD	2017	19 894	19 894	23 544	23 544
			19 894	***19 894***	***23 544***	***23 544***
Unsecured bank loans						
Alfa-Bank	RUB	2017	151 673	151 672	-	-
ING Bank (Eurasia)	USD	2017	55 556	55 147	36 111	35 866
Nordea Bank	USD	2017	47 297	46 740	56 757	56 451
Sberbank	USD	2017	33 379	33 190	54 171	54 012
UniCredit Bank	USD	2017	31 250	31 071	155 171	154 029
Credi Agricole	USD	2017	24 000	23 791	7 978	7 916
AKB Rosbank	USD	2017	14 545	14 545	44 545	44 545
Raiffeisen Bank	USD	2017	8 000	7 949	37 697	37 460
UniCredit Bank AG	EUR	2017	3 901	3 886	4 376	4 370
Commerzbank AG	EUR	2017	2 568	2 547	2 362	2 349
Credi Agricole	EUR	2017	162	162	505	505
Cador Ltd	USD	2016	-	-	45 000	45 000
			372 331	***370 700***	***444 673***	***442 503***
			392 225	**390 594**	**468 217**	**466 047**

’000 RUB			2016		2015	
	Currency	Year maturity	Face value	Carrying amount	Face value	Carrying amount
Long-term loans						
Secured bank loans						
Citibank, N.A.	USD	2023	151 642	151 642	-	-
			151 642	*151 642*	-	-
Long-term loans						
Unsecured bank loans						
UniCredit Bank	USD	2018-2021	13 128 755	13 018 735	18 757 706	18 660 732
Sberbank	USD	2018-2021	11 120 632	10 873 855	4 863 790	4 848 496
Nordea Bank	USD	2018-2021	5 041 080	4 985 963	6 549 594	6 514 357
ING Bank (Eurasia)	USD	2018	3 369 827	3 345 059	8 098 078	8 054 044
Raiffeisen Bank	USD	2019	2 547 590	2 531 424	1 548 757	1 542 341
Credi Agricole	USD	2018	1 334 452	1 322 818	3 352 604	3 330 225
Commerzbank AG	EUR	2024-2025	1 192 309	1 182 844	1 683 669	1 673 900
UniCredit Bank AG	EUR	2018-2022	727 373	723 055	443 881	441 416
AKB Rosbank	USD	2018	661 712	661 712	1 855 196	1 855 196
			39 123 730	**38 645 465**	**47 153 275**	**46 920 707**
			39 275 372	**38 797 107**	**47 153 275**	**46 920 707**

’000 RUB			2016		2015	
	Currency	Year maturity	Face value	Carrying amount	Face value	Carrying amount
Short-term loans						
Secured bank loans						
Bank of America	USD	2017	1 206 685	1 206 685	1 715 957	1 715 957
			1 206 685	***1 206 685***	***1 715 957***	***1 715 957***
Unsecured bank loans						
Alfa-Bank	RUB	2017	9 200 000	9 200 000	-	-
ING Bank (Eurasia)	USD	2017	3 369 828	3 345 060	2 631 875	2 614 031
Nordea Bank	USD	2017	2 868 907	2 835 089	4 136 586	4 114 332
Sberbank	USD	2017	2 024 690	2 013 219	3 948 113	3 936 544
UniCredit Bank	USD	2017	1 895 500	1 884 646	11 309 273	11 225 956
Credi Agricole	USD	2017	1 455 766	1 443 074	581 443	576 923
AKB Rosbank	USD	2017	882 282	882 282	3 246 593	3 246 593
Raiffeisen Bank	USD	2017	485 255	482 176	2 747 486	2 730 189
UniCredit Bank AG	EUR	2017	236 615	235 693	318 942	318 494
Commerzbank AG	EUR	2017	155 752	154 492	172 168	171 212
Credi Agricole	EUR	2017	9 827	9 827	36 820	36 820
Cador Ltd	USD	2016	-	-	3 279 722	3 279 722
			22 584 422	***22 485 558***	***32 409 021***	***32 250 816***
			23 791 107	**23 692 243**	**34 124 978**	**33 966 773**

Bank loans are secured by following:

- Property, plant and equipment with a carrying amount of USD 2 986 thousand or RUB 181 144 thousand (2015: USD 9 846 thousand or RUB 717 593 thousand), see Note 14;
- Inventories with a carrying amount of USD 76 480 thousand or RUB 4 639 017 thousand; (2015: USD 48 334 thousand or RUB 3 522 740 thousand), see Note 19;
- Trade and other accounts receivable with a carrying amount of USD 56 235 thousand or RUB 3 411 039 thousand (2015: USD 75 062 thousand or RUB 5 470 689 thousand), see Note 20.

As at 31 December 2016, the Group had an outstanding loan from Bank of America, which is secured with total assets of the Group’s subsidiary – VSMPO-Tirus U.S., except investment in Uniti. As at 31 December 2016, the assets of VSMPO-Tirus U.S. amounted to USD 150 760 thousand or RUB 9 144 655 thousand (2015: USD 143 360 thousand or RUB 10 448 397 thousand), excluding Uniti.

As at 31 December 2016, the Group had undrawn credit line facilities for the total amount of USD 218 935 thousand or RUB 13 279 942 thousand (2015: USD 365 517 thousand or RUB 26 639 867 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 2016, the Group breached one of the covenants under the loan agreement with the bank in terms of maintaining a certain level of turnover on accounts that are opened with the bank. The Group informed the bank on the breach in 2016 and the bank agreed not to demand early repayment of the loan as well in 2016. Given that the bank provided waiver in 2016, as at 31 December 2016, the Group retained its right to defer payments under this loan for more than 12 months from the reporting date therefore the loan was classified as long term in accordance with contractual payment terms.

25. Trade and other payables

	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Trade payables	48 129	33 660	2 919 347	2 453 240
Accrued liabilities and other creditors	36 557	29 307	2 217 425	2 135 983
Payroll and social tax payable	14 278	9 853	866 081	718 082
	98 964	**72 820**	**6 002 853**	**5 307 305**

The Group’s exposure to currency and liquidity risk related to trade and other payables is disclosed in Note 26.

26. 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 investments available-for-sale (see Note 18).

As at 31 December 2016 and 31 December 2015, carrying amount of the Group's financial assets and liabilities did not differ significantly from their fair value.

As at 31 December 2016 and 31 December 2015, fair value of financial assets 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	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 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% (2015: 13%) 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 20.

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	
	2016 ’000 USD	**2015 ’000 USD**	**2016 ’000 RUB**	**2015 ’000 RUB**
Loans receivable	73 204	50 519	4 440 350	3 681 983
Investments held-to-maturity	-	851	-	62 000
Bank deposits, current	113	861	6 882	62 775
Trade receivable	175 893	175 865	10 669 119	12 817 583
Other receivable	33 175	28 769	2 012 319	2 096 760
Cash and cash equivalents	638 029	509 120	38 700 845	37 106 057
	920 414	**765 985**	**55 829 515**	**55 827 158**

Impairment losses

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

	2016		2015	
’000 USD	**Gross**	**Impaired**	**Gross**	**Impaired**
Trade receivable				
Neither past due nor impaired	145 282	-	144 925	-
Past due less than 3 months	25 186	(555)	27 924	(922)
Past due from 3 to 6 months	3 136	(469)	2 821	(94)
Past due from 6 to 12 months	1 379	(200)	579	(472)
Past due over 12 months	11 686	(9 552)	16 874	(15 770)
	186 669	**(10 776)**	**193 123**	**(17 258)**

	2016		2015	
’000 RUB	**Gross**	**Impaired**	**Gross**	**Impaired**
Trade receivable				
Neither past due nor impaired	8 812 333	-	10 562 623	-
Past due less than 3 months	1 527 710	(33 659)	2 035 175	(67 190)
Past due from 3 to 6 months	190 239	(28 428)	205 635	(6 836)
Past due from 6 to 12 months	83 635	(12 159)	42 174	(34 427)
Past due over 12 months	708 831	(579 383)	1 229 774	(1 149 345)
	11 322 748	**(653 629)**	**14 075 381**	**(1 257 798)**

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

	2016		2015	
’000 USD	**Trade receivables**	**Other receivables**	**Trade receivables**	**Other receivables**
Provision for impairment as at 1 January	**17 258**	**4 479**	**16 585**	**3 835**
Impairment loss recognised	2 223	2 435	8 537	2 021
Provision reversed	(6 532)	(1 078)	(3 163)	(1)
Provision used	(4 704)	(810)	(47)	(204)
Cumulative translation adjustment	2 531	960	(4 654)	(1 172)
Provision for impairment as at 31 December	**10 776**	**5 986**	**17 258**	**4 479**

	2016		2015	
’000 RUB	**Trade receivables**	**Other receivables**	**Trade receivables**	**Other receivables**
Provision for impairment as at 1 January	**1 257 798**	**326 446**	**933 061**	**215 750**
Impairment loss recognised	149 045	163 229	520 384	123 213
Provision reversed	(437 926)	(72 264)	(192 792)	(76)
Provision used	(315 288)	(54 331)	(2 855)	(12 441)
Provision for impairment as at 31 December	**653 629**	**363 080**	**1 257 798**	**326 446**

Impairment loss recognized included revaluation of provision in respect of receivables nominated in foreign currency that is under litigations with the customer, which began in 2012. The amount of the trade receivables provision revaluation for 2016 amounted to USD 1 815 thousand or RUB 121 681 thousand (2015: USD 2 665 thousand or RUB 162 448 thousand) and the amount of other receivable provision revaluation for 2016 amounted to USD 406 thousand or RUB 27 184 thousand (2015: USD 1 764 thousand or RUB 107 559 thousand).

(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 24.

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 2016						
Unsecured loans and borrowings	1 007 816	1 199 805	443 618	330 218	206 059	219 910
Secured loans and borrowings	22 394	22 945	19 935	41	41	2 928
Trade and other payables	98 964	98 964	98 964	-	-	-
	1 129 174	**1 321 714**	**562 517**	**330 259**	**206 100**	**222 838**
As at 31 December 2015						
Unsecured loans and borrowings	1 086 287	1 151 489	467 896	340 494	259 215	83 884
Secured loans and borrowings	23 544	23 544	23 544	-	-	-
Trade and other payables	72 820	72 820	72 820	-	-	-
	1 182 651	**1 247 853**	**564 260**	**340 494**	**259 215**	**83 884**

’000 RUB	Carrying amount	Contractual cash flows	0-12 mths	1-2 yrs	2-3 yrs	Over 3 yrs
As at 31 December 2016						
Unsecured loans and borrowings	61 131 023	72 776 413	26 908 496	20 030 011	12 498 870	13 339 036
Secured loans and borrowings	1 358 327	1 391 829	1 209 192	2 507	2 507	177 623
Trade and other payables	6 002 853	6 002 853	6 002 853	-	-	-
	68 492 203	**80 171 095**	**34 120 541**	**20 032 518**	**12 501 377**	**13 516 659**
As at 31 December 2015						
Unsecured loans and borrowings	79 171 523	83 923 646	34 101 519	24 816 142	18 892 288	6 113 697
Secured loans and borrowings	1 715 957	1 715 957	1 715 957	-	-	-
Trade and other accounts payables	5 307 305	5 307 305	5 307 305	-	-	-
	86 194 785	**90 946 908**	**41 124 781**	**24 816 142**	**18 892 288**	**6 113 697**

(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:

31 December 2016

’000 USD	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	540 801	4 355	2 339
Trade receivables	176 147	1 833	781
Bank deposits	-	-	113
Loans receivable	11 272	-	-
Trade payables and other liabilities	(19 542)	(6 605)	(681)
Loans and borrowings	(840 522)	(38 016)	-
Net exposure	**(131 844)**	**(38 433)**	**2 552**

31 December 2015

’000 USD	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	486 610	2 669	1 921
Trade receivables	188 125	1 050	237
Bank deposits	746	-	115
Other investments	-	-	1
Loans receivable	4 611	-	-
Trade payables and other liabilities	(13 118)	(6 437)	(832)
Loans and borrowings	(1 073 583)	(36 248)	-
Net exposure	**(406 609)**	**(38 966)**	**1 442**

31 December 2016

’000 RUB	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	32 803 341	264 184	141 798
Trade receivables	10 684 517	111 179	47 383
Bank deposits	-	-	6 882
Loans receivable	683 742	-	-
Trade payables and other liabilities	(1 185 335)	(400 669)	(41 315)
Loans and borrowings	(50 983 439)	(2 305 911)	-
Net exposure	**(7 997 174)**	**(2 331 217)**	**154 748**

31 December 2015

’000 RUB	**USD**	**EUR**	**Other foreign currencies**
Cash and cash equivalents	35 465 420	194 528	140 008
Trade receivables	13 711 050	76 500	17 255
Bank deposits	54 380	-	8 395
Other investments	-	-	38
Loans receivable	336 062	-	-
Trade payables and other liabilities	(956 107)	(469 158)	(60 639)
Loans and borrowings	(78 245 638)	(2 641 842)	-
Net exposure	**(29 634 833)**	**(2 839 972)**	**105 057**

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

	31 December 2016	**Average for 12 months 2016**	**31 December 2015**	**Average for 12 months 2015**
USD	60,6569	67,0349	72,8827	60,9579
EUR	63,8111	74,2310	79,6972	67,7767

Sensitivity analysis

A 10% weakening of the RUB against USD and Euro at 31 December 2016 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 2015.

Sensitivity analysis

2016	**Equity ’000 USD**	**Profit or loss ’000 USD**
USD strengthening 10%	(13 184)	(13 184)
Euro strengthening 10%	(3 843)	(3 843)
2015		
USD strengthening 10%	(40 661)	(40 661)
Euro strengthening 10%	(3 897)	(3 897)

2016	**Equity ’000 RUB**	**Profit or loss ’000 RUB**
USD strengthening 10%	(799 717)	(799 717)
Euro strengthening 10%	(233 122)	(233 122)
2015		
USD strengthening 10%	(2 963 483)	(2 963 483)
Euro strengthening 10%	(283 997)	(283 997)

(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:

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Fixed rate instruments				
Loans receivable	73 204	50 519	4 440 350	3 681 983
Bank deposits classified as cash equivalents	580 541	481 188	35 213 843	35 070 291
Bank deposits	113	861	6 882	62 775
Current loans and borrowings	(166 218)	(89 545)	(10 082 282)	(6 526 315)
Non-current loans and borrowings	(10 909)	(25 455)	(661 712)	(1 855 196)
	476 731	**417 568**	**28 917 081**	**30 433 538**
Variable rate instruments				
Current loans and borrowings	(224 376)	(376 502)	(13 609 961)	(27 440 458)
Non-current loans and borrowings	(628 707)	(618 329)	(38 135 395)	(45 065 511)
	(853 083)	**(994 831)**	**(51 745 356)**	**(72 505 969)**

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
2016				
100 bp parallel fall	8 531	8 531	517 454	517 454
100 bp parallel rise	(8 531)	(8 531)	(517 454)	(517 454)
2015				
100 bp parallel fall	9 948	9 948	725 060	725 060
100 bp parallel rise	(9 948)	(9 948)	(725 060)	(725 060)

(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 2016 and 2015, the Group does not have financial instruments, which can be offset.

27. Significant subsidiaries

	Country of incorporation	2016 Ownership voting	2015 Ownership voting
VSMPO-TIRUS, U.S., Inc	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 Titan Scandinavia AB	Sweden	100%	100%
VSMPO-TIRUS LIMITED	UK	100%	100%
VSMPO-Tirus (Bejing) Metallic Materials Ltd.	China	100%	100%
LIMPIEZA LIMITED	Cyprus	75%	75%
LLC “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%	-

28. Operating leases

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

	2016 '000 USD	2015 '000 USD	2016 '000 RUB	2015 '000 RUB
Less than 1 year	5 143	4 642	311 950	338 342
1 to 5 years	9 656	13 378	585 690	975 017
Over 5 years	5 584	9 902	338 714	721 687
	20 383	**27 922**	**1 236 354**	**2 035 046**

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 2016, USD 2 411 thousand or RUB 161 643 thousand (2015: USD 4 792 thousand or RUB 292 091 thousand) was recognised in the consolidated statement of profit or loss and other comprehensive income in respect of operating leases.

29. Commitments

(a) Capital commitments

As at 31 December 2016, the Group has entered into contracts to purchase plant and equipment for USD 107 917 thousand or RUB 6 545 910 thousand (2015: USD 93 594 thousand or RUB 6 821 376 thousand).

(b) Long term sales contracts

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

30. 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 2015 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.

All these circumstances may create tax risks in the Russian Federation that are substantially more significant than in other countries. Management believes that it has provided adequately for tax liabilities based on its interpretations of applicable Russian tax legislation, official pronouncements and court decisions. However, the interpretations of the tax authorities and courts, especially due to reform of the supreme courts that are resolving tax disputes, could differ and the effect on these consolidated financial statements, if the authorities were successful in enforcing their interpretations, could be significant.

31. 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. Bank loans are provided on the basis of market rates. Taxes are accrued and settled in accordance with Russian tax legislation. 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	2016 ’000 USD	2015 ’000 USD	2016 ’000 RUB	2015 ’000 RUB
Revenue				
Parties under Government control	151 356	152 156	10 146 159	9 275 111
Entities under Rostech control	99 887	111 613	6 695 928	6 803 708
Joint arrangement	15 329	17 948	1 027 568	1 094 056
Associates	1 573	1 356	105 416	82 644
Purchases				
Parties under Government control	(46 495)	(97 812)	(3 116 795)	(5 962 411)
Entities under Rostech control	(1 606)	(3 271)	(107 641)	(199 420)
Joint arrangement	(9 684)	(5 669)	(649 145)	(345 578)
Associates	(55 565)	(53 822)	(3 724 771)	(3 280 871)
Purchases of property, plant and equipment				
Parties under Government control	(324)	(316)	(21 730)	(19 251)
Entities under Rostech control	-	(1)	-	(68)
Sales of property, plant and equipment				
Joint arrangement	8 427	-	564 890	-
Associates	-	38	-	2 300
Sale of own shares				
Ultimate beneficiary	-	23 828	-	1 400 929
Loans provided				
Joint arrangement	(4 030)	-	(270 151)	-
Associates	(3 970)	-	(266 104)	-
Entities under ultimate beneficiary's control	(7 339)	(3 248)	(492 000)	(198 000)
Proceeds from borrowings				
Parties under Government control	149 724	-	10 036 755	-
Entities under ultimate beneficiary's control	-	60 000	-	3 657 471
Interest income				
Parties under Government control	17 791	18 178	1 192 607	1 108 100
Entities under Rostech control	5 848	6 447	392 000	393 013
Associates	155	-	10 373	-
Interest expenses				
Parties under Government control	(6 728)	(5 572)	(451 043)	(339 648)
Entities under ultimate beneficiary's control	(464)	(322)	(31 100)	(19 635)

Revenue from related parties refers to sales of titanium products under usual short term contracts. 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 2016**	**31 December 2015**	**31 December 2016**	**31 December 2015**
Bank balances				
Parties under Government control	19 168	1 052	1 162 662	76 654
Entities under Rostech control	4	460	272	33 515
Trade and other receivables				
Parties under Government control	7 447	1 742	451 737	126 985
Entities under Rostech control	3 787	1 749	229 689	127 444
Joint arrangement	742	81	45 007	5 926
Associates	243	139	14 713	10 142
Entities under ultimate beneficiary's control	4 155	-	252 000	-
Ultimate beneficiary	10 779	14 406	653 831	1 049 970
Advances to suppliers				
Parties under Government control	1 815	4 442	110 093	323 718
Entities under Rostech control	9	2	527	178
Advances given to suppliers for capital construction				
Parties under Government control	-	5 463	-	398 153
Entities under ultimate beneficiary's control	194	583	11 752	42 505
Bank deposits, classified as investments				
Parties under Government control	-	746	-	54 380
Bank deposits, classified as cash and cash equivalents				
Parties under Government control	523 777	460 434	31 770 667	33 557 708
Investments available-for-sale measured at fair value				
Parties under Government control	1 383	677	83 863	49 376
Loans receivable				
Entities under Rostech control	46 161	38 418	2 800 000	2 800 000
Associates	3 942	-	239 126	-
Top management	248	722	15 059	52 599
Joint arrangement	4 030	-	244 447	-
Entities under ultimate beneficiary's control	14 030	5 324	851 000	388 000
Loans and borrowings				
Parties under Government control	(212 459)	(120 537)	(12 887 074)	(8 785 040)
Entities under ultimate beneficiary's control	-	(45 000)	-	(3 279 722)
Trade and other payables				
Parties under Government control	(2 564)	(3 981)	(155 549)	(290 171)
Entities under Rostech control	(87)	(478)	(5 301)	(34 836)
Joint arrangement	(2 124)	(1 675)	(128 828)	(122 056)
Associates	(1 876)	(2 460)	(113 815)	(179 296)
Entities under ultimate beneficiary's control	-	(293)	-	(21 386)
Advances received				
Parties under Government control	(40 842)	(23 059)	(2 477 340)	(1 680 621)
Entities under Rostech control	(47 463)	(10 696)	(2 878 985)	(779 517)
Joint arrangement	(142)	(128)	(8 633)	(9 314)
Associates	-	(1)	(4)	(107)

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 38 418 thousand or RUB 2 800 000 thousand 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 2,75% to 3,82%.

Bank deposits in USD, classified as cash and cash equivalents, in banks under Government control have interest rate from 2% to 4%.

In 2016, the Group repaid all loans received from entities controlled by the ultimate beneficiary. In 2015, the Group received short-term loans from entities under beneficiary’s control in the amount of USD 60 000 thousand or RUB 3 657 471 thousand payable June 2016. Interest rate for these loans is 2,25%.

In 2015, the Group sold the treasury shares to the ultimate beneficiary, see Note 22. The sale agreement provide payment by instalments for three years with interest rate of 5%. Sold shares are pledged.

As at 31 December 2016, the balance of loans issued to entities under ultimate beneficiary’s control amounted to USD 14 030 thousand or RUB 851 000 thousand. The interest rate on these loans was from 6% to 11,2%. Loans are not overdue and should be repaid in 2017.

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 general and administrative expenses in the consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2016 amounted to USD 7 683 thousand or RUB 515 024 thousand (2015: USD 7 771 thousand or RUB 473 690 thousand). Related state pension and social security costs for the year ended 31 December 2016 amounted to USD 1 459 thousand or RUB 97 782 thousand (2015: USD 1 469 thousand or RUB 89 571 thousand). There were no significant post-employment or other long-term benefits.

32. Subsequent events

In 2017, the Group concluded several loan agreements in the total amount of USD 355 000 thousand with maturity from one to five years and interest rate of Libor + 2,55% – 2,7% per annum.

33. Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for the available-for-sale financial assets and property, plant and equipment (except for land), which are measured on fair value basis.

34. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements, and have been applied consistently by 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 34(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.

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.

(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 an available-for-sale 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

(i) Goods sold

Revenue is recognised when persuasive evidence exists, usually in the form of an executed sales agreement, that the significant risks and rewards of ownership have been transferred to the customer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the goods, and the amount of revenue can be measured reliably. Revenue is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates.

The timing of the risks and rewards transfer varies depending on the individual terms of the sales agreement.

(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;
- the net gain or loss currency translation differences.

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 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, except for differences arising on the translation of available-for-sale equity instruments which are recognised in other comprehensive income.

(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 less accumulated depreciation and any accumulated impairment losses.

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 «General and administrative expenses» in profit or loss. 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:

- Buildings and constructions 25 - 40 years;
- Plant and equipment 15 years;
- Transport 10 years;
- Transfer devices 20 years;
- Other assets 3-5 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 3-20 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

The Group classifies non-derivative financial assets into the following categories: financial assets, held-to-maturity, loans and receivables and available-for-sale financial assets.

(i) Non-derivative financial assets and financial liabilities – recognition and derecognition

The Group initially recognises loans and receivables and debt securities issued on the date that they are originated. All other financial assets and financial liabilities are recognised initially on the trade date at which the Group becomes a party to the contractual provisions of the instrument.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled or expire. Financial assets and 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 recognised amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously. The Group currently has a legally enforceable right to set off if that right is not contingent on a future event and enforceable both in the normal course of business and in the event of default, insolvency or bankruptcy of the Group and all counterparties.

(ii) Non-derivative financial assets – measurement

Loans and receivables

Loans and receivables are a category of financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses (see note 34(l)(i)).

Loans and receivables category comprise the following classes of financial assets: loans receivable (see note 18), trade and other receivables as presented in note 20 and cash and cash equivalents as presented in note 21.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, call deposits and highly liquid investments with maturities of three months or less from the acquisition date that are subject to insignificant risk of changes in their fair value.

In the statement of cash flows, cash and cash equivalents includes bank overdrafts that are repayable on demand and form an integral part of the Group's cash management.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale or are not classified in any of the above categories of financial assets. Such assets are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses (see note 34(l)(i)) and foreign currency differences on available-for-sale debt instruments (see note 34(d)(i)), are recognised in other comprehensive income and presented within equity in the fair value reserve. When an investment is derecognised, the cumulative gain or loss in equity is reclassified to profit or loss. Unquoted equity instruments whose fair value cannot reliably be measured are carried at cost.

Available-for-sale financial assets comprise equity securities and debt securities.

(iii) Non-derivative financial liabilities - measurement

The Group classifies non-derivative financial liabilities into the other financial liabilities category. Such financial liabilities are recognised initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest method.

Other financial liabilities comprise loans and borrowings, bank overdrafts, and trade and other payables.

(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

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.

Financial assets measured at amortised cost

The Group considers evidence of impairment for these assets at both an individual asset and a collective level. All individually significant assets are individually assessed for impairment. Those found not to be impaired are then collectively assessed for any impairment that has been incurred but not yet identified. Assets that are not individually significant are collectively assessed for impairment by grouping together assets with similar risk characteristics.

In assessing collective impairment the Group uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

An impairment loss is 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 are recognised in profit or loss and reflected in an allowance account. When the Group considers that there are no realistic prospects of recovery of the asset, the relevant amounts are written off. Interest on the impaired asset continues to be recognised through the unwinding of the discount. When a subsequent event causes the amount of impairment loss to decrease and the decrease can be related objectively to an event occurring after the impairment was recognised, the decrease in impairment loss is reversed through profit or loss.

Available-for-sale financial assets

Impairment losses on available-for-sale financial assets are recognised by reclassifying the losses accumulated in the fair value reserve in equity, to profit or loss. The cumulative loss that is reclassified from equity to profit or loss is 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. Changes in impairment provisions attributable to application of the effective interest method are reflected as a component of interest income. If, in a subsequent period, the fair value of an impaired available-for-sale debt security increases and the increase can be related objectively to an event occurring after the impairment loss was recognised in profit or loss, then the impairment loss is reversed, with the amount of the reversal recognised in profit or loss. However, any subsequent recovery in the fair value of an impaired available-for-sale equity security is recognised in other comprehensive income.

Equity-accounted investees

An impairment loss in respect of an equity-accounted investee is measured by comparing the recoverable amount of the investment with its carrying amount. An impairment loss is recognised in profit or loss, and is reversed if there has been a favourable change in the estimates used to determine the recoverable amount.

(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. Other expenses

(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.

35. New standards and interpretations not yet adopted

A number of new Standards, amendments to Standards and Interpretations are effective for annual periods beginning after 1 January 2016 and have not been applied in preparing these consolidated financial statements. Of these pronouncements, potentially the following will have an impact on the Group's operations. The Group plans to adopt these pronouncements when they become effective.

(a) Disclosure Initiative (*Amendments to IAS 7*)

The amendments require disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flow and non-cash changes.

The amendments are effective for annual periods beginning on or after 1 January 2017, with early adoption permitted.

To satisfy the new disclosure requirements, the Group intends to present a reconciliation between the opening and closing balances for liabilities with changes arising from financing activities.

(b) IFRS 15 *Revenue from Contracts with Customers*

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18 *Revenue*, IAS 11 *Construction Contracts* and IFRIC 13 *Customer Loyalty Programmes*.

The fundamental principle of the new standard is that the enterprise recognizes revenue in order to reflect the transfer of the promised goods or services to customers in an amount corresponding to the refund for which the enterprise, in accordance with its expectations, will receive the right in exchange for these goods or services. The new standard provides for detailed disclosure in terms of revenue, includes guidance on accounting for transactions that were not previously fully considered, and also improves the agreement accounting guide, which consists of many elements.

IFRS 15 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted.

(i) Transition

The Group plans to adopt IFRS 15 in its consolidated financial statements for the year ending 31 December 2018.

The Group is currently performing a detailed assessment of the impact resulting from the application of IFRS 15 and expects to disclose additional quantitative information before it adopts IFRS 15.

(c) IFRS 9 Financial Instruments

In July 2014, the International Accounting Standards Board issued the final version of IFRS 9 *Financial Instruments*. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted.

The Group currently plans to apply IFRS 9 initially on 1 January 2018. The actual impact of adopting IFRS 9 on the Group’s consolidated financial statements in 2018 is not known and cannot be reliably estimated because it will be dependent on the financial instruments that the Group holds and economic conditions at that time as well as accounting elections and judgements that it will make in the future. The new standard will require the Group to revise its accounting processes and internal controls related to reporting financial instruments and these changes are not yet complete. However, the Group has performed a preliminary assessment of the potential impact of adoption of IFRS 9 based on its positions at 31 December 2016 and hedging relationships designated during 2016 under IAS 39.

(i) Classification - Financial assets

IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics.

IFRS 9 contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). The standard eliminates the existing 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 bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification.

Based on its preliminary assessment, the Group does not believe that the new classification requirements, if applied at 31 December 2016, would have had a material impact on its accounting for trade receivables and loans receivable.

(ii) Impairment - Financial assets and contract assets

IFRS 9 replaces the ‘incurred loss’ model in IAS 39 with a forward-looking ‘expected credit loss’ (ECL) model. This will require considerable judgement as to how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis.

The new impairment model will apply to financial assets measured at amortised cost or FVOCI, except for investments in equity instruments, and to contract assets.

Under IFRS 9, loss allowances will be measured on either of the following bases:

- 12-month ECLs. These are ECLs that result from possible default events within the 12 months after the reporting date; and
- lifetime ECLs. These are ECLs that result from all possible default events over the expected life of a financial instrument.

Lifetime ECL measurement applies if the credit risk of a financial asset at the reporting date has increased significantly since initial recognition and 12-month ECL measurement applies if it has not. An entity may determine that a financial asset’s credit risk has not increased significantly if the asset has low credit risk at the reporting date. However, lifetime ECL measurement always applies for trade receivables and contract assets without a significant financing component; an entity may choose to apply this policy also for trade receivables and contract assets with a significant financing component.

The Group believes that impairment losses are likely to increase and become more volatile for assets in the scope of the IFRS 9 impairment model.

The Group has not yet finalised the impairment methodologies that it will apply under IFRS 9.

(iii) Classification - Financial liabilities

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

However, under IAS 39 all fair value changes of liabilities designated as at FVTPL are recognised in profit or loss, whereas under IFRS 9 these fair value changes are generally presented as follows:

- the amount of change in the fair value that is attributable to changes in the credit risk of the liability is presented in OCI; and
- the remaining amount of change in the fair value is presented in profit or loss.

The Group has not designated any financial liabilities at FVTPL and the Group has no current intention to do so. The Group’s preliminary assessment did not indicate any material impact if IFRS 9’s requirements regarding the classification of financial liabilities were applied at 31 December 2016.

(iv) Disclosures

IFRS 9 will require extensive new disclosures, in particular about credit risk and expected credit losses. The Group’s preliminary assessment included an analysis to identify data gaps against current processes and the Group plans to implement the system and controls changes that it believes will be necessary to capture the required data.

(v) Transition

The Group plans to apply IFRS 9 in its consolidated financial statements for the year ended 31 December 2018.

As at the reporting date, the Group did not complete its analysis of possible options for this standard application.

(d) IFRS 16 *Leases*

IFRS 16 introduces a single, on-balance lease sheet 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 optional 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*.

The standard is effective for annual periods beginning on or after 1 January 2019. Early adoption is permitted for entities that apply IFRS 15 *Revenue from Contracts with Customers* at or before the date of initial application of IFRS 16.

(i) Transition

The Group plans to apply IFRS 16 in its consolidated financial statements for the year ended 31 December 2019.

As at the reporting date, the Group did not complete its analysis of possible options for this standard application and its impact on the Group's consolidated financial statements.

(e) Other amendments

The following new or amended standards are not expected to have a significant impact on the Group's consolidated financial statements.

- Classification and Measurement of Share-based Payment Transactions (Amendments to IFRS 2).
- Recognition of deferred tax assets for unrealized losses (Amendments to IAS 12);
- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to IFRS 10 and IAS 28).

Numbered, bound and sealed 72 (seventy two) sheets.

Adamov N.A.
Deputy Director of JSC KPMG

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