

JSC “TVEL”

**Consolidated Financial Statements
for 2016
and Independent Auditors’ Report**

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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 Shareholder and Board of Directors of JSC "TVEL"

Opinion

We have audited the consolidated financial statements of JSC "TVEL" (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, 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.

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.

Audited entity: JSC "TVEL"

Registration No. in the Unified State Register of Legal Entities
1027739121475.

Moscow, 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.

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.



Company name JSC "TVEL"
Independent Auditors' Report
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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.

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

Trubakova Lubov
JSC "KPMG"
Moscow, Russia
6 June 2017



JSC “TVEL”
Consolidated Statement of Financial Position as at 31 December 2016
'000 RUB

	Note	31 December 2016	31 December 2015
Assets			
Non-current assets			
Property, plant and equipment	15	133 852 435	140 408 731
Intangible assets	16	3 435 429	3 838 166
Advances for non-current assets		4 193 347	5 907 252
Other long-term investments	17	18 945 445	26 412 494
Investments in equity accounted investees	9	2 735 111	431 968
Trade and other receivables		961 311	1 677 395
Deferred tax assets	14	11 284 619	8 501 385
Other non-current assets		424 662	400 862
Total non-current assets		175 832 359	187 578 253
Current assets			
Inventories	19	85 666 156	94 354 187
including:			
<i>Asset relating to enrichment services</i>		534 187	1 210 145
Trade and other receivables	20	54 831 538	44 973 546
Income tax receivables		83 456	349 095
Other short-term investments	18	39 064 343	5 019 373
Cash and cash equivalents	21	18 704 690	52 730 160
Assets classified as held for disposal		56 793	72 840
Total current assets		198 406 976	197 499 201
Total assets		374 239 335	385 077 454

JSC "TVEL"
Consolidated Statement of Financial Position as at 31 December 2016
'000 RUB

	Note	31 December 2016	31 December 2015
Equity and liabilities			
Equity			
Share capital	22	45 191	45 191
Share premium		91 414 451	91 414 451
Reserves		10 266 699	15 653 765
Retained earnings		171 161 697	159 625 662
Equity attributable to owners of the Company		272 888 038	266 739 069
Non-controlling interests	7	20 192 497	17 286 248
Total equity		293 080 535	284 025 317
Non-current liabilities			
Employee benefits	12	4 696 297	4 961 745
Non-current provisions	24	20 203 575	13 480 245
Deferred tax liabilities	14	21 790	1 021 904
Deferred income, long-term	25	4 877 934	5 715 631
Finance lease liabilities, long-term	26	5 284 766	6 691 160
Trade and other payables	28	912 998	1 734 202
Total non-current liabilities		35 997 360	33 604 887
Current liabilities			
Short-term loans and borrowings	27	-	22 009 650
Trade and other payables	28	40 276 900	40 715 344
Finance lease liabilities, short-term	26	1 511 223	1 498 184
Income tax payable		917 439	965 720
Deferred income, short-term	25	2 322 041	1 393 891
Current provisions	29	87 086	448 258
Liabilities classified as held for disposal		46 751	416 203
Total current liabilities		45 161 440	67 447 250
Total liabilities		81 158 800	101 052 137
Total equity and liabilities		374 239 335	385 077 454

Senior Vice-President for finance, economics and corporate governance

Director of Accounting department - Chief Accountant




/ Guseva M. N./

JSC “TVEL”
Consolidated Statement of Profit or Loss and Other Comprehensive Income for 2016
'000 RUB

	Note	2016	2015
Revenue	10	185 743 742	194 116 030
Personnel costs	13	(31 605 425)	(30 474 037)
Raw materials		(18 670 784)	(31 199 754)
Depreciation and amortization	15,16	(15 819 313)	(15 964 102)
Electricity, gas and fuel, water supply costs		(10 507 896)	(10 394 118)
Taxes other than income taxes		(2 773 191)	(2 784 767)
Research and development costs		(3 792 393)	(3 032 478)
Transportation costs		(4 110 435)	(3 019 841)
Repairs and maintenance		(10 660 040)	(4 261 380)
Insurance		(1 419 184)	(1 457 211)
Goods for resale		-	(15 065)
Change in finished goods and work in progress		(7 349 427)	(11 087 098)
Other operating income	11	2 470 248	3 338 706
Other operating expenses	11	(28 060 006)	(17 926 278)
Results from operating activities		53 445 896	65 838 607
Finance income	11	4 213 754	6 854 149
Finance expense	11	(9 368 214)	(3 841 071)
Share of profit/(loss) of equity accounted investees (net of income tax)	9	2 303 195	25 975
Profit before income tax		50 594 631	68 877 660
Income tax expense	14	(7 546 143)	(14 479 630)
Profit for the year		43 048 488	54 398 030

Other comprehensive income

Items that are or may be reclassified to profit or loss:

Change in fair value of available-for-sale financial assets	17	(6 441 321)	10 660 478
Change in fair value of available-for-sale financial assets reclassified to profit or loss	17	(663 233)	-
Deferred tax on change in fair value of available-for-sale financial assets	14	1 420 911	(2 116 819)
<i>Total items that are or may be reclassified to profit or loss</i>		<i>(5 683 643)</i>	<i>8 543 659</i>

JSC “TVEL”
Consolidated Statement of Profit or Loss and Other Comprehensive Income for 2016
'000 RUB

	2016	2015
<i>Items that will never be reclassified to profit or loss :</i>		
Defined benefit plan actuarial gains/(losses)	12	358 090
Deferred tax on defined benefit plan actuarial (gains)/losses	14	(71 618)
<i>Total items that will never be reclassified to profit or loss</i>	<i>286 472</i>	<i>(329 250)</i>
Total other comprehensive income for the year, net of income tax	(5 397 171)	8 214 409
Total comprehensive income for the year	37 651 317	62 612 439
 Profit attributable to:		
Owners of the Company	43 345 218	52 566 633
Non-controlling interests	(296 730)	1 831 397
	43 048 488	54 398 030
 Total comprehensive income attributable to:		
Owners of the Company	37 958 153	60 801 782
Non-controlling interests	(306 836)	1 810 657
	37 651 317	62 612 439

These consolidated financial statements were approved by management on the 6 June 2017 and were signed on its behalf by:

Senior Vice-President for finance, economics and corporate governance



Director of Accounting department – Chief Accountant



JSC "TVEL"
 Consolidated Statement of Changes in Equity for 2016
 '000 RUB

	Note	Attributable to equity holders of the Company							Non-controlling interests	Total equity
		Share capital	Share premium	Fair value reserve for available-for-sale investments	Property, plant and equipment revaluation reserve	Other reserves	Retained earnings	Total		
Balance at 1 January 2015		45 191	91 414 451	1 426 133	4 670 029	1 601 539	120 065 033	219 222 376	13 617 601	232 839 977
Total comprehensive income for the year										
Profit for the year		-	-	-	-	-	52 566 633	52 566 633	1 831 397	54 398 030
Other comprehensive income										
Net change in fair value of available-for-sale financial assets		-	-	10 660 478	-	-	-	10 660 478	-	10 660 478
Remeasurements of defined benefit liability		-	-	-	-	(385 635)	-	(385 635)	(25 925)	(411 560)
Income tax on other comprehensive income	14	-	-	(2 116 819)	-	77 125	-	(2 039 694)	5 185	(2 034 509)
Total other comprehensive income		-	-	8 543 659	-	(308 510)	-	8 235 149	(20 740)	8 214 409
Total comprehensive income for the year		-	-	8 543 659	-	(308 510)	52 566 633	60 801 782	1 810 657	62 612 439
Transactions with owners of the Company										
Contributions and distributions										
Dividends		-	-	-	-	-	(15 296 080)	(15 296 080)	(32 619)	(15 328 699)
Total contributions and distributions		-	-	-	-	-	(15 296 080)	(15 296 080)	(32 619)	(15 328 699)
Changes in ownership interests										
Disposal of non-controlling interests without a change in control		-	-	-	-	-	2 010 991	2 010 991	1 985 972	3 996 963
Disposal of subsidiaries		-	-	(279 085)	-	279 085	-	-	(95 363)	(95 363)
Total changes in ownership interests		-	-	(279 085)	-	2 290 076	2 010 991	1 890 609	3 901 600	
Total transactions with owners of the Company		-	-	(279 085)	-	(13 006 004)	(13 285 089)	1 857 990	(11 427 099)	
Balance at 31 December 2015		45 191	91 414 451	9 969 792	4 390 944	1 293 029	159 625 662	266 739 069	17 286 248	284 025 317

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 14 to 80.

JSC "TVEL"

Consolidated Statement of Changes in Equity for 2016

'000 RUB

	Note	Attributable to equity holders of the Company								Non-controlling interests	Total equity
		Share capital	Share premium	Fair value reserve for available-for-sale investments	Property, plant and equipment revaluation reserve	Other reserves	Retained earnings	Total			
Balance at 1 January 2016		45 191	91 414 451	9 969 792	4 390 944	1 293 029	159 625 662	266 739 069	17 286 248	284 025 317	
Total comprehensive income for the year							43 345 218	43 345 218	(296 730)	43 048 488	
Profit for the year		-	-	-	-	-	43 345 218	43 345 218	(296 730)	43 048 488	
Other comprehensive income											
Net change in fair value of available-for-sale financial assets		-	-	(7 104 554)	-	-	-	(7 104 554)	-	(7 104 554)	
Remeasurements of defined benefit liability		-	-	-	-	370 722	-	370 722	(12 632)	358 090	
Income tax on other comprehensive income	14	-	-	1 420 911	-	(74 144)	-	1 346 767	2 526	1 349 293	
Total other comprehensive income		-	-	(5 683 643)	-	296 578	-	(5 387 065)	(10 106)	(5 397 171)	
Total comprehensive income for the year		-	-	(5 683 643)	-	296 578	43 345 218	37 958 153	(306 836)	37 651 317	
Transactions with owners of the Company											
Contributions and distributions											
Dividends		-	-	-	-	-	(29 532 936)	(29 532 936)	(84 652)	(29 617 588)	
Total contributions and distributions		-	-	-	-	-	(29 532 936)	(29 532 936)	(84 652)	(29 617 588)	
Changes in ownership interests											
Disposal of non-controlling interests without a change in control		-	-	-	-	(1)	(2 276 247)	(2 276 248)	3 260 149	983 901	
Disposal of subsidiaries		-	-	-	-	-	-	-	37 588	37 588	
Total changes in ownership interests		-	-	-	-	(1)	(2 276 247)	(2 276 248)	3 297 737	1 021 489	
Total transactions with owners of the Company		-	-	-	-	(1)	(31 809 183)	(31 809 184)	3 213 085	(28 596 099)	
Balance at 31 December 2016		45 191	91 414 451	4 286 149	4 390 944	1 589 606	171 161 697	272 888 038	20 192 497	293 080 535	

Senior Vice-President for finance, economics and corporate governance

Director of Accounting department - Chief Accountant

/ Nikipelova N. V./

/ Guseva M. N./

JSC “TVEL”
Consolidated Statement of Cash Flows for 2016
 '000 RUB

	2016	2015
Cash flows from operating activities		
Profit before income tax	50 594 631	68 877 660
<i>Adjustments for:</i>		
Depreciation and amortization	15 819 313	15 964 102
Loss on disposal and impairment of property, plant and equipment	4 097 227	2 337 581
Loss on disposal of intangible and other assets	1 210 351	1 042 016
(Profit)/Loss on disposal of investments	(1 135 812)	(319 210)
Share in (profit)/loss of associates net of CPT	(2 303 195)	(25 975)
Non-cash income from financial lease	-	(698 733)
Net finance (income)/expense	6 290 272	(3 013 078)
Income from curtailment of pension plans	(6 058)	(4 453)
Changes in provisions	6 844 231	977 474
Inventory obsolescence provision accrual/ (reversal of inventory obsolescence provision)	(286 834)	1 002 636
Other	<u>(1 135 941)</u>	<u>(584 189)</u>
Cash from operating activities before changes in working capital	79 988 185	85 555 831
Change in inventories	9 581 153	11 480 584
Change in trade and other receivables	(10 114 491)	(3 801 809)
Change in employee benefits	(76 843)	(827 846)
Change in trade and other payables	(1 879 405)	261 034
Change of government grants with deferred recognition	<u>90 453</u>	<u>(33 532)</u>
Cash flows from operations before income taxes and interest paid	77 589 052	92 634 262
Income tax paid	(9 746 754)	(12 553 488)
Interest paid	<u>(438 631)</u>	<u>(2 442 915)</u>
Net cash from operating activities	67 403 667	77 637 859

JSC “TVEL”
Consolidated Statement of Cash Flows for 2016
 '000 RUB

	2016	2015
Cash flows from financing activities		
Proceeds from borrowings	-	5 923 499
Réparation of borrowings	(19 442 372)	(19 581 435)
Dividends paid to shareholders and owners of non-controlling interests	(28 317 822)	(15 314 391)
Réparation of finance lease liabilities	(1 586 322)	(2 123 801)
Cash on disposal of interests in subsidiaries	934 085	3 508 499
Acquisition of non-controlling interests	-	-
Net cash used in financing activities	(48 412 431)	(27 587 629)
Net increase in cash and cash equivalents	(25 679 877)	29 129 146
Cash and cash equivalents at the beginning of the year	52 730 160	17 497 675
Effect of exchange rate fluctuations on cash and cash equivalents	(8 345 593)	6 103 339
Cash and cash equivalents at the end of the year	18 704 690	52 730 160

Senior Vice-President for finance, economics and corporate governance

 / Nikipelova N. V./

Director of Accounting department - Chief Accountant


 / Guseva M. N./

1. Reporting entity

(a) Business environment in the Russian Federation

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.

(b) Organisational structure and operations

JSC “TVEL” (the “Company”) and its subsidiaries (the “Group”) consist of the Russian Joint Stock Companies and Limited Liability Companies, in accordance with the legislation of the Russian Federation.

The Company was established as a state-owned company on the 12th September 1996 in compliance with the Decree of the President of the Russian Federation dated 8 February 1996 № 166 “Concerning Improvement of Nuclear Fuel Cycle Entities Management”.

The Company is registered by the Moscow Registration Chamber on the 12th September 1996 at:

24/26 Bolshaya Ordynka St., Moscow, Russian Federation, 119017.

The sole shareholder of the Company is JSC “Atomic Energy Power Corporation” (hereinafter referred to as JSC “Atomenergoprom”), which in turn is 100% owned by the State Corporation “Rosatom” (hereinafter referred to as the SC “Rosatom”).

In September 2009, under the decision of the State Corporation “Rosatom” the Fuel Company (the “Group”) of State Corporation “Rosatom” was established on the basis of OJSC “TVEL”. In 2010 establishment of the Fuel Company was completed. The entities of separation and sublimation and gas-centrifuge complex, as well as research and development organizations were integrated into the Company.

Thus, as at 31 December 2010 the Company became responsible for the whole value cycle of nuclear fuel in the Russian nuclear industry and combined the following:

- entities of nuclear fuel fabrication complex which produce components for fuel elements, nuclear fuel in the form of fuel assemblies and their components in the form of fuel elements and fuel pellets, control and regulative rods for reactors of various types;
- entities of separation-sublimation complex which provide services for conversion and enrichment of uranium and isotopes;
- entities of gas-centrifuge complex which produce main and auxiliary equipment for uranium enrichment;
- entities of research and development complex.

JSC “TVEL”
Notes to the Consolidated Financial Statements for 2016
‘000 RUB

The main activities of the Group include:

- production and sale of nuclear fuel and its components;
- production (conversion) of uranium tetrafluoride and hexafluoride, enrichment of natural and reprocessed uranium and its compounds used to make fuel for nuclear power plants, ships and nuclear research facilities and for the supply of enriched uranium products to external customers;
- production and sale of components technologically related to production of nuclear fuel, nuclear and non-nuclear components of complex processing of raw materials;
- implementation of research, development, design and survey works in various fields.

The Group’s activities are conducted in the following cities of the Russian Federation: Angarsk, Vladimir, Glazov, Zelenogorsk, Kovrov, Krasnoyarsk, Moscow, Novouralsk, Novosibirsk, Seversk, Elektrostal. The products are sold in the Russian Federation and abroad.

2. Basis of accounting

(a) Statement of compliance

These consolidated financial statements (hereinafter referred to as “financial statements”) have been prepared based on the requirements of JSC “Atomenergoprom” (parent company) in accordance with International Financial Reporting Standards (“IFRSs”).

Basis for measurement

The consolidated financial statements are prepared on the historical cost basis except for:

- revaluation of fixed assets was made under transition to IFRS as at 1 January 2002 in order to determine their deemed cost;
- the carrying value of non-monetary assets, liabilities and equity as of 31 December 2002 included inflation adjustments, calculated using conversion factors based on the Consumer Price Index published by the State Statistics Committee of the Russian Federation – the body of State Statistics of the Russian Federation. With regard to the preparation of financial statements in accordance with IFRS Russian economics ceased to be considered as hyperinflationary since 1 January 2003;
- investments stated at their fair value and classified as available-for-sale financial assets.

(b) Functional and presentation currency

The national currency of the Russian Federation is the Russian Rouble (“RUB”), which is the Company’s functional currency and the currency in which these consolidated financial statements are presented. All financial information presented in RUB has been rounded to the nearest thousand, except when otherwise indicated.

(c) 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.

JSC “TVEL”
Notes to the Consolidated Financial Statements for 2016
‘000 RUB

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

- Useful lives of property, plant and equipment – Note 3 (c) (iii);
- Provision for inventory obsolescence - Note 19;
- Other long-term investments – Note 17;
- Non-current provisions – Note 24;
- Employee benefits – Note 12.

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.

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 30 – Fair value and risk management.

3. 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 have been reclassified to conform to the current year presentation.

(a) Basis of consolidation

(i) Business combinations, except for transactions between entities under common control

Business combinations except for transactions between entities under common control are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group.

The Group measures goodwill at the acquisition date as:

- the fair value of the consideration transferred; plus
- the recognized 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 acquiree, less

JSC “TVEL”
Notes to the Consolidated Financial Statements for 2016
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- the net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

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

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognized 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 payable is recognized at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not subsequently remeasured and settlement is accounted for within equity. Otherwise, contingent consideration is remeasured to fair value at each reporting date and subsequent changes in fair value of the contingent consideration are recognized in profit or loss.

(ii) *Business combinations between entities under common control*

Business combinations arising from transfers of interests in entities that are under the control of the same shareholder that controls the Group are accounted for as if the acquisition had occurred at the beginning of the earliest comparative periods presented or, if later, at the date that common control was established; for this purpose comparatives are revised. The assets and liabilities acquired are recognised at the carrying amounts recognised previously in the Group’s controlling shareholder’s consolidated financial statements.

(iii) *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.

Acquisitions (disposals) of non-controlling interests are accounted for as transactions with owners in their capacity as owners and therefore no goodwill is recognised as a result. Adjustments to non-controlling interests arising from transactions are based on the proportionate amount of the net assets of the subsidiary. The difference between the carrying amounts of the acquired (disposed) non-controlling interest and the consideration paid (transferred) is recognised within equity.

(iv) *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.

(v) *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 former subsidiary, then such interest is measured at fair value at the date the 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.

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(vi) *Interests in equity-accounted investees*

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

Associates are those entities in which the Group has significant influence, but not control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds directly or indirectly (for example, through subsidiaries) between 20% and 50% of the voting power of another entity except for the situations when there is evidence to the contrary. Joint ventures are those entities over activities of which the Group has joint control, established by contractual agreement and requiring unanimous consent for strategic financial and operating decisions.

Interests in associates and joint ventures are accounted for using the equity method and are recognized 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 on compensation of losses or has made payments on behalf of the investee.

(vii) *Transactions eliminated on consolidation*

Intercompany balances and transactions, and any unrealised profit or loss arising from intercompany transactions, are eliminated in preparing the consolidated financial statements. 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) *Foreign currency*

(i) *Foreign currency transactions*

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

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are converted to the functional currency at the exchange rate at the date the fair value was determined. Non-monetary items in a foreign currency that are measured based on actual cost are converted 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 conversion of available-for-sale equity instruments which are recognised in other comprehensive income.

(c) *Property, plant and equipment*

(i) *Recognition and measurement*

Items of property, plant and equipment are measured at actual cost less accumulated depreciation and any accumulated impairment losses. Under preparation of consolidated financial statements as at 1 January 2002,

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date of transition to IFRS, the Group recorded fixed assets at fair value and used it as deemed cost at this date. In order to identify fair value of fixed assets at the date of transition to IFRS, results of evaluation by independent appraiser were used.

The actual cost includes expenditures that are directly attributable to the acquisition of the asset. The actual cost of constructed (built) assets includes the cost of materials, direct labour costs, all other costs directly attributable to bringing the asset to a working condition for its intended use, and the costs of dismantling, removing the items and restoring land that they occupy at the end of their useful lives. Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment. Borrowing costs attributable to the acquisition or construction of qualifying assets are capitalized in the value of such assets. A qualifying asset is an asset with substantial period of preparation for its intended use.

When 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 recognised net within other income/other expenses in profit or loss.

(ii) Subsequent costs

The cost of replacing a component of an item of property, plant and equipment is recognized in the carrying amount of the item if it is probable that the future economic benefits embodied within the component will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced component is derecognized. The costs of the day-to-day maintenance of property, plant and equipment are recognized in profit or loss as incurred.

Costs of performing mandatory technical inspections and capital repairs of property, plant and equipment are identified and accounted for as separate component, if the component is used for more than one reporting period. Costs of mandatory inspections and capital repairs, recognised as separate components of property, plant and equipment, are depreciated over the period until the subsequent inspection or capital repair is performed.

(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 residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation is recognized in profit or loss on a straight-line basis over the estimated useful life of each part of an item of property, plant and equipment, since this method 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.

Depreciation methods, useful lives and residual values are reviewed at the end of each financial year.

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

- Buildings 7 – 87 years;
- Plant and equipment 1 – 44 years;
- Installations and transmission devices 3 – 56 years;
- Transport vehicles 1 – 22 years;

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- Other 1 – 36 years.

(d) Intangible assets

(i) Recognition and measurement

Intangible assets with finite useful lives acquired by the Group are measured at cost less accumulated amortization and accumulated impairment losses.

(ii) Subsequent expenditures

Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditure, including expenditure on internally generated goodwill and brands, are recognized in the profit or loss as incurred.

(iii) Amortization

Amortisation is calculated based on the initial (actual) cost of the asset, or other amount substituting for the initial cost, less its liquidation value. Amortisation is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use since this method most closely reflects the expected pattern of consumption of future economic benefits embodied in the asset.

The estimated useful lives for the current and comparative periods are as follows:

- Development expenditure 1-4 years;
- Computer software 1-12 years;
- Licenses 1-7 years.

(iv) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The capitalized expenditure includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use. Other development expenditure is recognized in the profit or loss as incurred.

Capitalized development expenditure is measured at cost less accumulated amortization and accumulated impairment losses.

(e) Leased assets

Lease contracts in terms of which the Group assumes 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 the asset.

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

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(f) Financial instruments

(i) Non-derivative financial assets

Non-derivative financial assets comprise investments in equity and debt securities, trade and other receivables, and cash and cash equivalents, loans and borrowings, trade and other payables.

The Group initially recognizes loans, receivables and deposits on the date that they are originated. All other financial assets (including assets designated at fair value through profit or loss) are recognized initially on the contract date at which the Group becomes a party to the contractual provisions of the instrument.

The Group derecognizes 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 for the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognized as a separate asset or liability.

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

The Group classifies non-derivative financial assets into the following categories: loans and receivables, financial assets held-for-maturity, financial assets available-for-sale, financial assets at fair value through profit or loss.

Loans and receivables

Loans and receivables is 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.

Loans and receivables category comprise the following classes of financial assets: trade and other receivables and loans given (see Notes 17, 20).

Cash and cash equivalents

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

Financial assets held-to-maturity

If the Group has the positive intent and ability to hold to maturity debt securities that are quoted in an active market, then such financial assets are classified to held-to-maturity category. Held-to-maturity financial assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition held-to-maturity financial assets are measured at amortized cost using the effective interest method, less any impairment losses.

Financial assets at fair value through profit or loss for the period

A financial asset is classified into fair value through profit or loss category if it is classified as held for trading or is designated as such upon initial recognition. Financial assets are designated at fair value through profit or loss if the Group manages such investments and makes purchase and sale decisions based on their fair value in accordance with the Group’s documented risk management or investment strategy. Attributable transaction costs are recognized in profit or loss as incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss for the period.

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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 other categories of financial assets. Such assets are recognized 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 and foreign currency differences on available-for-sale debt instruments, are recognized in other comprehensive income and presented within equity in the fair value reserve. When an investment is derecognized or impaired, the cumulative gain or loss in equity is reclassified to profit or loss. Unquoted equity instruments whose fair value cannot be reliably measured are carried at cost.

(ii) Non-derivative financial liabilities

Non-derivative financial liabilities are classified into the category of other financial liabilities. 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. The Group derecognizes a financial liability when its contractual obligations are discharged, cancelled or expire.

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

Bank overdrafts that are repayable on demand and form an integral part of the Group’s cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

(iii) Derivative financial instruments

The Group uses certain hedging instruments, which include forward contracts and currency options for hedging the risk of changes in foreign currency exchange rates that compensate for adverse effects of the change of asset fair value, cumulative cash flows or net investments in foreign operations. Derivatives are recognized initially at fair value; attributable transaction costs are recognized in profit or loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized immediately in the profit or loss.

(g) Inventory

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is determined using the following cost formulas:

- for nuclear and fission materials – individual cost of an inventory batch;
- for all other inventories – weighted average cost method.

The cost of inventories 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 and a standard (planned) volume of production. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(h) Share capital

(i) Ordinary shares

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

(i) Impairment

(i) Non-derivative financial assets

A financial asset not carried at fair value through profit or loss 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, indicators that a debtor or issuer will enter bankruptcy, adverse changes in the payment status of borrowers or issuers, economic conditions that correlate with defaults or the disappearance of an active market for a security. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is an objective evidence of impairment.

Loans and receivables, and held-to-maturity investment securities

The Group considers evidence of impairment for loans and receivables and held-to-maturity investment securities at both a specific asset and collective level. All individually significant loans and receivables, and held-to-maturity investment securities are assessed for specific impairment. All individually significant loans and receivables, and held-to-maturity investment securities found not to be specifically impaired are then collectively assessed for any impairment that has been incurred but not yet identified. Loans and receivables, and held-to-maturity investment securities that are not individually significant are collectively assessed for impairment by grouping together loans and receivables and held-to-maturity investment securities 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 judgment 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 in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount, and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognized in profit or loss and reflected in an allowance account against loans and receivables or held-to-maturity investment securities. Interest on impaired assets continues to be recognized through the unwinding of the discount. When a subsequent event causes the amount of impairment loss to decrease, 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 recognized 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 amortization, and the current fair value, less any impairment loss previously recognized 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 recognized in profit or loss, then the impairment loss is reversed, with the amount of the reversal recognized in profit or loss. However, any subsequent recovery in the fair value of an impaired available-for-sale equity security is recognized in other comprehensive income.

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(ii) Non-financial assets

The carrying amounts of the Group’s non-financial assets, other than 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. An impairment loss is recognized if the carrying amount of an asset or its related cash-generating unit (CGU) exceeds its estimated recoverable amount.

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. 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 CGUs. Subject to a provision stating that the level of impairment testing could not be higher than operating segments’ level 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 utilized 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.

Impairment losses are recognized in profit or loss. Impairment losses recognized 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 recognized 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 amortization, if no impairment loss had been recognized.

(j) Employee benefits

(i) 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 Russian 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.

(ii) 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

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periods; that benefit is discounted to determine its present value, and any unrecognised past service costs and the fair value of any plan assets are deducted. 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.

A qualified actuary using the projected unit credit method performs the calculation annually. When the results of the calculations obtained reveal profits 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 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.

(iii) *Other long-term employee benefits*

The Group’s net obligation in respect of long-term employee benefits other than pension plans is the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any related assets is deducted. 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 using the projected unit credit method - accumulation of future payments. Remeasurements are recognised in profit or loss in the period in which they arise.

(iv) *Termination benefits*

Termination benefits are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognises costs for a restructuring. If benefits are payable more than 12 months after the reporting date, then they are discounted to their present value.

(v) *Short-term benefits*

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized 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 if the obligation can be estimated reliably.

(k) *Provisions*

A provision is recognized 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.

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(i) Assets retirement obligation

The provision for decommissioning an item of property, plant and equipment is included in its cost during initial recognition and is depreciated over the estimated useful life using the method applied for depreciation of the asset.

The obligation for decommissioning of property, plant and equipment is calculated based on estimated costs of the liquidation of installations and equipment at current prices that is the estimated cost of dismantling and liquidation of the relevant objects.

The provisions are reconsidered at the end of each reporting date taking account of changes in the estimates of future cash flows (for example, the cost of item dismantling) or discount rates. Any changes in the amount of the obligation due to the above reasons are included in the cost of item of property, plant and equipment. The cost of an item of property, plant and equipment cannot be negative or exceed its recoverable amount.

(ii) Provision for site restoration and territory rehabilitation

The Group recognizes a provision in respect of the Group’s obligation to rectify any environmental damage arising as a result of the operating activity of other Group entities. The obligation to rectify environmental damage is recognized in other operating expenses as incurred. The obligation is calculated based on estimated decontamination costs at current prices.

(iii) Provision for decommissioning of radioactive waste (RAW)

The amount of the provision for decommissioning RAW is determined by the estimation of future cost of storage, conversion, conditioning, containerisation, RAW transportation to burial sites and burying of the RAW formed as a result of mining and processing of uranium ore, and the operating activity of the Group’s entities that use the nuclear facilities and nuclear-related items. The obligation for decommissioning RAW is recognized in other operating expenses as incurred. Special features of the recognition of these liabilities in the consolidated financial statements are disclosed in Note 24.

(iv) Compensation of expenses

If it is expected with a high degree of confidence that the obligation stated in Note 3 (k) (i) – (iii) will be financed by any third party, for example the state, than the amount of such compensation is recognized as a non-current asset. The asset is discounted, using the same rate and schedule as the appropriate part of the recognized provision for decommissioning of property, plant and equipment, except for cases when the dates/periods of repayment of the obligation and assets are not consistent.

(I) Revenue

(i) Sales of goods

Revenue from the sale of goods in the course of ordinary activities is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. Revenue is recognized 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. If it is probable that discounts will be granted and the amount can be measured reliably, then the discount is recognized as a reduction of revenue as the sales are recognized.

The timing of the transfers of risks and rewards varies depending on the individual terms of the sales agreements.

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(ii) Sales of electricity

Revenue from sales of electricity, heat and power is recognised at the moment of delivery to customers.

(iii) Sales of enrichment services

Revenue from sales of uranium enrichment services is recognised in proportion to the stage of completion of an agreement (based on costs incurred).

(m) Government grants and other financing

Grants and other financing, including funds received from government bodies and international organisations, are recognised initially as deferred income at fair value when there is reasonable assurance that they will be received and that the Group will comply with the conditions associated with the grant. Grants and other financing received for the purpose of acquisition on non-current assets are recognised within deferred income. Grants and other financing received in the form of assets or cash for acquisition of assets are recognised in profit and loss as other income (loss) on a systematic basis over the useful life of the asset. Grants that compensate the Group for expenses incurred are recognized in profit or loss as other income on a systematic basis in the same periods in which the expenses are recognized.

(n) Other expenses

(i) Lease payments

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized 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.

(ii) 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 the 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 recognized 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 recognized using the Group’s incremental borrowing rate.

(iii) Social expenditures

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 recognized in profit or loss as incurred.

(o) Finance income and expense

Finance income comprises interest income on funds invested (including available-for-sale financial assets), dividend income, gains on the discounting of financial assets and liabilities, gains on disposal of available-for-sale investments and foreign currency gains. Interest income is recognised as it accrues in profit and loss,

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using the effective interest method. Dividend income is recognized in profit or loss on the date that the Group’s right to receive the payment is established.

Finance expenses comprise interest expenses on loans, except for interest expenses capitalised as part of the cost of the Group’s qualifying assets, interest expenses on finance lease, unwinding of the discount on provisions, foreign currency losses, and impairment losses recognised on financial assets (other than trade and other receivables). Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit and loss using the effective interest method.

Foreign currency gains and losses are reported on a net basis as either finance income or finance expense depending on whether foreign currency movements are in a net gain or net loss position.

(p) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity.

Current tax is 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 with respect to dividends declared and any adjustment to tax payable in respect of previous years, including provisions accrued in respect of possible tax risks.

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 and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future; and
- taxable temporary differences arising on the initial recognition of goodwill.

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 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 at the reporting date.

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 of tax liabilities will impact the tax expense in the period that such determination is made.

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.

A deferred tax asset is recognised for unused tax losses, 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 utilised.

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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.

(q) Dividends declared

Dividends and the related tax liabilities are recognized as a liability in the period in which they are declared and legally payable.

4. New standards and interpretations not yet adopted

A number of new Standards, amendments to Standards and Interpretations will be effective for annual periods beginning on or after 1 January 2017, 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 disclosure that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

The amendments are effective for annual periods beginning on or after 1 January 2017.

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 financial activities.

(b) “Recognition of Deferred Tax Assets in relation to Unrealized Losses (Amendments to IAS 12)”

The amendments clarify the accounting for deferred tax assets for unrealized losses that arose on debt instruments measured at fair value.

The amendments are effective for annual periods beginning on or after 1 January 2017.

The Group is assessing the potential impact on its consolidated financial statements resulting from amendments. So far, the Group does not expect any significant impact.

(c) 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 IFRS (IAS) 11 Construction contracts, IFRS (IAS) 18 Revenue and IFRIC 13 Customer Loyalty Programmes.

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

The Group is in process of evaluation the potential impact of IFRS 15 on the consolidated financial statements.

(d) IFRS 9 Financial Instruments

In July 2014 International Accounting Standards Board issued the final version of IFRS 9 Financial Instruments. IFRS 9 is effective for annual reporting beginning on or after the 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 will hold at that moment, on

future economic conditions and on chosen accounting options and assertions made by the Group in the future.

Changes in accounting policy resulted from IFRS 9 adoption will be applied retrospectively excluding situations provided below:

- The Group plans to make use of exemption which allows not to recalculate comparative data for the previous periods concerning changes in classification and evaluation (including impairment) of financial instruments. Differences between previous book value of instruments and their book value in accordance with IFRS 9 ordinary will be recognized in retained earnings and reserves as at 1 January 2018.
- New requirements within hedge accounting ordinary should be applied prospectively. However, the Group can make decision on changes application in forward points retrospective accounting. The Group still has not made decision on this matter.

Following estimations should be made basing on the facts and circumstances as at the date of the first application:

- Identification of a business model in terms of which a financial asset is possessed.
- Identification upon decision of the Group and cancellation of previously made identification of some financial assets and financial liabilities into a category, which is evaluated at fair value through profit or loss.
- Identification upon decision of the Group of some investments as equity instruments unappropriated for sale and as evaluated at fair value through other comprehensive income category.

(e) IFRS 16 Leases

IFRS 16 introduces a single, on-balance sheet accounting model for lessees. According to this model a lessee recognizes 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 the existing lease accounting guidance in IFRS (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*.

IFRS 16 is effective for annual reporting periods on or after the 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.

The Group has started an initial assessment of the potential impact on its consolidated financial statements.

As a lessee, the Group can either apply the standard using a:

- retrospective approach; or
- modified retrospective approach with optional practical expedients.

The lessee applies the election consistently in relation to all its leases. The Group currently plans to apply IFRS 16 initially on the 1 January 2019. The Group has not yet determined which transition approach to apply.

As a lessor, the Group is not required to make any adjustments for leases in which it is a lessor except where it is an intermediate lessor sub-lease.

The Group has not yet quantified the impact on its reported assets and liabilities of adoption of IFRS 16. The quantitative effect will depend on, inter alia, the transition method chosen, the extent to which the Group uses practical expedients and recognition exemptions, and any additional leases that the Group enters into.

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).
- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to IFRS 10 and IAS 28).

5. Determination of fair values

A number of the Group’s accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement or/and for disclosure purposes based on the methods described below. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

(a) Property, plant and equipment

The fair value of property, plant and equipment recognized as a result of a business combination is based on market values. The market value of property, plant and equipment is the estimated amount for which an item of property, plant and equipment could be exchanged on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing wherein the parties had each acted knowledgeably and willingly. The property, plant and equipment fair value is based on a market approach using quoted market prices for similar items when available or on a cost approach.

When no quoted market prices are available, the fair value of property, plant and equipment is 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.

(b) Intangible assets

The fair value of patents and trademarks acquired in a business combination is based on the discounted estimated royalty payments that have been avoided as a result of the patent or trademark being owned.

The fair value of other intangible assets is based on the discounted cash flows expected to be derived from the use and eventual sale of the assets.

(c) Inventories

The fair value of inventories acquired in a business combination is determined based on its estimated selling price in the ordinary course of business less the estimated costs of completion and sale, and a reasonable profit margin based on the effort required to complete and sell the inventories.

(d) Equity and debt securities

The fair value of equity and debt securities is determined by reference to their quoted closing bid price at the reporting date, or if unquoted, determined using a valuation technique. Valuation techniques employed include market multiples and discounted cash flow analysis using expected future cash flows and a market-related discount rate. The fair value of held-to-maturity investments is determined for disclosure purposes only.

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(e) Trade and other receivables

The fair value of trade and other receivables is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. This fair value is determined for disclosure purposes or when acquired in a business combination.

(f) Non-derivative financial liabilities and assets

Fair value, which is determined only for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date. In respect of liability component of convertible notes, the market rate of interest is determined by reference to similar liabilities that do not have a conversion option. For finance leases the market rate of interest is determined by reference to similar lease agreements.

6. Significant subsidiaries

Significant subsidiaries included into these consolidated financial statements are presented below:

Subsidiary	Country of incorporation	Ownership/voting	
		31 December 2016	31 December 2015
JSC “Chepetsk mechanical plant” (ChMZ)	Russia	100%	99,98%
JSC “Industrial innovations”	Russia	100%	100%
JSC “TVEL-Stroy”	Russia	90,98%	92,24%
JSC “Moscow Plant of Polymetals”	Russia	100%	100%
JSC “A.A. Bochvar High-Technology Scientific Research Institute for Inorganic Materials” (JSC “VNIINM by A.A. Bochvar”)	Russia	88,34%	96,25%
JSC “United Company “Razdelitelno-Sublimatny Kompleks” (RSK)	Russia	100%	100%
JSC “Angarsk electrochemical plant”	Russia	100%	100%
JSC “Siberian chemical plant” (SKhK)	Russia	96,23%	92,40,%
JSC “Ural electrochemical plant” (UEKhK)	Russia	87,50%	87,50%
JSC “Production Association “Electrochemical Plant” (EKhZ)	Russia	100%	100%
JSC “Engineering Center “Russian Gas Centrifuge” (IC RGC)	Russia	100%	100%
JSC “Vladimir Production Association “Tochmash”	Russia	100%	100%
JSC “Commercial Center”	Russia	97,83%	97,83%
PJSC “Novosibirsk chemical concentrates plant” (NZKhK)	Russia	88,51%	89,00%
PJSC “Machine building plant” (MSZ)	Russia	75,39%	79,97%
PJSC “Kovrovsk mechanical plant” (KMZ)	Russia	94,19%	94,19%
LLC “Ural plant of gas centrifuges”	Russia	100%	100%

7. Non-controlling interests

The following table summarises the information relating to each of the Group’s subsidiaries that has material NCI, before any intra-group eliminations.

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	JSC “SKhK”	JSC “UEKhK”	PJSC “KMZ”	JSC “VNIINM by A.A. Bochvar”	PJSC “MSZ”	PJSC “NZKhK”	Other group compa- nies	Intra- group elimina- tions	Total
NCI percentage	3,77%	12,50%	5,81%	11,66%	24,61%	11,49%			
Non-current assets	11 772 513	52 797 764	1 556 711	4 843 068	18 612 781	8 661 480			
Current assets	10 375 270	22 323 319	1 689 683	2 064 432	32 208 678	8 929 839			
Non-current liabilities	(7 697 198)	(5 256 345)	(34 508)	(663 223)	(7 950 271)	(1 411 497)			
Current liabilities	(2 640 921)	(5 526 236)	(299 108)	(1 467 478)	(4 579 606)	(1 427 796)			
Net assets	11 809 664	64 338 502	2 912 778	4 776 799	38 291 582	14 752 026			
Carrying amount of NCI	445 165	8 042 313	169 232	556 908	9 421 847	1 695 315	656 753	(795 036)	20 192 497
Revenue	14 980 519	22 907 616	2 657 990	3 519 676	22 769 941	7 088 588			
Profit	(2 920 038)	5 305 274	(520 444)	184 709	(343 872)	(140 893)			
Other comprehensive income/(loss)	31 034	(64 442)	(12 505)	36 474	(73 323)	80 817			
Total comprehensive income	(2 889 004)	5 240 832	(532 949)	221 183	(417 195)	(60 076)			
Profit allocated to NCI	(204 847)	663 159	(30 238)	21 535	(84 611)	(16 192)	226 641	(872 177)	(296 730)
Other comprehensive income/(loss) allocated to NCI	2 753	(8 055)	(726)	1 493	(14 735)	9 162	2	-	(10 106)
Cash flows from operating activities	930 142	8 160 845	506 749	(119 058)	2 588 856	704 173			
Cash flows from investment activities	(2 770 946)	(7 590 963)	(241 123)	(76 471)	(3 137 857)	(1 101 671)			
Cash flows from financing activities	2 088 040	(1 570 141)	-	118 427	282 361	123 330			
Effect of exchange rate fluctuations on cash and cash equivalents	(2 552)	(64 850)	-	(26 560)	(68 734)	(17 201)			
	244 684	(1 065 109)	265 626	(103 662)	(335 374)	(291 369)			

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	JSC “SKhK”	JSC “UEKhK”	PJSC “KMZ”	JSC “VNIINM by A.A. Bochvar”	PJSC “MSZ”	PJSC “NZKhK”	Other group companies	Intra-group eliminations	Total
NCI percentage	7,60%	12,50%	5,81%	3,75%	20,03%	11,00%			
Non-current assets	11 165 748	47 926 824	2 258 684	4 672 806	20 437 943	9 879 396			
Current assets	10 698 449	20 132 881	1 658 903	2 193 739	28 263 323	8 038 462			
Non-current liabilities	(5 100 380)	(5 671 025)	(79 764)	(1 311 890)	(5 838 634)	(1 681 545)			
Current liabilities	(2 572 387)	(3 291 109)	(392 113)	(900 191)	(4 253 843)	(1 493 533)			
Net assets	14 191 430	59 097 571	3 445 710	4 654 464	38 608 789	14 742 780			
Carrying amount of NCI	1 077 913	7 387 196	200 196	174 344	7 733 877	1 622 377	154 866	(1 064 521)	17 286 248
Revenue	14 276 308	21 328 711	2 566 972	3 560 115	21 883 042	7 319 998			
Profit	(465 965)	6 336 830	(165 948)	(131 752)	5 394 060	1 541 733			
Other comprehensive income/ (loss)	(6 941)	(103 057)	(4 019)	(7 838)	(15 188)	(38 803)			
Total comprehensive income	(472 906)	6 233 794	(169 967)	(139 590)	5 378 872	1 502 930			
Profit allocated to NCI	(35 392)	792 104	(9 642)	(14 224)	1 041 424	88 933	(834)	(30 972)	1 831 397
Other comprehensive income/ (loss) allocated to NCI	(263)	(12 877)	(233)	(250)	(2 857)	(4 270)	11	-	(20 740)
Cash flows from operating activities	1 003 015	12 548 769	267 614	633 820	5 830 212	886 119			
Cash flows from investment activities	(5 028 976)	(10 142 348)	(194 555)	(545 088)	(8 800 822)	(996 777)			
Cash flows from financing activities	3 684 935	(1 703 256)	(398)	323 169	524 851	117 643			
Effect of exchange rate fluctuations on cash and cash equivalents	(3 874)	86 793	-	31 646	(40 821)	(16 520)			
Net increase (decrease) in cash and cash equivalents	(344 900)	789 958	72 661	443 547	(2 486 580)	(9 535)			

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8. Change in non-controlling interests

In 2016, ownership shares in JSC “VNIINM”, JSC “SKhK”, PJSC “MSZ”, PJSC “NZKhK” had changed without loss of control due to additional share issues and purchase of shares by minority shareholders. As a result, the book value of non-controlling share increased by 3 260 149 thousand roubles, an effect (decrease) in retained earnings comprises 2 276 247 thousand roubles.

In 2015, ownership shares in JSC “VNIINM”, JSC “SKhK”, PJSC “MSZ”, PJSC “NZKhK” had decreased without loss of control due to additional share issues and purchase of shares by minority shareholders. As a result, the book value of non-controlling share increased by 1 985 972 thousand roubles, an effect in retained earnings comprises 2 010 991 thousand roubles. Cash contributions to the Statutory capitals amounted to RUB 3 508 499 thousand. Non-monetary contributions to the statutory capital of the entities in the form of transferred property amounted to RUB 392 003 thousand.

In 2015, the Group sold its 100% stake in LLC "Katodnye Litievye Materialy" (including its subsidiary, JSC "KhMZ", in which LLC "Katodnye Litievye Materialy" owned 51% of shares). The effect is reflected in the Consolidated statement of changes in equity as the disposal of non-controlling interests' carrying value of RUB 95 363 thousand (decrease).

9. Investments in equity accounted investees

Name	Country of incorporation	Ownership	
		31 December 2016	31 December 2015
JSC “Uranium Enrichment Centre”	Russia	50%	50%
LLC “Inter-Smart”	Russia	50%	50%
CJSC “SP “UKRTVS”	Ukraine	33%	33%
JSC “ALVEL”	Czech Republic	50%	50%
JSC “Nuclear fuel production plant”	Ukraine	50%	50%
OJSC “Russian industrial house “Rainbow”	Russia	29%	29%
LLC “Scientific-production company “Heat resistant textiles”	Russia	28%	28%
LLC “Publishing firm “Neiva-press”	Russia	-	38%
LLC “MK ChMZ”	Russia	49%	49%

In 2016, the Group sold 38% of the shares of LLC “Publishing firm “Neiva-press”.

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The change of the carrying amount of the Group investments in associates and jointly controlled entities is listed below:

Name	Carrying value of investments as at 01 January 2016	Share of profit/(loss)	Acquisition/(disposal)	Carrying value of investments as at 31 December 2016
Jointly controlled entities				
JSC “Uranium Enrichment Centre”	-	2 292 927	-	2 292 927
LLC “Inter-Smart”	12 782	(9 167)	-	3 615
	12 782	2 283 760	-	2 296 542
Associates				
JSC “Nuclear fuel production plant”	269 736	(405)	-	269 331
CJSC “SP UKRTVS”	8 111	(98)	-	8 013
JSC “ALVEL”	12 144	714	-	12 858
OJSC “Russian industrial house “Rainbow”	697	51	-	748
LLC “Publishing firm “Neiva-press”	52	-	(52)	-
LLC “Scientific-production company “Heat resistant textiles”	-	6 206	-	6 206
LLC “MK ChMZ”	128 446	12 967	-	141 413
	419 186	19 435	(52)	438 569
	431 968	2 303 195	(52)	2 735 111

Name	Carrying value of investments as at 01 January 2015	Share of profit/(loss)	Acquisition/(disposal)	Carrying value of investments as at 31 December 2015
Jointly controlled entities				
LLC “Inter-Smart”	212 590	13 392	(213 200)	12 782
	212 590	13 392	(213 200)	12 782
Associates				
JSC “Nuclear fuel production plant”	270 896	(1 160)	-	269 736
CJSC “SP UKRTVS”	4 373	3 738	-	8 111
JSC “ALVEL”	11 634	510	-	12 144
OJSC “Russian industrial house “Rainbow”	645	52	-	697
LLC “Publishing firm “Neiva-press”	47	5	-	52
LLC “Scientific-production company “Heat resistant textiles”	-	-	-	-
LLC “MK ChMZ”	119 008	9 438	-	128 446
	406 603	12 583	-	419 186
	619 193	25 975	(213 200)	431 968

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JSC "Uranium Enrichment Centre" is a joint Russian-Kazakh enterprise, which is the most significant object of a joint venture agreement with participation of JSC "TVEL". Company's business is connected with handling of nuclear materials and radioactive substances during their transportation and storage through performing works and providing services to the operating company on the territory of the Russian Federation.

JSC "Uranium Enrichment Centre" is a separate entity in the net assets of which JSC "TVEL" has a residual interest. Accordingly, JSC "TVEL" classified its share in JSC "Uranium Enrichment Center" as an equity accounted investment in the joint venture.

The table below summarizes the financial information of JSC "Uranium Enrichment Center". In addition, the table provides a reconciliation of the consolidated financial information of JSC "Uranium Enrichment Center" with the book value of share of JSC "TVEL" in this entity.

	2016 '000 RUB
Share of participation	50%
Non-current assets	21 325 553
Current assets	2 988 584
Non-current liabilities	(16 382 566)
Current liabilities	(3 345 717)
Net assets (100%)	4 585 854
Share of JSC "TVEL" in net assets (50%)	2 292 927
Carrying amount of share in a joint venture	2 292 927
Revenue	12 881 140
Depreciation	(487)
Interest expense	(1 092 550)
Income tax expense	(1 712 974)
Net Profit and total comprehensive income (100%)	6 850 321
Net Profit and total comprehensive income (50%)	3 425 161
Share of JSC "TVEL" in profit and total comprehensive income	3 425 161
Dividends received by JSC "TVEL"	-

As part of the profit of JSC "Uranium Enrichment Centre" for 2016 refers to earlier unrecognized losses (amounted to RUB 1 132 234 thousand) the amount of recognized profit in 2016 is RUB 2 292 927 thousand.

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10. Revenue

	2016	2015
Revenue from nuclear fuel sales	110 404 219	119 961 781
Revenue from other uranium-containing goods	28 349 181	24 045 419
Revenue from conversion and enrichment services	20 810 621	21 716 065
Revenue from sales of other goods	9 420 105	7 253 927
Revenue from other activities	6 621 862	7 248 386
Revenue from sales of produced electricity, heat and power	6 116 388	5 454 491
Revenue from sales of research and development	2 962 838	5 186 786
Revenue from sales of special technological equipment	1 058 528	3 249 175
	185 743 742	194 116 030

Revenue from sales of other uranium-containing goods comprises proceeds mainly from sales of enriched uranium hexafluoride (HFC) of brand N, absorbing rods of the protection control system (PS CPS), isotopes, metallic uranium, other nuclear materials and products under government contracts.

Revenue from sales of other goods and revenue from other activities comprise proceeds mainly from sales of products and services (works) of processing and non-core activities (lithium metal, calcium, zirconium and products from these metals, pipes and pipelines, calcium injection wire, household devices, chemical products, catalyzers), transport and construction and installation services and also proceeds under government contracts.

11. Income and expenses

(a) Other operating income

	2016	2015
Grants and financial aid	818 612	1 088 266
Rent income	502 740	402 156
Inventory obsolescence provision reversal	286 834	-
Income from forfeits and damages received	200 318	-
Inventory surplus identified during stocktake	141 459	148 228
Income from changes in estimates in RAW decommissioning provision	21 579	-
Provisions for tax disputes and litigation reversal	16 778	-
Profit and losses of previous years	-	35 281
Other operating income	481 928	1 664 775
	2 470 248	3 338 706

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(b) Other operating expenses

	2016	2015
Expenses from changes in estimates of provision for land rehabilitation and site restoration	(4 181 541)	(440 176)
Loss from disposal of property, plant and equipment	(3 989 826)	(1 123 702)
Expenses from changes in estimates of provision for asset retirement obligation	(3 042 817)	(18 664)
Software expenses	(1 557 924)	(945 757)
Provision for doubtful debts	(1 209 452)	(129 116)
Social and cultural sphere expenses	(1 186 184)	(1 010 450)
Loss on disposal of other assets	(1 107 217)	(783 489)
Rent expenses	(946 770)	(778 759)
Security services	(890 671)	(899 087)
Other services provided by third parties	(855 538)	(1 014 854)
Maintenance of objects on conservation	(712 936)	(561 881)
Consulting and other professional services expenses	(568 880)	(395 455)
Selling expense	(419 725)	(366 122)
Business trip expenses	(375 888)	(355 373)
Utilities	(336 469)	(237 405)
Environmental expenses	(275 402)	(142 260)
Communication services expenses	(259 514)	(263 362)
Expenses for radioactive wastes treatment (RAW)	-	(98 137)
Other expenses financed by subsidies	(181 723)	(201 881)
Charity and financial aid expenses	(140 932)	(287 431)
Expenses for licensing	(131 644)	(79 817)
Loss on impairment of fixed assets (other than exploration and evaluation assets)	(107 401)	(1 213 879)
Loss on disposal of intangible assets	(103 134)	(258 527)
Safety assurance services (industrial and fire safety)	(97 876)	(88 473)
Profits and losses of previous years	(95 626)	-
Advertising and marketing expenses	(87 272)	(103 795)
Inventory obsolescence provision accrual	-	(1 002 636)
Provision for tax disputes and litigations accrual	-	(448 458)
Other expenses	<u>(5 197 644)</u>	<u>(4 677 532)</u>
	<u>(28 060 006)</u>	<u>(17 926 278)</u>

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(c) Net finance expense

	2016	2015
Foreign exchange gain	-	4 663 146
Interest income	2 970 383	1 760 468
Gain on disposal of investments	1 135 812	277 422
Gain on discounting long-term receivables	13 716	19 883
Other finance income	93 843	133 230
Total finance income	4 213 754	6 854 149
Foreign exchange loss	(5 775 462)	-
Interest expenses on finance lease and borrowed funds	(1 777 322)	(2 140 736)
Unwinding of discount on asset retirement provision and provision for land rehabilitation and site restoration	24	(1 283 731)
Interest on retirement benefit plans	(454 642)	(581 215)
Unwinding of discount on provision for radioactive wastes treatment (RAW)	24	(19 330)
Other finance expense	(57 727)	(2 000)
Total finance expense	(9 368 214)	(3 841 071)
Net finance income/(expense)	(5 154 460)	3 013 078

12. Employee benefits

Pension and other long-term employee benefit plans are provided by the Group.

Group's program on other long-term employee benefits and retirement benefit plans includes defined benefit retirement plan. Retirement benefit plans include life-long monthly retirement payments or lump-sum retirement payments or both of them.

The Group provides other long-term benefits, including compensation for death caused by discharging professional duties, compensations paid in case of pensioner's death and disability benefits under the defined benefit plan.

All retirement benefit plans are unfunded. The plans described above include payment of retirement benefits. The retirement benefits are accrued if an employee complies with the criteria for retirement benefit accrual stated by law.

A significant number of employees are eligible for early retirement under pension law and early retirement pension accrual order.

The Group also provides financial assistance under a defined benefit plan. Assistance is provided to old-aged pensioners and people with disabilities who do not receive a pension under occupational pension plan.

(a) Defined benefit obligations recognized in the statement of financial position

Defined benefit obligations recognized in the statement of financial position are presented below:

	31 December 2016	31 December 2015
Obligations for post-employment defined benefit plans	4 696 297	4 961 745
	4 696 297	4 961 745

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(b) Movement in discounted value of defined benefit obligations

	Obligations for post-employment defined benefit plans		Total defined benefit obligations	
	2016	2015	2016	2015
Balance at 1 January	4 961 745	5 334 501	4 961 745	5 334 501
Included in profit or loss				
Current service cost	21 609	35 774	21 609	35 774
Past service cost	(104 511)	(868 073)	(104 511)	(868 073)
Net interest cost	454 642	581 215	454 642	581 215
Included in OCI				
Remeasurement (gain)/loss:				
Actuarial (gain)/loss - experience adjustment	-	(485 440)	-	(485 440)
Actuarial (gain)/loss - change in demographic assumptions	(610 704)	-	(610 704)	-
Actuarial (gain)/loss – change in financial assumptions	252 614	897 000	252 614	897 000
Other				
Defined benefits paid	(279 098)	(533 232)	(279 098)	(533 232)
Balance at 31 December	4 696 297	4 961 745	4 696 297	4 961 745

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(c) Defined benefit obligations

Change in remeasurement of obligations included in OCI for the period:

	2016	2015
Remeasurement at 1 January	(1 775 471)	(2 187 031)
Change in remeasurement	(358 090)	411 560
Remeasurement at 31 December	(2 133 561)	(1 775 471)

The principal actuarial assumptions at the reporting date (expressed as weighted averages) are disclosed below:

	2016	2015
<i>Financial assumptions</i>		
Discount rate	8,45%	9,75%
Future salary growth	6,60%	7,61%
Inflationary rate	4,50%	5,50%
Social contribution rate	27,00%	27,00%

(d) Demographic assumptions

Expected retirement age (years):

- Males	60	60
- Females	57	57

Staff turnover

Probability distribution in respect of age

Mortality table of the Russian Federation (1998), adjusted for 30% for employees and for 70% for pensioners

(e) 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 shown below.

31 December 2016	Defined benefit obligations	
	Increase	Decrease
	'000 RUB	'000 RUB
Discount rate (1 pp)	(261 053)	299 879
Future wages increases (1 pp)	850	(770)
Future pension increases (1 pp)	283 703	(271 508)
Future mortality adjusted by 10%	(154 112)	169 733

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

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13. Personnel costs

	2016	2015
Wages and salaries	25 019 109	24 992 455
Social security contributions and contributions to State pension fund	6 669 218	6 313 881
Income related to defined benefit pension plans	(82 902)	(832 299)
	<u>31 605 425</u>	<u>30 474 037</u>

14. Income tax expense

(a) Amounts recognised in profit or loss

The Group's applicable tax rate is the income tax rate of 20% for Russian companies.

	2016	2015
<i>Current tax expense</i>		
Current year	(10 001 335)	(14 756 850)
Adjustment for prior years	37 223	(29 898)
	<u>(9 964 112)</u>	<u>(14 786 748)</u>
<i>Deferred income tax expense</i>		
Origination and reversal of temporary differences	2 417 969	307 118
Total income tax expense	<u>(7 546 143)</u>	<u>(14 479 630)</u>

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(b) Tax recognized in other comprehensive income

	2016			2015		
	Before tax	Tax	Net of tax	Before tax	Tax	Net of tax
Revaluation of available-for-sale financial assets	(7 104 554)	1 420 911	(5 683 643)	10 660 478	(2 116 819)	8 543 659
Actuarial gains and losses from defined benefit pension plans	358 090	(71 618)	286 472	(411 560)	82 310	(329 250)
	(6 746 464)	1 349 293	(5 397 171)	10 248 918	(2 034 509)	8 214 409

Reconciliation of effective tax rate:

	2016		2015	
	'000 RUB	%	'000 RUB	%
Profit before income tax	50 594 631	100%	68 877 659	100%
Income tax expense at 20%	(10 118 926)	20%	(13 775 532)	20%
Non-deductible expense	(715 780)	1%	(1 441 111)	2%
Adjustment of income tax CGT (Consolidated group of taxpayers)	3 251 340	(7)%	766 911	(1)%
Current tax adjustments in respect of prior periods	37 223	0%	(29 898)	0%
Current income tax	(7 546 143)	15%	(14 479 630)	21%

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(c) Recognized deferred tax assets and liabilities

Tax effects of temporary differences that give rise to deferred tax assets and liabilities as at 31 December 2016 and 31 December 2015 were as follows:

	Assets		Liabilities		Net amount	
	2016	2015	2016	2015	2016	2015
Property, plant and equipment	4 045 380	2 308 007	(1 360 633)	(1 583 388)	2 684 747	724 619
Intangible assets	76 091	99 613	(81 348)	(77 247)	(5 257)	22 366
Other investments	151 689	142 076	(590 070)	(1 950 646)	(438 381)	(1 808 570)
Inventories	1 841 822	3 229 543	(511 424)	(693 815)	1 330 398	2 535 728
Trade and other receivables	298 365	244 672	(1 077)	(52 072)	297 288	192 600
Loans and borrowings	-	-	-	-	-	-
Provisions	3 968 470	2 561 897	(13 718)	-	3 954 752	2 561 897
Other	527 428	138 613	(567 925)	(377 521)	(40 497)	(238 908)
Trade and other payables and financial lease liabilities	3 386 834	3 459 779	-	(265)	3 386 834	3 459 514
Tax loss carry-forward	92 945	30 235	-	-	92 945	30 235
Tax assets / (liabilities)	14 389 024	12 214 435	(3 126 195)	(4 734 954)	11 262 829	7 479 481
Tax offset	(3 104 405)	(3 713 050)	3 104 405	3 713 050	-	-
Net tax assets / (liabilities)	11 284 619	8 501 385	(21 790)	(1 021 904)	11 262 829	7 479 481

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	2016	2015
Balance at the beginning of the year	7 479 481	9 246 103
Accrued in the statement of profit or loss	2 417 969	307 118
Accrued in other comprehensive income	1 349 293	(2 034 509)
Disposal	16 086	(39 231)
Balance at the end of the year	11 262 829	7 479 481

(d) Unrecognized deferred tax assets and liabilities

As of 1 January 2013 JSC “Atomenergoprom” and its 29 subsidiaries merged into a consolidated group of taxpayers (CGT) for the calculation and payment of income tax. In accordance with the tax legislation of the Russian Federation tax losses accumulated by the participants before they entered to the consolidated group of taxpayers, do not reduce the consolidated tax base for the entire period of their stay in the consolidated group of taxpayers. However, at an exit of a taxpayer from the consolidated group of taxpayers such losses can be again used for offset. The period during which a taxpayer has the right to offset such losses, is increased by the number of years during which the taxpayer has been the participant of the consolidated group of taxpayers. As at 31 December 2016 the consolidated group of taxpayers included JSC “Atomenergoprom” and its 34 subsidiaries.

As at 31 December 2016 the Group had unrecognized deferred tax liability amounted to RUB 24 321 mln. (2015: RUB 20 972 mln.), that related to investments in subsidiaries and associates. These liabilities have not been recognized due to the fact that the Group controls the timing of reversal of the relevant taxable temporary differences, and management is confident that they will not reverse in the foreseeable future.

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(e) Movement in deferred tax balances

	1 January 2016	Recognised in profit or loss	Recognised in other comprehensive income	Disposed of	31 December 2016
Property, plant and equipment	724 619	1 960 128	-	-	2 684 747
Intangible assets	22 366	(27 623)	-	-	(5 257)
Other investments	(1 808 570)	(50 722)	1 420 911	-	(438 381)
Inventories	2 535 728	(1 205 330)	-	-	1 330 398
Trade and other receivables	192 600	104 688	-	-	297 288
Loans and borrowings	-	-	-	-	-
Provisions	2 561 897	1 392 855	-	-	3 954 752
Other items	(238 908)	182 325	-	16 086	(40 497)
Trade and other payables	3 459 514	(1 062)	(71 618)	-	3 386 834
Tax loss carry-forward	30 235	62 710	-	-	92 945
	7 479 481	2 417 969	1 349 293	16 086	11 262 829

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	1 January 2015	Recognised in profit or loss	Recognised in other comprehensive income	Disposed of	31 December 2015
Property, plant and equipment	(181 514)	906 133	-	-	724 619
Intangible assets	123 134	(100 768)	-	-	22 366
Other investments	915 222	(606 973)	(2 116 819)	-	(1 808 570)
Inventories	2 659 825	(124 097)	-	-	2 535 728
Trade and other receivables	387 576	(194 976)	-	-	192 600
Loans and borrowings	(22 936)	22 936	-	-	-
Provisions	1 826 509	735 388	-	-	2 561 897
Other items	6 093	(205 770)	-	(39 231)	(238 908)
Trade and other payables	3 519 564	(142 360)	82 310	-	3 459 514
Tax loss carry-forward	12 630	17 605	-	-	30 235
	9 246 103	307 118	(2 034 509)	(39 231)	7 479 481

15. Property, plant and equipment

	Land	Buildings	Machinery and equipment	Installations and transmission devices	Transport vehicles	Other	Construction-in-progress	Total
<i>Cost or deemed cost</i>								
Balance at 1 January 2015	982 957	48 336 398	141 480 594	16 524 767	3 044 686	9 196 745	25 723 759	245 289 906
Additions	33 440	34 189	760 717	53 472	41 063	259 207	16 549 379	17 731 467
Disposals	(2 384)	(392 803)	(2 534 841)	(734 069)	(213 958)	(126 210)	(3 894 217)	(7 898 482)
Put into operation	-	1 982 821	14 401 798	777 736	1 683	478 633	(17 642 671)	-
Reclassification	-	(84 863)	111 451	(15 689)	3 766	(14 324)	(341)	-
Movement in ARO	-	(38 675)	1 873 720	715 523	-	-	-	2 550 568
Balance at 31 December 2015	1 014 013	49 837 067	156 093 439	17 321 740	2 877 240	9 794 051	20 735 909	257 673 459
Balance at 1 January 2016	1 014 013	49 837 067	156 093 439	17 321 740	2 877 240	9 794 051	20 735 909	257 673 459
Additions	46 368	478 506	3 521 437	586 343	77 822	596 494	19 589 105	24 896 075
Disposals	(1 511)	(3 112 820)	(7 288 773)	(1 758 940)	(180 754)	(389 113)	(8 867 033)	(21 598 944)
Put into operation	-	1 084 350	8 323 674	282 180	5 189	56 243	(9 751 636)	-
Reclassification	-	(14 783)	30 814	3 376	4	(18 969)	(442)	-
Movement in ARO	-	(961 099)	(387 334)	(434 077)	-	-	-	(1 782 510)
Balance at 31 December 2016	1 058 870	47 311 221	160 293 257	16 000 622	2 779 501	10 038 706	21 705 903	259 188 080

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	Land	Buildings	Machinery and equipment	Installations and transmission devices	Transport vehicles	Other	Construction-in-progress	Total
<i>Depreciation and impairment losses</i>								
Balance at 1 January 2015	(75)	(20 878 625)	(65 555 910)	(9 260 955)	(2 276 353)	(5 751 841)	(839 894)	(104 563 653)
Depreciation for the year	-	(1 351 089)	(11 704 720)	(1 072 685)	(169 981)	(743 329)	-	(15 041 804)
Impairment	-	(672 739)	(512 188)	(84 487)	139 214	(86 778)	3 100	(1 213 878)
Reclassification	-	2 171	(7 713)	(1 441)	1 280	5 703	-	-
Disposals	-	195 694	2 456 667	341 758	158 121	99 733	302 634	3 554 607
Balance at 31 December 2015	(75)	(22 704 588)	(75 323 864)	(10 077 810)	(2 147 719)	(6 476 512)	(534 160)	(117 264 728)
Balance at 1 January 2016	(75)	(22 704 588)	(75 323 864)	(10 077 810)	(2 147 719)	(6 476 512)	(534 160)	(117 264 728)
Additions	-	(7 392)	(291 264)	(18 861)	(5 134)	(17 140)	-	(339 791)
Depreciation for the year	-	(1 465 756)	(11 600 883)	(1 109 877)	(146 256)	(606 133)	-	(14 928 905)
Impairment	9	867 519	(187 744)	(158 749)	(81 923)	(6 041)	(207 493)	225 578
Reclassification	-	704 431	(21 297)	(703 949)	(1)	30 273	(9 457)	-
Disposals	-	1 402 638	4 102 932	986 313	150 506	329 810	2	6 972 201
Balance at 31 December 2016	(66)	(21 203 148)	(83 322 120)	(11 082 933)	(2 230 527)	(6 745 743)	(751 108)	(125 335 645)
<i>Carrying amounts</i>								
At 1 January 2015	982 882	27 457 773	75 924 684	7 263 812	768 333	3 444 904	24 883 865	140 726 253
At 31 December 2015	1 013 938	27 132 479	80 769 575	7 243 930	729 521	3 317 539	20 201 749	140 408 731
At 31 December 2016	1 058 804	26 108 073	76 971 137	4 917 689	548 974	3 292 963	20 954 795	133 852 435

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Interest expense on loans and borrowings is capitalized in the cost of qualifying assets amounted to RUB 167 126 thousand in 2016 using capitalization rate 2,90% (RUB 296 485 thousand in 2015 using capitalization rate 2,87%). Expenses on loans and borrowings capitalized in advances for non-current assets amounted to RUB 86 811 thousand in 2016 (RUB 122 904 thousand in 2015).

In 2016 depreciation in the amount of RUB 14 431 698 thousand was included in expenses and depreciation in the amount of RUB 497 207 thousand was capitalized.

In 2015 depreciation in the amount of RUB 14 331 162 thousand was included in expenses and depreciation in the amount of RUB 710 642 thousand was capitalized.

(a) Security

As at 31 December 2016 there were no properties pledged as collateral for bank loans as well as at 31 December 2015. (Note 27).

(b) Finance lease

Property, plant and equipment with a carrying amount of RUB 13 822 458 thousand as at 31 December 2016 (RUB 14 789 831 thousand as at 31 December 2015) is subject to lease, including machinery and equipment in the amount of RUB 13 822 458 thousand as at 31 December 2016 (machinery and equipment in the amount of RUB 14 789 831 thousand as at 31 December 2015).

(c) Loss on impairment

Loss on fixed assets impairment as at 31 December 2016 in the amount of RUB 10 775 818 thousand is represented by book value of fixed assets under full or partial conservation (RUB 9 277 192 thousand as at 31 December 2015). Conservation of fixed assets is caused by the fact that the Group does not have any plans to use fixed assets or due to obsolescence or unviability of further use of fixed assets and absence of plans for reconstruction, modernization or liquidation of fixed assets.

(d) Construction-in-progress

Property, plant and equipment under construction include property, plant and equipment items not put into operation.

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16. Intangible assets

	Patents, licenses and other intangible assets	Development expenses	Total
<i>Cost</i>			
Balance at 1 January 2015	2 863 289	5 506 610	8 369 899
Additions	1 401 893	1 557 089	2 958 982
Reclassification	14 577	(14 577)	-
Disposals	(694 096)	(758 137)	(1 452 233)
Balance at 31 December 2015	3 585 663	6 290 985	9 876 648
Additions	728 443	1 643 506	2 371 949
Disposals	(550 760)	(4 867 792)	(5 418 552)
Balance at 31 December 2016	3 763 346	3 066 699	6 830 045
<i>Amortization</i>			
Balance at 1 January 2015	(1 114 225)	(3 732 907)	(4 847 132)
Amortization for the year	(805 410)	(827 530)	(1 632 940)
Reclassification	(6 628)	6 628	-
Disposals	302 831	138 759	441 590
Balance at 31 December 2015	(1 623 432)	(4 415 050)	(6 038 482)
Additions	(297 710)	(99 420)	(397 130)
Amortization for the year	(848 276)	(539 339)	(1 387 615)
Disposals	280 867	4 147 744	4 428 611
Balance at 31 December 2016	(2 488 551)	(906 065)	(3 394 616)
<i>Carrying amounts</i>			
At 1 January 2015	1 749 064	1 773 703	3 522 767
At 31 December 2015	1 962 231	1 875 935	3 838 166
At 31 December 2016	1 274 795	2 160 634	3 435 429

In 2016 and 2015 amortization in the amount of RUB 1 387 615 thousand and RUB 1 632 940 thousand respectively was included in expenses.

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17. Other long-term investments

	31 December 2016	31 December 2015
Available-for-sale investments	18 726 046	26 212 480
Loans to employees	117 674	150 333
Loans to third-party companies	40 861	49 681
Loans given and third party promissory notes	60 864	-
	18 945 445	26 412 494

The amount of available-for-sale investments and ownership interests were as follows:

	31 December 2016		31 December 2015	
	Share of ownership %	Investment '000 RUB	Share of ownership %	Investment '000 RUB
JSC “Atomredmetzoloto”	16,14	18 726 020	16,14	25 589 025
JSC “Atomenergomash”	-	-	4,0	389 324
PJSC “PPGHO”	-	-	0,98	234 103
Other		26		28
		18 726 046		26 212 480

As at 31 December 2016 fair value assessment of shares of JSC “Atomredmetzoloto” was performed. The loss from revaluation of JSC “Atomredmetzoloto”’s shares was recognized in other comprehensive income in the amount of RUB 6 863 005 thousand.

Fair value assessment of the Group’s ownership interest in PJSC “PPGHO” and JSC “Atomenergomash” was performed as at the dates of sales of the respective shares - as at 14 December 2016 and as at 28 December 2016 correspondingly.

As at 28 December 2016 compared to 31 December 2015 the carrying amount of JSC “Atomenergomash” increased by RUB 439 291 thousand and amounted to RUB 828 615 thousand, the carrying amount of PJSC “PPGHO” as at 14 December 2016 compared to 31 December 2015 decreased by RUB 17 505 thousand and amounted to RUB 216 598 thousand. Following the disposals of these investments, accumulated revaluation reserve amounting to RUB 663 233 thousand was reclassified to profit or loss in the consolidated statement of profit or loss and other comprehensive income.

Valuation technique and significant unobservable inputs

In order to assess the fair value of shares of JSC “Atomenergomash” and JSC “Atomredmetzoloto” (including PJSC “PPGHO”) income approach (discounted cash flows method) was used as a primary approach. At the same time, comparative approach was used for reconciliation purposes.

Cash flows were forecast for each subsidiary of JSC “Atomenergomash” group separately. Cash flow forecast was based on the calculation of cash flows on invested capital. The forecast was based on the following assumptions: nominal after-tax cash flows, the duration of the forecast period of 14 years.

As for JSC “Atomredmetzoloto”, the cash flows from new projects were forecast on the basis of the approved investment documentation (including Investment Passports), taking into account all the components of the forecast: the time required for the construction and output at full capacity, the cost of construction, production volumes, etc.

Discounted cash flows method takes into account the amount of revenue for the period from 1 January 2017 to 31 December 2030 for JSC “Atomenergomash” and up to depletion of uranium reserves for JSC “Atomredmetzoloto” and PJSC “PPGHO”, which the owner plans to earn during the period of assets holding, term of receiving these revenues and risk level related to the revenue flows.

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Cash flow forecast on invested capital was made in nominal values in roubles (free cash flow).

The following discounts were applied for absence of control to determine the fair value of the investments: JSC “Atomenergomash” – 24,5%, JSC “Atomredmetzoloto” – 15,9% and PJSC “PPGHO” – 18,0% applied to the proportional value of the shares.

To determine the fair value the following assumptions regarding forecast prices for uranium and production volumes were used:

- The forecast of uranium prices has been determined based on spot prices provided by consulting agency UX Consulting Company, and based on adjustments that reflect the excess of the prices in long-term contracts over spot prices and over prices in the domestic market. Nominal cash flows in US dollars (adjusted for inflation) were used in this forecast translated at the exchange rate of rouble to US dollar determined for the whole forecast period taking into account long-term forecast of Energy Intelligence Unit agency. The average annual increase in prices of uranium for the period from 2017 to 2026 will amount to 8,7% and 3,4% after 2026 as per the forecast.
- Production forecast was based on the data incorporated in the production programs of producing entities.

Expenses that are taken into account at determining fair value of investments are based on the current business plans of the entities and the long-term development program of the SC “Rosatom”.

Inflation rate in the Russian Federation in 2016 equalled 5,4% (2015 – 12,9%).

Exchange rate for US dollar and EUR as at 31 December 2016 was RUB 60,6569 and RUB 63,8111 respectively (exchange rate for US dollar and EUR as at 31 December 2015 was RUB 72,8827 and RUB 79,6972 respectively).

Uranium prices used for fair value appraisal in 2016 equalled to RUB 5 062 thousand per tonne (2015 – RUB 6 480 thousand per tonne).

Tax rate applicable to estimated companies is 20%.

The discount rate (nominal pre-tax rate) used for determination of the fair value equalled to 13,9% for JSC “Atomenergomash” and 13,9% for JSC “Atomredmetzoloto” and PJSC “PPGHO” (in 2015 14,25% and 13,9%, respectively) which was calculated on the basis of capital structure data, cost of equity and cost of debt capital, and taking into account income tax rate.

The effect of changes in assumptions used to calculate fair value of available-for-sale investments in JSC “Atomredmetzoloto” is as follows:

- A 2 pp increase / (decrease) in average discount rate would have (decreased) / increased the amount of fair value of investments as at 31 December 2016 by RUB (2 172 517) thousand / RUB 2 675 241 thousand (as at 31 December 2015 by RUB (3 029 552) thousand / RUB 3 962 748 thousand);
- A 5% increase / (decrease) in uranium prices would have increased / (decreased) the amount of fair value of investments as at 31 December 2016 by RUB 1 369 338 thousand / RUB (1 369 480) thousand (as at 31 December 2015 by RUB 1 445 372 thousand / RUB (1 450 828) thousand).

Conditions of outstanding loans and other investments were as follows:

Debtor	Currency	Effective rate %	31 December	
			2016	2015
Employees	RUB	1,0 – 12,0	117 674	150 333
Third party	USD	5,7	60 864	-
Other	RUB	1,0 - 12,0	40 861	49 681
			219 399	200 014

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18. Other short-term investments

	31 December 2016	31 December 2015
Loans given	39 039 199	4 796 206
Financial assets held to maturity	15	15
Bank deposits with maturity from 3 to 12 months	25 129	223 152
Balance at 31 December	39 064 343	5 019 373

Terms of existing loans given were as follows:

'000 RUB	Currency	Effective rate	31 December 2016	31 December 2015
Borrower		%		
Employees	RUB	1,0 – 12,0	35 715	41 001
JSC “Atomenergoprom”	RUB	10,75 – 10,78	38 076 234	4 737 291
Other	RUB	1,05 – 13,15	927 250	17 914
Total			39 039 199	4 796 206

Terms of deposits were as follows:

'000 RUB	Currency	Effective rate	31 December 2016	31 December 2015
Borrower		%		
PJSC “Sberbank of Russia”	RUB	6,97	25 129	-
JSC “Gazprombank”	EUR	0,15	-	223 152
Total			25 129	223 152

The Group’s exposure to credit, currency and interest rate risks related to other investments is disclosed in Note 30.

19. Inventories

	31 December 2016	31 December 2015
Raw materials	5 955 691	6 395 624
Fuel	61 369	114 080
Spare parts and auxiliary materials	1 994 745	2 352 313
Other materials	2 239 266	2 709 242
Work in progress – nuclear fuel	55 127 371	63 159 255
Work in progress – other goods for nuclear fuel cycle	1 839 348	1 592 987
Asset relating to enrichment services	534 187	1 210 145
Work in progress – other uranium containing goods	3 394 690	4 274 542
Work in progress - other	4 889 677	4 270 274
Finished goods – nuclear fuel	7 467 360	6 723 912
Finished goods - other	2 856 557	3 359 996
Goods for resale	827 499	125 574
Goods shipped	181 255	28 483
Total gross inventory	87 369 015	96 316 427

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	31 December 2016	31 December 2015
Provision for raw materials obsolescence	(535 923)	(798 243)
Provision for fuel obsolescence	(17 411)	(19 311)
Provision for spare parts and auxiliary obsolescence	(546 857)	(620 040)
Provision for other materials obsolescence	(487 826)	(502 950)
Provision for work in progress - other	(7 090)	(8 316)
Provision for finished goods - other	(71 688)	(11 164)
Provision for goods for resale	(2 217)	(2 216)
Provision for work in progress –other goods for nuclear fuel cycle	(33 847)	-
Total net inventory	85 666 156	94 354 187

Other finished goods include chemical products, pipe products, spare parts and fittings.

As at 31 December 2016 under the contract with JSC “ČEZ” (ČEZ Group, Czech Republic) for production of nuclear fuel the Group received materials for reprocessing in the amount of RUB 895 295 thousand (RUB 2 476 084 thousand as at 31 December 2015). The materials are not accounted at the Group’s consolidated Statement of financial position as the ownership for the materials is not transferred to the Group as stipulated by the terms of the contract.

The cost of materials received by the Group from SC “Rosatom” for responsible storage of the goods and reprocessing amounted to RUB 628 541 thousand and RUB 103 069 thousand as at 31 December 2016 (RUB 1 969 746 thousand and RUB 66 292 thousand respectively as at 31 December 2015).

The cost of materials received by the Group from the companies under SC “Rosatom” control for responsible storage of the goods and for reprocessing amounted to RUB 8 936 060 thousand and RUB 12 526 868 thousand respectively as at 31 December 2016 (RUB 9 489 460 thousand and RUB 20 090 031 thousand respectively as at 31 December 2015).

Asset relating to enrichment services was presented within inventory caption as at 31 December 2016 and as at 31 December 2016 reflecting unfinished services under uranium enrichment services contracts.

20. Trade and other receivables

	31 December 2016	31 December 2015
Trade receivables	29 705 091	22 288 527
Advances given to suppliers	1 997 370	3 503 939
Other receivables	7 687 200	3 456 794
VAT recoverable	17 518 209	16 624 439
Other taxes receivables	51 415	165 117
Other current assets	99 643	74 007
Other prepayments	-	97 035
Total gross receivables	57 058 928	46 209 858
Bad debt provision for trade receivables	(471 913)	(296 395)
Bad debt provision for advances given to suppliers	(414 215)	(413 480)
Bad debt provision for other receivables	(1 341 262)	(526 437)
Total net receivables	54 831 538	44 973 546

The Group’s exposure to credit and currency risks and impairment losses related to trade and other receivables is disclosed in Note 30.

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21. Cash and cash equivalents

	31 December 2016	31 December 2015
Petty cash, RUB	6 536	5 745
Petty cash, foreign currency	85	265
Bank balances, RUB	6 770 199	7 606 666
	7 769 950	1 855 508
Bank balances, foreign currency		
Short-term deposits with original maturity less than 3 months (or call deposits), RUB	915 000	1 668 030
Short-term deposits with original maturity less than 3 months (or call deposits), foreign currency	3 190 555	41 567 369
Other cash equivalents, RUB	52 365	26 212
Other cash equivalents, foreign currency	-	365
Cash and cash equivalents in the consolidated statements of cash flows and in the consolidated statements of financial position	18 704 690	52 730 160

The Group's exposure to credit, interest rate and currency risks and sensitivity analysis of financial assets and liabilities are disclosed in Note 30.

22. Equity

(e) Share capital and additional paid-in capital

	Ordinary shares	
	31 December 2016	31 December 2015
Par value (in RUB)	1	1
Authorized shares at the beginning of the period, (shares)	22 961 670	22 961 670
Authorized shares at the end of the period, fully paid , (shares)	22 961 670	22 961 670
Historic value ('000 RUB)	22 962	22 962
Hyperinflation effect till 31 December 2002 ('000 RUB)	22 229	22 229
Carrying value ('000 RUB)	45 191	45 191

Up to 31 December 2002, Russian economy was considered hyperinflationary. Therefore, the carrying value of the ordinary shares (RUB 1,97) differs from the nominal value (RUB 1).

As at 31 December 2016 JSC “Atomenergoprom” is the sole shareholder of the Company.

The capital structure includes a fixed assets revaluation reserve. The reserve was accrued on fixed assets put into operation before 2002, during revaluation of fixed assets under the first application of IFRS as of January 1, 2002. Further, the cost of these assets has been considered deemed cost. All impairment losses of fixed assets, if any, are recognized as profit or loss for the period and the reserve is not reduced.

(f) Dividends

In accordance with Russian legislation the Company's distributable reserves are determined based on the amount of retained earnings, reported in the Company's statutory financial statements prepared in accordance with Russian Accounting Principles. As at 31 December 2016 the Company had retained earnings, including the profit for the current year, of RUB 171 161 697 thousand (2015: RUB 159 625 662 thousand).

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Profit earned in 2015 was used in 2016 for payment of dividends to JSC “Atomenergoprom” in the amount of RUB 25 616 494 thousand (RUB 1 116 per share), also interim dividends for 2016 were accrued in the amount of RUB 3 000 000 thousand and dividends out of retained earnings of previous years were accrued in the amount of RUB 916 442 thousand.

Profit earned in 2014 was used in 2015 for payment of dividends to JSC “Atomenergoprom” in the amount of RUB 15 296 080 thousand (RUB 666 per share).

(g) Revaluation reserve for available-for-sale financial assets

Revaluation reserve for available-for-sale financial assets is a net amount of change in fair value of available-for-sale financial assets, accumulated until the investment is disposed or impaired. In 2016 revaluation reserve for financial assets available-for-sale decreased (net of tax) by RUB 5 683 643 thousand (in 2015 increased by RUB 8 543 659 thousand).

Revaluation reserve decreased by RUB 663 233 thousand as consequence of sale of investments.

As at 31 December 2016 the amount of the reserve (net of tax) equalled RUB 4 286 149 thousand.

(h) Other reserves

As at 31 December 2016, other reserves included actuarial gains / (losses) on pension plans in the amount of RUB 2 133 561 thousand (as at 31 December 2015: RUB 1 775 471 thousand).

23. Capital management

The Group’s capital management is aimed at compliance with the requirements of the Russian legislation on joint stock companies. As at reporting date the Group met the requirements in relation to equity.

The Group doesn’t have an official internal document with capital management principles. However, management of the Group is taking steps to maintain the capital at a level sufficient to meet operational and strategic needs of the Group, as well as to maintain market confidence. This is achieved through effective cash management, continuous monitoring of the Group’s revenue and profit, and long-term investments planning, that are financed with funds provided by the Group operations. With these measures the Group aims for steady profit growth.

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24. Non-current provisions

	Provision for asset retirement obligation	Provision for site restoration and territory rehabilitation	Provision for decommissioning of radioactive waste (RAW)	Total
Balance at 1 January 2015	8 471 393	674 880	363 864	9 510 137
Change in estimate (Federal Target Program)	1 254 409	-	-	1 254 409
Changes in provision estimates due to changes in inflation forecast	745 066	73 547	5 496	824 109
Change in provision estimates due to discount rate fluctuations	3 996 079	260 923	7 134	4 264 136
Unwinding of discount	1 008 096	80 311	28 713	1 117 120
Provisions used during the year	(42 240)	-	(562 181)	(604 421)
Changes in provision due to appearance of new objects	-	-	380 249	380 249
Other changes in provision estimates	(3 327 930)	85 919	(23 483)	(3 265 494)
Balance at 31 December 2015	12 104 873	1 175 580	199 792	13 480 245
Change in estimate (Federal Target Program)	(319 038)	-	-	(319 038)
Changes in provision estimates due to changes in inflation forecast	(2 236 386)	(431 837)	(11 158)	(2 679 381)
Change in provision estimates due to discount rate fluctuations	2 598 692	570 071	11 691	3 180 454
Unwinding of discount	1 174 091	109 640	19 330	1 303 061
Provisions used during the year	(615 770)	(5 599)	(412 641)	(1 034 010)
Changes in provision due to appearance of new objects	-	-	379 424	379 424
Other changes in provision estimates	1 832 808	4 048 907	11 105	5 892 820
Balance at 31 December 2016	14 539 270	5 466 762	197 543	20 203 575

(a) Obligations for nuclear and radiation safety

Group companies and companies whose successors are the companies of the Group has been operating in the Soviet Union and the Russian Federation for many years, this led to the necessity of taking specific measures to ensure nuclear and radiation safety. These measures include site restoration and territory rehabilitation, nuclear waste reprocessing, construction and renovation of existing facilities and retirement of plants.

Provision for decommissioning of radioactive waste (RAW)

In accordance with the Federal Law No. 190-FZ “On management of radioactive waste and on amendment of certain legislative acts of the Russian Federation” (further – Federal Law No. 190-FZ), the Group companies, whose operations implied radioactive wastes formation are financially responsible for all stages of RAW management, including RAW burial and safety maintenance till the moment of RAW transfer for burial to the national operator.

Financial responsibility for RAW management arises in respect of RAW formed after entering into force of the Federal Law №190-FZ.

In this regard in these financial statements a provision for decommissioning of radioactive waste is accrued in relation to radioactive waste generated starting from 15 July 2011. Separation in 2011 of RAW generated as a result of Group’s operations after the Federal Law №190-FZ came into force was performed based on the data of the state system of recording and control of radioactive materials and radioactive waste.

Since 2013 Group entities make contributions to the Special Reserve Fund of the SC Rosatom for financing RAW burial. For estimating the provision on decommissioning of radioactive waste the following information was used: data on the schemes of engineering and production chains of preparing RAW for burial for each Group entity; data on actual expenses of Group entities on certain works of preparation for RAW burial; data on the cost of certain works of preparation for RAW burial, provided by specialised organizations; and estimated terms of putting burial sites into operation and tariffs on burying.

The discount rate applied for calculating this provision was 8,56% as at 31 December 2016, 9,75% as at 31 December 2015.

Provisions for assets retirement obligation, site restoration and territory rehabilitation

In order to assess the provision for assets retirement obligation, site restoration and territory rehabilitation the following information was used: predicted amounts of the costs across the nuclear industry in the Russian Federation, market data on the cost of certain types of works, as well as past experience gained by the enterprises of SC “Rosatom” in this area. The expected timing of the retirement of property, plant and equipment was also taken into account for calculation of the provision.

The discount rate applied for calculating this provision was 8,56% as at 31 December 2016, 9,75% as at 31 December 2015.

For calculation of the required costs for retirement of property, plant and equipment the Group’s management based their estimates on the characteristics of the life cycles of nuclear facilities, as well as on the provisions of the Federal Law № 190-FZ, as follows:

- The amount of estimated provision is based on the life cycle of nuclear facilities and calculated proportionally to the total estimated costs only in part relating to the period from the date of the Federal Law №190-FZ entering into force to the date of expected commencement of the decommissioning process.
- Group management believes it is not highly probable that there will be an outflow of economic benefits to cover the proportionate share of total estimated costs relating to the period before the entering into force of the Federal Law №190-FZ. Therefore, estimated costs with regard to this period were not included in the amount of the provision. Except for a possible outflow of the Group's funds allocated in the period 2016-2030 for co-financing decommissioning and rehabilitation of the territories of certain heritage sites defined in the federal target program "Nuclear and radiation safety in the years 2016-2020 and for the period up to 2030" (approved by the RF Government Decree as of 19 November 2015 № 1248 hereinafter – FTP).

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(b) Changes in provision estimates

In 2016 the Group revised the estimates of nuclear facilities retirement obligation and site restoration and rehabilitation provision and provision for decommissioning of radioactive waste. These changes are mainly caused by the adjustment of discount rate and also by changes in tariffs on burial of RAW as well as by correction by the entities of the concepts of nuclear facilities retirement, correction of information on production and engineering chains on RAW treatment, including types of containers used for RAW burial, correction of certain costs of retirement of nuclear facilities and rehabilitation of contaminated land and also changes due to inclusion in the provision of the estimates of forecast costs to be incurred in 2017-2030 as a co-financing of measures on retirement of certain facilities and rehabilitation of certain heritage sites determined in the federal target program (FTP).

The changes in estimates of future cash flows (costs of some works) are presented within “Other changes in provision estimates” in this note.

The effect of changes in estimates in the provisions amounted to RUB 6 074 855 thousand. These changes include:

- a decrease by RUB 2 679 381 thousand due to changes in the macro forecast (inflation);
- an increase by RUB 3 180 454 thousand due to changes in the discount rate;
- an increase by RUB 5 892 820 thousand due to changes in other estimates;
- a decrease by RUB 319 038 thousand due to changes in estimates of federal target program (FTP).

The effect of changes in estimates and change of the provisions due to its use and the appearance of new facilities in 2016 amounted to RUB 5 420 269 thousand and were recognized within:

- property, plant and equipment (Note 15) in the amount of RUB 1 782 510 (decrease of both the provision and the value of property, plant and equipment) thousand, RUB 384 346 thousand of which relate to the federal target program (FTP).
- the Consolidated statement of comprehensive income in other operating income in the amount of RUB 7 224 359 thousand (expense), RUB 65 307 thousand related to the costs associated with federal target program (FTP), all these compensated by RUB 21 579 thousand of income.

(c) Assumptions used in calculation of provisions and sensitivity analysis

The Group used the following key assumptions in the calculation of the provisions:

- Life cycle of items of property, plant and equipment is calculated based on the dates of putting them into operation from 1948 to 2016, it is estimated that works on decommissioning of these items of property, plant and equipment operating at the reporting date will be performed during the period from 2017 to 2102. The substantial part of the works will be performed from 2058 to 2081 and from 2087 to 2102. Works on decommissioning of other items of property, plant and equipment operating at the reporting date will be performed during the period from 2017 to 2151, the substantial part of the works will be performed from 2026 to 2078.
- The discount rate applied to calculate the provision for retirement of property, plant and equipment and site restoration is a pre-tax risk-free rate that reflects the current market estimates of the time value of money. The discount rates applied to calculate the provision were 8,56% as at 31 December 2016 and 9,75% as at 31 December 2015.
- Discount rates are based on the yield of federal loan bonds (FLB) with a maturity date equal to the liabilities term. Cash flows used in the calculation take into account inflation.
- In evaluating liabilities for decommissioning of fixed assets, RAW treatment and contaminated site remediation the inflation forecast after 2031 was set at the forecast value of 3,6%, which is consistent with the Ministry of Economic Development data.

The amount of the provision for decommissioning of property, plant and equipment changes in case the core assumptions change as follows:

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- A 5-year change in the commencement date of decommissioning to a later date / (earlier date) would have (decreased) / increased the amount of the provision by RUB (2 764 904) thousand / RUB 3 136 421 thousand as at 31 December 2016;
- A 10% increase / (decrease) in the cost of decommissioning works would have increased/(decreased) the amount of provision by RUB 1 348 159 thousand / RUB (1 348 159) thousand as at 31 December 2016;
- A 1 pp increase / (decrease) in the average discount rate would have (decreased)/increased the amount of provision by RUB (2 351 484) thousand / RUB 3 109 889 thousand as at 31 December 2016.

The amount of provision for land rehabilitation and site restoration changes in case the core assumptions change as follows:

- A 5-year change in the schedule of works to a later date / (earlier date) would have (decreased) / increased the amount of the provision by RUB (995 057) thousand / RUB 753 995 thousand as at 31 December 2016;
- A 10% increase / (decrease) in the cost of works would have increased / (decreased) the amount of provision by RUB 47 287 thousand / RUB (47 287) thousand as at 31 December 2016;
- A 1 pp increase / (decrease) in the average discount rate would have (decreased)/increased the amount of provision by RUB (576 812) thousand / RUB 656 426 thousand as at 31 December 2016.

25. Deferred income

The deferred income is mainly represented by the assets acquired at the expense of the various government target financing programmes and international financial aid:

	31 December 2016	31 December 2015
Non-current	4 877 934	5 715 631
Current	2 322 041	1 393 891
Total Deferred income	7 199 975	7 109 522

26. Finance lease liabilities

Finance lease liabilities are payable as follows:

	31 December 2016		
	Minimum future lease payments	Interest	Present value of minimum lease payments
Less than 1 year	2 802 948	(1 291 725)	1 511 223
Between 1 and 5 years	7 209 170	(2 285 894)	4 923 276
More than 5 years	462 781	(101 291)	361 490
	10 474 899	(3 678 910)	6 795 989

	31 December 2015		
	Minimum future lease payments	Interest	Present value of minimum lease payments
Less than 1 year	3 044 863	(1 546 679)	1 498 184
Between 1 and 5 years	8 914 878	(3 315 528)	5 599 350
More than 5 years	1 366 949	(275 139)	1 091 810
	13 326 690	(5 137 346)	8 189 344

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Interest rate used for fair value estimation

Interest rate used for discounting future cash flows was calculated on the basis of an effective interest rate method where it is applicable. In the reporting period there were the following interest rates:

	2016	2015
Lease agreements	14,83% - 51,15%	14,83% - 51,15%

The Group's exposure to liquidity risk related to finance lease liabilities is disclosed in Note 30.

27. Short-term loans and borrowings

	31 December 2016	31 December 2015
Bank loans - current	-	22 009 650
	-	22 009 650

The Group has no short-term loans and borrowings in 2016. As at 31 December 2015 current liabilities include interest payable arising from long-term and short-term loans and borrowings in the amount of RUB 3 931 thousand.

Creditor	Currency	Nominal interest		31 December 2016	31 December 2015
		rate %	31 December 2016		
PJSC “Sberbank RF”	USD	2,90%		-	1 822 935
PJSC “Sberbank RF”	EUR	2,53%-3,10%		-	6 751 416
PJSC “Rosbank”	EUR	1,95%		-	2 438 734
JSC “Nordea Bank”	USD	3,30%		-	4 931 608
JSC “Nordea Bank”	EUR	2,95%-3,35%		-	6 064 957
Total				-	22 009 650

The nominal interest rate of loans repaid was between 1,95% and 3,35% per annum for loans in foreign currency; there were no loans in RUB. The weighted average interest rate for foreign currency loans – 2,82% per annum.

28. Trade and other payables

Long-term trade and other payables:

	31 December 2016	31 December 2015
Advances from customers	773 638	867 040
Trade payables	4 103	43 100
Other payables	135 257	824 063
	912 998	1 734 203

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Short-term trade and other payables:

	31 December	31 December
	2016	2015
Payables to suppliers	6 533 418	5 080 749
Advances from customers	18 964 172	21 940 774
Payables to employees	4 970 771	5 037 682
Other payables	2 957 680	3 628 570
VAT payable	2 907 056	2 444 244
Other taxes payable	1 083 312	1 076 083
Social contribution payable	1 548 911	1 495 428
Dividends payable	1 311 580	11 814
	40 276 900	40 715 344

The Group's exposure to liquidity and currency risks is disclosed in Note 30.

29. Current provisions

	31 December	31 December
	2016	2015
Provision for legal and tax litigations and claims	75 322	448 123
Other estimated provisions	11 764	135
	87 086	448 258

As at 31 December 2016 provision for litigations and claims includes provision for legal and tax claims in the amount of RUB 75 322 thousand and RUB 11 764 thousand of other provisions (as at 31 December 2015: RUB 448 123 thousand – provision for legal claims and RUB 135 thousand - other provisions).

30. Fair value and risk management

(a) Overview

The Group has exposure to the following risks from its use of financial instruments:

- credit risk;
- liquidity risk;
- market risk.

The information about the Group's exposure to each of the aforementioned risks, the Group's objectives, its risk estimation and risk management policy and procedures as well as the Group's approach to capital management is provided in this Note. Additional quantitative information is disclosed throughout the text of the consolidated financial statements.

General risk management principles

General principles of the corporate risk management system (CRMS) are determined by the Risk management policy:

- integration into general planning processes to ensure that most business risks are taken into account;

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- regular risk reassessment;
- transparency of risk management process, potential risk alerts and open dialogue on the possible consequences;
- consideration of mutual effect of risks within different categories relating to various functional areas;
- reliability of business unit information sharing system;
- constant development aimed at complete satisfaction of the Group’s objectives;
- segregation of functions of risk management operations and risk management operations control and assessment.

The architecture of the risk management system is aligned with the current operating model of SC Rosatom and its subsidiaries, which determines the extent of risk management operations centralisation.

The Risk Committee of SC “Rosatom” is a permanent collective coordination body overseeing the effective functioning of CRMS. The authority of the Committee includes but is not limited to control over the CRMS organisational structure and due responsibility delegation as well as coordination of the interaction between the participants of the risk management process at different organisational levels.

The independent assessment of CRMS work is conducted by the internal audit and control department. Risk readiness (the level of total risk that the Group can bear in order to achieve its goals) is estimated and regularly updated for control purposes.

(b) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or a counterparty to a financial instrument fails to meet its contractual obligations in due time. The risk arises principally from the Group’s receivables from customers, loans given and bank deposits.

The Group’s exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the factors that may influence the credit risk of the Group’s customer base, including the default risk of the industry and country, in which customers operate, particularly in the currently deteriorating economic circumstances. However, geographically there is no concentration of credit risk.

The Group has established a credit policy under which each new customer is analysed individually for creditworthiness before the Group’s standard payment and delivery terms and conditions are offered. The Group’s review includes external ratings, when available, bank references and clients’ financial statements. The limits are established for each customer, and represent the maximum outstanding debt amount without requiring approval from the senior management. These limits are reviewed annually. Customers that fail to meet the Group’s benchmark creditworthiness may transact with the Group only upon the decision of the Group’s senior management. Internal audit and the Committee for receivables and payables management may require the grounds for a decision for sale.

The Group implemented measures for customer credit risk management which include but are not limited to letters of credit, prepayments, funds reservation, bank guarantees, risk hedging against non-payment.

Most of the Group’s customers have been transacting with the Group for an extended period, and losses have occurred infrequently. In monitoring customer credit risk, contractors are grouped according to their credit characteristics, including availability of collateral, aging profile, maturity and existence of previous financial difficulties.

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(i) Exposure to credit risk

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

	31 December 2016	31 December 2015
Cash and cash equivalents	18 704 690	52 730 160
Available-for-sale financial assets	18 726 046	26 212 480
Current trade receivables	29 233 178	21 992 132
Loans given and third party promissory notes	39 217 737	4 946 539
Current other receivables	6 345 938	2 930 357
Long-term trade receivables	616 335	901 227
Long-term other receivables	225 973	325 049
Bank deposits	25 129	223 152
Long-term loans given to third parties	40 861	49 681
Financial assets held to maturity	15	15
	113 135 902	110 310 792

Available-for-sale financial assets are by 100% represented by investments in the securities of companies under control of SC “Rosatom”.

Significant part of Group’s cash and cash equivalents is placed in banks and financial institutions which as at 31 December 2016 have a credit rating of BB+ (based on S&P data) and from BBB- to BB+ (based on Fitch Ratings data), in particular 60,4% of all cash and cash equivalents is placed in PJSC “Sberbank of Russia” and 26,8% is placed in JSC “Gazprombank”.

Loans given and third party promissory notes are primarily given to JSC “Atomenergoprom” which is under control of SC “Rosatom”, share of such loans constitute 96,9%.

91% of bank deposits are placed in JSC “Gazprombank” and 9% of bank deposits are placed in JSC “VTB” having as at 31 December 2016 credit rating equal to BB+ (based on S&P data) and BB+ (based on Fitch Ratings data).

There is no concentration of credit risk with respect to other assets as at 31 December 2015 and as at 31 December 2016. Long-term receivables exposure to credit risk at 31 December 2016 amounted to RUB 842 308 thousand. Long-term receivables was recognized in the balance sheet at the end of the year in the amount of RUB 961 311 thousand, and consisted of the advances paid (RUB 7 360 thousand) and other taxes payable (RUB 111 643 thousand). These balances are not financial instruments, and, hence, are not disclosed in that Note.

As at 31 December 2016 maximum amount of credit risk for guarantees equals to RUB 36 663 thousand (as at 31 December 2015 – RUB 18 407 thousand).

The Group provides loans to third parties and related parties. As at 31 December 2016 and as at 31 December 2015 there is no received guarantees and collateralized property for loans given.

The amount of guarantees and the value of collateral received under the contracts of performing works and on other grounds, amounted to RUB 10 951 097 thousand (as at 31 December 2015 – RUB 9 194 116 thousand). The principal amount of guarantees received under the contracts of performing works and on other grounds, refers to the guarantee on the contract on the supply of raw materials and equipment (RUB 9 826 857 thousand). The largest guarantee was received under the contract concluded with JSC "Sverdlovskiy

Nauchno-issledovatel'skij Institut Khimicheskogo Mashinostroeniya" (the guarantee received equals RUB 3 757 440 thousand).

(ii) Trade and other receivables

The Group’s exposure to credit risk is influenced mainly by the individual characteristics of each customer. The Group is the single producer of nuclear fuel for Nuclear Power Stations (NPS) in Russia.

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In 2016 about 60% or RUB 110 404 219 thousands of the Group’s revenue is attributable to sales of nuclear fuel, of which RUB 34 387 671 thousand or 31% of sales turnover is attributable to NPS in Russia controlled by JSC “Atomenergoprom” (parent company of the Group), RUB 30 259 160 thousand or 27% of sales turnover is attributable to “NAEK Energoatom”, Ukraine, and RUB 45 757 388 thousand or 42% is attributable to the following twelve foreign counterparties: Department of Atomic Energy, Government of India, JSC “CHEZ”, “Areva” GmbH Germany, “China Nuclear Energy Corporation” China, “NPS Kozloduy” Bulgaria, “Slovenske Elektrarne” Slovakia, “NPS Paks” Hungary, Atomic Energy Organization of Iran, Fortum Power and Heat Oy, JSC “AAEK”, JSC «ALTA», NRJ «PETTEN». The Group’s long-established practice shows that the risk of non-payment is not significant.

In 2016 about 11% of the Group’s revenue or RUB 20 810 621 thousand is attributable to sales of services for uranium conversion and enrichment, of which RUB 7 858 191 thousand or 38% of sales turnover is represented by sales to CJSC “COU” (related party), RUB 12 588 313 thousand or 60% by sales to JSC “Tekhsnabexport” (related party) that is under control of JSC “Atomenergoprom”, RUB 32 774 thousand or less 1% to SC Rosatom (related party), RUB 331 343 thousand or 2% is represented by sales to JSC “MCOU” (related party).

The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables and investments. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for groups of similar assets (portfolio) in respect of losses that have been already incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets.

Impairment losses

The aging of trade and other receivables at the reporting date was as follows:

	Gross at 31 December 2016	Impairment at 31 December 2016	Gross at 31 December 2015	Impairment at 31 December 2015
Not past due	34 906 416	-	24 517 553	-
Past due 0-6 month	1 961 498	(781 071)	1 406 566	(181)
Past due 6-12 month	337 569	(37 545)	205 808	(26 071)
Past due for more than 12 month	1 025 897	(994 559)	841 670	(796 580)
Total	38 231 380	(1 813 175)	26 971 597	(822 832)

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

	2016	2015
Balance at 1 January	(822 832)	(806 568)
Amount of provision accrued	(1 123 015)	(21 094)
Amounts of provision used	132 672	4 830
Balance at 31 December	(1 813 175)	(822 832)

The Group accrues allowances for recognition of an impairment of trade and other receivables, except for cases when the Group is convinced that repayment of due amount is impossible; in these cases the unrecoverable amount is written off by decreasing the cost of the appropriate financial asset.

(iii) Offsetting financial assets and liabilities

Since August 2004 the Group concluded a number of lease agreements with the related party JSC “Tenex-Service” for the provision of equipment (gas centrifuges and other components). The Group’s accounts receivable include the advances given to JSC “Tenex-Service” under these lease agreements, the amount of

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long-term and short-term liabilities includes the present value of minimal future lease payments. The balances for the following calculations are shown on the net basis in the financial statements.

The carrying amount of the recognized financial instruments stemming from the above mentioned lease agreements are presented in the table below:

31 December 2016	Trade and other receivables	Finance lease liabilities
Gross amounts	915 832	5 832 788
Netted amounts in accordance with the requirements of IAS 32	(915 832)	(915 832)
Net amount presented in the consolidated statement of financial position	-	4 916 956

31 December 2015	Trade and other receivables	Finance lease liabilities
Gross amounts	1 012 316	8 207 051
Netted amounts in accordance with the requirements of IAS 32	(1 012 316)	(1 012 316)
Net amount presented in the consolidated statement of financial position	-	7 194 735

(iv) Investments

The Group limits its exposure to credit risk by only investing in liquid securities, loans given to employees and organisations under common control. Management does not expect any counterparty to fail to meet its obligations.

The allowance accounts in respect of trade receivables and held-to-maturity investments are used to record impairment losses unless the Group is satisfied that no recovery of the amount owing is possible; at that point the amounts are considered irrecoverable and are written off against the financial asset directly.

(v) Cash and cash equivalents

The Group held cash and cash equivalents of RUB 18 704 690 thousand at 31 December 2016 (RUB 52 730 160 thousand as at 31 December 2015) and bank deposits amounted to RUB 25 129 thousand which represents its maximum credit exposure on these assets (RUB 223 152 thousand as at 31 December 2015). The cash and cash equivalents are held with banks and financial institutions, which are rated BB+ and higher (based on S&P data) and from BBB- to BB+ (based on Fitch Ratings data).

Below are the banks, in which the group has the highest amount of cash:

	as at 31 December 2016	as at 31 December 2015
PJSC “Sberbank”	10 585 686	44 132 512
JSC “Gazprombank”	4 698 659	4 902 165
PJSC “VTB”	2 141 697	2 747 090

There are bank deposits with maturity from one to three months from the date of purchase in the amount of RUB 3 675 555 thousand as at 31 December 2016. The interest rate equalled 0,01% per annum on deposits in euro and ranged from 6,97% to 9,50% per annum on deposits in roubles.

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(vi) Guarantees

Management adopts the policy aimed at provision of guarantees only to subsidiaries and companies under common control. The Group considers these financial instruments as insurance arrangements, and accounts for them as such.

At 31 December 2016 and at 31 December 2015 the Group’s guarantees totalled RUB 36 663 thousand and RUB 18 407 thousand respectively. The Group’s management does not expect the occurrence of significant liabilities in respect of these guarantees, hence no provision for guarantees was created in these financial statements.

(c) 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 maintains the level of cash and cash equivalents at an amount in excess of expected cash outflows on operating expenses, including financial liabilities (this excludes the potential impact of extreme circumstances that cannot reasonably be predicted). Moreover, the Group has open credit lines to maintain sufficient cash amount.

The information on contractual maturities of financial liabilities’ settlements, including estimated amounts of interest payments and taking into account netting arrangements, is presented below.

It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

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The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements:

31 December 2016	Carrying amount	Contractual cash flows	0-6 months	6-12 months	1-2 years	2-3 years	Over 3 years
Non-derivative financial liabilities							
Finance lease liabilities (Note 26)							
6 795 989	10 474 899	1 427 202	1 375 746	2 468 691	2 164 718	3 038 542	
10 930 458	10 939 259	10 582 047	209 050	139 310	4 010	4 842	
17 726 447	21 414 158	12 009 249	1 588 796	2 608 001	2 168 728	3 043 384	
31 December 2015							
Non-derivative financial liabilities							
Bank loans							
22 009 650	22 436 618	318 609	22 118 009	-	-	-	-
Finance lease liabilities (Note 26)	13 326 692	1 545 830	1 499 034	2 770 140	2 443 109	5 068 579	
Trade and other payables (Note 28)	9 576 481	9 412 029	53 854	385 960	-	465 234	
39 775 475	46 080 387	11 276 468	23 670 897	3 156 100	2 443 109	5 533 813	

* Trade and other payables include short-term other payables, long-term other payables and other long-term liabilities.

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The gross outflows disclosed in the above table represent the contractual undiscounted cash flows relating to non-derivative financial liabilities held for risk management purposes and which are not usually closed out before contractual maturity. The disclosure shows gross cash inflow and outflow amounts for non-derivatives that have simultaneous gross cash settlement or regular payments upon schedule.

As at 31 December 2016 no secured bank loans including loans with covenants were outstanding.

(d) Market risk

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

The Group buys and sells derivatives, and also incurs financial liabilities, in order to manage market risks. All such transactions are carried out within the guidelines established in accordance with local normative acts of the Group.

(i) Currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Group entities. The currencies in which these transactions primarily are denominated are euro (EUR) and the U.S. Dollar (USD).

Interest on borrowings is denominated in the currency of the borrowing. Generally, borrowings are denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily EUR and USD.

The Group’s exposure to foreign currency risk was as follows based on notional amounts:

	USD-denominated 31 December 2016	EUR-denominated 31 December 2016	USD-denominated 31 December 2015	EUR-denominated 31 December 2015
Current assets				
Loans given	837 065	-	-	-
Trade and other receivables	5 279 163	3 891 025	2 558 959	1 753 494
Cash and cash equivalents	3 509 199	7 450 447	33 502 992	9 919 477
Current liabilities				
Trade and other payables	(959 272)	(1 440 030)	(317 047)	(997 060)
Loans and borrowings	-	-	(6 754 543)	(15 255 107)
Net exposure in consolidated statement of financial position	8 666 155	9 901 442	28 990 361	(4 579 196)

The Group controls the currency risk and concludes currency denominated contracts only after ensuring that the planned revenue in foreign currency will fully cover the Group’s liabilities under transaction in foreign currency.

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

in RUB	USD	EUR
31 December 2016	60,6569	63,8111
31 December 2015	72,8827	79,6972

in RUB	USD	EUR
Average rate for 2016	67,0349	74 2310
Average rate for 2015	60,9579	67,7767

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Sensitivity analysis

A strengthening of the RUB by 10% against the following currencies at the end of the reporting period would have increased/(decreased) profit and equity by the amounts shown below. This analysis was based on the assumption that all other variables, in particular interest rates, remain constant.

'000 RUB

31 December 2016

	Equity	Profit/(loss)
USD	(693 292)	(693 292)
EUR	(792 115)	(792 115)

'000 RUB

31 December 2016

	Equity	Profit/(loss)
USD	(2 319 229)	(2 319 229)
EUR	366 336	366 336

A weakening of the RUB by 10% against the following currencies at the end of the reporting period would have the equivalent reverse impact on the amounts shown above; the result is based on the assumption that all other variables remain constant.

(i) Interest rate risk

The Group has loans and borrowings with fixed interest rate. In 2016 the interest rate for all credit and loan agreements with fixed rate doesn't exceed 3,35%, the Group does not have valid credit agreements in roubles.

Changes in interest rates impact primarily loans and borrowings by changing either their fair value (fixed rate debt) or their future cash flows (variable rate debt). Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of raising new loans or borrowings management uses its judgment to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

Profile

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was the following:

	31 December 2016	31 December 2015
'000 RUB		
Fixed rate instruments		
Financial assets	43 328 418	48 454 771
Financial liabilities	-	(22 009 650)
Total	43 328 418	26 445 121

Fair value sensitivity analysis for fixed rate financial instruments

The Group does not account for any fixed rate financial instruments at fair value through profit or loss or as available-for-sale. Therefore, a change in interest rates at the reporting date would not have an effect on profit or loss for the period.

(e) Fair value and carrying amount

The fair value of financial assets and liabilities approximately equals their carrying amounts.

As at 31 December 2016 and as at 31 December 2015, the Group has no long-term Bank loans and borrowings.

The fair value of trade receivables approximately equals its carrying value net of bad debt allowance due to short-term nature of trade receivables.

Principles of fair value determination are disclosed in Note 5.

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(f) Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within 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).

	Level 3	Total
31 December 2016		
Equity securities	18 726 046	18 726 046
Financial assets held to maturity	15	15
Total assets	18 726 061	18 726 061
Total liabilities	-	-
Total	18 726 061	18 726 061
31 December 2015		
Equity securities	26 212 480	26 212 480
Financial assets held to maturity	15	15
Total assets	26 212 495	26 212 495
Total liabilities	-	-
Total	26 212 495	26 212 495

As at 31 December 2016 available-for-sale financial assets were reflected at Level 3 of the hierarchy due to the fact that regular information on market quotations of such financial assets is not published. Management used technical tools where all key input characteristics were based on unobservable market data to estimate fair value of these financial assets (Note 17).

Below is the reconciliation of opening and closing balances with regards to Level 3 fair value.

	Available-for-sale equity securities
Balance at 1 January 2015	15 552 002
Losses attributable to finance costs	-
– Accruals of impairment losses on available-for-sale financial assets	-
Gains attributable to OCI	-
– Net change in fair value (unrealized)	10 660 478
Balance at 31 December 2015	26 212 480
Balance at 1 January 2016	26 212 480
Losses attributable to finance costs	-
Gains attributable to OCI	-
– Net change in fair value (unrealized)	(6 863 005)
Disposal of financial instruments	(623 429)
Balance at 31 December 2016	18 726 046

31. Contingencies

(a) Insurance

Russian insurance market is currently developing. It is characterized by low insurance penetration.

The Group offers the full range of insurance services including the compulsory insurance (required by law) and temporary insurance (required by secondary legislation, oversight bodies, local authorities, etc.):

- public liability of the nuclear power facilities operating entities and third party liability of the entities engaged in transportation of radioactive and nuclear materials, products made of radioactive or nuclear materials and waste associated with these products is insured in accordance with the Federal Law No. 170-FZ “On the Use of Atomic Energy” of 21 November 1995 and the 1963 Vienna Convention on civil responsibility for nuclear damage. The liability amount is equal to 5 million U.S. dollars (here, the U.S. dollar value is determined using the gold exchange standard of 1963), which is approximately RUB 9 billion per insured event as of the reporting date;
- public liability of the entities operating hazardous production facilities and hydraulic structures is insured in accordance with the Federal Law No. 225-FZ of 27 July 2010 “On the Compulsory Insurance of Civil Liabilities of the Owner of a Hazardous Object for the Damage Incurred As a Result of an Accident at the Hazardous Object”;
- public liability of vehicle owners is insured in accordance with the Federal Law No. 40-FZ of 22 April 2002 «On Compulsory Insurance of Third Party Liability of Motor Vehicle Owners».

The optional insurance segment (property, cargo, builder’s risk, etc.) includes the insurance of property, plant and equipment and intangible assets used in the production process, assets under construction, risks stipulated by the current contracts, vehicle insurance as well as the voluntary health insurance of the staff.

Since property, plant and equipment and intangible assets used in the production process are mainly insured based on their replacement cost. Total insurance value of the insured property is set based on the replacement cost stipulated by the insuring party. However, there is still a risk that loss or damage of certain assets can negatively impact financial results and the financial position of the Group.

The Group’s insurance policy with regard to production facilities and equipment, business interruption losses and third party liabilities due to real estate or environmental damage caused by technological accidents or the Group’s operating activities fully complies with the current legislation and the requirements of the oversight bodies, but it may not provide full coverage for potential losses.

(b) Litigations

As at 31 December 2016 the Group has accrued the provision for litigations and claims in the amount of RUB 75 322 thousand and other contingencies in the amount of RUB 11 764 thousand (as at 31 December 2015 RUB 448 123 thousand – provision for legal claims and RUB 135 thousand - other contingencies).

(c) Taxation risks

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 remains open for review by the tax authorities during the three subsequent calendar years; however, under certain circumstances a tax year may remain open longer. 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.

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New 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 new 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 price 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 RUB 1 billion.

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.

(d) Guarantees provided

As at 31 December 2016 the Group concluded guarantee agreements for RUB 36 663 thousand, and as at 31 December 2015 - RUB 18 407 thousand, respectively. Management does not expect significant obligations in relation to these guarantees, therefore no provisions were recognized in these consolidated financial statements.

(e) Warranties

Agreements for nuclear fuel sale include the Group’s warranties concerning the supplies of fuel assemblies. The specific terms of guarantee service and validity are determined for each type of the fuel assemblies in the relevant provisions of the contract and generally include guarantees for the storage period of the fuel assemblies before loading in nuclear-power reactor and for nuclear fuel burn-up period. If the guarantee obligations are breached, the Group bears responsibility under the contract, the responsibility generally includes elimination of the identified defects or compensation of the damages incurred. In 2016 and in the previous reporting periods there were no claims to the Group for compensation of the damages incurred under the warranties. Taking into consideration the aforesaid and the fact that the Group believes there is a low probability of economic benefits outflow, the provision for warranties is not accrued.

32. Related party transactions

(a) Control relationships

As at 31 December 2016 the Group is under the control of JSC “Atomenergoprom” which is under the state control represented by SC “Rosatom”. JSC “Atomenergoprom” prepares the consolidated financial statements in accordance with IFRS.

Since the ultimate controlling party of the Group is the Russian Federation, the Group applies the exception to the disclosure of operations with related parties, because the Russian Federation has control, joint control or the significant influence in their regard, and in respect of the Group.

The Group discloses the amounts of significant transactions with companies affiliated with the state and outstanding balances from such companies as quantitative characteristics of the transactions with related parties.

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(b) Key management remuneration

Key management received the following remuneration during the year, which is included in personnel costs:

Remuneration	2016		2015	
	Key management		Key management	
Basic salary (emolument)		279 260		127 549
Bonus for production results		202 022		185 613
Annual leave		35 975		16 077
Other		4 813		1 082
Total		522 070		330 321

(c) Other related party transactions

Further, the transactions with the following categories of the related parties are disclosed:

- SC “Rosatom”,
- JSC “Atomenergoprom”,
- Companies under control of SC “Rosatom”
- Other entities under the state control and other related parties (Other).

(i) Income/Revenue from sales of goods, works, services

	Transaction value 2016	Transaction value 2015	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Sales of goods and services:				
SC “Rosatom”	2 352 428	3 252 094	8 090	-
Parent company – JSC “Atomenergoprom”	-	1 119	-	1 118
Entities under control of SC “Rosatom”	84 143 956	86 356 482	15 601 241	15 557 140
Other entities under the state control and other related parties and individuals	2 917 730	1 382 155	263 733	1 508 218
	89 414 114	90 991 850	15 873 064	17 066 476
Other income	13 712 588	2 072 774	3 951 725	1 823 331
Total	103 126 702	93 064 624	19 824 789	18 889 807

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(ii) Expenses/purchases of goods, works, services

	Transaction value 2016	Transaction value 2015	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Cost of goods and services				
SC “Rosatom”	386 315	4 343 765	-	-
Parent company –				
JSC “Atomenergoprom”	217 769	1 004 173	90 048	137 870
Entities under control of SC “Rosatom”	32 938 120	47 000 981	2 586 510	1 472 846
Other entities under the state control and other related parties and individuals	2 485 509	1 969 070	236 855	164 223
	36 027 713	54 317 989	2 913 413	1 774 939
Other expenses	8 724 317	9 722 022	4 387 218	4 391 165
Total	44 752 030	64 040 011	7 300 631	6 166 104

All outstanding balances with related parties are to be settled in cash within six months of the reporting date. None of the balances are secured.

(iii) Loans

	Amount loaned 2016	Amount loaned 2015	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Loans received:				
Entities under control of SC “Rosatom”	-	435 688	-	-
PJSC “Sberbank of Russia”	-	3 605 635	-	8 574 351
Total	-	4 041 323	-	8 574 351

The weighted average interest rate for loans received from related parties equalled 2,82% in 2016 and 2,82% in 2015.

	Amount loaned 2016	Amount loaned 2015	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Loans given:				
Parent company –				
JSC “Atomenergoprom”	170 537 000	39 535 300	38 076 234	4 737 291
Entities under control of SC “Rosatom”	890 599	3 804 983	837 182	70 217
Total	171 427 599	43 340 283	38 913 416	4 807 508

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(iv) Advances and other transactions

	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Advances given:		
SC “Rosatom”	23 499	43 217
Parent company – JSC “Atomenergoprom”	180	771
Entities under control of SC “Rosatom”	3 063 367	5 257 385
Other entities under the state control and other related parties and individuals	63 393	264 784
Total	3 150 439	5 566 157

	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Advances received:		
Entities under control of SC “Rosatom”	4 307 911	8 352 734
Other entities under the state control and other related parties and individuals	1 449 592	212 695
Total	5 757 503	8 565 429

(v) Cash and cash equivalents

	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
Banks:		
PJSC “Sberbank of Russia”	8 590 668	3 587 940
JSC “Gazprombank”	4 427 015	3 957 928
PJSC “VTB”	1 485 326	1 142 633
SC Vnesheconombank	3 748	1 053
PJSC “VTB 24”	743	751 027
Total	14 507 500	9 440 582

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(vi) Bank deposits

	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
<i>Long-term bank deposits</i>		
JSC “Gazprombank”	-	223 152
Total	-	223 152
 ‘000 RUB		
<i>Short-term bank deposits</i>		
PJSC “Sberbank”	3 240 555	41 917 369
JSC “Gazprombank”	-	750 000
PJSC “VTB”	340 000	568 207
Total	3 580 555	43 235 576

(vii) Other transactions with JSC “Atomenergoprom”

	Transactions value 2016	Transactions value 2015	Outstanding balance as at 31 December 2016	Outstanding balance as at 31 December 2015
‘000 RUB				
Other transactions with JSC “Atomenergoprom”	1 645 507	(3 028 508)	1 238 431	(343 257)
Total	1 645 507	(3 028 508)	1 238 431	(343 257)

Other transactions with JSC “Atomenergoprom” are performed under settlements within the consolidated group of taxpayers.

Property, plant and equipment with the carrying value of RUB 13 822 458 thousand and RUB 14 789 831 thousand as at 31 December 2016 and 31 December 2015 respectively are leased assets received from JSC “Tenex-Service” (entity under control of SC Rosatom). Accounts payable to JSC “Tenex-Service” as at 31 December 2016 equalled to RUB 6 795 989 thousand (as at 31 December 2015 equalled to RUB 8 189 344 thousand).

33. Capital commitments

Total amount of the Group’s liabilities for capital expenditures not met as at 31 December 2016 equals to RUB 9 228 543 thousand (as at 31 December 2015 RUB 12 514 016 thousand).

In 2016 and in 2015 the Group did not conclude lease agreements for provision of equipment with the delivery in future reporting periods.

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34. Events subsequent to the reporting date

At the beginning of 2017 there was continuing political and economic instability in the Ukraine. The Group monitors the situation and assesses the risks associated with its activities with “NAEK Energoatom” of the Ukraine (see Note 30 (b) (ii)), as well as with other activities of the Group in the Ukraine. The Group’s management believes that currently there are no potential losses that can be identified and reasonably estimated with respect to situation in the Ukraine.

In February 2017 the Group sold a wholly owned subsidiary LLC “TLC”.