JSC RUSNANO

International Financial Reporting Standards Consolidated Financial Statements and Independent Auditors' Report

31 December 2019

Contents

INDEPENDENT AUDITORS' REPORT

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statement of Financial Position ... 1
Consolidated Statement of Profit or Loss ... 2
Consolidated Statement of Comprehensive Income ... 3
Consolidated Statement of Changes in Equity ... 4
Consolidated Statement of Cash Flows ... 5

Notes to the Consolidated Financial Statements:

1 RUSNANO Group and Its Operations ... 6
2 Operating Environment of the Group ... 7
3 Summary of Significant Accounting Policies ... 7
4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies ... 14
5 Balances and Transactions with Related Parties ... 16
6 Financial Assets at Fair Value through Profit or Loss ... 18
7 Investment in Associate ... 19
8 Other Debt Instruments ... 19
9 Property, Plant and Equipment ... 21
10 Receivables and Prepayments ... 21
11 Cash and Cash Equivalents ... 21
12 Equity ... 22
13 Borrowings ... 23
14 Payables and Accrued Expenses ... 24
15 Net Financial Performance of Financial Assets at Fair Value Through Profit or Loss ... 24
16 Interest Income ... 25
17 Operating Expenses ... 25
18 Income Taxes ... 25
19 Contingencies and Commitments ... 26
20 Principal Subsidiaries ... 27
21 Financial Risk Management ... 28
22 Management of Capital ... 34
23 Fair Value of Financial Instruments ... 34
24 Events after the Reporting Period ... 36

Independent Auditors' Report

To the Shareholder and Board of Directors of JSC RUSNANO

Opinion

We have audited the consolidated financial statements of JSC RUSNANO (the "Company") and its consolidated subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2019, the consolidated statements of profit or loss, 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 2019, 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 Code of Ethics for Professional Accountants (including International Independence Standards), and we have fulfilled our other ethical responsibilities in accordance with the requirements in the Russian Federation and the International Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

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

Fair value measurement of investments in portfolio companies	
Please refer to the Notes 8, 23 in the financial statements.	
The key audit matter	**How the matter was addressed in our audit**
The fair value measurement has a key impact on the Group's financial performance. We focused on the investments in portfolio companies relating to Level 3 of fair value measurement hierarchy, which is based on unobservable inputs and material to the consolidated financial statements. Due to the inherent uncertainty involved in forecasting and discounting future cash flows, which are the primary basis for the Group's fair value measurement, this is one of the key judgmental areas that our audit is concentrated on.	We assessed design and implementation of the key controls related to fair value measurement of investments in portfolio companies, including review of valuation models by the executives of Management Company "Rusnano" LLC and the experts engaged by them with regard to the valuation methodology, reasonableness of assumptions, and mathematical accuracy of the models. For the significant valuation models and/or valuation models with considerable change in value during the reporting period we involved our own valuation specialists to assist us in evaluating the methodologies used by the Group, as well as reasonableness of key assumptions and inputs such as sales volume and prices, main items of cost of production, EBITDA margin forecasts, capital expenditure and working capital level. These key assumptions and inputs were compared with industry averages and macroeconomic parameters from alternative external data sources such as Economic Intelligence Unit. Discount rates were recalculated based on market data from open sources, credit information of portfolio companies and average ratios of cost of capital applicable to respective industry. In addition we also: — assessed forecasted sales volumes and prices as well as cost of production by comparison with historical data; — evaluated historical accuracy of the forecasts by comparison with actual results in financial statements and relevant inquiries of investment teams on deviations identified; — considered how cash flows correlate with the project life cycle and if it was properly adjusted for effects of potential risks of a portfolio company when indicated by respective investment team as well as facts and circumstances identified by us in public domain. We also evaluated the reasonableness of disclosures made in notes to consolidated statement of financial position and consolidated statement of profit or loss.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report of JSC RUSNANO, but does not include the consolidated financial statements and our auditors' report thereon. The annual report of JSC RUSNANO is expected to be made available to us after the date of this auditors' report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

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

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

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

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

— Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

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

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

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

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

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

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

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

Altukhov Kirill

JSC "KPMG"

Moscow, Russia

2 April 2020

In million of Russian Roubles	Note	31 December 2019	31 December 2018
ASSETS			
Non-current assets			
Equity instruments at fair value through profit or loss	6	102,327	113,169
Debt instruments at fair value through profit or loss	6	23,169	21,902
Investment in associate	7	1,836	1,786
Deferred tax asset	18	7,206	7,203
Property, plant and equipment	9	2,431	2,527
Receivables and prepayments	10	3	2
Other non-current assets		103	96
Total non-current assets		**137,086**	**146,685**
Current assets			
Equity instruments at fair value through profit or loss	6	21,172	16,844
Debt instruments at fair value through profit or loss	6	1,024	1,354
Other debt instruments	8	5,484	18,869
Receivables and prepayments	10	292	684
Income tax prepayments		367	8
Cash and cash equivalents	11	2,244	1,079
Other current assets		7	7
Total current assets		**30,590**	**38,845**
TOTAL ASSETS		**167,676**	**185,530**
EQUITY			
Share capital	12, 22	53 742	53,742
Paid-in capital	12, 22	2,000	-
Additional paid-in capital	12	56,342	53,506
Currency translation reserve	12	(146)	33
Accumulated losses		(32,720)	(7,767)
TOTAL EQUITY		**79,218**	**99,514**
LIABILITIES			
Non-current liabilities			
Deferred tax liability	18	557	382
Long-term borrowings	13	45,625	27,999
Liabilities on returns on additional paid-in capital	13	30,537	25,179
Total non-current liabilities		**76,719**	**53,560**
Current liabilities			
Current portion of long-term borrowings	13	1,649	21,142
Income tax payable		516	38
Payables and accrued expenses	14	1,371	3,323
Liabilities on returns on additional paid-in capital	13	8,203	7,953
Total current liabilities		**11,739**	**32,456**
TOTAL LIABILITIES		**88,458**	**86,016**
TOTAL EQUITY AND LIABILITIES		**167,676**	**185,530**

Approved for issue and signed on 2 April 2020.

Chubais Anatoly Borisovich
Chairman of the Executive Board
of Management Company "RUSNANO" LLC

In million of Russian Roubles	**Note**	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
Profit on financial assets at fair value through profit or loss other than foreign currency recalculation effect		1,506	4,317
Foreign currency recalculation effect on financial assets at fair value through profit or loss		(6,576)	10,537
Net financial performance of financial assets at fair value through profit or loss	15	**(5,070)**	**14,854**
Interest income	16	608	780
Other operating income		338	235
Operating expenses	17	(5,444)	(5,409)
Foreign currency exchange (losses)/gains		(259)	1,283
Operating (loss)/profit		**(9,827)**	**11,743**
Finance costs		(5,680)	(6,025)
(Loss)/profit before income tax		**(15,507)**	**5,718**
Income tax expense	18	(1,000)	(82)
(LOSS)/PROFIT FOR THE YEAR		**(16,507)**	**5,636**

In million of Russian Roubles	**Note**	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
(Loss)/profit for the year		**(16,507)**	**5,636**
Other comprehensive income			
Foreign currency translation differences	12	(179)	6
Total comprehensive income for the year		**(16,686)**	**5,642**

In million of Russian Roubles	**Note**	**Share capital**	**Paid-in capital**	**Additional paid-in capital**	**Accumulated losses**	**Currency translation reserve**	**Total equity**
As at 1 January 2018		**53,742**	**-**	**48,395**	**(6,972)**	**27**	**95,192**
Total comprehensive income							
Profit for the year		-	-	-	5,636	-	5,636
Other comprehensive income	12	-	-	-	-	6	6
Total comprehensive income for the year		-	-	**-**	**5,636**	**6**	**5,642**
Recognition of additional paid-in capital	12	-	-	10,266	-	-	10,266
Returns on additional paid-in capital		-	-	5,894	(5,894)	-	-
Repayment of additional paid-in capital				(11,049)	-	-	(11,049)
Dividends	12	-	-	-	(537)	-	(537)
As at 31 December 2018		**53,742**	**-**	**53,506**	**(7,767)**	**33**	**99,514**
Total comprehensive income							
Loss for the year		-	-	-	(16,507)	-	(16,507)
Other comprehensive income	12	-	-	-	-	(179)	(179)
Total comprehensive income for the year		-	**-**	**-**	**(16,507)**	**(179)**	**(16,686)**
Contributions to equity	12	-	2,000	-	-	-	2,000
Recognition of additional paid-in capital	12	-	-	11,417	-	-	11,417
Returns on additional paid-in capital		-	-	7,896	(7,896)	-	-
Repayment of additional paid-in capital		-	-	(16,477)	-	-	(16,477)
Dividends	12	-	-	-	(550)	-	(550)
As at 31 December 2019		**53,742**	**2,000**	**56,342**	**(32,720)**	**(146)**	**79,218**

In million of Russian Roubles	Note	For the year ended 31 December 2019	For the year ended 31 December 2018
Cash flows from operating activities			
Operations with investment portfolio			
Proceeds from equity instruments at fair value through profit or loss		5,344	16,737
Proceeds from debt instruments at fair value through profit or loss		1,346	2,286
Investments in equity instruments at fair value through profit or loss		(6,647)	(16,666)
Investments in debt instruments at fair value through profit or loss		(1,223)	(794)
		(1,180)	**1,563**
Other operations			
Proceeds from sale of financial assets held for trading		-	734
Repayment of debt securities		3,089	6,804
Acquisition of debt securities		-	(4,408)
Receipts of cash from deposit accounts		63,719	35,072
Placement of cash on deposit accounts		(54,084)	(40,756)
Interest income received		925	791
Operating payments		(5,358)	(5,078)
Income taxes paid		(337)	(29)
Other payments		(45)	(98)
		7,909	**(6,968)**
Net cash from/(used in) operating activities		**6,729**	**(5,405)**
Cash flows from financing activities			
Proceeds from loans and borrowings		18,791	10,000
Repayment of loans and borrowings		(20,625)	(1,250)
Contributions to equity		2,000	-
Proceeds from of additional paid-in capital		25,403	18,636
Repayment of additional paid-in capital		(16,961)	(11,049)
Returns on additional paid-in capital		(7,896)	(5,894)
Interest paid		(5,713)	(6,020)
Dividends paid		(550)	(537)
Net cash (used in)/from financing activities		**(5,551)**	**3,886**
Net increase/(decrease) in cash and cash equivalents		**1,178**	**(1,519)**
Effect of exchange rate changes on cash and cash equivalents held in foreign currencies		**(13)**	**(2)**
Cash and cash equivalents at the beginning of the year	11	**1,079**	**2,600**
Cash and cash equivalents at the end of the year	11	**2,244**	**1,079**

1 RUSNANO Group and Its Operations

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards for the year ended 31 December 2019 for the Joint-Stock Company RUSNANO (JSC RUSNANO, the "Company") and its consolidated subsidiaries disclosed in Note 20 (together referred to as the "Group" or the "RUSNANO Group").

Initially the Russian Corporation of Nanotechnologies (the "Corporation") was established on 19 September 2007 by the Government of the Russian Federation in accordance with the Federal Law No. 139-FZ "On the Russian Corporation of Nanotechnologies" dated 19 July 2007.

In accordance with Federal Law No. 211-FZ "On Reorganization of the Russian Corporation of Nanotechnologies" adopted on 27 July 2010, the Corporation was reorganized into OJSC RUSNANO and ceased its operations upon the state registration of the Company on 11 March 2011. As the result OJSC RUSNANO assumed all rights and responsibilities of the Corporation under the principle of universal succession.

In 2014 the Group transferred its management function and staff from the Company to its subsidiary Management Company RUSNANO LLC founded in 2013.

In February 2016 before these Consolidated Financial Statements were authorized for issue the Company changed its legal entity status from Open Joint-Stock Company to Joint-Stock Company.

Principal activity. The Group was formed to implement the policy of the Russian Federation with respect to nanotechnology, to develop an innovative infrastructure for nanotechnology and initiate projects on the creation of advanced nanotechnologies and nano-industry in Russia. The main activity of the Group is to invest funds in line with the above-mentioned State policy.

The Company is an investment entity (Note 4).

The RUSNANO Group's investment activity is focused on funding nano-technology projects at the initial stage, when the opportunities to raise funds from other sources are limited due to high risks and market and technological uncertainty. The Group plans to withdraw from projects when certain production criteria are met and other investors are ready to finance the project independently. The return on the Group's investments in such projects is determined by the terms and conditions stipulated in the investment agreements. Starting 2016 the Group focused its primary activities on investments in newly-founded investment funds.

The subsidiaries of the Group were formed or acquired in line with the main Group's activities stated above.

***Location*.** The Company's registered address is: Prospekt 60-letiya Oktyabrya, 10A, 117036, Moscow, Russian Federation.

Segment information. Under the IFRS 8 "Operating Segments" operating segments are components of an enterprise on which separate financial information is available and is evaluated regularly by the chief operating decision-maker (further – "CODM") in deciding how to allocate resources and in assessing performance. The Executive Board of Management Company RUSNANO LLC has been determined as the CODM. For management purposes, the Group is organised into one main operating segment in accordance with IFRS 8, which invests in equity and debt instruments and related derivatives. Accordingly, all significant operating decisions are based upon analysis of the Group as one segment. The financial results from this segment are equivalent to the financial statements of the Group as a whole.

The Group operates in one industry segment being the investor with respect to developing an innovative nanotechnological infrastructure and initiating projects on the creation of advanced nanotechnologies. The financial position and results of this segment as at 31 December 2019 and 2018 are presented in the consolidated statement of financial position and the consolidated statement of profit or loss and consolidated statement of comprehensive income, respectively.

The Group performs most of its activities in the Russian Federation and does not have any significant non-current assets other than financial assets located in foreign countries or any significant income from foreign countries except for gains/losses on financial assets at fair value through profit or loss from foreign projects.

2 Operating Environment of the Group

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 Group's major assets are the financial instruments, i.e. equity or debt instruments, the most of which are not quoted in the active market. The fair values of these financial instruments as at 31 December 2019 and 2018 have been determined as the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. As the most of the Group's investee shares are not traded in the active market, the fair value calculations are based on transaction prices, valuation models and discounted cash flows prepared by the Group. Determining fair value requires consideration of current market conditions, future business plans of investees, potential liquidity of the market and current credit spreads. The valuation techniques used by management to determine fair values in the absence of an active market include adjusted present value and utilizes interest rates applicable to similar investments on the Russian market or international markets where applicable.

3 Summary of Significant Accounting Policies

Basis of preparation

The consolidated financial statements of the RUSNANO Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). The financial statements have been prepared on a historical cost basis, except for financial instruments at fair value through profit or loss, that have been measured at fair value.

These consolidated financial statements have been prepared on a going concern basis, which assumes that the Group will continue to realize its assets and discharge its obligations and commitments in the normal course of operations.

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

Consolidated financial statements

The consolidated financial statements comprise the financial statements of the Company and its consolidated subsidiaries for the year ended 31 December 2019.

(a) Subsidiaries

Subsidiaries are companies and other entities which are controlled by the Company, i.e. in respect of which the Company is exposed, or has rights, to variable returns from its involvement and has the ability to affect those returns through its power over the company or the other entity.

In accordance with the exemption for investment entities provided by IFRS 10, Subsidiaries are not consolidated by the Company and measured at fair value through profit or loss from the date on which control is obtained.

Exception comprises subsidiaries that that are not themselves investments entities and whose main purpose and activities are providing services that relate to the investment entity's investment activities. Such subsidiaries are consolidated from the date on which control is obtained (acquisition date) and are deconsolidated from the date on which that control ceases.

The acquisition method is used to account for the acquisition of consolidated subsidiaries. Identifiable assets acquired as well as liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date.

3 Summary of Significant Accounting Policies (continued)

Consolidated financial statements (continued)

(a) Subsidiaries (continued)

Intercompany transactions, balances and unrealised gains on transactions between the Group consolidated companies are eliminated; unrealised losses are also eliminated unless the cost cannot be recovered. The Company and all of its consolidated subsidiaries use uniform accounting policies consistent with the RUSNANO Group's policies.

(b) Associates and joint ventures

Associates are entities over which the Group has significant influence, i.e. has the power to participate in the financial and operating policy decisions of the entity but not controls or joint controls those entities. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

For investments in associates and jointly controlled entities within investment portfolio the equity accounting is not applied. The investments are accounted as financial instruments at fair value through profit or loss.

For other investments in associates accounting the equity method is applied.

New Accounting Pronouncements

(a) Standards and Amendments effective in 2019

In 2019 the Group adopted all standards and interpretations that became effective as at 1 January 2019.

IFRS 16 Leases. The application of the standard does not have any material effect on the Group financial position or financial performance.

Prepayment Features with Negative Compensation (Amendments to IFRS 9). The amendments do not have any material effect on the Group financial position or financial performance.

Long-term Interests in Associates and Joint Ventures (Amendments to IAS 28). The amendments do not have any material effect on the Group financial position or financial performance.

IFRIC 23 Uncertainty over Income Tax Treatments. The interpretation does not have any material effect on the Group financial position or financial performance.

Various **Improvements to International Financial Reporting Standards** issued by IASB within 2015-2017 Annual Improvements Cycle. The amendments have no any material effect on the Group consolidated financial statements.

(b) Standards and Amendments to existing Standards that are not yet effective and have not been early adopted by the Group

Certain new standards and interpretations have been issued that are mandatory for the annual periods beginning on or after 1 January 2020 and which the Group has not early adopted. The Group intends to adopt applicable standards when they become effective. None of them is expected to affect the consolidated financial statements of the Group, except the following set out below.

The following standards, amendments and interpretations may affect the Group consolidated financial statements but the effects are not expected to be significant.

IFRS 17 Insurance Contracts. IFRS 17 is effective for annual periods beginning on or after 1 January 2021 with early adoption permitted.

Definition of a Business (Amendments to IFRS 3). The amendments are effective for annual periods beginning on or after 1 January 2020, with early adoption permitted.

Definition of Material (Amendments to IAS 1 and IAS 8). The amendments are effective for annual periods beginning on or after 1 January 2020, with early adoption permitted.

Amendments to References to Conceptual Framework in IFRS Standards. The amendments are effective for annual periods beginning on or after 1 January 2020, with early adoption permitted.

3 Summary of Significant Accounting Policies (continued)

Foreign currency translation

The functional currency of the Company and its key subsidiaries and the Group's presentation currency, is the national currency of the Russian Federation, i.e., Russian Roubles ("RUB").

Monetary assets and liabilities are translated into each entity's functional currency at official exchange rates. Official exchange rates for companies that have Russian Roubles as their functional currency are the rates published by the Central Bank of the Russian Federation for the certain date. Official exchange rates for foreign companies that have functional currency other than Russian Roubles are rates quoted in their local central banks for the certain date. Foreign exchange gains and losses resulting from the settlement of transactions and from the translation of monetary assets and liabilities into each entity's functional currency at period-end official exchange rates are recognised in the profit or loss for the year in net amount. Translation at year-end rates does not apply to non-monetary items that are measured at historical cost. Items measured at fair value in a foreign currency, including equity investments, are translated using the exchange rates at the date when the fair value was determined. Effects of exchange rate changes on items measured at fair value in a foreign currency are recorded as part of the fair value gain or loss.

The items of statement of financial position, statement of profit or loss and statement of comprehensive income of each Group entity are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of the respective reporting period;
- income and expenses are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions);
- components of equity are translated at the historic rate; and
- all resulting exchange differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

At 31 December 2019, the principal rate of exchange used for translating foreign currency balances was USD 1 = RUB 61.9057 (31 December 2018: USD 1 = RUB 69.4706); EUR 1 = RUB 69.3406 (31 December 2018: EUR 1 = RUB 79.4605); CHF 1 = RUB 63.6039 (31 December 2018: CHF 1 = RUB 70.5787).

Financial assets at fair value through profit or loss

(a) Classification

The Group classifies its debt and equity investments, including embedded derivatives, as financial assets at fair value through profit or loss at inception. These financial assets are managed and their performance is evaluated on a fair value basis.

Equity instruments of the Group comprise shares in portfolio companies and equity instruments in investment funds.

Investment managers of the Group are required to evaluate the performance of the financial assets using their fair value at the end of the reporting period together with other related financial information pertaining to the particular investment.

Assets included in this category are classified as current assets if they are reasonably expected to be realised within 12 months from the end of the reporting period. Other assets included in this category are classified as non-current.

Cash inflows and outflows from the operations with financial assets at fair value through profit or loss are presented in the consolidated statement of cash flows as cash flows from operating activities on a gross basis.

3 Summary of Significant Accounting Policies (continued)

Financial assets at fair value through profit or loss (continued)

(b) Recognition, de-recognition and measurement

Financial assets at fair value through profit or loss are initially recognised at fair value. Fair value at initial recognition is usually best evidenced by the transaction price. Gain or loss on initial recognition is recorded only if there is a difference between the fair value and the transaction price, which can be evidenced by other observable current market transactions in the same instrument or by a valuation technique whose inputs include only data from observable markets. If the valuation technique that uses unobservable inputs is expected to be used for fair value determination in subsequent periods, the valuation technique is calibrated to ensure that it reflects current market conditions evidenced by transaction price and other relevant factors. If the Group provides financing to a portfolio company by the package of investments which includes several financial instruments, the transaction price of the full investment package is determined.

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or the Group has transferred largely all risks and rewards of ownership.

Following initial recognition, all financial assets at fair value through profit or loss are measured at fair value. Gains and losses arising from changes in the fair value of the financial assets at fair value through profit or loss are presented in the consolidated statement of profit or loss with regard to the changes in fair value of financial assets at fair value through profit or loss in the period in which they arise.

Interest income on debt investments at fair value through profit or loss is recognised in the consolidated statement of profit or loss as part of the fair value gains or losses on financial assets at fair value through profit or loss.

(c) Fair value estimation

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

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

Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities;

Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly;

Level 3: techniques, which use inputs that have a significant effect on the recorded fair value that are not based on observable market data.

As the most of the Group’s portfolio companies’ shares are not traded in the active market, the fair value calculations for equity investments are based on valuation models and discounted cash flows prepared by the Group.

The Group also considers the original transaction price and adjusts the model as deemed necessary for such factors as non-sustainable earnings, investment and growth stages. The valuations produced by the primary techniques incorporate the effects of any embedded derivatives (such as call and put options) relating to the equity instrument.

The Group’s valuation technique for debt instruments is the present value of estimated future cash flows based on a discounted cash flow model. The discount rate used by the Group is based on the risk-free rate of the economic environment in which portfolio companies operate, adjusted with other factors, such as the investment stage period and appropriate risk factors.

Cash flows used in the discounted cash flows model are based on the projected cash flows or earnings of the portfolio companies. In determining fair valuation, the Group in many instances relies on the financial information of the portfolio companies and on estimates by the management of the portfolio companies as to the effect of future development. Although best judgement is used in estimating the fair value of investments, there are inherent limitations in any estimation techniques. The fair value estimates presented herein are not necessarily indicative of the amount the Group could realise in a current transaction. Future events will also affect the estimates of fair value. The effect of such events on the estimates of fair value could be material in relation to the consolidated financial statements.

3 Summary of Significant Accounting Policies (continued)

Financial assets at fair value through profit or loss (continued)

(c) Fair value estimation (continued)

Derivative financial instruments are often embedded in investment agreements entered into by the Group. If derivatives are embedded, they are not valued separately, but rather are built into the valuation models determining the range of fair value movements for a particular investment.

The Group's valuation technique for instruments presented by shares in investment funds usually is the share in fair value of net assets of each particular fund attributable to the Group at the end of reporting period.

(d) Transaction costs

Transaction costs are incremental costs directly attributable to the acquisition, issue or disposal of a financial instrument. An incremental cost is one that would not have been incurred if a transaction had not taken place. Transaction costs include fees and commissions paid to agents (including employees acting as selling agents), advisors, brokers and dealers, levies by regulatory agencies and securities exchanges, and transfer taxes and duties. Transaction costs relating to instruments at fair value through profit or loss are immediately recognised in profit or loss as an expense when incurred.

(e) Debt instruments

Debt instruments are non-derivative financial assets with fixed or determinable payments that are not quoted in the active market. Debt instruments are carried at fair value as they are usually managed together with the related equity interest on a total return basis (interest or dividends and changes in fair value). Management of the Group believes that the interest rates for debt instruments acquired in 2018 are equal to market rates for debt instruments with similar conditions; hence, the discount rate for such debt instruments has been determined individually for each instrument.

Interest income on debt instruments is included in the net recognised changes in the fair value of financial assets at fair value through profit or loss.

Financial assets at amortised cost

(a) Classification, recognition and measurement

A financial asset is included in this category if both of the following conditions are met:

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

The category includes receivables, cash and cash equivalents including cash in hand and on current accounts and other debt instruments.

Financial assets classified into this category except for trade receivables are initially recognized at fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. After the initial recognition the financial assets are carried at amortised cost using the effective interest rate method taking into account their credit risk.

Financial assets at amortised cost are included in current assets, if they have maturity or offer within 12 months after the end of the reporting period, in other cases they are classified as non-current assets.

All classified into this category debt securities and deposits are presented together, including those with original maturities or offers of three months or less. Cash inflows and outflows from the operations with debt securities and deposits classified into this category are presented in the consolidated statement of cash flows as cash flows from operating activities on a gross basis.

3 Summary of Significant Accounting Policies (continued)

Financial assets at amortised cost (continued)

(b) Impairment

The Group recognise the loss allowance for a financial asset at amortised cost at the amount equal to the lifetime expected credit losses if the credit risk on that financial asset has increased significantly since initial recognition. If, at the reporting date, the credit risk on a financial asset has not increased significantly since initial recognition, The Group recognise the loss allowance for that financial asset at the amount equal to 12-month expected credit losses.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date to the amount that is required is recognised within profit or loss, as an impairment loss or gain.

Prepayments

Prepayments for goods and services are carried at cost less allowance for impairment. A prepayment is classified as non-current when the goods or services relating to the prepayment are expected to be obtained after one year, or when the prepayment relates to an asset which will itself be classified as non-current upon initial recognition.

If there is an indication that the assets, goods or services relating to a prepayment will not be received, the carrying value of the prepayment is written down accordingly and a corresponding impairment loss is recognised in profit or loss for the year.

Prepayments for equity investments are classified as rights to obtain shares and presented within equity investments at fair value through profit or loss when management observe objective evidence that the registration process with relevant regulatory authorities would be completed in the nearest term.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and allowance for impairment, if any.

Cost includes all costs directly attributable to bringing the asset to the location and condition for its intended use. Costs of minor repairs and maintenance are expensed when incurred. The cost of replacing major parts or components of property, plant and equipment is capitalised and the replaced part is retired.

At the end of each reporting period, management assesses whether there is any indication of impairment of property, plant and equipment. If any such indication exists, management estimates the recoverable amount, which is determined as the higher of an asset's fair value less costs to sell and its value in use.

The carrying amount is reduced to the recoverable amount and the impairment loss is recognised in profit or loss for the period. An impairment loss recognised for an asset in prior periods may be reversed if there has been a positive change in the estimates used to determine the asset's value in use or fair value less costs to sell.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount and are recognised within operating income or expenses in profit or loss for the year.

Depreciation

Depreciation of items of property, plant and equipment is calculated using the straight-line method to allocate their costs less their residual values over their estimated useful lives:

	Useful lives in years
Building	10 - 50 years
Computer and office equipment	2 - 7 years
Other	5 - 20 years

3 Summary of Significant Accounting Policies (continued)

Depreciation (continued)

The residual value of an asset is the estimated amount that the Group would currently obtain from its disposal less the estimated costs of disposal if the asset were already of the age and in the condition expected at the end of its useful life. The assets' residual values and useful lives are reviewed and, if appropriate, adjusted at the end of each reporting period. Assets under construction are not depreciated. Depreciation of these assets will begin when the related assets are available for use.

Leases

At inception of a contract, management assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

When the Group is a lessor in a lease which does not transfer substantially all the risks and rewards of ownership from the Group to the lessee, the lease payments are recognised as income on a straight-line basis over the lease term.

When the Group is a lessee in short-term leases or leases for which the underlying asset is of low value, the lease payments are recognised as expense on a straight-line basis over the lease term.

Income taxes

Income taxes have been provided for in the financial statements in accordance with the legislation enacted or substantively enacted at the reporting date in the country in which the Company and its consolidated subsidiaries operate and generate taxable income. The income tax charge comprises current tax and deferred tax and is recognised in profit or loss for the year except if it is recognised in other comprehensive income or directly in equity because it relates to transactions that are also recognised, in the same or a different period, in other comprehensive income or directly in equity.

Current tax is the amount expected to be paid to or recovered from the tax authorities in respect of taxable profits or losses for the current and prior periods. Taxes other than income tax expenses are recorded in the operating expenses.

Deferred income tax is provided for the temporary differences arising between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes using the balance sheet liability method and for tax loss carry forward. In accordance with the initial recognition exemption, deferred taxes are not recorded for temporary differences upon initial recognition of an asset or a liability in a transaction other than a business combination if the transaction, when initially recorded, affects neither accounting nor taxable profit.

Deferred tax balances are measured at tax rates enacted or substantively enacted at the end of the reporting period which are expected to apply to the period when the temporary differences will be reversed or the tax loss carry forward will be utilised. Deferred tax assets and liabilities are netted only in individual companies of the Group. Deferred tax assets for deductible temporary differences and tax loss carry forward are recorded only to the extent that it is probable that future taxable profit will be available and against which the deductions can be utilised.

Equity

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction from the proceeds. Any excess of the fair value of the consideration received over the par value of the shares issued is recorded as share premium in equity.

Borrowings

Borrowings other than those received under the state guarantees and meeting definition of equity are carried at amortised cost using the effective interest rate method.

3 Summary of Significant Accounting Policies (continued)

Trade and other payables

Trade and other payables are accrued when the counterparty performs its obligations under a contract and are carried at amortised cost using the effective interest rate method.

Provisions for liabilities and charges

Provisions for liabilities and charges are non-financial liabilities of uncertain timing or amount. They are accrued when the Group has a legal or constructive obligation as a result of past events, when it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

Interest income

Interest income is recognised on a time-proportion basis using the effective interest rate method. It includes interest income from debt securities, deposits and cash and cash equivalents.

Interest income on debt instruments designated at fair value through profit or loss is not presented separately and is included in the changes of the fair value of such financial assets.

Employee benefits

Wages, salaries, contributions to the Russian Federation's state pension and social insurance funds, paid annual leave and sick leave, bonuses, and non-monetary benefits (such as health services and other) are accrued in the year in which the associated services are rendered by the Group's employees.

4 Critical Accounting Estimates and Judgements in Applying Accounting Policies

The Group makes estimates and assumptions that affect the amounts recognised in the financial statements and the carrying amounts of assets and liabilities in the next reporting period. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. The judgements that have the most significant effect on the amounts recognised in the financial statements and the estimates that can cause a significant adjustment in the carrying amount of assets and liabilities in the future financial periods are presented below.

Investment entity

On the basis of the Company's incorporation documents, public information about the Company presented for the external users and local legislation applicable to the Company's transactions and activities the Company meets the definition of an investment entity in accordance with IFRS 10 because the following conditions are satisfied:
(a) it obtains funds from one or more investors for the purpose of providing those investor(s) with investment management services;
(b) it commits to its investor(s) that its business purpose is to invest funds solely for returns from capital appreciation, investment income, or both; and
(c) it measures and evaluates the performance of substantially all of its investments on a fair value basis.

When considering criterion b) above, management took into account certain ancillary activities of the Group (e. g. being the Government's agent in specific infrastructure projects) and concluded that such activities were immaterial for the Group and did not change the business purpose of the Group, which is to invest funds in nanotechnology projects for returns from capital appreciation and investment income.

In accordance with criterion c) above management measures and evaluates the performance of substantially all of investments on a fair value basis. The approach is not applied for debt instruments not identified as a part of investment portfolio of the Group. At the reporting date the carrying amount of those instruments does not differ materially from their fair value.

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

Investment entity (continued)

Further, in assessing whether the Company meets the definition, management considered the following typical characteristics of an investment entity: it has more than one investment; it has more than one investor; it has investors that are not related parties of the entity; it has ownership interests in the form of equity or similar interests.

The Company does not fully meet all of the typical characteristics of an investment entity. In particular as at 31 December 2019 and 31 December 2018 the Government of Russian Federation was the sole owner of 100% of the shares in the Company's share capital. However market of nano-technologies and nano-technology infrastructure in Russian Federation is an emerging market therefore there are restrictions of the abilities of financing provided by private sector of the economy due to high risks and market and technological uncertainty. Under the circumstances only the Government of Russian Federation had an ability to take potential risk of investing to the emerging sphere and became the sole investor of the Company. Based on this reasoning from this fact management believes the Company is nevertheless an investment entity.

Fair value of equity instruments not quoted in the active market

The fair value of equity investments in portfolio companies not quoted in the active market at initial recognition is usually best evidenced by the transaction price. If the transaction price is fair value at initial recognition and a valuation technique that uses unobservable inputs will be used to measure fair value in subsequent periods, the valuation technique is calibrated so that at initial recognition the result of the valuation technique approximates the transaction price.

Following initial recognition, the fair value of equity instruments in portfolio companies is determined by using valuation techniques, primarily financial models based on the estimated future cash flows. The financial models are prepared based on the cash flow forecasts, which have been updated for the circumstances and events which occurred as at the end of the reporting period and were known to management as of the date the financial statements were authorized for issue. Management uses adjusted present value models with appropriate discount factor that incorporates the estimated project risks. In the discounted cash flow models, unobservable inputs are the projected cash flows of the relevant portfolio company and the risk premium for the project risk that are incorporated in the discount rate. However if appropriate, the discount rates used for valuing equity instruments are determined with regard to the expected equity returns for other entities operating in the same industry for which market returns are observable.

Models are periodically reviewed by the Group's investment managers. The sensitivity of the factors impacting the fair value estimation for equity investments is presented in Note 21.

Fair value of equity instruments with embedded options

Management has analysed the terms of investment contracts in respect of its investments into portfolio companies, including the embedded call and put options. The options embedded in the investment contracts are not separated from the host instruments. Management embedded the effects of the options in the financial models for such portfolio companies with the options limiting the fluctuation of the possible outcomes of a particular investment in a definite range. The majority of such investment projects are at a start-up phase; therefore, management considers it appropriate to account for such instruments at a fair value taking into account the put or call options, which are in-the-money upon expected exit date. Put options contain the unconditional rights to sell shares embedded in the investment contract. Call options contain the rights but not the obligations to buy shares embedded in the investment contract. The sensitivity of the factors impacting the fair value estimation for equity investments with embedded options is presented in Note 21.

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

Fair value of debt instruments

Underlying the fair value of debt instruments are cash flow forecasts using the discounted cash flow valuation technique. Management reviews the debt instruments portfolio to assess whether there is any observable data indicating a measurable decrease in the estimated future cash flows from debt instruments. This evidence may include observable data indicating an adverse change in the payment status of borrowers, or national or local economic conditions that correlate with defaults on assets in the group of debt instruments. The cash flow estimates consider the possible realisable value of collateral, if any. The discount rates are based on an analysis of market rates for debt instruments with similar conditions and interest rates on debt instruments actually issued by portfolio companies. Gains or losses resulting from both changes in the estimates of future cash flows and changes in the discount rates are presented in profit or loss as an increase or a decrease in the fair value of financial assets through profit or loss. The sensitivity of the factors impacting the fair value estimation for debt instruments is presented in Note 21.

Classification of loans received under the state guarantees

Additional paid-in capital include financing under the state guarantees that meet definition of equity. The Group applied judgment in this respect (see Note 12).

5 Balances and Transactions with Related Parties

Parties are generally considered to be related if they are under common control or if one party has the ability to control the other party or can exercise significant influence or joint control over the other party in making financial and operational decisions. In considering each possible related party relationship, attention is focused on the substance of the relationship, and not merely the legal form. All related party transactions were made at an arm's length on normal commercial terms and conditions.

Ultimate controlling party

The Group's ultimate controlling party is the Government of the Russian Federation. Hence, all parties related to the Government of the Russian Federation are also related parties of the Group.

Government-related entities

In the normal course of business, the Group enters into multiple transactions with state-owned entities, such as placing cash and cash equivalents and deposits, paying taxes, purchasing services from utilities and other similar payments. However, not all such transactions have a significant impact on the financial statements of the Group. Management presents hereunder only the balances and transactions with entities in which the government has control, joint control or significant influence, which relate to the core operating activities of the Group.

The table below presents individually significant transactions with government-related entities and the individually insignificant transactions with regard to which it was practicable to identify and report them.

	31 December 2019		**31 December 2018**	
In million of Russian Roubles	**Russian Government**	**State-owned entities**	**Russian Government**	**State-owned entities**
Assets				
Receivables	-	23	-	28
Debt securities	-	1,475	-	4,004
Deposits	-	4,009	-	9,679
Cash and cash equivalents	-	78	-	19
Liabilities and commitments				
Payables and accrued expenses	-	45	-	96
Liabilities on returns on additional paid-in capital	-	6,566	-	13,582
Borrowings		1,200		
Income				
Interest income	-	588	36	489
Expenses				
Finance costs	-	121	-	545

5 Balances and Transactions with Related Parties (continued)

Government-related entities

Contractual interest rates of RUB denominated deposits as at 31 December 2019 and 2018 were 4-7% p.a. (31 December: 5-8% p.a.). Contractual interest rate of deposits denominated in other currencies as at 31 December 2019 was 2% p.a. As at 31 December 2018 there were no deposits denominated in other currencies.

Liabilities on returns on additional paid-in capital relates to financing under the state guarantees (Note 13). Liabilities on returns on additional paid-in capital as at 31 December 2019 have effective annual interest rates 9%-10% (31 December 2018: 9%-11%) and maturity in 2019-2026 (31 December 2018: 2019-2026).

Portfolio companies

In the ordinary course of business the Group invests in nano-technology projects. Usually the Group maintains control or significant influence over its investees. So most of financial assets accounted at fair value through profit or loss represents investments in related parties.

Balances with subsidiaries accounted at fair value through profit or loss are as follows:

In million of Russian Roubles	**31 December 2019**	**31 December 2018**
Equity instruments at fair value	27,498	28,125
Debt instruments at fair value	2,529	2,177
Equity investments with embedded options	1,284	2,728

Expected financing for subsidiaries accounted at fair value through profit or loss amount to RUB 2,193 million as at 31 December 2019 (RUB 2,143 million as at 31 December 2018).

Other balances on core investment activities relate primarily to investment operations with associates and joint ventures.

During the year ended 31 December 2019 and 2018 the Group did not have any material transactions with its portfolio companies other than investment activities.

Key management personnel

Key management personnel of the Group in 2019 and 2018 include the Board of Directors of the Company, the Board of Directors of Management Company RUSNANO LLC, and the Management Board of Management Company RUSNANO LLC.

The remuneration of the key management personnel of the Group for the year ended 31 December 2019 comprises salaries, short-term bonuses and social security contributions amounting to RUB 527 million (2018: RUB 674 million).

Short-term bonuses are payable within 12 months after the period they relate to. As at 31 December 2019 the Group do not have the outstanding salary or short-term bonuses liabilities to key management personnel (31 December 2018: nil).

6 Financial Assets at Fair Value through Profit or Loss

The structure of the Group's financial assets at fair value through profit or loss is detailed below:

		31 December 2019	31 December 2018
In million of Russian Roubles	**Note**	**Fair value**	**Fair value**
Current assets			
Equity instruments		13,917	16,048
including equity instruments in investment funds	6.3	-	*130*
Equity instruments with embedded options		7,255	796
including equity instruments in investment funds		*7,255*	
Total equity instruments at fair value through profit or loss within current assets		**21,172**	**16,844**
Non-current assets			
Equity instruments		92,501	95,044
including equity instruments in investment funds	6.3	*46,354*	*42,689*
Equity instruments with embedded options		9,826	18,125
including equity instruments with embedded options in investment funds		-	*6,170*
Total equity instruments at fair value through profit or loss within non-current assets		**102,327**	**113,169**
Total equity instruments at fair value through profit or loss	6.1	**123,499**	**130,013**
Current portion of debt instruments		1,024	1,354
Non-current portion of debt instruments		23,169	21,902
Total debt instruments at fair value through profit or loss	6.2	**24,193**	**23,256**
Total financial assets at fair value through profit or loss		**147,692**	**153,269**

6.1 Equity instruments at fair value through profit or loss

Equity investments of the Group at fair value through profit or loss are represented by the equity investments in portfolio companies without embedded options, equity investments with embedded options and shares in investment funds.

Management believes that the financial models used for fair value assessment are reliable, and they have been updated for the facts and circumstances occurred as at 31 December 2019.

6.2 Debt instruments at fair value through profit or loss

As part of its operating activity, the Group provides debt financing to its portfolio companies. These debt instruments are sometimes secured by collateral (pledged equipment, shares and intangible assets – see Note 21) and bear interest ranging from 6% to 20% p.a.

6.3 Equity instruments in investment funds

The Group invests in funds with activities that are in-line with the Group strategy. Shares in investment funds are carried at fair value through profit or loss and amount to RUB 53,609 million and RUB 48,989 million as at 31 December 2019 and 2018, respectively.

7 Investment in Associate

As at 31 December 2019 and 2018 the Company owns 46.2% of ordinary shares of CJSC Innovative Technopark Idea ("Technopark") incorporated in the Russian Federation. Technopark provides a full range of services for developing business, such as lease of office spaces and industrial premises, access to high-tech equipment of nanotechnology centre, information and consulting services.

As at 31 December 2019 and 2018 and for the years then ended, the summarised financial information of Technopark was as follows:

In million of Russian Roubles	**2019**	**2018**
Non-current assets	1,518	1,537
Current assets	2,545	2,420
Non-current liabilities	(63)	(69)
Current liabilities	(25)	(23)
Revenue	341	311
Profit	110	35
Total comprehensive income	**110**	**35**

8 Other Debt Instruments

The structure of other debt instruments is detailed below:

In million of Russian Roubles	**Note**	**31 December 2019**	**31 December 2018**
Current assets			
Deposits	8.2	4,009	13,681
Debt securities	8.1	1,475	5,188
Total other debt instruments		**5,484**	**18,869**

8.1 Debt securities

The portfolio structure of debt securities that the Group intends to hold until maturity or offer is presented in the table below.

In million of Russian Roubles	**Issuer Rating**	**Currency**	**31 December 2019**	**31 December 2018**
Neither past due nor impaired				
Debt securities	Baa3**	RUB	389	557
Debt securities	BB+***	USD	-	428
Debt securities	Baa3**	USD	-	413
Debt securities	BB***	USD	335	373
Debt securities	Baa2**	USD	-	359
Debt securities	Baa3**	USD	302	338
Debt securities	BB-***	RUB	-	316
Debt securities	BBB-*	USD	-	306
Debt securities	BB+*	USD	-	284
Debt securities	BBB-***	RUB	-	265
Debt securities	Baa3**	USD	237	264
Debt securities	BBB-*	USD	212	235
Debt securities	Ba1**	USD	-	217
Debt securities	Baa3**	USD	-	210
Debt securities	BB***	USD	-	167
Debt securities	BBB-*	RUB	-	156
Debt securities	Baa2**	USD	-	115
Debt securities	BB+***	USD	-	113
Debt securities	Baa2**	USD	-	72
Total debt securities			**1,475**	**5,188**

* - Fitch
** - Moody's
*** - Standard&Poor's

8 Other Debt Instruments (continued)

8.1 Debt securities (continued)

The actual annual interest rates for debt securities are similar to their yield rates at acquisition. As at 31 December 2019 the actual annual interest rates amount to 8.5% for debt securities nominated in Russian Roubles (as at 31 December 2018: 7.3%-8.5). As at 31 December 2019 the actual annual interest rates for debt securities nominated in other currencies amount to 4.3%-6.3% (31 December 2018: 3.8%-6.3%). The maturity or offer time frame at acquisition for debt securities is below 12 months.

As at 31 December 2019 and 2018 the carrying value of debt securities approximates their fair value.

8.2 Deposits

The portfolio structure of deposits is presented in the table below.

In million of Russian Roubles	**Counterparty rating**	**Currency**	**31 December 2019**	**31 December 2018**
Neither past due nor impaired				
Deposits	BBB*	RUB	3,996	5,666
Deposits	Ba3**	RUB	-	4,002
Deposits	BB-***	RUB	-	4,001
Deposits	BBB*	RUB	13	12
Total deposits			**4,009**	**13,681**

* - Fitch's;
** - Moody's;
***- Standard&Poor's.

The actual annual interest rates for deposits are similar to their contractual rates. As at 31 December 2019 the actual annual interest rates amount to 3.7%-6.6% for deposits nominated in Russian Roubles (31 December 2018: 5.0%-7.8%). As at 31 December 2019 the actual annual interest rate amount to 1.7% for deposits nominated in other currencies. As at 31 December 2018 there were no deposits nominated in other currencies.

As at 31 December 2019 and 2018 the carrying value of deposits approximates their fair value.

9 Property, Plant and Equipment

Movements in the carrying amount of property, plant and equipment were as follows:

In million of Russian Roubles	Building	Computer and office equipment	Other	Total
Cost as at 1 January 2018	3,256	2,742	1	5,999
Accumulated depreciation as at 1 January 2018	(780)	(2,520)	-	(3,300)
Carrying amount as at 1 January 2018	**2,476**	**222**	**1**	**2,699**
Additions	-	31	-	31
Disposals at cost	-	(88)	-	(88)
Depreciation charge	(109)	(82)	-	(191)
Depreciation on disposal	-	76	-	76
Carrying amount as at 31 December 2018	**2,367**	**159**	**1**	**2,527**
Cost as at 31 December 2018	3,256	2,685	1	5,942
Accumulated depreciation as at 31 December 2018	(889)	(2,526)	-	(3,415)
Carrying amount as at 31 December 2018	**2,367**	**159**	**1**	**2,527**
Additions	-	178	-	178
Disposals at cost	-	(84)	-	(84)
Depreciation charge	(109)	(85)	(1)	(194)
Depreciation on disposal	-	15	-	15
Carrying amount as at 31 December 2019	**2,258**	**183**	**-**	**2,442**
Cost as at 31 December 2019	3,256	2,779	-	6,035
Accumulated depreciation as at 31 December 2019	(998)	(2,596)	-	(3,594)
Carrying amount as at 31 December 2019	**2,258**	**182**	**-**	**2,442**

10 Receivables and Prepayments

In million of Russian Roubles	31 December 2019	31 December 2018
Receivables	239	643
Total financial assets within receivables	**239**	**643**
Prepayments	56	43
Total receivables and prepayments	**295**	**686**
Less non-current portion	(3)	(2)
Total receivables and prepayments – current portion	**292**	**684**

As at 31 December 2019 and 2018, the carrying value of each class of short-term financial assets with regard to receivables and prepayments approximates their fair values. During the reporting period, the Group recognized allowance for impairment of receivables in the amount of RUB 28 million (2018: allowance for impairment of receivables in the amount RUB 33 million) (Note 17).

11 Cash and Cash Equivalents

In million of Russian Roubles	31 December 2019	31 December 2018
Cash at bank	244	253
Cash at broker	-	826
Other cash	2,000	-
Total cash and cash equivalents	**2,244**	**1,079**

11 Cash and Cash Equivalents (continued)

The following table presents cash at bank by currencies:

In million of Russian Roubles	31 December 2019	31 December 2018
USD	119	220
EUR	90	28
RUB	35	4
Other	-	1
Total cash at bank	**244**	**253**

The credit quality of cash at bank may be summarised with regard to Fitch's / Moody's ratings as follows:

In million of Russian Roubles	31 December 2019	31 December 2018
Neither past due nor impaired		
- BBB- to BBB+ * / Aaa to A ** rated	177	187
- BB- to BB+ * / Baa ** rated	16	18
- B- to B+ * / Ba	1	1
- Unrated	50	47
Total cash at bank	**244**	**253**

* - Fitch's
** - Moody's

12 Equity

Share capital

As at 31 December 2019, the share capital of the Company comprises 53,741,700,000 ordinary shares of RUB 1 each (as at 31 December 2018: 53,741,700,000 ordinary shares of RUB 1 each). All these shares were authorized and fully paid at par value.

Paid-in capital

Paid-in capital include contributions of shareholders to equity before the related shares are authorized within share capital.

During the year ended 31 December 2019 shareholder contributed RUB 2,000 million to the Company equity. 2,000,000,000 of ordinary shares with par value of 1 RUB each were issued for shareholder in January 2020 (Note 24). As at the date these consolidated financial statements were authorized for issue this share issue was not registered.

Distributions

During the year ended 31 December 2019 the Company declared and paid dividends in the amount of RUB 550 million. Dividend per share amounted to RUB 0.01.During the year ended 31 December 2018 the Company declared and paid dividends in the amount of RUB 537 million. Dividend per share amounted to RUB 0.01.

Additional paid-in capital

Additional paid-in capital include financing under the state guarantees that meet definition of equity. In 2019 and 2018 subject to credit agreements, certain borrowings received under the state guarantees were recognised in equity.

Component of financing under the state guarantees that relates to returns on additional-paid-in-capital and does not meet definition of equity is recognised as financial liabilities (Note 13).

Currency translation reserve

The Group's consolidated financial statements are presented in Russian Roubles. Currency translation reserve is used to record exchange differences arising from the translation of the financial statements of subsidiaries with functional currency other than Russian Roubles into presentation currency.

Additional information upon management of capital is presented in Note 22.

13 Borrowings

In million of Russian Roubles	**Currency**	**Effective annual interest rate**	**Due**	**31 December 2019**	**31 December 2018**
Bonds (Series 04-05)	RUB	Consumer price index-100%+2.5%	2019	-	20,251
Bonds (Series 06-07)	RUB	12.5, 12.75%	2022	18,267	18,259
Bonds (Series БО-П01) – unsecured	RUB	Key rate of the Russian Central Bank +2.5%	2023	10,002	10,006
Bonds (Series БО-002Р-01) – unsecured	RUB	9.1%	2021	16,632	-
Bank loans	RUB	7.64%	2020	1,173	-
Bank credits		Key rate of the Russian Central Bank +1.5%-3%	2019	-	625
Other borrowings				1,200	-
Total borrowings				**47,274**	**49,141**
Less					
Current portion of long-term borrowings				**(1,649)**	**(21,142)**
Total long-term borrowings				**45,625**	**27,999**

The effective interest rate is the market interest rate applicable to the loan at the date of origin for fixed rate loans and the current market rate for floating rate loans. The carrying value of borrowings approximates their fair values.

Changes in borrowings for the year ended 31 December 2019 and 2018 are presented in the table below.

In million of Russian Roubles	**Year ended 31 December 2019**	**Year ended 31 December 2018**
Borrowings as at 1 January	**49,141**	**40,386**
Changes from financing cash flows		
Proceeds from of loans and borrowings	18,791	10,000
Proceeds from of additional paid-in capital	23,724	18,636
Repayment of loans and borrowings	(20,625)	(1,250)
Interest paid	(4,026)	(3,411)
Total changes from financing cash flows	**17,864**	**23,975**
Other changes		
Recognition of additional paid-in capital	(23,724)	(18,636)
Finance cost	3,993	3,416
Total other changes	**(19,731)**	**(15,220)**
Borrowings as at 31 December	**47,274**	**49,141**

Bonds and bank credits other than stated as unsecured are secured by the guarantees issued by the Government of the Russian Federation in respect of bondholders and creditors.

Bank loans are secured by financial assets at fair value through profit or loss in the amount of RUB 7,658 million as at 31 December 2019.

Financing under the state guarantees that meet definition of equity is recognised within additional paid-in capital (Note 12).

Component of financing under the state guarantees that relates to returns on additional-paid-in-capital and does not meet definition of equity is recognised as financial liabilities.

Liabilities on returns on additional paid-in capital as at 31 December 2019 have effective annual interest rates 9%-12% (31 December 2018: 9%-12%) and maturity in 2019-2028 (31 December 2018: 2019-2027).

13 Borrowings (continued)

Changes in liabilities on returns on additional-paid-in-capital for the year ended 31 December 2019 and 2018 are presented in the table below.

In million of Russian Roubles	Year ended 31 December 2019	Year ended 31 December 2018
Liabilities on returns on additional-paid-in-capital as at 1 January	**33,132**	**30,656**
Changes from financing cash flows		
Recognition of liabilities on returns on additional paid-in capital	12,307	8,370
Returns on additional paid-in capital	(7,896)	(5,894)
Interest paid	(1,687)	(2,609)
Total changes from financing cash flows	**2,724**	**(133)**
Other changes		
Finance cost	1,687	2,609
Other	1,197	-
Total other changes	**2,884**	**2,609**
Liabilities on returns on additional-paid-in-capital as at 31 December	**38,740**	**33,132**

Guarantees and warranties issued

In certain cases the Group can issue guaranties or warranties upon liabilities of portfolio companies and funds.

Guarantees and warranties issued as at 31 December 2019 and 2018 are presented in the table below.

In million of Russian Roubles	31 December 2019	31 December 2018
Guarantees issued	-	6,695
Warranties issued	-	-
Total	**-**	**6,695**

14 Payables and Accrued Expenses

In million of Russian Roubles	31 December 2019	31 December 2018
Accrued liabilities and other creditors	496	2,237
Payables to suppliers	24	64
Total financial liabilities within other payables and accrued expenses	**520**	**2,301**
Accrued employee benefit costs	651	848
Other taxes payable	200	174
Total payables and accrued expenses	**1,371**	**3,323**

The carrying values of each class of financial liabilities within other payables and accrued expenses approximates their fair values.

15 Net Financial Performance of Financial Assets at Fair Value Through Profit or Loss

In million of Russian Roubles	Note	For the year ended 31 December 2019	For the year ended 31 December 2018
Change in fair value of equity instruments	23	(8,314)	7,796
Change in fair value of equity investments with embedded options	23	1,811	1,145
Change in fair value of debt instruments	23	1,433	6 009
Change in fair value of financial assets held for trading	23	-	(96)
Net gain on financial assets at fair value through profit or loss		**(5,070)**	**14,854**

For the year ended 31 December 2019 changes in the fair value of debt instruments attributable to change in credit risk amounted to RUB (187) million (year ended 31 December 2018: RUB 2,766 million).

Interest income on debt financial instruments designated at fair value through profit or loss included in change in fair value of debt instruments amounted to RUB 3,601 million (year ended 31 December 2018: RUB 3,814 million).

16 Interest Income

Interest income on financial assets other than carried at fair value through profit or loss consists of the following:

In million of Russian Roubles	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
Interest income on deposits	433	281
Interest income on debt securities	175	496
Interest income on cash and cash equivalents	-	3
Total interest income	**608**	**780**

17 Operating Expenses

In million of Russian Roubles	**Note**	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
Personnel expense		2,763	2,588
Taxes, other than income tax		836	623
Legal services		306	254
Consulting services		300	324
Depreciation	9	194	191
Security		183	164
Office maintenance		160	169
Car rent		98	81
Business trips and entertainment		83	77
Equipment support and telecommunication		61	35
Project expertise		61	35
Amortisation		53	33
Allowance for impairment of other receivables		28	33
Advertising		23	11
Provisions		-	407
Other expenses		295	384
Total operating expenses		**5,444**	**5,409**

Personnel expense for the year ended 31 December 2019 includes social security contributions for the Group employees of RUB 405 million (year ended 31 December 2018: RUB 290 million).

18 Income Taxes

Income tax expense recorded in the consolidated statement of profit or loss comprises the following:

In million of Russian Roubles	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
Current income tax expense	828	47
Deferred tax expense	172	35
Income tax expense for the year	**1,000**	**82**

The income tax rate applicable to the majority of the Group's 2019 activities is 20% (2018: 20%). Reconciliation between the expected and the actual taxation charge is provided below:

In million of Russian Roubles	**For the year ended 31 December 2019**	**For the year ended 31 December 2018**
(Loss)/profit before tax	**(15,507)**	**5,718**
Theoretical tax credit at the statutory rate of 20%	(3,101)	1,144
Tax effect of items which are not deductible or assessable for taxation purposes:		
- Other non-deductible expenses	722	-
- Other non-assessable incomes	(80)	(564)
Changes of unrecognised deferred tax asset	3,459	(498)
Income tax expense for the year	**1,000**	**82**

18 Income Taxes (continued)

Differences between the IFRS and taxation regulations give rise to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their tax bases.

Temporary differences recorded relate primarily to differences between IFRS and tax regulations within Russian Federation. The tax effect of the movements in these temporary differences is detailed below and is recorded at the rate of 20% (2018: 20%).

In million of Russian Roubles	**1 January 2019**	**Recognized in profit or loss**	**Recognized in equity**	**31 December 2019**
Tax effect of deductible/ (taxable) temporary differences				
Fair value adjustments to debt instruments	4,114	134	-	4,248
Fair value adjustments to equity instruments	1,061	329	-	1,390
Other payables and accrued expenses	254	(129)	-	125
Liabilities on returns on additional paid-in capital	6,509	(1,393)	2,632	7,748
Tax loss carried forward	10,867	4,346	-	15,213
Unrecognized deferred tax asset	(15,984)	(3,459)	(2,632)	(22,075)
Net recognized deferred tax asset/(liability)	**6,821**	**(172)**	**-**	**6 649**

In million of Russian Roubles	**1 January 2018**	**Recognized in profit or loss**	**Recognized in equity**	**31 December 2018**
Tax effect of deductible/ (taxable) temporary differences				
Fair value adjustments to debt instruments	3,674	440	-	4,114
Fair value adjustments to equity instruments	2,225	(1,164)	-	1,061
Other payables and accrued expenses	290	(36)	-	254
Liabilities on returns on additional paid-in capital	5,969	(1,133)	1,673	6,509
Tax loss carried forward	9,507	1,360	-	10,867
Unrecognized deferred tax asset	(14,809)	498	(1,673)	(15,984)
Net recognized deferred tax asset/(liability)	**6,856**	**(35)**	**-**	**6,821**

As at 31 December 2019 the Group estimated its future taxable profit against which deductible temporary differences and tax loss carried forward can be utilized and recognized recoverable deferred tax asset in the amount of RUB 7,206 million in the consolidated financial statements. As at 31 December 2018 the recoverable deferred tax asset was estimated in the amount of RUB 7,038 million.

Unrecognized deferred tax assets as at 31 December 2019 include those related to tax loss carried forward in the amount of RUB 15,892 million (31 December 2018: RUB 10,867 million).

19 Contingencies and Commitments

Legal proceedings. From time to time and in the normal course of business, claims against the Group may be received. On the basis of its own estimates and both internal and external professional advice, management believes that no material losses will be incurred in respect of claims; accordingly, no provisions have been made in these consolidated financial statements.

Tax legislation. The Group follows the provisions of the Russian tax legislation, clarifications of the controlling authorities and court practice while performing its business activities. If any difficult questions arise in the sphere of taxation or in case of planning non-typical transactions, the Group’s management requests specific clarifications of the controlling authorities in order to officially confirm its position regarding interpretation of the particular provisions of the Russian tax legislation.

Recently the tax legislation was updated by provisions related to additional control of activities of Russian and international groups of companies, including controlled foreign companies rules and transfer pricing rules.

Capital and rent commitments. As at 31 December 2019 and 2018, the Group has no material contractual capital expenditure or rent commitments.

20 Principal Subsidiaries

The principal consolidated subsidiaries of the Company as at 31 December 2019 and 2018:

Name	Country of registration	Primary activities	Percentage of ownership 31 December 2019	Percentage of ownership 31 December 2018
Management Company RUSNANO LLC	Russian Federation	Management company	99%	99%
RUSNANO Capital AG in Liquidation	Switzerland	Investment activities	100%	100%
Fonds Rusnano Capital S.A.	Luxembourg	Investment activities	100%	100%
RNI LLC	Russian Federation	Investment activities	100%	100%

The percentage of voting rights in the equity of the subsidiaries in which the Company holds is the same as its percentage of ownership as at 31 December 2019 and 2018.

As at 31 December 2019 the following subsidiaries were not consolidated and were accounted as financial assets at fair value through profit or loss:

	Country of incorporation	% of ownership
Placart JSC	Russia	100%
Profotech JSC	Russia	100%
PHK JSC	Russia	52%
RM Nanotech JSC	Russia	75%
ELVIS Neo-Tech JSC	Russia	59%
Akrilan LLC	Russia	70%
Hematology Corporation LLC	Russia	81%
Crocus Nanoelectronics LLC	Russia	79%
LED-Energoservis LLC	Russia	100%
Liteko LLC	Russia	100%
MAPPER LLC	Russia	100%
Neophotonics Corporation LLC	Russia	99%
New Rosana LLC	Russia	100%
Novye Technologii Stroitelstva LLC	Russia	100%
Plastic Logic LLC	Russia	100%
RusnanoMedInvest LLC	Russia	100%
RU-VEM LLC	Russia	84%
Rusalox LLC	Russia	100%
SIGMA.Novosibirsk LLC	Russia	83%
SIGMA.Tomsk LLC	Russia	90%
TAT-Advenira LLC	Russia	100%
Technology Transfer Center LLC	Russia	75%
Thermoelectric Innovative Technologies LLC	Russia	80%
Energy Solutions LLC	Russia	86%
ESTO-Vacuum LLC	Russia	59%
Advenira Enterprises, Inc.	USA	61%
FlexEnable Limited	UK	89%

20 Principal Subsidiaries (continued)

As at 31 December 2018 the following subsidiaries were not consolidated and accounted at fair value through profit or loss:

	Country of incorporation	% of ownership
Placart JSC	Russia	51%
Plastic Logic JSC	Russia	100%
Profotech JSC	Russia	100%
PHK JSC	Russia	52%
RM Nanotech JSC	Russia	75%
ELVIS Neo-Tech JSC	Russia	59%
Akrilan LLC	Russia	70%
Hematology Corporation LLC	Russia	81%
Crocus Nanoelectronics LLC	Russia	79%
LED-Energoservis LLC	Russia	100%
Liteko LLC	Russia	100%
MAPPER LLC	Russia	100%
New Rosana LLC	Russia	100%
Novye Technologii Stroitelstva LLC	Russia	100%
Otritech LLC	Russia	53%
RusnanoMedInvest LLC	Russia	100%
RU-VEM LLC	Russia	84%
Rusalox LLC	Russia	100%
SIGMA.Novosibirsk LLC	Russia	83%
SIGMA.Tomsk LLC	Russia	90%
TAT-Advenira LLC	Russia	100%
Technology Transfer Center LLC	Russia	75%
Energy Solutions LLC	Russia	86%
ESTO-Vacuum LLC	Russia	59%
Advenira Enterprises, Inc.	USA	61%
Compass Networks LTD	Israel	73%
FlexEnable Limited	UK	93%

21 Financial Risk Management

The Group's risk management relates to financial, operating and legal risks. Financial risks comprise market risks (including currency, interest and other price risks), credit risks and liquidity risks. The primary objectives of the risk management function are to establish risk limits, and then ensure that exposure to risks stays within these limits. The operational and legal risk management functions are intended to ensure the proper application of internal policies and procedures to minimise operational and legal risks. The Group uses financial instruments to moderate certain risk exposures.

Credit risk. The Group assumes exposure to credit risk which is the risk that one party will cause a financial loss for the other party by failing to discharge an obligation.

The Group's maximum exposure to credit risk is summarised in the table below. It does not include any collateral or other credit risk enhancements, which reduce the Group's exposure.

In million of Russian Roubles	Note	31 December 2019	31 December 2018
Equity instruments with embedded options	6	17,081	18,921
Debt instruments at fair value through profit or loss	6	24,193	23,256
Other debt instruments	8	5,484	18,869
Financial assets within receivables	10	295	643
Cash and cash equivalents	11	2,244	1,079
Total maximum exposure to credit risk		**49,297**	**62,768**

The Group invests temporarily available funds in debt securities and places them within financial institutions in accordance with its financial policies.

21 Financial Risk Management (continued)

Credit risk (continued)

For investments of temporarily available funds the Group selects debt securities of Russian Federation, Russian Federation regions and Russian companies of non-financial sector quoted within organized financial markets and meeting certain criteria. The issuer should usually have long-term solvency ratings by Fitch Ratings, Standard & Poor's or Moody's Investors Service not less than national rating of Russian Federation decreased by 2 stages or above. Also debt securities should meet certain requirements upon yield and maturity or offer. Management performs regular monitoring of acquired debt securities market quotes and their issuers ratings.

For investments of temporarily available funds the Group selects financial institutions meeting certain criteria. The financial institution usually should have long-term solvency ratings assigned by at least two international or national rating agencies with at least one assigned by international rating agency. The long-term solvency ratings usually should meet the following criteria: if rated by Fitch Ratings, Standard & Poor's and Moody's Investors Service – not less than national rating of Russian Federation decreased by 4 stages or above; if rated by National Rating Agency – AAA or above; if rated by Rating Agency Analysis, Consulting and Marketing – A++ or above; if rated Rus-Rating – A- or above and if rated by Rating Agency Expert RA – A++ or above. Also financial institutions should meet certain requirements upon availability of own funds (equity) (usually in the amount of at least RUB 40,000 million determined under the methodology approved by the Central Bank of Russia as of the most recent end of the reporting period), share of borrowings to legal entities and entrepreneurs and share of problem assets. Management performs regular monitoring of the financial results and ratings of financial institutions where temporarily available cash is invested.

The Group provides financial resources to portfolio companies primarily by means of equity and/or debt instruments. Those instruments include loans receivable and equity investments with embedded derivatives, where the risks and rewards of equity ownership were not substantially transferred to the Group. Generally, the Group provides financial resources only if it has an equity investment in a portfolio company to facilitate influence over implementation of the project. It is preferable to grant the loan in tranches according to approved milestones.

The Group makes the decision to participate in a project after assessing the portfolio company's financial position and business plan at the preliminary examination phase for each investment project. Within examination phase the Group classifies key risks of the portfolio company (including management team competencies risk, market risk, technology risk, investment risk, financial risk, legal risk and other risks) as high, medium or low upon probability and potential negative effect on fair value of the investment.

Overall risk of project with three or more high risks is defined as high, overall risk of project with one or two high risks or three or more medium risks is defined as medium and overall risk of project without high risks and with two or less medium risks is defined as low. As a result, all projects are classified by risk groups. Interest rates depend on the risk of a project and the security provided.

Combination of debt instruments by risk groups as at reporting dates were as follows:

In million of Russian Roubles	**31 December 2019**	**31 December 2018**
Low	-	-
Medium	301	108
High	23,892	23,148
Total debt instruments	**24,193**	**23,256**

The Group accepts pledged property, such as production equipment, shares and intangible assets, as collateral only if its market value is assessed by an independent appraiser approved by JSC RUSNANO.

Management assesses the risk of default and incorporates it in the assessment of the overall fair value of the investment.

21 Financial Risk Management (continued)

Credit risk (continued)

The table below represent the carrying value of the collateralized financial assets.

In million of Russian Roubles	31 December 2019	31 December 2018
Collateralised assets:		
Equity instruments with embedded options	66	282
Debt instruments	5,997	5,403
Total collateralised assets	**6,063**	**5,685**
Unsecured exposures:		
Equity instruments with embedded options	17,015	18,639
Debt instruments	18,196	17,853
Total unsecured exposures	**35,211**	**36,492**
Total debt instruments and equity instruments with embedded options	**41,274**	**42,177**

The financial effect of collateral is presented by disclosing collateral values separately for (i) those assets where collateral and other credit enhancements are equal to or exceed carrying value of the asset ("over-collateralised assets") and (ii) those assets where collateral and other credit enhancements are less than the carrying value of the asset ("under-collateralised assets").

	Over-collateralised assets		Under-collateralised assets	
In million of Russian Roubles	Carrying value of the assets	Fair value of collateral	Carrying value of the assets	Fair value of collateral
As at 31 December 2019				
Equity instruments with embedded options	-	-	17,081	66
Debt instruments	3,891	8,557	20,302	2,106
Total as at 31 December 2019	**3,891**	**8,557**	**37,383**	**2,172**
As at 31 December 2018				
Equity instruments with embedded options	215	257	18,706	66
Debt instruments	3,298	8,319	19,958	2,106
Total as at 31 December 2018	**3,513**	**8,576**	**38,664**	**2,172**

Credit risk concentration. As at 31 December 2019 the Group keeps debt securities of 5 issuers (31 December 2018: 19). As at 31 December 2019 the Group keeps cash and cash equivalents at 13 banks (31 December 2018: 13 banks) and deposits at 2 financial institutions (31 December 2018: 4 financial institutions). The financial instruments of the Group at fair value through profit or loss exposed to credit risk relates to 26 portfolio investments (31 December 2018: 28 portfolio investments).

Market risk. The Group assumes exposure to market risks. Market risks arise from open positions in the interest rate, currency and equity investments, all of which are exposed to general and specific market movements. Management sets limits on the value of risk that may be accepted. However, the use of this approach does not prevent losses outside the limits in the event of more significant market movements.

Sensitivity to market risks described below is based on a change in one factor, while other factors remain unchanged. In practice, this is unlikely and changes in factors can be interdependent, e.g., simultaneous changes in the interest rates and foreign exchange rates.

Currency risk. The Group's assets and liabilities are denominated in currencies other than the functional currencies of certain Group's entities and therefore the Group is exposed to the currency risk. This risk arises primarily in respect to the assets and liabilities nominated in the US dollar and to the Euro. Management analyses currency position of the Group on a regular basis.

21 Financial Risk Management (continued)

Currency risk (continued)

The table below summarises the Group's exposure to the foreign currency exchange rate risk at the end of the reporting period:

In million of Russian Roubles	**31 December 2019** EUR-denominated	USD-denominated	CHF-denominated	**31 December 2018** EUR-denominated	USD-denominated	CHF-denominated
Assets	433	2,605	1	1,040	4,162	2
Liabilities	(376)	(55)	(1)	(411)	(95)	(1)
Net exposure	**57**	**2,550**	**-**	**629**	**4,067**	**1**

The following table presents sensitivities of comprehensive income and equity to reasonably possible changes in the exchange rates applied at the end of the reporting period relative to the functional currency of the respective Group entities, with all other variables being constant:

	31 December 2019			**31 December 2018**		
	Reasonably possible change in exchange rates (%)	**Impact on comprehensive income and equity**		**Reasonably possible change in exchange rates (%)**	**Impact on comprehensive income and equity**	
In million of Russian Roubles		**Increase**	**(Decrease)**		**Increase**	**(Decrease)**
EUR	1,0	1	(1)	1,0	6	(6)
USD	4,0	102	(102)	4,0	163	(163)
CHF	1,0	-	-	1,0	-	-
Total for assets denominated in foreign currencies		**103**	**(103)**		**169**	**(169)**

Interest rate risk. The Group assumes exposure to the effects of fluctuations in the prevailing levels of the market interest rates on its financial position and cash flows. The majority of the Group's financial assets are at fixed interest rates. The interest risk is secondary to the credit risk and business risks in the field of nanotechnology. However on a regular basis management monitors financial markets for the purpose of identification of unfavourable trends in changes of interest rates and where feasible, is prepared to take measures relating to decrease of exposure to interest rate risk (optimisation of portfolio structure, expansion in the number of partner banks, entering into forward and option contacts, etc.).

The Group is exposed to the interest rate risk through debt instruments, cash at a bank, deposits, options embedded in investment contracts and borrowings (including borrowings accounted within additional paid-in capital). The Group may also be indirectly affected by the interest rate changes through their impact on the earnings of certain investees. Therefore, the sensitivity analysis of the interest risk given below may not indicate the total effect on the Group's profit and equity.

As at 31 December 2019 and 2018 the Group has significant amount of borrowings with variable interest rates (Note 13) that results in direct exposure to interest rate risk. The maturity analysis of the Group liabilities is shown below in liquidity risk.

Financial instruments of the Group include equity investments with embedded options which are valued similarly as fixed income securities according to the conditions of the option agreements. If at the end of the reporting period these instruments are evaluated using options as a fair value driver in the option valuation model, they are primarily sensitive to changes in the discount rates used in this valuation model. If at the end of the reporting period equity investments with embedded options are evaluated using discounted cash flows as a fair value driver in the valuation model, they are primarily sensitive to equity price risk, and the sensitivity analysis for changes in discount rates used in this valuation model is shown below in equity price risk.

21 Financial Risk Management (continued)

Interest rate risk (continued)

The following table demonstrates the sensitivity of the Group's comprehensive income for the year and equity as at 31 December 2019 and 31 December 2018 to a reasonably possible change in interest rates with all other variables held constant.

	31 December 2019			31 December 2018		
	Reasonably possible change in interest rates (%)	Impact on comprehensive income and equity		Reasonably possible change in interest rates (%)	Impact on comprehensive income and equity	
In million of Russian Roubles		Increase	(Decrease)		Increase	(Decrease)
Equity investments with embedded options	+3 / -3	(556)	635	+3 / -3	(935)	1,130
Debt instruments	+3 / -3	(1,231)	1,273	+3 / -3	(1,533)	1,650
Borrowings	+3 / -3	(660)	660	+3 / -3	(656)	656
Total		**(2,447)**	**2,568**		**(3,124)**	**3,436**

Equity price risk. The Group's investments in portfolio companies and investment funds are exposed to equity price risk arising from uncertainties about the future values of the equity instruments. Investments in new projects commences only after the approval of the Management Board of Management Company Rusnano LLC upon recommendations of investment teams after completing scientific, technical and financial reviews. In certain cases further approval of the Board of Directors of the Company is required.

For the purpose of managing the price risk, investment managers carry out permanent monitoring of the portfolio companies' activities and are regularly in contact with management of the portfolio companies on business and operational matters. The Group is developing an internal control system to better monitor the performance of investments on a regular basis.

As at 31 December 2019 the fair value of investments exposed to equity price risk was RUB 106,418 million, (31 December 2018: RUB 111,092 million), the fair value of equity investments with embedded options exposed to equity price risk was RUB 17,081 million (31 December 2018: RUB 18,981 million) but the exposure was limited by the embedded options. Should the market values of these equity instruments, which are not traded in the active market, increase or decrease due to reasonably possible changes in market conditions by 3%, the comprehensive income for the year and equity would increase by RUB 2,949 million or decrease by RUB 2,056 million (2018: reasonably possible changes in market conditions by 3%, the comprehensive income for the year and equity would increase by RUB 4,492 million or decrease by RUB 3,368 million). The estimate of this sensitivity is based on a reasonably possible changes in the discount rate.

Analysis of Group's portfolio to risk exposure presented in table below:

	Risk level as at 31 December 2019			
In million of Russian Roubles	Low	Medium	High	Total
Equity investments				
Fair value	8,331	36,653	61,434	106,418
Equity investments with embedded options				
Fair value	-	8,739	8,342	17,081
Total equity investments	**8,331**	**45,392**	**69,476**	**123,499**

	Risk level as at 31 December 2018			
In million of Russian Roubles	Low	Medium	High	Total
Equity investments				
Fair value	11,164	34,201	65,727	111,092
Equity investments with embedded options				
Fair value	-	16,338	2,583	18,921
Total equity investments	**11,164**	**50,539**	**68,310**	**130,013**

21 Financial Risk Management (continued)

Liquidity risk. The liquidity risk is the risk that the Group may not be able to generate sufficient cash resources to settle its obligations and commitments in full as they fall due, or can only do so on terms that are materially disadvantageous. The Group is exposed to daily calls on its available cash resources.

Investments are made from shareholder's contributions and retained earnings of the Group and borrowings secured by the guarantees issued by the Government of the Russian Federation. The majority of investments in financial assets are presented by debt and equity instruments that are not traded in any organised market and may not be liquidated quickly.

The Group periodically invests temporary available cash in short-term deposits and marketable securities which, under normal market conditions, are readily convertible into cash. Management monitors a rolling forecast of cash and cash equivalents and deposits on the basis of the budgeted cash flows to manage the liquidity position of the Group. Management considers the liquidity position to ensure that the Group has sufficient cash to meet operational needs and capital commitments when they fall due. The liquidity portfolio of the Group comprises cash and cash equivalents, debt securities and deposits.

As at 31 December 2019 the Group had available unused credit line in the amount of RUB 1,314 million (31 December 2018: RUB 13,319 million).

The tables below describe financial assets held for liquidity risk management and financial liabilities as at 31 December 2019 and as at 31 December 2018 analysed by maturity date. Liability amounts by maturity date as disclosed below represent contractual and expected liabilities including expected financing commitments. Expected equity financing also includes expected investments in equity instruments of investment funds.

In million of Russian Roubles	**Note**	**Up to 6 months**	**From 6 to 12 months**	**More than 1 year**	**More than 5 years**	**Total**
31 December 2019						
Other debt instruments	8	4,009	1,475	-	-	5,484
Cash and cash equivalents	11	2,244	-	-	-	2,244
Total financial assets used for liquidity risk management by maturity as at 31 December 2019		**6,253**	**1,475**			**7,728**
Other financial assets						147,931
Total financial assets as at 31 December 2019						**155,659**
Borrowings	13	(2,234)	(3,496)	(8,969)	(46,241)	(60,940)
Payables and accrued expenses	14	(520)	-	-	-	(520)
Expected equity financing		(2,394)	(1,944)	(2,400)	(846)	(7,584)
Expected debt financing		(269)	-	-	-	(269)
Liabilities on returns on additional paid-in capital		(4,340)	(4,392)	(8,648)	(35,622)	(53,002)
Total future payments of financial liabilities as at 31 December 2019		**(9,757)**	**(9,832)**	**(20,017)**	**(82,709)**	**(122,315)**

21 Financial Risk Management (continued)

Liquidity risk (continued)

In million of Russian Roubles	**Note**	**Up to 6 months**	**From 6 to 12 months**	**More than 1 year**	**More than 5 years**	**Total**
31 December 2018						
Other debt instruments	8	13,681	5,188	-	-	18,869
Cash and cash equivalents	11	1,079	-	-	-	1,079
Total financial assets used for liquidity risk management by maturity as at 31 December 2018		**14,760**	**5,188**	**-**	**-**	**19,948**
Other financial assets						153,912
Total financial assets as at 31 December 2018						**173,860**
Borrowings	13	(22,847)	(1,657)	(38,587)	-	(63,091)
Payables and accrued expenses	14	(2,301)	-	-	-	(2,301)
Expected equity financing		(2,685)	(8,867)	(4,346)	(4,186)	(20,084)
Expected debt financing		(2,723)	-	(347)	-	(3,070)
Liabilities on returns on additional paid-in capital		(4,294)	(4,149)	(7,293)	(29,998)	(45,734)
Total future payments of financial liabilities as at 31 December 2018		**(34,850)**	**(14,673)**	**(50,573)**	**(34,184)**	**(134,280)**

22 Management of Capital

The capital of the Group is represented by equity attributable to its sole shareholder – the Russian Federation (Note 1).

The Group's objective when managing capital is to safeguard the Group's ability to continue as a going concern in order to implement the policy of the Russian Federation in respect of nanotechnology and maintain and enhance an optimal capital base to support the development of nanoindustry in Russia and the Group's investment activities.

The Group has no corporate law capital requirements except for set minimum share capital requirements. Its financial policy is aimed at maximising equity while securing liquidity and financial stability.

The amount of capital that the Group managed as at 31 December 2019 was RUB 79,218 million (31 December 2018: RUB 99,514 million).

23 Fair Value of Financial Instruments

Fair value is the price that would be received to sell the financial asset in an orderly transaction between market participants at the measurement date, and is best evidenced by an active quoted market price. For fair value estimation, refer to Note 3 for details.

Financial assets at fair value through profit or loss. All financial assets other than traded on active markets are valued using valuation techniques that require significant inputs which are not observable in the financial markets (Level 3 fair value measurement hierarchy). At initial recognition of financial assets the valuation technique is calibrated to ensure that it reflects current market conditions evidenced by transaction price and other factors to be taken into consideration.

Equity instruments, equity instruments with embedded options and debt instruments as at 31 December 2019 and 31 December 2018 amounting to RUB 147,692 million and RUB 153,269 million, respectively, are designated at fair value through profit or loss at inception and disclosed in Notes 6 and 21.

23 Fair Value of Financial Instruments (continued)

Financial assets at fair value through profit or loss (continued)

No active market exists for most of these financial instruments. If no active market exists the Group's management determined the fair value of financial instruments using valuation models and discounted cash flows. Inputs to these valuation models require judgement considering the factors specific to the future business plans of the underlying portfolio companies, their assets and liabilities and the impact on the fair value measurement in its entirety. The Group's valuation models for equity instruments and equity instruments with embedded options are the present value of the estimated future cash flows based on the discounted cash flows model for portfolio companies. For cash flows on equity instruments the annual discount rates applied as at 31 December 2019 were 12%-19% (31 December 2018: 16%-21%) for growth investments and 30%-45% (31 December 2018: 30%-40%) for venture investments. For cash flows on options the annual discount rates 7%-22% were applied as at 31 December 2019 (31 December 2018: 8%-23%). Fair value of equity instruments in investment funds is usually based on fair value of fund net assets calculated with reference to fund investments fair value. The Group's valuation model for debt instruments is based on the net present value of future cash flows relating to the instrument. Management determined the discount rate for debt instruments, based on comparable debt instruments interest rates, available to companies with a similar risk profile on the Russian market from third party banks. The annual discount rates applied for debt instruments receivable as at 31 December 2019 were 11%-15% (31 December 2018: 11%-15%).

Financial assets held for trading are disclosed in Notes 6 and 21. These financial assets are valued using quoted prices in the active markets for identical assets (Level 1 fair value measurement).

The following table shows the movements of the financial instruments for the year ended 31 December 2019 and 31 December 2018 by the class of financial instruments and the Level of fair value measurement hierarchy:

	Level 1		**Level 3**			**Total**
In million of Russian Roubles	**Financial assets held for trading**	**Equity instruments**	**Equity instruments**	**Equity instruments with embedded options**	**Debt instruments**	
1 January 2018	**4,890**	**6,007**	**96,272**	**12,677**	**23,331**	**143,177**
Investments in equity instruments	-	-	10,223	6,443	-	16,666
Investments in debt instruments	-	-	-	-	794	794
Conversion of debt instruments into equity	-	-	4,592	-	(4,592)	-
Gains/(losses) recognised in profit or loss for the year	(96)	1,278	6,518	1,145	6 009	14,854
Disposals	(734)	(5,100)	(8,266)	(1,776)	(2,286)	(18,162)
Reclassification	-	-	(432)	432	-	-
Other movement	(4,060)	-	-	-	-	(4,060)
31 December 2018	**-**	**2,185**	**108,907**	**18,921**	**23,256**	**153,269**
Investments in equity instruments	-	-	6,484	163	-	6,647
Investments in debt instruments	-	-	-	-	1,223	1,223
Conversion of debt instruments into equity	-	-	373	-	(373)	-
Gains/(losses) recognised in profit or loss for the year	-	(243)	(8 071)	1 811	1 433	(5 070)
Disposals	-	(1,823)	(4,901)	(307)	(1,346)	(8,377)
Reclassification	-	-	3,507	(3,507)	-	-
31 December 2019	**-**	**119**	**106,299**	**17,081**	**24,193**	**147,692**

23 Fair Value of Financial Instruments (continued)

Financial assets at fair value through profit or loss (continued)

For the year ended 31 December 2019 the net gain on financial assets at fair value through profit or loss included unrealised loss on financial instruments valued at the end of reporting period within Level 3 of fair value measurement hierarchy in the amount of RUB 5,084 million (year ended 31 December 2018: gain of RUB 13,750 million).

The sensitivity to valuation assumptions disclosed in Note 21 shows how much the fair value could increase or decrease had management used reasonably possible alternative valuation assumptions that are not based on observable market data.

Other financial assets. The fair value of debt securities is determined in accordance with market quotes – 1 level of fair-value measurement hierarchy (Note 8). The carrying amounts of deposits and cash approximate their fair values (Notes 8, 11). The carrying amounts of each class of financial instruments included in receivables approximate there fair values (Note 10).

Financial liabilities. The carrying amounts of each class of financial instruments included in the borrowings and other payables and accrued expenses approximate fair values. Refer to Notes 4, 13 and 14 for details.

24 Events after the Reporting Period

During the year ended 31 December 2019 shareholder contributed RUB 2,000 million to the Company equity. 2,000,000,000 of ordinary shares with par value of 1 RUB each were issued for shareholder in January 2020 (Note 12). As at the date these consolidated financial statements were authorized for issue this share issue was not registered.

In the first months of 2020 it has been seen significant global market turmoil triggered by the outbreak of the coronavirus. Together with other factors, this has resulted in a sharp decrease in the oil price and the stock market indices, as well as a depreciation of the Russian Rouble. These developments are further increasing the level of uncertainty in the Russian business environment. The Group Management is currently assessing the impact on the consolidated financial statements.