Consolidated Financial Statements

Orano

December 31, 2018

CONSOLIDATED STATEMENT OF INCOME

(in millions of euros)	*Note*	December 31, 2018 (**)	December 31, 2017 (*) (12 months)
REVENUE		**3,623**	**3,848**
Cost of sales		(3,047)	(3,102)
GROSS MARGIN		**576**	**746**
Research and development expenses		(97)	(87)
Marketing and sales expenses		(38)	(52)
General expenses		(103)	(103)
Other operating income	(Note 5)	344	81
Other operating expenses	(Note 5)	(166)	(634)
OPERATING INCOME		**517**	**(48)**
Share in net income of joint ventures and associates	(Note 13)	(10)	(4)
Operating income after share in net income of joint ventures and associates		**506**	**(53)**
Income from cash and cash equivalents		24	16
Gross borrowing costs		(176)	(221)
Net borrowing costs		**(152)**	**(205)**
Other financial income		191	427
Other financial expenses		(1,017)	(472)
Other financial income and expense		**(826)**	**(44)**
NET FINANCIAL INCOME	(Note 7)	**(978)**	**(250)**
Income tax	(Note 8)	(70)	(56)
NET INCOME FROM CONTINUING OPERATIONS		**(542)**	**(358)**
Net income from operations sold or held for sale		-	(2)
NET INCOME FOR THE PERIOD		**(542)**	**(360)**
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT		**(544)**	**(252)**
NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	(Note 20)	**2**	**(108)**

(*) The comparative data for 2017 (12 months) are the combination of the 8- and 4-month accounting periods of the 2017 calendar year, with the exchange rate effects mentioned in Note 36. Pursuant to IFRS 15, they have been restated in relation to the data reported in the 2017 financial statements. The impacts of these restatements are described in Note 35.

(**) Application of IFRS 9 as of January 1, 2018.

Comprehensive income

(in millions of euros)	*Note*	December 31, 2018 (**)	December 31, 2017 (*) (12 months)
Net income		**(542)**	**(360)**
Items not recyclable to the statement of income		**26**	**(8)**
Actuarial gains and losses on employee benefits		18	(7)
Income tax related to non-recyclable items		(0)	(1)
Share in non-recyclable items from joint ventures and associates, net of tax		8	1
Items recyclable to the statement of income		**(96)**	**(34)**
Currency translation adjustments		4	(197)
Change in value of financial assets at fair value through equity		-	(26)
Change in value of cash flow hedges		(138)	264
Income tax related to recyclable items		38	(76)
Share in recyclable items from joint ventures and associates, net of tax		-	-
Total other items of comprehensive income (net of income tax)	(Note 8)	**(70)**	**(42)**
COMPREHENSIVE INCOME		**(613)**	**(401)**
- Attributable to owners of the parent		(604)	(281)
- Attributable to non-controlling interests		(9)	(121)

(*) The comparative data for 2017 (12 months) are the combination of the 8- and 4-month accounting periods of the 2017 calendar year, with the exchange rate effects mentioned in Note 36. Pursuant to IFRS 15, they have been restated in relation to the data reported in the 2017 financial statements. The impacts of these restatements are described in Note 35.
(**) Application of IFRS 9 as of January 1, 2018.

Consolidated statement of financial position

ASSETS	*Note*	**December 31, 2018 (**)**	**December 31, 2017 (*)**	**January 1 2017 (*)**
(in millions of euros)				
NON-CURRENT ASSETS		**17,681**	**17,973**	**17,829**
Goodwill	(Note 9)	1,229	1,193	1,303
Intangible assets	(Note 10)	1,278	1,339	1,601
Property, plant and equipment	(Note 11)	8,120	7,952	8,379
End-of-lifecycle assets (third party share)	(Note 12)	139	153	127
Financial assets earmarked for end-of-lifecycle operations	(Note 12)	6,693	7,112	6,089
Investments in joint ventures and associates	(Note 13)	1	10	17
Other non-current assets	(Note 14)	118	114	135
Deferred tax assets	(Note 8)	104	102	178
CURRENT ASSETS		**4,859**	**5,010**	**4,329**
Inventories and in-process	(Note 15)	1,301	1,258	1,202
Trade accounts receivable and related accounts	(Note 16)	625	690	727
Contract assets	(Note 24)	97	99	92
Other operating receivables	(Note 17)	657	791	661
Other non-operating receivables		48	57	62
Current tax assets	(Note 8)	37	98	127
Other current financial assets	(Note 14)	66	67	2
Cash and cash equivalents	(Note 18)	2,027	1,950	1,434
Assets of operations held for sale		-	-	23
TOTAL ASSETS		**22,540**	**22,983**	**22,158**

(*) Pursuant to IFRS 15, the comparative 2017 data have been restated in relation to the data reported in the 2017 financial statements. The impacts of these restatements are described in Note 35.
(**) Application of IFRS 9 as of January 1, 2018.

SHAREHOLDERS' EQUITY AND LIABILITIES	*Note*	December 31, 2018 (**)	December 31, 2017 (*)	January 1 2017 (*)
(in millions of euros)				
Capital		132	119	53
Consolidated premiums and reserves		1,007	836	(1,251)
Actuarial gains and losses on employee benefits		(138)	(164)	(157)
Unrealized gains (losses) on financial instruments		(10)	305	136
Currency translation reserves		(64)	(79)	112
Equity attributable to owners of the parent		**927**	**1,017**	**(1,107)**
Non-controlling interests	(Note 20)	(204)	(192)	(40)
EQUITY	(Note 19)	**723**	**825**	**(1,147)**
NON-CURRENT LIABILITIES		**12,799**	**13,963**	**14,024**
Employee benefits	(Note 21)	1,088	1,382	1,402
Provisions for end-of-lifecycle operations	(Note 12)	7,881	7,545	7,341
Other non-current provisions	(Note 22)	279	270	254
Share in negative net equity of joint ventures and associates	(Note 13)	45	57	63
Long-term borrowings	(Note 23)	3,494	4,676	4,851
Deferred tax liabilities	(Note 8)	13	33	113
CURRENT LIABILITIES		**9,017**	**8,195**	**9,281**
Current provisions	(Note 22)	1,933	1,716	1,733
Short-term borrowings	(Note 23)	922	429	1,022
Trade accounts payable and related accounts		652	564	619
Contract liabilities	(Note 24)	4,514	4,274	4,281
Other operating liabilities	(Note 25)	972	1,120	1,327
Other non-operating liabilities		7	66	72
Current tax liabilities	(Note 8)	19	27	213
Liabilities of operations held for sale		-	-	15
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**22,540**	**22,983**	**22,158**

(*) Pursuant to IFRS 15, the comparative 2017 data have been restated in relation to the data reported in the 2017 financial statements. The impacts of these restatements are described in Note 35.
(**) Application of IFRS 9 as of January 1, 2018.

Consolidated statement of cash flows

(in millions of euros)	Note	December 31, 2018 (**)	December 31, 2017 (*) (12 months)
Net income for the period		**(542)**	**(360)**
Less: income from operations sold, discontinued or held for sale		-	2
Net income from continuing operations		**(542)**	**(358)**
Net amortization, depreciation and impairment of PP&E and intangible assets and marketable securities maturing in more than 3 months		424	1,046
Net increase in (reversal of) provisions	(Notes 12, 21, 22)	(293)	(253)
Net effect of unwinding of assets and provisions		498	334
Income tax expense (current and deferred)		70	56
Net accrued interest included in financial debt		165	206
Loss (gain) on disposals of fixed assets and marketable securities maturing in more than 3 months; change in fair value		404	(277)
Share in net income of joint ventures and associates	(Note 13)	10	4
Dividends received from joint ventures and associates and share of income from consortiums		(5)	0
Other non-cash items		(15)	14
Cash flow from operations before interest and taxes		**716**	**771**
Net interest received (paid)		(205)	(210)
Income tax paid		3	(309)
Cash flow from operations after interest and tax		**514**	**252**
Change in working capital requirement	(Note 26)	147	56
NET CASH FROM OPERATING ACTIVITIES		**661**	**309**
Investment in PP&E and intangible assets		(460)	(486)
Disposals of PP&E and intangible assets		7	55
Acquisitions of shares of consolidated companies, net of acquired cash		(1)	(62)
Disposals of shares of consolidated companies, net of disposed cash		0	4
Acquisitions of financial assets earmarked for end-of-lifecycle operations		(1,349)	(3,269)
Disposals of financial assets earmarked for end-of-lifecycle operations		1,396	2,515
Loans granted to joint ventures and associates		(32)	0
Repayment of loans from joint ventures and associates		1	2
Acquisitions of other financial assets		(6)	(61)
Disposals of other financial assets		59	1
NET CASH FLOW FROM INVESTING ACTIVITIES		**(384)**	**(1,301)**
Share issues of the parent company and shares issues subscribed by non-controlling interests	(Note 19)	499	2,500
Transactions with non-controlling interests		-	(110)
Dividends paid to non-controlling interests		(62)	(23)
Increase in borrowings	(Note 23)	7	7
Decrease in borrowings	(Note 23)	(565)	(866)
Change in other borrowings	(Note 23)	(77)	(4)
NET CASH FLOW FROM FINANCING ACTIVITIES		**(199)**	**1,506**
Impact of foreign exchange movements		(2)	(21)
Net cash generated by operations sold, discontinued or held for sale		-	2
CHANGE IN NET CASH		**77**	**494**

(in millions of euros)	**Note**	**December 31, 2018 (**)**	**December 31, 2017 (*) (12 months)**
Net cash at the beginning of the period		**1,877**	**1,382**
Net cash at the end of the period	(Note 18)	2,027	1,950
Less: short-term bank facilities and non-trade current accounts in credit	(Note 23)	(74)	(73)
Net cash at the end of the period		**1,953**	**1,877**

(*) The comparative data for 2017 (12 months) are the combination of the 8- and 4-month accounting periods of the 2017 calendar year presented in the specific consolidated financial statements. Pursuant to IFRS 15, the comparative data have been restated. The impacts of these restatements are described in Note 35.
(**) Application of IFRS 9 as of January 1, 2018.

Consolidated statement of changes in equity

(in millions of euros)	Note	**Number of shares outstanding**	**Capital**	**Consolidated premiums and reserves**	**Actuarial losses on employee benefits**	**Deferred unrealized gains and losses on financial instruments**	**Currency translation reserves**	**Total equity attributable to owners of the parent**	**Non-controlling interests**	**Total shareholders' equity**
JANUARY 1, 2017 (*)		**105,661,110**	**53**	**(1,251)**	**(157)**	**136**	**112**	**(1,107)**	**(40)**	**(1,147)**
Net income for the year				(244)				(244)	(120)	(364)
Other items of comprehensive income	(Note 8)				35	130	(181)	(16)	(13)	(29)
Comprehensive income				**(244)**	**35**	**130**	**(181)**	**(260)**	**(133)**	**(393)**
Dividends paid									(32)	(32)
Transactions with shareholders	(Note 19)	132,076,390	66	2,426			0	2,492	0	2,492
Transactions with companies under joint control	(Note 19)			(81)			0	(81)	0	(81)
AUGUST 31, 2017 (*)		**237,737,500**	**119**	**850**	**(123)**	**265**	**(68)**	**1,044**	**(204)**	**839**
Net income for the year				(8)				(8)	12	4
Other items of comprehensive income	(Note 8)				(41)	40	(11)	(13)	0	(12)
Comprehensive income				**(8)**	**(41)**	**40**	**(11)**	**(21)**	**12**	**(9)**
Transactions with shareholders	(Note 19)			(6)				(6)	0	(6)
DECEMBER 31, 2017 (*)		**237,737,500**	**119**	**836**	**(164)**	**305**	**(79)**	**1,017**	**(192)**	**825**
JANUARY 1, 2018 (**)		**237,737,500**	**119**	**1,066**	**(164)**	**90**	**(79)**	**1,032**	**(192)**	**840**
Net income for the year				(544)				(544)	2	(542)
Other items of comprehensive income	(Note 8)				26	(100)	14	(60)	(10)	(70)
Comprehensive income				**(544)**	**26**	**(100)**	**14**	**(604)**	**(9)**	**(613)**
Dividends paid									(3)	(3)
Transactions with shareholders	(Note 19)	26,415,278	13	486				499	-	499
DECEMBER 31, 2018		**264,152,778**	**132**	**1,007**	**(138)**	**(10)**	**(64)**	**927**	**(204)**	**723**

(*) Pursuant to IFRS 15, the comparative 2017 data have been restated in relation to the data reported in the 2017 financial statements. The impacts of these restatements are described in Note 35.
(**) Application of IFRS 9 as of January 1, 2018 (see Note 35).

Notes to the consolidated financial statements for the period ended December 31, 2018

All amounts are presented in millions of euros unless otherwise indicated. Certain totals may have rounding differences.

INTRODUCTION

Orano is a business corporation with a Board of Directors (*Société anonyme à Conseil d'administration*) under French law. It is governed by the French Commercial Code.

Orano SA has issued debt securities admitted to trading on the Euronext Paris regulated market; in accordance with Article L. 233-16 of the French Commercial Code, it is therefore required to publish consolidated financial statements.

The consolidated financial statements of the Orano group as of December 31, 2018 have been prepared in accordance with IFRS. They were approved by the Board of Directors of Orano SA on February 28, 2019.

Note 1 – HIGHLIGHTS OF THE PERIOD, ESTIMATES AND JUDGMENTS, AND ACCOUNTING PRINCIPLES

1.1 HIGHLIGHTS

Constitution and recapitalization of the Orano group

The restructuring of the AREVA group resulted in the creation in 2016 of New AREVA, a group focused on the mining, conversion-enrichment, spent fuel recycling, nuclear logistics, dismantling and engineering aspects of the cycle.

As part of this process, on July 26, 2017, the Company benefited from a 2.5 billion euro capital increase reserved for the French State, approved in principle by the European Commission on January 10, 2017. From July 26, 2017, the French State became the majority shareholder of New AREVA Holding (parent company of the New AREVA group), which ceased to be consolidated within the scope of AREVA.

On January 22, 2018, the Extraordinary General Meeting of New AREVA Holding approved the Company's change of name and adopted "Orano" as the new corporate name.

As such, in this document, the terms "Orano SA", the "Company" and "New AREVA Holding" refer to the business corporation (*société anonyme*) Orano. The terms "group" or "Orano" refer to the group of companies formed by Orano SA and its subsidiaries and interests, both direct and indirect. Subsidiaries are also referred to by their new legal names.

Capital increases reserved for JNFL and MHI

Under the terms of the Investment Protocol and the Shareholders' Agreement dated March 13, 2017, and their amendments signed on July 26, 2017, industrial groups Mitsubishi Heavy Industries (MHI) and Japan Nuclear Fuel Ltd (JNFL), the French State and AREVA SA agreed to two capital increases reserved for MHI and JNFL, each of 5% and in a cumulative amount of 500 million euros, subject to the fulfillment of conditions precedent.

These capital increases were completed on February 26, 2018. Following these transactions, Orano SA's share capital was held in the proportion of 45.2% by the French State, 4.8% by the CEA, 40% by AREVA SA, 5% by JNFL and 5% by MHI.

Change in share capital

At the end of March 2018, under a trust agreement and as security on behalf of certain AREVA SA lenders, AREVA SA transferred 10% of the capital of Orano SA to Caisse des Dépôts and 10% of the capital of Orano SA to Natixis.

As part of this, the shareholders' agreement (concluded on March 13, 2017 and amended on July 26, 2017) between the French State, AREVA SA, MHI, JNFL and the Company was the subject of an amendment signed on February 21, 2018 to take into account the subsequent completion of the transactions mentioned above. The terms of this agreement were reiterated on July 13, 2018.

On December 4, 2018, the French State then acquired 12,774,282 shares, or 4.8% of the capital of Orano, from the CEA.

Since then, Orano's share capital has been held by the French State in the proportion of 50% + 1 share, the CEA in the amount of 1 share, AREVA SA in the proportion of 20%, JNFL in the proportion of 5%, MHI in the proportion of 5%, and Caisse des Dépôts and Natixis in the proportion of 10% each.

Multi-Year Energy Program

The announcements made on November 27, 2018 as part of France's Multi-Year Energy Program (P*rogrammation Pluriannuelle de l'Énergie* – PPE) set the target of reducing the share of nuclear energy to 50% in the French electricity mix by 2035. The strategic nature of spent fuel recycling for France was also reaffirmed on this occasion.

These announcements will not have any short-term financial consequences. The longer-term consequences in the second half of the next decade will have to be studied with other companies in the sector, in particular with regard to the planned use of MOX fuel by 1300 MW reactors. These reactors are intended to replace the closure, under the PPE, of certain 900 MW reactors using MOX fuels.

Extension of the mothballing of the McArthur River Mine and Key Lake Mill

Due to the continuing deterioration in conditions in the natural uranium market, the mothballing of the McArthur River Mine (69.8% owned by Cameco and 30.2% by Orano) and the Key Lake processing plant (83.3% owned by Cameco and 16.7% by Orano), effective since February 2018, has been extended for an indefinite period.

The group does not anticipate this mothballing to have an impact on deliveries to its customers in view of its own supplies and an agreement under which Orano can borrow 5.4 million pounds of natural uranium (2,075 metric tons) from Cameco until the end of 2023.

Termination of the MFFF contract

MOX Services, 30% owned by Orano, was notified on October 10, 2018 by the National Nuclear Safety Administration (NNSA) of a request for termination for convenience of the contract for the construction of the Savannah River recycling plant (South Carolina). The plant, known as the MOX Fuel Fabrication Facility (MFFF), was to contribute to the nuclear disarmament program by recycling 34 metric tons of military plutonium into fuel to produce electricity for the U.S. grid. Orano, a minority partner of the MOX Services consortium in charge of building the plant, was in charge of supplying recycling equipment.

The actions planned for the termination of the contract are underway, and should be finalized in 2019, at the same time as the conclusions of the audit carried out by the DoE (Department of Energy). On February 14, 2019, the DoJ (Department of Justice) also announced that it had begun a legal action against MOX Services, alleging excess payments amounting to 7 million US dollars. At this stage, and pending the conclusion of the ongoing discussions on the termination of the contract, the group does not expect a material impact on its financial statements.

Abandonment of the EREF project

As foreshadowed at the close of 2017, the EREF project in the United States was officially abandoned in 2018 (see Note 8).

Philippe Coste plant

On September 10, 2018, the group's new conversion plant was inaugurated on the Orano Tricastin site. This plant, known as Philippe Coste, integrates technological innovations in terms of safety, the environment and improvement of industrial performance. It is part of the Orano Tricastin site's industrial tools renewal program.

The first UF_6 was produced there on December 12. The operating tests of the Philippe Coste plant were still in progress at the end of the reporting period; it is expected that the facility will be commissioned in the first half of 2019. The ramp-up of the plant's production will continue in the coming months until it reaches its nominal capacity of 15,000 metric tons in 2021.

Move of the Tricastin platform under a single nuclear operator

On December 31, 2018, Orano Cycle became the sole nuclear operator of the regulated nuclear facilities at Orano's Tricastin site, marking the culmination of a major simplification program that has helped improve both safety and competitiveness.

Liquidity position

On November 9, 2018, Orano prepaid the current outstanding amount of the syndicated loan with an original maturity of June 2024 secured by certain future income from the Georges Besse II enrichment plant in the amount of 444 million euros.

Orano's short-term borrowings amounted to 922 million euros as of December 31, 2018, including:

- the maturity of a 750 million euro bond on November 6, 2019;
- accrued interest not due in the amount of 61 million euros;
- short-term bank facilities and current accounts in credit in the total amount of 74 million euros.

Beyond a 12-month period, the first significant debt maturity is a 500 million euro bond due on September 4, 2020.

Orano had a gross cash position of 2,027 million euros as of December 31, 2018 to meet these commitments and ensure the continuity of its operations over the longer term. This cash position has been strengthened since the second half of 2018 by a confirmed and undrawn syndicated credit line in the amount of 840 million euros. This new facility, signed with a pool of ten international banks, has a term of three years, with two one-year extension options.

1.2 ESTIMATES AND JUDGMENTS

In preparing its consolidated financial statements, Orano must make estimates, assumptions and judgments impacting the carrying amount of certain assets and liabilities, income and expense items, or information disclosed in certain notes to the financial statements. Orano updates its estimates and judgments on a regular basis to reflect past experience and other factors deemed pertinent, based on economic conditions. Depending on change in these assumptions or in economic conditions, the amounts in its future financial statements may differ from current estimates, particularly in the following areas:

- operating margins on contracts recognized according to the percentage of completion method (see Notes 1.3.6 and 22), which are estimated by the project teams and reviewed by management following the group's procedures;
- cash flow forecasts and the discount and growth rates used for impairment tests for goodwill and other plant, property and equipment and intangible assets (see Notes 1.3.7.5, 9, 10 and 11);
- all assumptions used to assess the value of pension commitments and other employee benefits, including future payroll escalation and discount rates, retirement age and employee turnover (see Notes 1.3.10 and 21);
- all assumptions used to measure provisions for end-of-lifecycle operations (see Notes 1.3.12 and 12) and, where appropriate, the assets corresponding to the third-party share, in particular:
  - the estimated costs of those operations,
  - the inflation and discount rates,
  - the schedule of future disbursements,
  - the operating life of the facilities,
  - the scenario chosen with regard to knowledge of the initial condition of the facilities, the target final condition, and waste treatment and removal methods and their availability,
  - the procedures for final shut-down,
  - safety requirements and regulatory developments;
- assumptions used to measure provisions for contract completion, in particular for waste treatment channels not yet existing: the prospective cost estimates of the related operations, the provisional payment schedule, the inflation rate and the discount rate (see Notes 1.3.11 and 22);
- estimates and judgments regarding the outcome of disputes in progress and, more generally, estimates regarding all of the provisions and contingent liabilities of Orano (see Notes 1.3.11 and 22);
- estimates and judgments relative to the recoverability of accounts receivable from the group's customers and other financial assets (see Notes 1.3.6 and 1.3.9.5);
- estimates of future taxable income allowing the recognition of deferred tax assets (see Notes 1.3.13 and 8).

1.3 ACCOUNTING PRINCIPLES

1.3.1. Basis of preparation

Pursuant to European Regulation 1606/2002 of July 19, 2002 on international accounting standards, the consolidated financial statements of Orano for the year ended December 31, 2018 were prepared in accordance with international accounting standards as published by the International Accounting Standard Board (IASB) and approved by the European Union as of December 31, 2018. They include IAS (International Accounting Standards), IFRS (International Financial Reporting Standards) and the interpretations issued by the IFRS Interpretations Committee (IFRS-IC) and by the former Standing Interpretation Committee (SIC).

The IFRS standards and interpretations as adopted in the European Union are available on the website: *https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting_en*

The group has not early adopted any standards, amendments or interpretations published by the IASB whose implementation was not mandatory in 2018.

The consolidated financial statements have been prepared on a historical cost basis, with the exception of derivative instruments and certain financial assets, which have been measured at fair value. Financial liabilities (excluding derivatives) are measured on the amortized cost principle.

In establishing the tax consolidation of Orano in 2017, the Company was required to prepare consolidated financial statements for an initial eight-month period ended August 31, 2017, followed by a second period of four months ended December 31, 2017. In 2017, to facilitate comparison, the Company chose to prepare these specific consolidated financial statements presenting financial information for the 12-month period ended December 31, 2017, combining the eight- and four-month periods of 2017. The comparative period presented in the consolidated financial statements ended December 31, 2018 is based on the 12-month period presented in the specific consolidated financial statements for the year ended December 31, 2017.

Standards applicable from January 1, 2018

IFRS 9 “Financial Instruments”

IFRS 9 “Financial Instruments” came into effect on January 1, 2018. It replaces IAS 39 “Financial Instruments: Recognition and Measurement.” It lays down new principles for the classification and measurement of financial instruments (Phase 1), the impairment of financial assets due to credit risk (Phase 2) and hedge (or micro-hedging) accounting (Phase 3). The retrospective application of this standard did not have an impact on the 2017 fiscal year, as its effects are recorded in shareholders’ equity at the beginning of the year of first application, i.e. on January 1, 2018.
In addition, IFRS 9 ushers in various amendments to IFRS 7, adding new requirements for disclosures in respect of financial instruments to accompany financial statements.

Classification and measurement

In the first Phase of the standard’s application, the group’s portfolio of financial assets, mainly earmarked to cover end-of-lifecycle operations and trade receivables, was the subject of a detailed review to determine the classification and measurement approach for each asset class under IFRS 9, based on the characteristics of (i) the relevant contractual flows, and (ii) their business model.

Following its diagnosis, the group chose not to change the management of its earmarked funds (including mutual funds), and to classify all of its own earmarked securities in the “fair value through profit and loss” category.

Since most of the assets earmarked for end-of-lifecycle operations were already classified as available-for-sale financial assets in accordance with IAS 39 (and as such already measured at fair value in the group's consolidated financial statements), the impact of IFRS 9 on the classification of earmarked assets as of January 1, 2018 is confined to certain lines of assets classified as held-to-maturity investments (and as such previously recognized at amortized cost in the group's financial statements), which are now recognized at fair value through profit or loss. The remeasurement of these assets to fair value had a positive impact of 15 million euros net of tax on equity as of January 1, 2018.

With respect to the earmarked assets previously classified as available-for-sale financial assets under IAS 39, the accumulated changes in fair value classified in "Unrealized gains and losses on financial instruments" in the opening balance on January 1, 2018 have been reclassified in equity in reserves in the amount of 215 million euros net of tax.

Receivables related to end-of-lifecycle operations are recorded at amortized cost.

As of January 1, 2018, the asset breakdown between financial and non-financial assets and the classification of financial assets in accordance with the provisions of IFRS 9 was as follows:

Assets

Breakdown by category

(in millions of euros)	**Balance sheet value**	**Non-financial assets**	**Assets at amortized cost**	**Fair value recognized in profit or loss**	**Fair value by OCI**
Non-current assets	**7,241**	**29**	**1,225**	**5,987**	**-**
Assets earmarked for end-of-lifecycle operations (*)	7,127		1,198	5,929	
Other non-current assets	114	29	27	58	
Current assets	**3,555**	**502**	**1,695**	**1,358**	**-**
Trade accounts receivable and related accounts	690		690		
Other operating receivables	791	453	198	139	
Other non-operating receivables	57	49	8		
Cash and cash equivalents	1,950		740	1,210	
Other current financial assets	67		58	9	
Total assets	**10,796**	**531**	**2,920**	**7,345**	**-**

(*) including the 15 million euro adjustment related to the application of IFRS 9 as of January 1, 2018 (see Note 35)

This table should be read together with Note 29.

Impairment

Phase 2 of the "Impairment" standard introduces a new credit risk impairment model based on expected credit losses. This model requires the recognition of 12-month expected credit losses on purchased or originated instruments (resulting from the risk of defaults in the next 12 months) at their initiation. Full lifetime expected credit losses (resulting from the risk of default over the remaining life of the instrument) must be recognized when a significant increase in credit risk is recorded following initial recognition or in the case of short-term trade receivables. Henceforth, for the relevant financial assets, the group determines the expected loss on the basis of (a) the probability of default, (b) the associated loss rate and (c) the amount of exposure to default.

The group has reviewed the rules used to assess the deterioration of credit risk and the determination of expected losses, at one year and at maturity, depending on the case. For all relevant financial assets (mainly bonds, the claim on the CEA and trade receivables recorded at amortized cost), analyses conducted show that the expected credit loss recognized as of January 1, 2018 is not material.

Hedge accounting

Phase 3 "Hedging," with optional application from January 1, 2018, aims to align hedge accounting more closely with risk management. Based on the work conducted to date, the group does not expect material impacts in its consolidated financial statements. Pending the entry into force of the macro hedging standard, IFRS 9 offers the possibility of deferring the application of new hedging provisions. The group elected to continue applying the hedge accounting provisions of IAS 39 for 2018.

IFRS 15 "Revenue from Contracts with Customers" and clarifying amendments to IFRS 15

IFRS 15 "Revenue from Contracts with Customers" came into force on January 1, 2018, retroactive to the beginning of the comparative year. It replaces several standards and interpretations related to recognition of revenue, in particular IAS 18 "Revenue" and IAS 11 "Construction Contracts". This standard is based on detailed principles for determining when and how much revenue should be recognized.

IFRS 15 applies to all contracts with customers, with the exception of those falling within the scope of other standards. It ushers in a single model of revenue recognition for the sales of goods or services, or for long-term contracts.

The application of IFRS 15 has resulted in changes in revenue recognition, mainly related to the following questions:

- Customer-funded investments: funding received in respect of investments was previously recognized as revenue over the period of construction of the assets. In the event that the control of the financed asset is not transferred to the client, the funding received is allocated to services rendered by virtue of the asset in question, and recognized as revenue as the services are rendered. This change affects several of the group's Back End contracts;
- Significant financial components: the methods of recognition and measurement of financial components under IFRS 15 differ from the group's established practices: basis of funding determined by the difference between the pace of recognition of revenue and the pace of cash inflows (and no longer on the basis of the net cash curve of the contract), applicable interest rate set on the signing date of the contract (and not revised in each period), and consideration of the credit risk of the party receiving the funding. The application of these principles changed the method used to recognize the financial components attached to several of the group's Back End contracts.

The group has elected to apply IFRS 15 in accordance with the full retrospective method. The impact of the initial application of this standard on shareholders' equity at the beginning of the comparative period, as well as on the income statement and the 2017 statement of comprehensive income, is described in Note 35.

Other standards, amendments and interpretations that came into force on January 1, 2018

- IFRIC 22 "Foreign Currency Transactions and Advance Consideration": this interpretation states that the amount of any advance of a non-monetary nature paid or received in foreign currency must be recorded at the rate applying on the date of the transaction, without any subsequent remeasurement.
- Annual improvements, 2014-2016 cycle, to IFRS 1 "Removal of short-term exemptions for first-time adopters" and IAS 28 "Measurement at fair value through profit or loss of each investment, taken individually, in qualifying entities".

Amendments and interpretations with mandatory application from January 1, 2018 did not have an impact on the group's consolidated financial statements.

Moreover, the amendments to IAS 40 "Investment Property", IFRS 2 "Share-based Payment" and IFRS 4 "Insurance Contracts" are not applicable to the group.

Standards applicable after 2018 and not early adopted by the group

Standards and interpretations that have been published but are not yet applicable as of the date of publication of the group's financial statements, are listed below. The group has not early adopted any standards, amendments or interpretations published by the IASB whose implementation was not mandatory in 2018. The group plans to adopt these standards when their application becomes mandatory.

<u>IFRS 16 "Leases"</u>

IFRS 16 "Leases", adopted by the European Union on October 31, 2017, will replace IAS 17. It will be mandatory for fiscal years beginning on or after January 1, 2019. IFRS 16 requires all leases other than short-term leases and those for assets of low value to be recognized in the lessee's balance sheet as a "right-of-use" asset and in exchange for a financial liability.

The relevant leases relate mainly to buildings and land, industrial equipment and vehicles, as well as transport service contracts. The group is continuing work to estimate the impact of the first-time application of IFRS 16 on the consolidated aggregates. In view of the total consolidated statement of financial position and the level of its debt, the group does not expect the application of this standard to have a material impact.

The group has elected to apply the modified retrospective transition method, as well as the exemptions provided for by the standard for low-value and short-term contracts.

<u>Other standards and interpretations</u>

- IFRIC 23 "Uncertainty over Income Tax Treatments" (effective date: January 1, 2019). IFRIC 23 clarifies the application of IAS 12 "Income Taxes" as regards recognition and measurement when there is uncertainty over the treatment of income taxes.
- Amendments to IFRS 9 "Prepayment features with negative compensation" (effective date: January 1, 2019.
- Amendments to IFRS 10 and IAS 28 "Sales or contributions of assets between an investor and its associate/joint venture" (effective date deferred).
- Amendments to IAS 19 "Plan amendment, curtailment or settlement" (effective date: January 1, 2019).
- Amendments to IAS 28 "Investments in Associates and Joint Ventures": "Long-term interest in associates and joint ventures" (effective date: January 1, 2019).
- Annual improvements, 2015-2017 cycle: IAS 12 "Income tax consequences of payments for financial instruments classified as equity instruments", IAS 23 «Borrowing costs included in the cost of the asset," and IFRS 3 and IFRS 11 "Previously held interests in a joint operation."
- The amendments to IAS 1 and IAS 8 "Definition of materiality in the financial statements" (effective date: January 1, 2020).

The group has elected not to early apply these interpretations and amendments. The group does not expect the application of these new standards and amendments to have a material impact.

1.3.2. Rules governing the presentation of the financial statements

Current and non-current assets and liabilities

The assets and liabilities constituting working capital in the normal business cycle are classified as current in the consolidated balance sheet. Other assets and liabilities are classified as current or non-current depending on whether their maturity is greater or lesser than one year from the closing date.

Other operating income and expenses

Income and expenses that are unusual, abnormal or infrequent in nature are included in other operating income and expenses. This heading includes:

- impairment and reversals of impairment for loss of value;
- gains or losses on disposals of non-financial assets;
- changes in provisions for end-of-lifecycle operations on discontinued facilities caused by changes in cost estimates;
- the effects of restructuring plans;
- the effects of amendments to pension plans and other post-employment benefits;
- the ineffective portion of foreign exchange hedges and foreign exchange gains or losses on unhedged transactions and unqualified hedges on commercial transactions.

1.3.3. Consolidation method

Subsidiaries

Entities over which the group exercises exclusive control are fully consolidated. Control by the group over its subsidiaries is based on its exposure or entitlements to variable income resulting from its investment in these entities, as well as its ability to exercise power over the entity in such a way as to influence the amount of the returns it receives.
In the event of a change in the percentage of the group’s interest in a subsidiary without loss of control, the change is recognized as a transaction between shareholders.

Intra-group balances and transactions are eliminated.

The acquisition date from which the group consolidates the financial statements of the acquiree is the date of its effective takeover.

Non-controlling interests in the net assets of consolidated subsidiaries are presented on a separate line of equity under “non-controlling interests.” Non-controlling interests include the amount of minority interests as of the acquisition date and the amount represented by minority interests in the change in equity since that date. In the absence of a binding agreement, the negative results of subsidiaries are systematically allocated to equity attributable to the owners of the parent company and to non-controlling interests based on their respective interests, even if they become negative.

Transactions with non-controlling interests, without impact on control, are treated as transactions with group shareholders and are recorded in equity.

Joint ventures and associates

An associate is an entity over which the group exercises significant influence. Significant influence is the power to influence the making of key financial and operational decisions within the entity, without this demonstrating control or joint control of the group.
A joint venture is a joint arrangement in which the parties, who exercise joint control, are entitled to a share of the net assets of the joint venture. Joint control is demonstrated when, on the basis of the rights granted by the agreement, decisions on the relevant activities of the entity require the unanimous agreement of the parties.
The factors taken into account to demonstrate significant influence or joint control are similar to those used for analyzing the group's control over its subsidiaries. Joint ventures and associates are accounted for using the equity method.

Interests in joint operations

A joint operation is a partnership in which the partners (joint owners), who exercise joint control over the entity, have direct rights over the assets of the entity, and obligations in respect of its liabilities. As a co-investor, the group recognizes the relevant assets and liabilities line by line, as well as the income and expenses related to its interests in the joint operations.

1.3.4. Consideration of the effect of foreign currencies

The group's consolidated financial statements are denominated in euros, which is also the functional currency of the group's parent company. The group has determined the functional currency of each of its subsidiaries based on the economic environment in which it conducts the major part of its operations. In most cases, the functional currency is the local currency.

Transactions denominated in foreign currencies

Foreign currency-denominated transactions are translated by group companies into their functional currency at the exchange rate prevailing at the transaction date.
Monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rate prevailing on the last day of the period. Foreign exchange gains and losses are then recognized:

- in operating income when related to operating activities: trade accounts receivable, trade accounts payable, etc.;
- in financial income when they relate to financial transactions (loans or borrowings).

Translation of the financial statements of consolidated companies whose functional currency is different from that of the group

As part of the consolidation process, assets and liabilities denominated in foreign currencies are translated into euros at the closing rate, and expenses and income are converted at the rate prevailing on the date of the transaction. Foreign exchange differences are recognized in translation differences in other comprehensive income. In the event of the disposal of a foreign entity, the share of accumulated foreign currency translation adjustments relating to this entity is recycled in the income statement.

1.3.5. Operating segments

The operating segments selected for the purposes of segment information have been identified on the basis of the internal reporting used by the chief operating decision-maker to allocate resources to the various segments and assess their performance.

The group's chief operating decision-maker is the Executive Management, assisted by the Executive Committee.

The analysis of internal reporting and the specific features of the group's businesses have led Orano to present the following three operating segments: Mining, Front End and Back End. Disclosures relating to Orano Med are presented in "Corporate and other operations."

Mining activities cover exploration (search for new deposits), mining projects (studies and construction of mines), operation (extraction of natural uranium, then chemical concentration into U3O8) and the redevelopment of sites after their operation.
Front End activities primarily include the conversion of uranium concentrate (U3O8) to uranium hexafluoride (UF_6), followed by the enrichment of UF_6 by centrifugation.
Lastly, Back End activities include spent fuel recycling, nuclear logistics (cask design and manufacturing, and transportation of nuclear materials and waste), dismantling and services (dismantling of nuclear facilities, waste management and services to nuclear operators), as well as engineering activities (design and implementation of complex projects).

The methods used to measure the key indicators of each segment when preparing the internal reporting are identical to those used for the preparation of the consolidated financial statements. As a result, the segment information provided in the tables is presented in accordance with the same accounting principles as those used for the group's consolidated financial statements.
In addition, transactions between operating segments are carried out on an arm's length basis.

Segment assets include non-current assets, with the exception of "deferred tax assets" and "Securities of joint ventures and associates," as well as "Inventories and work in progress" and receivables (excluding taxes). Orano has adopted centralized management of financial assets and liabilities and tax matters. Therefore, the corresponding balance sheet and statement of income items are not assigned to business operations.
Moreover, information on segment assets and liabilities is not regularly provided to the chief operating decision-maker; the group has nevertheless elected to present the assets allocatable by operating segment on a voluntary basis.

Orano also publishes information by region: Orano's consolidated revenue is broken down between the following five regions by destination of sales: France, Europe excluding France, America (North and South), Asia-Pacific, Africa and Middle East.

1.3.6. Revenue

The group operates in the various stages of the fuel cycle, offering the following products and services:
- Supply of uranium concentrates (U3O8);
- Supply of conversion and enrichment services or UF6 and enriched UF6;
- Treatment-recycling services;
- Engineering support to the operator and dismantling of nuclear facilities;
- Transportation and warehousing logistics services and solutions, including cask design and manufacturing.

Customer contracts and performance obligations
Contracts with customers are analyzed to determine the performance requirements that constitute the unit of account for revenue recognition.

Contract price

The contract price is the amount of the consideration that Orano expects to receive in exchange for the goods and services transferred. It includes firm fixed items, as well as variable items in the proportion considered highly likely to be received. Variable items include price revisions potentially resulting from indexation clauses or riders, the potential effects of penalties or discounts, etc.

The contract price is adjusted in the event that one of the parties to the contract receives a significant financing advantage from the other party, i.e. when the combination of (i) the time lag between receipt and transfer of control of the goods and services covered by the contract (i.e. revenue recognition) and (ii) the interest rate applicable to an equivalent credit facility has a significant impact on the contract price negotiated by the parties. This adjustment is equivalent to recognizing revenue on the basis of a transaction price reflecting the price that the customer would have paid for a spot transaction, i.e. net of any items related to the financing terms. The adjustment determined in this manner on the contract price is recognized at the same time as revenue, while the expense or financial income is recognized in proportion to the performance and amortization of the implied credit facility resulting from the terms of payment. The interest rate applied is the marginal financing rate that the party receiving the financing would have obtained from a financial institution by negotiating, on the day of the signature of the contract, a loan whose characteristics are similar to the implied financing granted.

Allocation of the contract price to performance obligations

The contract price is allocated to each performance obligation based on the proportions of the separate sales prices, generally in line with the contractual terms.

Recognition of revenue associated with each performance obligation

Revenue is recognized when the company transfers control of the goods or services to the customer. In application of this principle, revenue is recognized:

- for concentrate supply contracts: on delivery of uranium concentrates to conversion sites designated by customers; the delivery can be materialized by a physical delivery or by a transfer from the material account held by Orano with the converter to the material account held by the customer with the same converter (book transfer);
- for conversion and enrichment contracts: upon delivery of UF_6. The delivery can be materialized by a physical delivery or by a transfer from the material account held by Orano to the material account held by the customer with the fuel enricher or assembler;
- for treatment-recycling, transportation and storage services: by the percentage-of-completion method; when the contract requires the customer to participate in the financing of the construction of an asset necessary for the performance of the services covered by the contract, the revenue relating to the financing received is recognized on the basis of the percentage of completion of the underlying services over the duration of use of the asset, except if the customer takes control of the asset upon completion (in which case the revenue is recognized as the asset is constructed);
- for design and equipment manufacturing contracts that meet the customer's technical specifications: by the percentage-of-completion method, except if the group does not have a sufficient right to payments for the services performed to date in the event of interruption of the contract for a reason other than the group's default.

When revenue recognition is made using the percentage-of-completion method in the cases described above, the percentage of completion is determined by the ratio of costs incurred to costs at termination. Revenue is recognized insofar as it is highly likely that it will not be subject to any subsequent reversal.

Contract assets and liabilities

Contract assets are the rights held by the group in respect of work performed, but which does not yet constitute an unconditional right to payment.

Contract liabilities are the amounts recognized in the event of payments received in excess of the amount recognized as revenue in satisfaction of a performance obligation. They include:

- the amounts received from customers and used to finance capital expenditure for the performance of long-term contracts to which they are party;
- other advances and down payments received from customers reversed as and when the services covered by the contract are realized.

In accordance with the provisions of the standard, the group offsets each contract between assets and liabilities.

Trade receivables represent the unconditional right of the group to receive a payment depending solely on the passage of time.

Costs of obtaining contracts

Costs incurred to obtain a contract are only capitalized if:

- they are marginal costs that the group would not have incurred if it had not obtained the contract; and
- the group expects to recover them.

1.3.7. Valuation of property, plant and equipment and intangible assets

1.3.7.1. Intangible assets

An intangible asset is recognized when it is probable that future economic benefits therefrom will accrue to the company and if the cost of this asset can be reliably estimated based on reasonable and documented assumptions.

Intangible assets are recorded at their acquisition or production cost.

Goodwill

In accordance with IFRS 3 “Business Combinations,” goodwill relating to a business combination is the difference between:

- The sum of the following items:
  - The purchase price for the takeover at fair value at the acquisition date,
  - The amount of non-controlling interests in the acquired entity, and
  - For step acquisitions, the fair value, at the acquisition date, of the group’s interest in the acquired entity before the acquisition of control; and
- The net amount of assets acquired and liabilities assumed, measured at their fair value at the acquisition date.

When the resulting difference is negative, it is immediately recognized in profit or loss.

The amount of goodwill is definitively set within 12 months of the date of acquisition.

Goodwill is allocated to the cash-generating units (CGUs) or group of CGUs in which it is monitored.

Goodwill from the acquisition of subsidiaries is presented separately in the balance sheet. Goodwill is not amortized, but is subject to impairment testing whenever indications of loss of value are identified, and at least once a year, as described in 1.3.7.5.
After initial recognition, goodwill is recorded at cost less any impairment recognized. In the income statement, impairment losses related to goodwill are presented under “Other operating expenses.”

Goodwill arising on the acquisition of associates and joint ventures is included in the carrying amount of the interest recorded in the group’s balance sheet. In the income statement, impairment losses related to this goodwill are recorded under “Share of net income of associates and joint ventures.”

When a CGU or part of a CGU is sold, the share of goodwill corresponding to the transferred entity is taken into account in the carrying amount of its net assets used to determine the gain or loss realized. The share of goodwill is measured based on the relative value of the scope transferred within the CGU or group of CGUs.

Research and development expenses

Research expenses incurred by the group on its own account are expensed as incurred.

Research and Development expenses funded by customers under contracts are included in the production cost of these contracts and recorded under “cost of sales.”

Expenses related to development projects are recorded as intangible assets if the project meets the criteria for capitalization established by IAS 38.

Development costs capitalized on that basis are then amortized over the probable useful life of the intangible asset, as from the commissioning date. They are depreciated on a straight-line basis over a minimum period of time.

Mineral exploration and pre-mining development

Mineral exploration and pre-development work is measured in accordance with IFRS 6 on the basis of the following rules:

- exploration expenses whose purpose is to identify new mineral resources, and expenses related to assessments and pre-development of identified deposits are incurred before project profitability is determined and are recognized as "Research and Development" expenses for the period;
- pre-mining development expenses concern a project which, as of the date of the financial statements, has a strong chance of technical success and commercial profitability, and are capitalized. Indirect costs, excluding overhead expenses, are included in the valuation of these costs. Capitalized pre-mining expenses are amortized in proportion to the number of tons mined from the reserves they helped identify.

Other intangible assets

Other intangible assets, including mining rights and acquired technology, are measured at acquisition cost or production cost. They are amortized using the most appropriate method in view of their use (straight-line or by units of production), starting on the date they were placed in service and over the shorter of their probable period of use or, when applicable, the length of their legal protection.

1.3.7.2. Property, plant and equipment

Property, plant and equipment are recognized at acquisition or production cost, including startup expenses, less cumulative depreciation and impairment.

The cost of in-house facilities includes all labor costs, parts and all other production costs involved in the construction of the asset.

The cost of nuclear facilities includes the group's share of provisions for end-of-lifecycle operations, estimated at the date they are placed in service, termed "end-of-lifecycle assets – group share" (see Note 1.3.12). In accordance with IFRIC 1, changes in provisions for end-of-lifecycle operations coming from changes in estimates or calculation assumptions and relating to nuclear facilities in operation are offset by a change in the same amount of the assets to which these provisions relate.

Property, plant and equipment are depreciated based on the approach deemed most representative of the economic depreciation of the assets (straight-line depreciation or as a function of the production units); each component is depreciated over its specific useful life.

Mining land is depreciated over the operating period of the deposit; site layout and preparation expenses are depreciated over 10 years; buildings over 10 to 45 years; production facilities, equipment and tooling other than nuclear facilities over 5 to 10 years; general facilities and miscellaneous fixtures over 10 to 20 years; industrial containers over 10 to 20 years, and other transportation equipment, office equipment, computer equipment and furniture over 3 to 10 years. Nuclear facilities are depreciated on a straight-line basis over their estimated useful lives.

Depreciation periods are revised if there is a significant change in their estimated useful lives.

Changes in the value of end-of-lifecycle assets (own share) are amortized on a prospective basis over the remaining useful lives of the facilities.

1.3.7.3. Leases

Leases are analyzed in accordance with the criteria set out in IAS 17 to determine whether they are operating leases or finance leases.

Leases are classified as financial leases when they transfer substantially all the risks and rewards of ownership to the lessee. At their inception, finance leases are recognized as assets, depreciated on the same terms as those described above (see note 1.3.7.2.), and a debt in the same amount, corresponding to the lesser of the fair value of the property in question on the date the lease is put in place and the present value of future minimum payments due under the contract.

Lease payments made subsequently are treated as debt service and allocated to repayment of the principal and interest, based on the rate stipulated in the contract or the discount rate used to value the debt.

Operating leases are expensed over the term of the lease.

1.3.7.4. Inclusion of borrowing costs

In accordance with IAS 23R, effective since January 1, 2009, the borrowing costs related to tangible and intangible investments for projects initiated after that date and for which the construction or development period is greater than one year are included in the costs of these assets.

Borrowing costs are not included in the measurement of property, plant and equipment and intangible assets when:

- they came into service before January 1, 2009; or
- they came into service after this date, but the expenses were incurred and recognized as fixed assets in progress at December 31, 2008.

1.3.7.5. Impairment of property, plant and equipment, intangible assets and goodwill

Impairment tests are performed on property, plant and equipment and intangible assets with finite useful lives whenever there is an indication of loss of value. As a consequence, impairment losses on property, plant and equipment or intangible assets may be reversed later if their recoverable value comes to be greater than their net carrying amount. The value of the asset after reversal of the impairment loss is capped at the carrying amount net of amortization, as if no impairment loss had been recognized in prior years.

Assets that do not generate cash flows that are largely independent of each other are grouped together in cash-generating units (CGUs). CGUs are uniform sets of assets whose ongoing use generates cash inflows that are largely independent of the cash inflows generated by other groups of assets. They reflect the way in which activities are managed within the group.

In addition, impairment tests are systematically performed at least once a year for goodwill and intangible assets with indefinite lives, and whenever there is an indication of loss of value. Such tests are performed at the level of the cash-generating units (CGU) or groups of CGUs to which goodwill and intangible assets belong.

Impairment is recognized when the recoverable amount of the CGU is less than the net carrying amount of the assets belonging to it. Impairment losses recognized on goodwill cannot subsequently be reversed.

The group performs impairment tests on its assets on the basis of its best estimate of their recoverable value, which is the greater of:

- its fair value less costs to sell, corresponding to the net realizable value based on observable data when available (recent transactions, offers received from potential acquirers, reported ratios for comparable publicly traded companies, multiples of uranium resources in the ground obtained by comparing the market capitalizations of comparable companies with the stated deposit reserves or resources);
- and its value in use, which is equal to the present value of its projected future cash flows, as it results from the strategic plan validated by the governance bodies and its underlying assumptions, plus its “terminal value,” corresponding to the present value, discounted to infinity, of cash flows for the “normative” year estimated at the end of the period covered by future cash flow projections. However, some CGUs or groups

of CGUs have finite lives (depending on the volume of ore resources in Mining or the duration of operating permits in the nuclear businesses); in such cases, the cash flows taken into account to assess their value in use are not discounted to infinity but within the limit of their expected useful lives.

The discount rates used are based on the weighted average cost of capital of each of the assets or groups of assets concerned. They are calculated after tax.

Impairment tests are sensitive to the macroeconomic (including the US dollar exchange rate) and sector-based assumptions used, particularly in terms of changes in ore prices or those of conversion and enrichment services, as well as the useful lives of the underlying assets. In view of this sensitivity, the group revises its underlying estimates and assumptions at least once a year, or more often as required by changes in market conditions.

1.3.8. Inventories and work-in-process

Inventories are carried at the lesser of their historical cost and their net realizable value, which is the estimated selling price in the ordinary course of business, less anticipated completion costs or costs to sell.
Inventory consumption is generally measured using the weighted average unit cost method.

The entry cost of inventory includes all direct material costs, labor costs and the allocation of indirect production costs.

In the case of material loans with transfer of ownership, the group recognizes in inventory the borrowed material at the weighted average unit cost, which corresponds to the estimated fair value of the consideration transferred on the transaction date. A liability corresponding to the obligation to return the material is recognized in the same amount in “other operating liabilities.”
A provision for onerous contracts is made when the expected weighted average unit cost of the return comes to be greater than that of the liability initially recorded.

1.3.9. Financial assets and liabilities

Financial assets

Financial assets consist of:
- financial assets earmarked for end-of-lifecycle operations;
- equity interests in unconsolidated companies;
- loans, advances and deposits;
- trade accounts receivable and related accounts;
- certain other operating receivables;
- pledged bank accounts;
- cash and cash equivalents; and
- the positive fair value of derivative financial instruments.

Financial liabilities

Financial liabilities include:
- financial debts;
- trade accounts payable and related accounts;
- certain other operating liabilities;
- bank overdrafts; and
- the negative fair value of derivative financial instruments.

1.3.9.1. Classification and measurement of financial assets and liabilities

IFRS 9 requires financial assets to be classified in one of three categories (amortized cost, fair value through profit or loss, or fair value through other comprehensive income), depending on the business model defined by the entity and the characteristics of its contractual cash flows (the so-called “solely payments of principal and interest” criterion, SPPI).

Assets meeting the definition of debt instruments (contractual cash flows associated with interest payments and repayments of capital) are recognized:

- at amortized cost when the group holds them in order to collect all contractual cash flows;
- at fair value through profit or loss when the group holds them in order to sell them and realize a capital gain;
- at fair value through other comprehensive income where the group holds them for the mixed purpose of collecting contractual cash flows and selling them (with the gain or loss recycled in profit or loss on the date of transfer).

Assets meeting the definition of equity instruments (equities or equity mutual funds) are recognized at fair value through profit or loss unless the group opts irrevocably to recognize them at fair value through other items of comprehensive income (without recycling gains or losses in profit or loss).

As an exception to these principles, certain instruments may be recognized at fair value through profit or loss when this treatment makes it possible to offset a matching position affecting the income statement.

1.3.9.2. Methods used to measure financial assets and liabilities

With the exception of financial assets and liabilities measured at amortized cost, the group measures its financial assets and liabilities at fair value at the balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in a normal transaction between market participants on the measurement date.

All assets and liabilities measured at fair value are valued using techniques that seek to maximize the use of observable market data. These techniques are hierarchical, and have three levels:

- Level 1 (unadjusted quoted prices): price at which the group may access identical assets or liabilities in active markets;
- Level 2 (observable inputs): valuation techniques based on inputs that are observable, either directly or indirectly, in an active market for similar instruments;
- Level 3 (unobservable inputs): valuation techniques primarily using unobservable inputs, including observable inputs with significant adjustments.

1.3.9.3. Financial assets earmarked for end-of-lifecycle operations

This heading brings together all the investments that Orano earmarks for the funding of its future end-of-lifecycle operations in the nuclear business, including facility dismantling and waste retrieval and packaging. It includes directly-held publicly traded shares and bonds, dedicated share investment funds, dedicated bond and money-market investment funds, and cash. It also includes receivables resulting from agreements with third parties for the funding of end-of-lifecycle operations. These receivables are recognized using the method described in Note 1.3.9.5.

Orano does not consolidate the assets of its earmarked investment funds line by line, insofar as it does not control them within the meaning of IFRS 10:

- Orano is not involved in the management of the earmarked investment funds, which are managed by front-ranking independent management companies;
- Orano does not hold voting rights in the investment funds;
- the investment funds do not trade directly or indirectly in financial instruments issued by Orano,
- none of the financial investments made by the funds are strategic to Orano;
- Orano receives no benefit and bears no risk other than that normally associated with investments in mutual funds and in proportion to its holding;
- Orano may only terminate the management agreements in specific cases (gross negligence, fraud, etc.). This means that Orano cannot replace a fund’s management company at will.

Accordingly, the earmarked mutual funds are recorded on a single line in the balance sheet in an amount corresponding to Orano's share of their net asset value as of the end of the year.

Other than government bonds and the claim on the CEA, which are recognized at amortized cost, the entire portfolio of assets earmarked for end-of-lifecycle operations is recorded as financial assets at fair value through profit or loss.

1.3.9.4. Loans, advances and deposits

This heading mainly includes loans related to unconsolidated interests, advances for acquisitions of interests, and security deposits.

These assets are valued at amortized cost. Impairment is recognized when the recoverable amount is less than the net carrying amount.

1.3.9.5. Trade accounts receivable

Trade receivables are recognized using the amortized cost method.

Impairment is calculated on the basis of the expected credit loss model. Under this model, 12-month expected credit losses are recorded on purchased or originated instruments (resulting from the risk of defaults in the next 12 months) at their initiation. Full lifetime expected credit losses (resulting from the risk of defaults over the remaining life of the instrument) are recognized when a significant increase in credit risk is recorded after initial recognition or in the case of short-term trade receivables. The group determines the expected loss on the basis of (a) the probability of default, (b) the associated loss rate and (c) the amount of exposure to default.

1.3.9.6. Cash and cash equivalents

Cash includes bank balances and non-trade current accounts with unconsolidated entities.

Cash equivalents include risk-free marketable securities with an initial maturity of three months or less, or which may be converted into cash almost immediately. These assets include negotiable debt securities and shares of euro-denominated money market UCITS; debt securities are measured using the amortized cost method, and UCITS at fair value through profit or loss.

1.3.9.7. Borrowings

Borrowings include:

- certain interest-bearing advances received from customers: interest-bearing advances received from customers are classified as financial liabilities when they are settled in cash, and as contract liabilities in other cases;
- loans from financial institutions;
- bonds issued by Orano;
- bank overdrafts; and
- liabilities under finance leases.

Financial debts are measured at amortized cost based on the effective interest rate method.

Bond issues hedged with a rate swap (fixed rate/variable rate swap) qualified as a fair value hedge are revalued in the same amount as the hedging derivative.

1.3.9.8. Derivatives and hedge accounting

1.3.9.8.1. Risks hedged and financial instruments

Orano uses derivative instruments to hedge its foreign exchange and interest rate risks. The derivatives used are mainly forward currency contracts, currency and interest rate swaps, inflation swaps and currency options.

The hedged risks relate to receivables, liabilities and firm or projected obligations in foreign currencies.

1.3.9.8.2. Recognition of derivatives

Derivatives are measured at fair value on initial recognition and subsequently remeasured at the end of each accounting period until settled.

Accounting methods for derivatives vary, depending on whether the derivatives are designated as fair value hedging items, cash flow hedging items, hedges of net investments in foreign operations, or do not qualify as hedging items.

<u>Fair value hedges</u>
This designation concerns hedges of firm commitments in foreign currencies: purchases, sales, receivables and debt. The hedged item and the derivative are revalued simultaneously and any changes in value are recorded in the statement of income.

<u>Cash flow hedges</u>
This designation refers to hedges of probable future cash flows: projected purchases and sales in foreign currencies.

The highly probable hedged items are not valued in the balance sheet. Only the derivative hedges are revalued at the end of each accounting period. The portion of the gain or loss that is considered effective is recognized under "other items of comprehensive income" and presented directly in equity under the balance sheet heading "deferred unrealized gains and losses on financial instruments", on an after-tax basis. Only the ineffective portion of the hedge impacts income for the period.

The amounts recognized under "deferred unrealized gains and losses on financial instruments" are released to income when the hedged item impacts the statement of income, i.e. when the hedged transaction is recognized in the financial statements.

<u>Hedges of net investments in foreign operations</u>
This designation relates to borrowings in a foreign currency and to borrowings in euros when the euro has been swapped against a foreign currency, to finance the acquisition of a subsidiary using the same functional currency for instance. Currency translation adjustments on these borrowings are recognized under "other items of comprehensive income" and presented on the balance sheet under "currency translation reserves" in their net amount after tax; only the ineffective portion is recognized through profit and loss.

The amount accumulated in currency translation reserves is released to profit and loss when the subsidiary in question is sold.

<u>Derivatives not qualifying as hedges</u>
When derivatives do not qualify as hedging instruments, fair value gains and losses are recognized immediately in the statement of income.

1.3.9.8.3. Presentation of derivatives in the statement of financial position and statement of income

Presentation in the statement of financial position

Derivatives used to hedge risks related to market transactions are reported under operating receivables and liabilities in the statement of financial position. Derivatives used to hedge risks related to loans, borrowings and current accounts are reported under financial assets or borrowings.

Presentation in the statement of income

The revaluation of derivatives and hedged items relating to market transactions affecting the statement of income is recognized under “other operating income and expenses”, except for the component corresponding to the discount/premium, which is recognized in financial income.

For loans and borrowings denominated in foreign currencies, fair value gains and losses on financial instruments and hedged items are recognized in financial income.

1.3.9.9. Derecognition of financial assets and liabilities

The group derecognizes a financial asset when:

- the contractual rights to the cash flows generated by the asset expire; or
- the group has transferred the rights to receive the contractual cash flows related to the financial asset as a result of the transfer of substantially all the risks and rewards of ownership of the said asset.

The group derecognizes a financial liability when its contractual obligations are extinguished, when they are canceled or when they expire.

1.3.10. Employee benefits

Pension, early retirement, severance pay, medical insurance, long-service medals, accident and disability insurance, and other related commitments, whether for active personnel and for retired personnel, are recognized pursuant to IAS 19 as amended.

The benefits provided under post-employment benefits can be distinguished according to whether the level of benefits depends on (i) contributions made by the employee ("defined contribution" plans) or (ii) a level of benefit defined by the company (“defined benefit" plans").
In the case of defined contribution plans, the group’s payments are recognized as expenses for the period to which they relate.
For defined benefit plans, benefit costs are estimated using the projected credit unit method: under this method, accrued pension benefits are allocated among service periods based on the plan vesting formula.

The amount of future benefit payments to employees is determined on the basis of actuarial assumptions (change in wages, retirement age, probability of payment, turnover rate and mortality rate). These future payments are reduced to their present value using a discount rate determined according to the rates of investment-grade corporate bonds of a maturity equivalent to that of the company's corporate liabilities.

The amount of the provision results from the measurement of commitments less the fair value of the assets intended to cover them.

Actuarial gains and losses relating to post-employment benefits (change in the valuation of commitments and financial assets due to changes in assumptions and experience differences) are recognized under “Other items of comprehensive income”; they are not recyclable to the income statement.

In contrast, actuarial gains and losses relating to benefits for currently employed employees (e.g. long-service medals) are recognized in the income statement under “Other operating income and expenses.”

The costs relating to employee benefits (pensions and other similar benefits) are split into two categories:

- the discounting reversal expense for the provision, net of the expected yield on assets earmarked for retirement plans, are charged to net financial income; the expected yield of the assets is calculated using the same interest rate used to discount the provision;
- the expense corresponding to the cost of the services rendered is divided between the different operating expense items by purpose: the costs of products and services sold, Research and Development, sales and marketing expenses, administrative expenses.

Past service costs, including the expense or income related to plan amendments/settlements or the introduction of new plans, are recognized in the income statement under "Other operating income and expenses."

1.3.11. Provisions relating to operating activities

In accordance with IAS 37, a provision is recognized when there is a current legal obligation, contractual or constructive, resulting from a past event, and it is likely to result in an outflow of resources without consideration expected after the closing date. A reasonably reliable estimate of net outflow must be determined in order to recognize a provision.

When the outflow of resources is expected to occur in more than two years, provisions are discounted to net present value if the impact of discounting is material.

Provisions for contract completion

Provisions for contract completion cover a series of future expenses to be incurred on the La Hague and Melox sites (Recycling BU), and the Tricastin and Malvesi sites (Chemistry-Enrichment BU) for waste treatment, remediation operations and other operations resulting from the operating cycle. For the Recycling BU, the work mainly covers the warehousing, treatment, packaging, transportation and final disposal of technological waste and processes, and, for the Chemistry-Enrichment BU, nitrate and dust treatment.

The discount rate is determined on basis of the yield curve for French government securities (OAT rates) at the closing date, extended for non-liquid maturities using a long-term equilibrium rate, plus a spread applicable to prime corporate bonds as well as an illiquidity premium. Based on expected disbursements, a single equivalent rate is deducted from the rate curve constructed in this manner;

The inflation rate is set in accordance with the long-term inflation projections for the Eurozone and taking into account the European Central Bank's target rate.

Changes in assumptions relating to changes in cost estimates, discount rates, inflation and payment schedules are recognized in a similar way as for end-of-lifecycle provisions (see Note 1.3.12).

Onerous contracts

An onerous contract is one in which the costs to fulfill the terms of the contract exceed the economic benefits expected from it. Costs to fulfill the terms of the contract reflect the net cost of exit from the contract, which is the lesser of the cost of performing the contract or any compensation or penalty arising from the failure to perform it.

When the group records an onerous contract, the present value of the resulting obligation is subject to a provision (after taking into account any impairment of the assets earmarked for its performance).

Provisions for restructuring

A provision for restructuring is recognized by the group when it has a constructive obligation, which is materialized when: (i) there is a formalized and detailed plan specifying the activity or part of the activity concerned, the location and number of people affected, the estimate of the expenses to be incurred and the date on which the plan will be implemented; and (ii) the people affected have been properly informed of the plan's main features.

Provisions for mining site reclamation

These provisions correspond to the share of the expected expenses related to the costs of rehabilitating mining sites. The provision is constituted as and when the site is operated, in accordance with the principle of progressive deterioration.
The provision for mining site reclamation is equal to the proportion of tonnages processed since the commissioning of the site compared to the total tonnage of the site (quantities already processed and yet to be processed).

1.3.12. Provisions for end-of-lifecycle operations

Provisions for end-of-lifecycle operations cover:

- the costs of storage, retrieval, treatment and packaging of certain legacy waste from older spent fuel treatment contracts that could not be processed on site (WRP);
- the dismantling costs required to prepare the facility for decommissioning (final state), including the costs of treatment and packaging of the waste resulting from the dismantling operations;
- costs related to the long-term management of radioactive waste (transport and storage);
- the cost of monitoring the sites until their complete dismantling.

At the closing date, these costs are adjusted in view of the prevailing economic conditions, and are positioned by payment date so as to be discounted using the inflation rate and the discount rate corresponding to the schedule of forecast expenditure.

Provisions for end-of-lifecycle operations performed by the group and relating to the dismantling of facilities are an integral part of the cost of facilities.

They are therefore measured and recognized in full as of the date of active commissioning of the corresponding nuclear facility, against an end-of-lifecycle asset, in property, plant and equipment (see Note 1.3.7.2).

Treatment of amortization

Dismantling assets are amortized on a straight-line basis over the same period as the relevant facilities.

The corresponding amortization expense does not contribute to the progress of the contracts and is not taken into account in the cost of inventories. It is however included in the profit and loss account under “cost of sales,” deducted from gross profit.

Treatment of expenses from discounting reversals

The discounting of the provision is partially reversed at the end of each period: the discounting reversal corresponds to the increase in the provision due to the passage of time. This increase is recorded as a financial expense.

Inflation and discount rates used to discount end-of-lifecycle operations

The inflation and discount rates used to measure present value for end-of-lifecycle operations are determined on the basis of the principles described below.

The inflation rate is set in accordance with the long-term inflation projections for the Eurozone and taking into account the European Central Bank’s target rate.

The discount rate is set:

- pursuant to IAS 37, i.e. based on market conditions at year-end closing and the specific characteristics of the liability; and
- to comply with the regulatory ceiling set by the decree of February 23, 2007 and the order of December 29, 2017 amending the decree of March 21, 2007 on securing the funding of nuclear expenses.

The rate thus results from implementation of the following approach:

- a rate curve is constructed based on the rate curve of the French State (OAT rates) at the closing date, extended for non-liquid maturities using a long-term break-even rate, plus a spread applicable to prime corporate borrowers and a liquidity risk premium. Based on expected disbursements, a single equivalent rate is deducted from the rate curve constructed in this manner;
- an estimate made by reference to the statutory ceiling, namely the weighted average of the fixed rate of 4.3% (level of the regulatory ceiling noted at December 31, 2016) and the average yield of French 30-year government bonds over the last four years, plus the spread of investment grade corporate bonds, the weighting changing gradually over a period of 10 years until 2026.

The revision of the discount rate is accordingly a function of market rates, structural changes in the economy resulting in medium- and long-term changes, and the potential effects of regulatory ceilings.

Treatment of changes in assumptions

Changes in assumptions relate to changes in cost estimates, discount and inflation rates, and payment schedules.

As provided in IFRS, the group uses the prospective method:

- if the facility is in operation, end-of-lifecycle assets are adjusted in the same amount as the provision; end-of-lifecycle assets are amortized over the remaining life of the facilities;
- if the facility is no longer in operation, or if the operations cover waste retrieval and packaging (WRP), the impact is expensed in the year of the change for the remaining share of the cost to the group. The impact of changes in cost estimates is recognized under operating income; the impact of changes in discount rates related to changes in market conditions and changes in the payment schedules is reflected in financial income.

End-of-lifecycle assets (third party share)

The group may be required to carry out dismantling operations, funded in part by third parties. Provisions for end-of-lifecycle operations covers all operations. They are recognized against “Dismantling assets (own share)” for the group’s share and, in return, and against “End-of-lifecycle assets (third party share)” in the amount of the funding expected from the third party.

End-of-lifecycle assets (third party share) are not amortized.
They are discounted symmetrically with the corresponding provisions. Accretion effects increasing the value of the asset are recorded in a financial income account.
They decline as the contracted work is carried out in return for the recognition of a claim on the same third parties and/or payments received from them.

1.3.13. Income tax

Income taxes include current tax expense (income) and the deferred tax expense (income), calculated in accordance with the tax laws of the countries where the income is taxable.

Current tax

Current tax assets and liabilities are measured based on the expected amount that will be received or paid to the tax authorities.
Current tax relating to items recognized in equity is also recognized in equity, and not in the income statement. When the positions it has taken in its tax returns are subject to interpretation, Management periodically reviews them, and records provisions accordingly when it deems necessary.

Deferred taxes

As provided for in IAS 12, deferred taxes are determined for all temporary differences between net carrying amounts and the tax basis of assets and liabilities, to which is applied the anticipated tax rate at the time of reversal of these temporary differences, and which has been adopted as of the closing date. They are not discounted.

Temporary taxable differences generate a deferred tax liability.
Temporary deductible differences, tax loss carry-forwards, and unused tax credits generate a deferred tax asset equal to the probable amounts recoverable in the future. Deferred tax assets are analyzed case by case for recoverability, taking into account the income projections from the group's strategic action plan.

Deferred tax liabilities are recorded for all taxable temporary differences of subsidiaries, associates and partnerships, unless AREVA is in a position to control the timing of reversal of the temporary differences and it is probable that such reversal will not take place in the foreseeable future. Tax accounts are reviewed at the end of each financial year, in particular to take into account changes in tax laws and the likelihood that amounts recognized will be recovered.

Deferred taxes are recognized in the income statement, with the exception of those relating to "other comprehensive income," which are also recorded under "other comprehensive income."

Orano has elected to recognize the value added business tax (*contribution sur la valeur ajoutée des entreprises*, CVAE) as an income tax; since 2010, its French subsidiaries have been subject to this tax (including the Chamber of Commerce and Industry tax) at the rate of 1.6%. As provided in IAS 12, this election requires recognition of deferred taxes at the rate of 1.6% on the corresponding temporary differences.

<u>Recoverability of deferred tax assets</u>
The amount of deferred tax assets is reviewed at each reporting date, and is reduced where necessary if it is no longer probable that future taxable profits will permit the use of all or part of the amount. Similarly, unrecognized deferred tax assets are remeasured at each reporting date and recognized in the amount of the estimated future taxable profits against which they may be charged.
The recoverable share of the group's deferred tax assets is that for which the probability of recovery is higher than 50%. To establish this probability, the group performs a three-step analysis: (a) demonstration of the non-recurring nature of the losses; (b) analysis of future earnings prospects; and (c) analysis of tax management opportunities.

Regarding the outlook for future income, the probability of future taxable profits to offset losses carried forward is assessed based on income projections from the strategic plan validated by the governance bodies.

The estimation of recoverable losses also takes into account the annual regulation on maximum recoverable amounts (50% for France).

<u>Netting of deferred taxes</u>
Deferred tax assets and liabilities are netted for each taxable entity if the entity is allowed to offset its current tax receivables against its current tax liabilities.

Note 2 – CONSOLIDATION SCOPE

2.1. Consolidated companies (French / foreign)

(number of companies)	December 31, 2018		December 31, 2017	
Consolidation method	French	Foreign	French	Foreign
Full consolidation	24	48	24	46
Equity method	1	5	1	4
Sub-total	**25**	**53**	**25**	**50**
Total	**78**		**75**	

2.2. 2018 Transactions

Creation of the Interim Storage Partners LLC joint venture

Orano CIS LLC, owned by Orano USA, and Waste Control Specialists (WCS) have created a 51% and 49% joint venture named Interim Storage Partners (ISP) to operate a centralized spent fuel storage facility on the WCS site in Texas. Orano TN is providing its unique expertise in cask design, transportation and spent fuel storage. WCS brings its experience of operating a single facility serving both the nuclear industry and the US Department of Energy (DOE).

2.3. 2017 transactions (12 months)

Sale of MAINCO

Orano sold its subsidiary MAINCO, specialized in industrial logistics, to a French family-owned group on June 30, 2017.

Acquisition of Orano Projets (formerly AREVA Projets)

In January 2017, Orano acquired Orano Projets from AREVA NP SAS in order to consolidate the nuclear fuel cycle engineering within Orano, as planned under the group's restructuring plan (see Note 19).

Creation of Orano GmbH and acquisition of Dekontaminierung Sanierung Rekultivierung (DSR)

Orano has established a German company trading as Orano GmbH as part of the restructuring of the Orano group, to house the dismantling and associated services previously housed in AREVA GmbH. To that end, this company has acquired from AREVA GmbH its reactor dismantling operations and DSR IngenieurgesellschaftmbH, an engineering company specialized in radiation protection and the safety of nuclear facilities, both operational and decommissioned.

Buyout of non-controlling interests in EURODIF SA

In July 2017, Orano Cycle acquired ENUSA's 11.1% stake in Eurodif SA, followed by ENEA's 8% stake in October 2017, bringing its direct stake in that company to 75%. This acquisition follows that made in December 2016 from SYNATOM and was consistent with Orano Cycle's plan to acquire all the shares held by its partners following the shutdown of the Georges Besse gaseous diffusion plant at the Tricastin site, in order to optimize its operational management of the site (see Note 1.1 Move of the Tricastin platform under a single nuclear operator).

Creation of SI-nerGIE

In 2017, Orano and Framatome (formerly New NP) created a consortium (*Groupement d'intérêt économique*, GIE) known as SI-nerGIE to share a joint information system and as such to avoid the additional costs and operational risks related to information systems as part of the restructuring of the AREVA group.

2.4. Consolidated companies and associates

Name of unit or controlling entity: Company name, legal form	Country	December 31, 2018		December 31, 2017	
		Method	Percentage of interest	Method	Percentage of interest
FRANCE					
Orano		FC	100	FC	100
Orano Cycle		FC	100	FC	100
Orano Support		FC	100	FC	100
Orano Mining		FC	100	FC	100
CFMM		FC	100	FC	100
CFM		FC	100	FC	100
Orano Expansion		FC	86.51	FC	86.51
EURODIF SA (see Note 20)		FC	90	FC	90
EURODIF PRODUCTION (see Note 20)		FC	90	FC	90
SOCATRI (**) (see Note 20)				FC	90
SOFIDIF		FC	60	FC	60
SET HOLDING		FC	95	FC	95
SET		FC	95	FC	95
Orano Temis		FC	100	FC	100
Orano DS – Démantèlement et Services		FC	73.86	FC	73.86
CNS		FC	51	FC	51
TRIHOM (1)		FC	48.75	FC	48.75
SICN		FC	100	FC	100
LEMARECHAL		FC	100	FC	100
TN International		FC	100	FC	100
Orano Med		FC	100	FC	100
Orano Projets		FC	100	FC	100
Orano Assurance et Réassurance		FC	100	FC	100
Laboratoire d'étalons d'activité		FC	100	FC	100
SI-nerGIE		EM	50	EM	50
EUROPE (Excluding France)					
Orano GmbH	Germany	FC	100	FC	100
Urangesellschaft - Frankfurt	Germany	FC	100	FC	100
Dekontaminierung Sanierung Rekultivierung	Germany	FC	100	FC	100
Enrichment Technology Company Ltd (ETC)	United Kingdom	EM	50	EM	50
Orano Projects Ltd.	United Kingdom	FC	100	FC	100
AMA Nuclear Ltd	United Kingdom	EM	33	EM	33
Orano UK Ltd.	United Kingdom	FC	100	FC	100

Name of unit or controlling entity: Company name, legal form	Country	December 31, 2018		December 31, 2017	
		Method	Percentage of interest	Method	Percentage of interest
AMERICAS					
Orano USA LLC	United States	FC	100	FC	100
UG USA	United States	FC	100	FC	100
Columbiana High Tech	United States	FC	100	FC	100
TN Americas LLC	United States	FC	100	FC	100
Orano Med LLC	United States	FC	100	FC	100
PIC	United States	FC	100	FC	100
Orano Federal Services LLC	United States	FC	100	FC	100
Orano Decommissioning Services LLC	United States	FC	100		
Orano CIS LLC	United States	FC	100		
Interim Storage Partners LLC	United States	EM	51		
Orano Canada Inc. (*)	Canada	FC	100	FC	100
Cigar Lake	Canada	JO	37.10	JO	37.10
Key Lake	Canada	JO	16.67	JO	16.67
Kiggavik	Canada	JO	23.97	JO	23.97
McArthur River	Canada	JO	30.20	JO	30.20
McClean Lake	Canada	JO	70	JO	70
Midwest	Canada	JO	69.16	JO	69.16
Areva Est Canada	Canada	FC	100	FC	100
Urangesellschaft Canada Limited	Canada	FC	100	FC	100
URANOR Inc.	Canada	FC	100	FC	100
Areva Quebec Inc.	Canada	FC	100	FC	100
Orano Resources Southern Africa	Virgin Islands	FC	100	FC	100
ASIA/PACIFIC					
Orano Japan	Japan	FC	100	FC	100
Orano Cycle Japan Projects	Japan	FC	100	FC	100
ANADEC – Orano ATOX D&D Solutions Co. Ltd.	Japan	EM	50	EM	50
Orano Beijing Technology Co. Ltd.	China	FC	100	FC	100
UG Asia Limited	China	FC	100	FC	100
Areva Mongol LLC	Mongolia	FC	66	FC	66
COGEGOBI	Mongolia	FC	66	FC	66
Badrakh Energy LLC (1)	Mongolia	FC	43.56	FC	43.56
Orano Korea	Rep. of Korea	FC	100	FC	100
AREVA India Private Ltd.	India	FC	100	FC	100
Katco	Kazakhstan	FC	51	FC	51
Orano Holdings Australia Pty Ltd	Australia	FC	100	FC	100
Orano Australia Pty Ltd.	Australia	FC	100	FC	100

Name of unit or controlling entity: Company name, legal form	Country	December 31, 2018		December 31, 2017	
		Method	Percentage of interest	Method	Percentage of interest
AFRICA/MIDDLE EAST					
Somair	Niger	FC	63.40	FC	63.40
IMOURAREN SA	Niger	FC	57.66	FC	57.66
COMINAK	Niger	EM	34	EM	34
Orano Mining (Namibia) Pty Ltd.	Namibia	FC	100	FC	100
Orano Processing Namibia	Namibia	FC	100	FC	100
Erongo Desalination Company (PTY) Ltd.	Namibia	FC	100	FC	100
URAMIN Centrafrique	Central African Rep.	FC	100	FC	100
AREVEXPLO RCA SA	Central African Rep.	FC	70	FC	70
Orano Gabon	Gabon	FC	100	FC	100
COMUF	Gabon	FC	68.42	FC	68.42
JORDAN AREVA RESSOURCES	Jordan	FC	50	FC	50

(FC: Full consolidation; EM: equity method; JO: Joint operation)

(**) Mergers between consolidated entities.

(1) The percentage of control over these entities is greater than 50%.

2.5. Unconsolidated companies

At December 31, 2018, the net carrying amount of the 10 unconsolidated companies in which Orano holds interests of less than 50% amounted to 3 million euros in the statement of financial position.

At December 31, 2018, the net carrying amount of the 12 unconsolidated companies in which Orano holds interests of more than 50% amounted to 4 million euros in the statement of financial position. The company believes there is no risk associated with these holdings and considers them non-material.

Note 3 – SEGMENT INFORMATION

BY BUSINESS SEGMENT

2018 result

(in millions of euros)	Mining	Front End	Back End	Corporate, other operations and eliminations	Total
Gross revenue	1,129	888	1,708	(101)	3,623
Inter-segment sales	(4)	(41)	(69)	115	-
Contribution to consolidated revenue	1,124	846	1,638	14	3,623
Operating income	393	56	140	(73)	517
Share in income of joint ventures and associates	-	-	-	-	(10)
Net financial income	-	-	-	-	(978)
Income tax	-	-	-	-	(70)
Net income	-	-	-	-	(542)
EBITDA (*)	584	164	166	(94)	821
% of gross revenue	*51.8%*	*18.3%*	*9.7%*	*n/a*	*22.7%*

(*) see Note 6

In the year ended December 31, 2018, the group generated approximately 40% of its revenue with EDF (including Framatome).

Revenue is recognized when the control of the material is transferred for the Mining and Front End divisions, and predominantly on the basis of the percentage-of-completion method for the Back End segment.

2018 statement of financial position

(in millions of euros)	Mining	Front End	Back End	Corporate, other operations and eliminations	Total
PP&E and intangible assets (including goodwill)	2,724	4,224	3,627	51	10,627
Assets earmarked for end-of-lifecycle operations	-	2,393	4,243	195	6,831
Other non-current assets	-	-	-	222	222
Subtotal: Non-current assets	**2,724**	**6,617**	**7,871**	**468**	**17,681**
Inventories and receivables (excluding tax receivables)	657	1,149	675	248	2,729
Other current assets	-	-	-	2,130	2,130
Subtotal: Current assets	**657**	**1,149**	**675**	**2,378**	**4,859**
TOTAL ASSETS	**3,381**	**7,766**	**8,546**	**2,846**	**22,540**

2017 results (12 months)

(in millions of euros)	Mining	Front End	Back End (*)	Corporate, other operations and eliminations (*)	Total
Gross revenue	**1,280**	**918**	**1,882**	**(231)**	**3,848**
Inter-segment sales	(6)	(25)	(230)	261	-
Contribution to consolidated revenue	**1,274**	**893**	**1,652**	**30**	**3,848**
Operating income	**107**	**14**	**71**	**(241)**	**(48)**
Share in income of joint ventures and associates	-	-	-	-	(4)
Net financial income	-	-	-	-	(250)
Income tax	-	-	-	-	(56)
Net income from operations sold or held for sale	-	-	-	-	(2)
Net income	-	-	-	-	**(360)**
EBITDA(**)	**639**	**281**	**200**	**(228)**	**892**
% of gross revenue	*49.9%*	*30.6%*	*10.6%*	*n/a*	*23.2%*

(*) Since January 1, 2018, the Project activity has been housed in the Back End segment and is no longer reported under "Corporate and other operations." As a result, the 2017 data have been restated.
(**) see Note 6 and adjustments pursuant to IFRS 15 in Note 35.

The group generated approximately 33% of its revenue with EDF in the 12 months ended December 31, 2017.

2017 statement of financial position

(in millions of euros)	Mining	Front End	Back End (*)	Corporate, other operations and eliminations (*)	Total
PP&E and intangible assets (including goodwill)	2,845	4,191	3,397	51	**10,483**
Assets earmarked for end-of-lifecycle operations	-	1,798	5,196	271	**7,265**
Other non-current assets	-	-	-	225	**225**
Subtotal: Non-current assets	**2,845**	**5,989**	**8,593**	**547**	**17,973**
Inventories and receivables (excluding tax receivables)	508	1,150	763	474	**2,894**
Other current assets	-	-	-	2,116	**2,116**
Subtotal: Current assets	**508**	**1,150**	**763**	**2,589**	**5,010**
TOTAL ASSETS	**3,352**	**7,139**	**9,356**	**3,136**	**22,983**

(*) Since January 1, 2018, the Project activity has been housed in the Back End segment and is no longer reported under "Corporate and other operations." As a result, the 2017 data have been restated.

BY REGION

2018

Contribution to consolidated revenue by business segment and customer location

(in millions of euros)	Mining	Front End	Back End	Corporate and other operations	Total
France	347	357	978	14	**1,696**
Europe (excluding France)	64	113	180	0	**358**
North & South America	187	170	253	0	**611**
Asia-Pacific	464	188	221	0	**874**
Africa and Middle East	61	18	5	-	**85**
Total	**1,124**	**846**	**1,638**	**14**	**3,623**

Acquisitions of property, plant and equipment and intangible assets (excluding goodwill) at December 31, 2018 by business segment and region of origin of the units

(in millions of euros)	Mining	Front End	Back End	Corporate and other operations	Total
France	2	140	272	2	**417**
Europe (excluding France)	28	-	3	0	**31**
North & South America	21	-	12	0	**33**
Asia-Pacific	3	-	-	0	**3**
Africa and Middle East	13	-	-	-	**13**
TOTAL	**67**	**140**	**287**	**3**	**497**

December 31, 2017 **(12 months)**

Contribution to consolidated revenue by business segment and customer location

(in millions of euros)	Mining	Front End	Back End (*)	Corporate and other operations (*)	Total
France	324	315	1,072	24	**1,735**
Europe (excluding France)	82	143	207	4	**436**
North & South America	186	215	266	1	**668**
Asia-Pacific	633	190	103	0	**926**
Africa and Middle East	49	30	5	-	**84**
TOTAL	**1,274**	**893**	**1,651**	**30**	**3,848**

(*) Since January 1, 2018, the Project activity has been housed in the Back End segment and is no longer reported under “Corporate and other operations.” As a result, the 2017 data have been restated.

Acquisitions of property, plant and equipment and intangible assets (excluding goodwill) for the 12 months ended December 31, 2017 by business segment and by original region of the units

(in millions of euros)	**Mining**	**Front End**	**Back End (*)**	**Corporate and other operations (*)**	**Total**
France	1	145	212	2	**359**
Europe (excluding France)	30	-	2	0	**32**
North & South America	44	0	11	1	**56**
Asia-Pacific	4	-	-	0	**4**
Africa and Middle East	33	-	-	-	**33**
TOTAL	**111**	**145**	**225**	**3**	**484**

(*) Since January 1, 2018, the Project activity has been housed in the Back End segment and is no longer reported under "Corporate and other operations." As a result, the 2017 data have been restated.

Note 4 – ADDITIONAL INFORMATION BY TYPE OF EXPENSE

(in millions of euros)	**December 31, 2018**	**December 31, 2017 (12 months)**
Employee expenses(*)	(1,376)	(1,468)
Average full time equivalent workforce	17,552	18,293
Operating leases	(44)	(47)

(*) Excluding pension obligations

Note 5 - OTHER OPERATING INCOME AND EXPENSES

Other operating income

(in millions of euros)	**December 31, 2018**	**December 31, 2017 (12 months)**
Gain on disposals of assets other than financial assets	6	31
Reversal of impairment on assets (excluding goodwill)	70	-
Other operating income	269	50
Total other operating income	**344**	**81**

The reversal of impairment relates mainly to the Philippe Coste plant (see Note 11).

In 2018, other operating income includes the provision reversal related to the renegotiation of the master health and accident/disability personal insurance plan (see Note 21).

In 2017, the other income included the reversal of a provision covering a supply and service contract with ETC for 29 million euros.

Other operating expenses

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
Restructuring and early retirement plan costs	(23)	(54)
Reversal of impairment on assets (excluding goodwill)	(17)	(492)
Gain on disposals of assets other than financial assets	(5)	(6)
Other operating expenses	(121)	(83)
Total other operating expenses	**(166)**	**(634)**

Impairment losses on other assets are described in Note 11.

In 2018, other operating expenses include:

- expenses related to the postponement of the start of mining operations on the Imouraren and Trekkopje sites, as well as 22 million euros in infrastructure maintenance (33 million euros in the 12 months ended December 31, 2017);
- provisions for tax, social and environmental contingencies and losses in the various countries in which Orano operates.

Note 6 - RECONCILIATION BETWEEN OPERATING INCOME AND EBITDA

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
Operating income	517	(48)
Net increase in depreciation and impairment of intangible assets, net of reversals	71	289
Net increase in depreciation and impairment of property, plant and equipment, net of reversals	362	740
Impairment of current assets, net of reversals	(36)	(35)
Provisions, net of reversals(*)	(291)	(248)
Costs of end-of-lifecycle operations performed	199	195
EBITDA	**821**	**892**

(*) including increases and reversals of provisions for employee benefits and end-of-lifecycle operations

Note 7 – NET FINANCIAL INCOME

Gross borrowing costs

Gross borrowing costs in the year ended December 31, 2018 include interest expense on bonds in the amount of 157 million euros (188 million euros in the 12 months ended December 31, 2017).

Other financial income and expenses

(in millions of euros)	**December 31, 2018**	**December 31, 2017** **(12 months)**
Change in fair value through profit or loss of earmarked assets (*)	(405)	-
Gain or loss on disposal of earmarked assets (*)	-	253
Dividends received	116	125
Income from receivables and accretion gains earmarked assets	50	37
Impact of changes in discount rates and inflation rates	(79)	-
Impact of revisions of payment schedules	3	3
Unwinding expenses on end-of-lifecycle operations	(309)	(265)
Share related to end-of-lifecycle operations	***(624)***	***153***
Foreign exchange gain (loss)	11	(29)
Change in fair value through profit or loss of non-earmarked assets (*)	(1)	-
Impairment of financial assets net of reversals	8	(16)
Interest on advances	(47)	(33)
Financial income from pensions and other employee benefits	(21)	(21)
Accretion expenses of debt and other provisions	(100)	(58)
Other financial income	5	8
Other financial expenses	(58)	(49)
Share not related to end-of-lifecycle operations	***(202)***	***(197)***
Other financial income and expenses	**(826)**	**(44)**

(*) Application of IFRS 9 as of January 1, 2018 (see Note 2).

Other financial expense consists chiefly of premiums/discounts on earmarked assets.

Note 8 – INCOME TAX

Analysis of tax expense

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
Current taxes (France)	(32)	(114)
Current taxes (other countries)	(20)	(35)
Total current taxes	**(51)**	**(150)**
Deferred taxes	(19)	94
Total tax income	**(70)**	**(56)**

The main French subsidiaries in the consolidation, which are at least 95% owned, have established a new tax consolidation as of September 1, 2017.

No deferred tax assets were recognized in respect of the tax loss carryforwards of the French entities included in the tax consolidation at December 31, 2018.

In view of the implementation of the tax consolidation formed around the Company as of September 1, 2017, future relationships between the subsidiaries and Orano SA are governed by a tax consolidated agreement for the period covered by the tax consolidation, based on a principle of neutrality.

It should also be noted that at December 31, 2018, relationships between the subsidiaries and AREVA SA for the period in which they were part of the scope of the tax consolidation formed around AREVA SA, i.e. until December 31, 2016 inclusive, are still governed by an exit agreement, based on a principle of fiscal neutrality.
The tax credits that the tax-consolidated companies transmitted to the parent company during the tax consolidation period and that were not used within the consolidation will be refunded by AREVA SA in the first half of the fourth year following that in which the expenses giving rise to the tax credit were incurred, i.e., from 2018 (the 2014 tax credits) to 2020 (the 2016 tax credits).

Reconciliation of tax expense and income before taxes

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
Net income for the period	**(542)**	**(360)**
Less		
Net income from operations sold, discontinued or held for sale	-	2
Share in net income of joint ventures and associates	10	4
Tax expense (income)	70	56
Income before tax	**(462)**	**(298)**
Theoretical tax income (expense) at 34.43%	159	103
<u>Impact of tax consolidation</u>		
Operations taxed at a rate other than the full statutory rate	(37)	(20)
Unrecognized deferred taxes	(141)	39
Other change in permanent differences	(51)	(178)
Effective tax income (expense)	**(70)**	**(56)**
Effective tax rate	**n/a**	**n/a**

Breakdown of other change in permanent differences

(in millions of euros)	**December 31, 2018**	**December 31, 2017 (12 months)**
Parent / subsidiary tax treatment and inter-company dividends	2	(1)
Impact of permanent differences for tax purposes	(9)	4
Differences between the French tax rate and tax rates applicable abroad	5	(11)
CVAE business tax	(14)	(15)
Impact of change in tax rate		(147)
Impact of changes in temporary differences in the payment schedules for calculating the impact of the reduction in rates in France	(33)	
Other	(3)	(9)
Total other change in permanent differences	**(51)**	**(178)**

Deferred tax assets and liabilities

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Deferred tax assets	104	101
Deferred tax liabilities	13	33
Net deferred tax assets and liabilities	**91**	**68**

For all French companies, the expected tax rates depending on the year in which temporary differences will be reversed are as follows:

2018	2019	2020	2021	>2022
34.43%	32.02%	28.92%	27.37%	25.83%

Following the entry into force of the US tax reform from January 1, 2018, the federal tax rate in the United States is 21%. Combined with the average standard rate of taxes collected by the states, Orano Inc.'s tax rate is now approximately 25%.

Main categories of deferred tax assets and liabilities

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Tax impact of temporary differences related to:		
Property, plant and equipment, intangible assets and non-current assets	56	18
Working capital assets	16	(29)
Employee benefits	11	124
Provisions for restructuring	0	0
Tax-driven provisions	(146)	(134)
Provisions for end-of-lifecycle operations	30	30
Impact of loss carry-forwards and deferred taxes	93	34
Other temporary differences	31	25
Net deferred tax assets and liabilities	**91**	**68**

The change in deferred income tax assets and liabilities on current assets and employee benefits and on the impact of tax loss carryforwards mainly reflects the application of IFRS 9 in other comprehensive income and the termination of the EREF project in the United States.

AREVA Nuclear Material (renamed Orano USA LLC since January 22, 2018) had a tax asset of more than 300 million US dollars serving as the tax base at December 31, 2017 (i.e. 75 million US dollars taxed at 25%), representing the cost of studies for the Eagle Rock Enrichment Facility (EREF) project.
This expenditure, recognized since its origin as annual expenses for accounting purposes, has now been capitalized for tax reasons, and could be depreciated once the facility has been commissioned. Since the U.S. Department of Energy (DOE) has informed the company of its decision not to renew in 2018 its original commitment to guarantee the loan necessary to build the plant, the decision was made to abandon the project, put the land that had been acquired in Idaho up for sale, and to make this known to the public. As a result, this asset, now devoid of any future utility, is totally written off for tax purposes starting in 2018, with a 20-year carryforward. Deferred tax assets have been maintained accordingly.

Change in consolidated deferred tax assets and liabilities

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
At January 1	**68**	**65**
Tax on continuing operations, recognized in profit or loss	(19)	94
Tax recognized in operations held for sale	-	-
Tax expense recognized directly in other items of comprehensive income	38	(77)
Change in consolidated group	-	-
Currency translation adjustments	5	(13)
Net deferred tax assets and liabilities	**91**	**68**

Consolidated deferred tax income and expenses by category of temporary difference

(in millions of euros)	**December 31, 2018**	**December 31, 2017 (12 months)**
Property, plant and equipment, intangible assets and non-current assets	48	60
Working capital assets	(8)	34
Employee benefits	(22)	(43)
Provisions for restructuring	(17)	(21)
Tax-driven provisions	(11)	20
Provisions for end-of-lifecycle operations	-	-
Net loss carry-forwards and deferred taxes	128	16
Impairment of deferred taxes	(141)	39
Other temporary differences	4	(10)
Net deferred tax income (expenses)	**(19)**	**94**

Breakdown of deferred taxes recognized in other comprehensive income (in equity)

(in millions of euros)	**December 31, 2018**			**December 31, 2017 (12 months)**		
	Before tax	**Income tax**	**After tax**	**Before tax**	**Income tax**	**After tax**
Actuarial gains and losses on employee benefits	18	(0)	18	(7)	(1)	(9)
Currency translation adjustments	4	-	4	(197)	-	(197)
Change in value of available-for-sale securities	-	-	-	(26)	13	(14)
Change in value of net investment hedges	0	0	0		(7)	(7)
Change in value of cash flow hedges	(138)	38	(100)	264	(81)	183
Share in comprehensive income of associates (net of income tax)	8	-	8	1	-	1
Total gains and (losses) in other comprehensive income after tax	**(108)**	**38**	**(70)**	**35**	**(77)**	**(42)**

Deferred tax assets not recognized

(in millions of euros)	December 31, 2018	December 31, 2017
Tax credits	-	-
Tax losses	589	434
Other temporary differences	1,177	1,069
Total deferred tax assets not recognized	**1,766**	**1,503**

Note 9 – GOODWILL

(in millions of euros)	December 31, 2017	Increase	Disposals	Impairment	Currency translation adjustments and other	December 31, 2018
Mining	**805**				36	**840**
Front end	**161**					**161**
Back End	**227**				1	**227**
Total	**1,193**	**-**	**-**	**-**	**36**	**1,229**

Goodwill impairment tests

As indicated in Notes 1.2. "Estimates and judgments" and 1.3.7.5 "Impairment of property, plant and equipment, intangible assets and goodwill," the group performs impairment tests at least once a year and whenever there is an indication of impairment. These tests consist of comparing the net carrying amount of the assets of cash-generating units (CGU) or groups of CGUs to which goodwill has been allocated (after inclusion of impairment of property, plant and equipment and intangible assets listed in Notes 10 and 11) with their recoverable amount.

The discount rates used for impairment testing are based on the average cost of capital, and reflect current assumptions as regards the time value of money and the specific risk represented by the asset, the CGU or the group of CGUs; they are determined on the basis of observed market data and evaluations prepared by specialized firms (10-year risk-free rate, equity market risk premium, volatility indices, credit spreads and debt ratios of comparable companies in each sector).

The following assumptions were used to determine the net present value of the estimated future cash flows of the CGUs or groups of CGUs:

December 31, 2018	**Discount rate after tax**	**Growth rate of the normative year**	**Standard year**
Mining	7.65%-11.60%	n/a	n/a
Front end	6.70%	n/a	n/a
Back End	6.83%-7.21%	1.50%	2027

December 31, 2017	**Discount rate after tax**	**Growth rate of the normative year**	**Standard year**
Mining	7.5%-12.00%	n/a	n/a
Front end	6.70%	n/a	n/a
Back End	6.40%-6.70%	1.75%	2026

These impairment tests were calculated using exchange rates in effect on the balance sheet date or the hedged rate when cash flows are hedged.

Mining

The recoverable amount of the Mining group of CGUs is determined based on the value in use. The value in use of mining operations is calculated based on forecast data for the entire period, up to the planned end of mining operations at existing mines and the marketing of the corresponding products (i.e. no later than 2041), rather than on a normative year. The value in use is determined by discounting estimated future cash flows per mine at rates between 7.65% and 11.60% (7.50%-12.00% at December 31, 2017) and based on exchange rates and December 31, 2018.

Future cash flows are determined using the contractually set prices for the fixed component of the backlog and, for the variable component, the market prices based on the forecast price curve prepared and updated by Orano. The forecast price curve is also used for the portion of sales not yet covered by a contract. The price curve is based among other things on Orano's vision of changes in supply (uranium mines and secondary resources) and demand (reflecting the consumption of the global fleet of nuclear power plants over the length of the curve and the purchasing policy of the relevant utilities). The forecast price curve was updated in November 2018 to take into account Orano's analysis of foreseeable changes in the nuclear fleet, the purchasing policy of electricity utilities and trends in resources, both production resources and secondary resources.

The result of this test was higher than the net carrying amount and therefore does not result in goodwill impairment.

The test remains sensitive to discount rates, to foreign exchange parity and to the anticipated future prices of uranium. The value in use of the assets of the Mining group of CGUs would fall by the amounts below if any of the following assumptions were used:

- a discount rate of 50 basis points higher: 109 million euros;
- a euro/US dollar exchange rate of 5 eurocents higher (i.e. 1.20 instead of 1.15): 223 million euros;
- selling price assumption US$5 per pound of uranium below Orano's projected price curves over the entire period of the business plans: 416 million euros.

On this point, the sensitivity analysis was carried out without taking into account a revision of economically mineable uranium quantities or production schedules resulting from this price change.

However, deterioration of this nature would not result in the impairment of the goodwill allocated to the Mining group of CGUs.

Front End

In the Front End segment, goodwill is carried by the Enrichment CGU. The recoverable amount of the CGU is determined from the value in use, calculated using forecast data for the entire period up to the planned end of the operation of industrial assets, without using a normative year. The value in use is determined by discounting estimated future cash flows at 6.70% (unchanged vs. December 31, 2017) and on the basis of a euro/US dollar exchange rate of 1.15 at December 31, 2018 (1.20 at December 31, 2017).

Future cash flows are determined using the contractually set prices for the fixed component of the backlog and, for the variable component, the market prices based on the forecast price curve prepared and updated by Orano. The forecast price curve is also used for the portion of sales not yet covered by a contract. The price curve is based among other things on Orano's vision of changes in supply (enrichment capacities, secondary stocks and resources) and demand for enriched uranium (reflecting the consumption of the global fleet of nuclear power plants over the length of the curve and the purchasing policy of the relevant utilities).

Impairment testing performed at December 31, 2018 did not result in the recognition of any impairment of goodwill.

The test is very sensitive to the discount rate, to the exchange rate, and to the long-term price expectations for separative work units (SWU). The value in use of the assets of the Enrichment CGU would fall by the amounts below if any of the following assumptions were used:

- a discount rate of 50 basis points higher: 275 million euros;
- a euro/US dollar exchange rate of 5 eurocents higher (i.e. 1.20 instead of 1.15): 150 million euros;
- selling price assumptions US$1 per SWU below Orano's projected price curves: 30 million euros.

Other than a reduction of less than US$1 in selling prices per SWU, any of these variations would result in impairment of the goodwill.

Back End

In the Back End segment, goodwill was carried by the Recycling BU in the amount of 171 million euros, the Logistics BU in the amount of 41 million euros and the DS BU in the amount of 15 million euros.

Impairment testing carried out at December 31, 2018 on the CGUs relating to the Back End activities did not result in the recognition of any impairment of goodwill.

Sensitivity analyses show that the use of a discount rate 50 basis points higher or a growth rate for the normative year 1 percentage point lower than the above-mentioned rates would not have led to the recognition of impairment on goodwill.

Note 10 – INTANGIBLE ASSETS

(in millions of euros)	Pre-mining expenses	R&D expenses	Mineral rights	Concessions & brevets	Software	Intangible assets in progress	Other	Total
Gross amount at December 31, 2017	**1,907**	**65**	**1,160**	**407**	**364**	**287**	**187**	**4,376**
CAPEX	20	10	-	-	-	13	-	43
Disposals	-	-	(0)	(0)	(2)	(0)	(0)	(2)
Currency translation adjustments	(55)	(1)	40	1	(0)	6	2	(7)
Change in consolidated group	-	-	-	-	-	-	-	-
Other changes	10	(3)	0	1	4	(11)	(0)	1
Gross amount at December 31, 2018	**1,882**	**71**	**1,200**	**409**	**366**	**295**	**189**	**4,411**
Depreciation and provisions at December 31, 2017	**(1,123)**	**(4)**	**(1,160)**	**(82)**	**(330)**	**(230)**	**(109)**	**(3,038)**
Net increase in depreciation / impairment (1)	(51)	(0)	(0)	(8)	(4)	(0)	(7)	(70)
Disposals	-	-	0	0	2	-	-	2
Currency translation adjustments	29	-	(40)	(1)	0	(11)	(2)	(25)
Change in consolidated group	-	-	-	-	-	-	-	-
Other changes	(2)	-	-	-	(0)	-	0	(2)
Depreciation and provisions at December 31, 2018	**(1,147)**	**(4)**	**(1,200)**	**(91)**	**(332)**	**(241)**	**(118)**	**(3,133)**
Net carrying amount at December 31, 2017	**784**	**61**	**-**	**325**	**34**	**57**	**78**	**1,339**
Net carrying amount at December 31, 2018	**735**	**67**	**-**	**318**	**34**	**54**	**71**	**1,278**

(1) Including 20 million euros in reversals of impairment losses.

Note 11 – PROPERTY, PLANT AND EQUIPMENT

(in millions of euros)	Land	Buildings	Plant, equipment and tooling	End-of-lifecycle assets - attributable to owners of the parent	Other	In progress	Total
Gross amount at December 31, 2017	**155**	**1,865**	**19,883**	**1,497**	**1,408**	**1,992**	**26,799**
CAPEX	0	5	18	-	5	437	465
Disposals	(1)	(2)	(125)	(418)	(36)	(9)	(591)
Currency translation adjustments	(1)	(13)	(20)	0	21	(3)	(16)
Change in consolidated group	-	-	-	-	-	-	-
Other changes	1	50	192	93	38	(269)	106
Gross amount at December 31, 2018	**154**	**1,905**	**19,948**	**1,172**	**1,436**	**2,148**	**26,763**
Depreciation and provisions at December 31, 2017	**(81)**	**(972)**	**(14,581)**	**(988)**	**(1,137)**	**(1,089)**	**(18,847)**
Net increase in depreciation / impairment [(1)]	(1)	(54)	(303)	(27)	(24)	48	(361)
Disposals	0	2	122	418	35	-	576
Currency translation adjustments	0	7	10	-	(23)	1	(6)
Change in consolidated group	-	-	-	-	-	-	-
Other changes	-	6	10	-	(21)	1	(5)
Depreciation and provisions at December 31, 2018	**(82)**	**(1,012)**	**(14,742)**	**(597)**	**(1,170)**	**(1,040)**	**(18,643)**
Net carrying amount at December 31, 2017	**74**	**894**	**5,301**	**509**	**271**	**903**	**7,952**
Net carrying amount at December 31, 2018	**73**	**893**	**5,205**	**575**	**265**	**1,109**	**8,120**

(1) Including 33 million euros in reversals of impairment losses.

MINING ASSETS

The tangible and intangible assets of mining and industrial sites (constituting Mining segment CGUs) are subject to an impairment test at each year-end (in accordance with the principles set out in Note 1.3.7.5) taking into account the deteriorating conditions in the uranium market.

Mining assets in Namibia - Trekkopje

The carrying amount of intangible assets and property, plant and equipment in Namibia includes the mining infrastructure and the desalination plant.

The value in use of the desalination plant is tested separately from that of the mining infrastructure. It is determined on the basis of its business plan at a rate of 7.65% (8.50% at December 31, 2017). No impairment was recognized at December 31, 2018.

Impairment in the amount of 23 million euros was recorded on the carrying amount of intangible assets and property, plant and equipment of the mine at December 31, 2017, and additional impairment of 7 million euros was recorded at December 31, 2018 based on their fair value, determined from a multiple of uranium resources in the ground. After recognition of impairment of the mining assets, the carrying amount of mining assets was 48 million euros (58 million euros at December 31, 2017).

INDUSTRIAL ASSETS: CONVERSION

The assets of the Conversion CGU (Comurhex I and Philippe Coste) are subject to an impairment test at each year-end (in accordance with the principles set out in Note 1.3.7.5) taking into account the deteriorated conditions in the uranium market.

The value in use of property, plant and equipment was estimated at December 31, 2018, using a discount rate of 6.70% (identical to December 31, 2017), a euro-US dollar exchange rate of 1.15 in line with the rate at December 31, 2018 (1.20 at December 31, 2017) and selling price assumptions for the conversion units resulting from Orano’s analysis of the expected medium and long-term supply and demand trends. On these bases, the impairment test resulted in a reversal of 45 million euros over the period. At December 31, 2018, the net carrying amount of the industrial assets was 261 million euros.

The test result is sensitive to the assumptions used. Sensitivity analysis was therefore carried out using a discount rate 50 basis points higher (7.2% as opposed to 6.7%), a euro-US dollar exchange rate 5 cents higher (1.2 as opposed to 1.15) and selling price assumptions 1 dollar lower per kilogram of converted uranium than in Orano’s projected price curves over the entire business plan period. Any variation in these assumptions would imply additional loss of value.

INDUSTRIAL ASSETS: ENRICHMENT

Impairment testing of the Enrichment CGU, which also carried goodwill, did not result in the recognition of any impairment (see Note 9).

Note 12 – END-OF-LIFECYCLE OPERATIONS

PROVISIONS FOR END-OF-LIFECYCLE OPERATIONS

(in millions of euros)	**Net carrying amount at December 31, 2017**	**Reversal (when risk has materialized)**	**Accretion**	**Change in assumptions, revised budgets, etc.**	**Net carrying amount at December 31, 2018**
Provisions for dismantling	4,833	(101)	197	121	5,051
Provision for waste retrieval and packaging	1,186	(66)	49	(13)	1,156
Provisions for long-term waste management and site monitoring	1,256	(18)	52	77	1,367
Provisions for end-of-lifecycle operations (legal*)	**7,276**	**(185)**	**298**	**185**	**7,575**
Provisions for end-of-lifecycle operations (other than legal*)	269	(12)	11	38	306
PROVISIONS FOR END-OF-LIFECYCLE OPERATIONS	**7,545**	**(197)**	**309**	**223**	**7,881**

(*) scope of application of the Act of June 28, 2006

At December 31, 2018, used provisions in the amount of (197) million euros correspond to the expenses relating to the end-of-lifecycle operations incurred by the group.

Changes in assumptions, revisions and other variations in the positive amount of 223 million include:

- the impact of the change in the discount rate for positive 174 million euros, (of which positive 168 million on the regulated scope) allocated in the amount of 95 million euros to end-of-lifecycle assets and 79 million euros in expenses to net financial income;
- changes in payment schedules in the amount of (3) million euros;
- changes in estimates in the positive amount of 76 million, resulting mainly from:
  - change in the transport packaging fleet in the positive amount of 32 million euros,
  - facilities discontinued at the La Hague site in the positive amount of 26 million euros,
  - transport and storage assumptions in the positive amount of 17 million euros;
- expenditure on works carried out on facilities financed by third parties in the amount of (22) million euros.

Nature of the commitments

As a nuclear facility operator, the group has a legal obligation to secure and dismantle its production facilities when they are shut down in whole or in part on a permanent basis. It must also retrieve and package in accordance with prevailing standards certain legacy waste as well as the waste resulting from operating and dismantling activities. The group must also assume the monitoring obligations of closed storage sites. These facilities relate to the Front End of the cycle (including the Pierrelatte site) and the Back End of the cycle (including the La Hague spent fuel treatment plant and the MELOX MOX fuels manufacturing plant).

In December 2004, the CEA, EDF and Orano Cycle signed an agreement concerning the Marcoule facility, which transfers the responsibilities of site owner-operator to the CEA, which will be responsible for funding the site cleanup. This agreement does not cover final disposal costs for long-lived high- and medium-level waste. Accordingly, provisions for the Marcoule site only cover Orano’s share of waste shipping and final waste disposal costs.

For all the facilities on the regulated scope (regulated nuclear facilities, “RNF”) and those outside the scope (installation classified for the protection of the environment, “ICPE”), Orano uses the same methods to assess both the cost of end-of-lifecycle operations and expenses related to disposal and storage of waste.

In accordance with Article 20 of French planning law no. 2006-739 of June 28, 2006 on the sustainable management of radioactive materials and waste, codified in articles L. 594-1 *et seq*. of the French Environmental Code, Orano submits a report on RNFs to the administrative authority every three years setting out cost estimates and calculation methods for provisions, as well as an annual update of this report.

Measurement of provisions for dismantling and WRP operations

The costing of facility dismantling and WRP operations is based on methodologies and scenarios describing the nature and timing of the planned operations. The estimate is based on a parametric approach for facilities in operation (costing resulting from the inventory of the facility: volume of materials, equipment, etc.) and an analytical approach for facilities that have been shut down (costing resulting from estimates for each operation envisaged: volume and cost of the required units of work, collection of quotes from subcontractors, etc.).

The group measures its provisions on the basis of a reference scenario providing for the industrial reuse of buildings after the decommissioning of the facilities, excluding the deconstruction of buildings, together with the treatment of radioactively contaminated ground when the characterization studies of this ground make such operations probable.

Main opportunities and uncertainties

In view of the duration of the end-of-lifecycle commitments, the main opportunities and uncertainties cited as examples below are taken into account as they occur:

- Opportunities:
    - gains generated by the learning curve and industrial standardization of operating procedures,
    - in-depth investigations on the condition of the facilities using new technologies in order to reduce the uncertainty related to initial facility conditions;
- Uncertainties:
    - revision of scenarios of certain waste retrieval and packaging projects at La Hague during the qualification of waste retrieval processes,
    - differences between the expected initial conditions of the legacy facilities and the actual initial conditions,
    - uncertainties related to changes in the Nuclear Safety Authority’s requirements (e.g. for final conditions and soil treatment) and to changes in generally applicable regulations,
    - uncertainties related to changes in financial parameters (discount rate and inflation rate).

Consideration of identified risks and unforeseen events

The technical cost of end-of-lifecycle operations is backed up by consideration of:
- a baseline scenario that takes operating experience into account;
- a margin for risks identified through risk analyses conducted in accordance with the Orano standard and updated regularly as the projects advance;
- a margin for unforeseen events designed to cover unidentified risks.

Long-term waste management

Orano sets aside a provision for expenses related to radioactive waste in its possession.

These expenses include:
- the removal and storage in saturated surface dry form of very low-level waste (VLLW) and short-lived low- and intermediate-level waste (SL-LILW), and its share of monitoring of the ANDRA disposal facilities in the Manche and Aube departments, which received or still receive such waste;
- the removal and underground disposal of long-lived low-level waste (LL-LLW);
- The removal and disposal of long-lived medium- and high-level waste covered by the French law of December 30, 1991 (now codified in articles L. 542-1 et seq. of the French Environmental Code).

The measurement of the provision related to the long-term management of HLW and MLW is based on the assumption that a deep geological repository (subsequently referred to as Cigeo) will be built. It draws on the cost at completion of 25 billion euros set in the Ministerial Order of January 15, 2016 (gross value not discounted, under the economic conditions prevailing at December 31, 2011). This order took into account the cost estimate of the project established by ANDRA, the ASN opinion and the observations made by nuclear operators. On January 15, 2018, the ASN also issued its opinion on the CIGEO safety options file, finding that the project had reached satisfactory overall technological maturity at the safety options file stage and requesting additional elements of demonstration regarding the bituminous waste safety options.

This cost at completion, after adjustment to the economic conditions prevailing at December 31, 2018 and discounting, have been covered by a provision for the amount of the estimated share of financing that will ultimately be borne by the group and the proportion of waste existing at the closure. The breakdown of funding between nuclear operators depends on many factors, including the volume and nature of the waste sent by each operator, the timing of the shipment of waste and the design of the underground facility.
For sensitivity analysis purposes, an increase of 1 billion euros in the amount of the CIGEO project estimate before discounting would result in an additional expense in a present value of approximately 32 million euros for Orano, based on the methodology used to establish the existing provision.

The discount rate (see principles laid out in Note 1.3.12)

At December 31, 2018, Orano applied a long-term inflation assumption of 1.60% and a discount rate of 3.95% (1.65% and 4.10% respectively at December 31, 2017).

At December 31, 2018, the use of a discount rate 25 basis points higher or lower than that used (3.95%) would have the effect of changing the closing balance of provisions for end-of-lifecycle operations by (385) million euros with a rate increased by 25 bp or a positive 422 million euros with a rate reduced by 25 bp.

Tentative schedule of provision disbursements

The following table shows the forward payment schedule of provisions both within and outside the scope of the law of June 28, 2006, excluding Andra's monitoring costs:

(in millions of euros)	**December 31, 2018**
2019	271
2020 – 2022	1,315
2023 – 2027	1,742
2028 – 2037	1,969
2038 and beyond	8,674
TOTAL PROVISIONS BEFORE DISCOUNTING	**13,971**

The amounts represent the future disbursement of provisions expressed before discounting and aligned with the economic conditions prevailing in 2018.

END-OF-LIFECYCLE ASSETS

End-of-lifecycle assets include two items:

- The group's share of end-of-lifecycle assets, classified under property, plant and equipment in the statement of financial position (see Note 11);
- Third party dismantling assets (see Note 1.3.12) described in this Note.

(in millions of euros)	**Net carrying amount at December 31, 2017**	**Decrease from period expense**	**Acc-retion**	**Change in assumptions, revised budgets, etc.**	**Net carrying amount at December 31, 2018**
End-of-lifecycle assets – third party share (regulated assets)	149	(22)	6	2	135
End-of-lifecycle assets – third party share (non-regulated assets)	4	0	-	-	4
TOTAL THIRD-PARTY SHARE	**153**	**(22)**	**6**	**2**	**139**

The share of third parties remaining in the end-of-lifecycle assets corresponds to the funding expected from third parties contributing to the dismantling of certain facilities.

FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS

This heading consists of the following:

(in millions of euros)	**December 31, 2018**		**December 31, 2017**	
	Net carrying amount	Market value	Net carrying amount	Market value
Portfolio of earmarked securities	6,457	6,561	6,368	6,504
Receivables related to end-of-lifecycle operations	236	236	744	744
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	**6,693**	**6,797**	**7,112**	**7,248**
Of which earmarked assets (regulated assets*)	6,630	6,734	7,049	7,185
Of which earmarked assets (non-regulated assets*)	63	63	63	63

(*) scope of application of the Act of June 28, 2006

Objective of hedging assets, portfolio of earmarked securities and end-of-lifecycle receivables

To secure the funding of end-of-lifecycle obligations, the group has built up a special portfolio earmarked for the payment of its future facility dismantling and waste management expenses. This obligation has applied to all nuclear operators in France since the Law no. 2006-739 of June 28, 2006 and the implementing decree no. 2007-243 of February 23, 2007 came into force. This portfolio was composed based on a schedule of disbursements over more than a century and is therefore managed with long-term objectives. The portfolio is comprised of financial assets covering all of the group's commitments, whether related to obligations imposed by the Law of June 28, 2006 for regulated nuclear facilities located in France, or related to other end-of-lifecycle commitments for facilities located in France or abroad.

The group relies on independent consultants to study strategic target asset allocations to optimize the risk/return of the portfolio over the long term and to advise it on the choice of asset classes and portfolio managers. These recommendations are submitted to the Cleanup and Dismantling Fund Monitoring Committee of the Board of Directors. Long-term asset allocations indicate the target percentage of assets to cover liabilities (bonds and money market assets, including receivables from third parties) and diversification assets (shares, etc.), subject to limits imposed by decree no. 2007-243 of February 23, 2007 and its amendment by decree no. 2013-678 of July 24, 2013, both in terms of the control and spread of risks and in terms of the type of investments.

As of December 31, 2018, for the end-of-lifecycle obligations falling within the scope of Articles L. 594-1 et seq. of the French Environmental Code, the legal entities comprising Orano had assets representing 91% of end-of-lifecycle liabilities (compared with 101% at December 31, 2018). This coverage ratio is determined as follows:

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Provisions for end-of-lifecycle operations (regulated scope*)	**7,575**	**7,276**
Third party assets (regulated scope*)	135	149
Earmarked assets at market value (regulated scope*)	6,734	7,185
Earmarked for end-of-lifecycle operations (regulated scope*)	**6,869**	**7,334**
(Deficit)/Surplus of earmarked assets (regulated scope*)	(706)	58
Coverage ratio (regulated scope*)	**91%**	**101%**

(*) Scope of application of the Act of June 28, 2006

Portfolio of earmarked assets

Orano has ensured that all Orano Cycle funds are held, registered and valued by a single service provider capable of performing the necessary control and valuation procedures independently, as required by the implementing decree.

The Equity segment is primarily managed by external service providers via:
- an equity management agreement; and
- earmarked investment funds.

The Rate segment (bonds and money market) is invested via:
- open-ended mutual funds;
- earmarked investment funds; and
- directly held bonds.

The portfolio of assets earmarked to fund end-of-lifecycle expenses includes the following:

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
In market value or liquidation value		
Equity mutual funds and listed equities	2,409	2,610
Bond and money market mutual funds	3,466	3,127
Unlisted mutual funds	210	139
At amortized cost		
Bonds and bond mutual funds held to maturity	372	492
Portfolio of securities earmarked for end-of-lifecycle operations	**6,457**	**6,368**
Receivables related to end-of-lifecycle operations	236	744
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	**6,693**	**7,112**

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
By region		
Eurozone	6,137	6,562
Non-euro Europe	260	365
Other	296	184
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	**6,693**	**7,112**

Financial assets held as securities or mutual funds represent 96% of all earmarked assets at December 31, 2018. They are classified as follows: 39% equity, 57% bonds and money-market instruments and 4% receivables.

Performance of financial assets earmarked for end-of-lifecycle operations by asset class (*)

Asset class	**December 31, 2018**	**December 31, 2017**
Shares	-9.8%	+12.4%
Rate products (including receivables related to end-of-lifecycle operations)	-0.2%	2.0%
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	**-3.9%**	**+6.1%**

(*) The performance shown for these asset classes only covers the portion of assets earmarked for end-of-lifecycle operations of regulated nuclear facilities subject to the French law of June 28, 2006

Receivables related to end-of-lifecycle operations

Receivables related to end-of-lifecycle operations correspond mainly to claims on the CEA resulting from the December 2004 agreement (amended in 2015 and 2018 as described below) bearing on the assumption by the CEA of a share of the cost of dismantling facilities in the La Hague and a share of waste retrieval and packaging costs at the UP2 400 plant.

The contractual framework for the main receivable related to end-of-lifecycle operations was amended in the second half of 2018 in order to define a payment schedule for the principal and interest. This change resulted in the payment in December 2018 of 541 million euros excluding taxes, which were reinvested in the dismantling fund. It also set a new final repayment schedule at December 31, 2019, leaving the CEA the possibility of making an early repayment of its residual debt in the amount of 173 million euros at December 31, 2018.

The earmarked asset account also includes two claims, one on the CEA and the other on EDF, resulting from Orano's over-financing of ANDRA between 1983 and 1999 (payments of tax contributions split between nuclear operators in excess of its share).

Risk description and assessment

Equity investments in the portfolio of earmarked securities include mainly:
- a mandate of publicly-traded shares, which includes about thirty companies based in the European Union. The securities are held in order to generate gains over the long term. Although it is not a management guideline, the mandate will be assessed over the long term by reference to the MSCI EMU index, net dividends reinvested. The nature of the long-term mandate is not compatible with an evaluation against a benchmark;
- dedicated equity funds with diversified management strategies centered on European securities. The managers must follow strict exposure rules, depending on the objectives of the fund involved: including limits on the amounts invested in certain stocks or as a percentage of the net value of the portfolio, limits on exposures in currencies other than the euro, tracking error (relative risk compared with the benchmark), and

limits on exposures to certain types of instruments. Together, these limits are designed to comply with investment rules established in the implementing decree of the Law of June 28, 2006.

Fixed income products in the portfolio of earmarked securities mainly include:

- directly held securities consisting of government bonds from the Eurozone, which will be held to maturity. They are recognized using the amortized cost method;
- dedicated bond funds, listed bonds and open-ended money market funds. The sensitivity to interest rates of bond funds is limited in both directions, including the portfolio's overall consistency with preset long-term sensitivity objectives and the sensitivity of the liabilities to the discount rate used. The issuers' ratings (Moody's or Standard & Poor's) are used to manage the credit risk exposure of money market and bond funds and listed bonds.

Derivatives may be used for hedging or to acquire a limited exposure. They are subject to specific investment guidelines prohibiting leverage. Total nominal commitments may not exceed the fund's net assets. Sales of puts and calls must be fully covered by underlying assets (and are prohibited on assets not included in the portfolio).

Risk assessment and management of the earmarked portfolio

The risks underlying the portfolios and funds holding assets under the management mandate for end-of-lifecycle operations are assessed every month. For each fund or earmarked asset, this assessment allows the maximum total loss to be estimated with a 95% level of confidence for different portfolio maturities using the VaR (Value at Risk) method and volatility estimates. A second estimate is made using deterministic scenarios: yield curve shock and/or fall in equity markets.

The impacts of changes in equity markets and interest rates on the valuation of financial assets earmarked are summarized in the following table:

(in millions of euros)	**December 31, 2018**
Assumption: declining equity markets and rising interest rates	
- 10% on equities	(262)
+100 basis points on rates	(65)
TOTAL	**(327)**
Assumption: rising equity markets and declining interest rates	
+10% on equities	+262
- 100 basis points on rates	+65
TOTAL	**+327**

Note 13 – INFORMATION ON JOINT VENTURES AND ASSOCIATES

2018

(in millions of euros)	Share in net income of joint ventures and associates	Investments in joint ventures and associates	Share in negative net equity of joint ventures and associates
Cominak	(22)	-	13
ETC	11	-	32
SI-nerGIE	0	0	-
ANADEC	(0)	0	-
Interim Storage Partners	-	1	-
TOTAL	**(10)**	**1**	**45**

2017

(in millions of euros)	Share in net income of joint ventures and associates	Investments in joint ventures and associates	Share in negative net equity of joint ventures and associates
Cominak	(8)	10	-
ETC	10	-	52
SI-nerGIE	(7)	-	5
ANADEC	0	0	-
TOTAL	**(4)**	**10**	**57**

SIGNIFICANT JOINT VENTURES

A joint venture is deemed to be significant if its revenue or balance sheet total is more than 150 million euros. An associate is deemed to be significant when its balance sheet total is more than 150 million euros.

Financial information required under IFRS 12 is presented before eliminations of intercompany transactions and restatements, and is based on 100% ownership.

(in millions of euros)	December 31, 2018	December 31, 2018	December 31, 2017	December 31, 2017
	ETC	SIner-GIE	ETC	SIner-GIE
	Front end	Corporate	Front end	Corporate
Country	UK	France	UK	France
% held	50%	50%	50%	50%
Revenue	**38**	**167**	**54**	**200**
EBITDA	**38**	**13**	**39**	**20**
Net income	**25**	**0**	**21**	**0**
Including increases to amortization and depreciation	(4)	(19)	(6)	(19)
Including interest income / expense	-	-	-	-
Including tax income / expense	-	-	-	-
Other items of comprehensive income	**18**	**-**	**1**	**-**
Comprehensive income	**43**	**0**	**23**	**0**

(in millions of euros)	December 31, 2018	December 31, 2018	December 31, 2017	December 31, 2017
	ETC	SIner-GIE	ETC	SIner-GIE
	Front end	Corporate	Front end	Corporate
Country	UK	France	UK	France
% held	50%	50%	50%	50%
Current assets	**156**	**78**	**150**	**56**
Including cash and cash equivalents	20	44	-	14
Non-current assets	**40**	**23**	**36**	**33**
Current liabilities	**96**	**76**	**107**	**89**
Including current financial liabilities	-	-	-	7
Non-current liabilities	**14**	**25**	**36**	**10**
Including non-current financial liabilities		20		
Net assets	**86**	**0**	**43**	**(10)**

(in millions of euros)	December 31, 2018	December 31, 2018	December 31, 2017	December 31, 2017
	ETC	SIner-GIE	ETC	SIner-GIE
	Front end	Corporate	Front end	Corporate
Country	UK	France	UK	France
% held	50%	50%	50%	50%
Share of net equity before eliminations at the beginning of the year	**22**	**(5)**	**10**	**22**
Share of comprehensive income	21	-	-	-
Share of dividend distributions	-	-	-	-
Share of income paid by consortiums	-	5	-	-
Other changes	-	-	-	-
Share of net equity before eliminations at the end of the year	**43**	**0**	**22**	**(5)**
Consolidation adjustments	(75)	-	(74)	-
Investments in joint ventures at year-end closing Share of negative net equity	**(32)**	**-**	**(52)**	**(5)**

Enrichment Technology Company (ETC) is a joint venture held in equal shares by Orano and URENCO. Its main activity is to build, assemble and install centrifuges and associated piping systems enabling its customers to enrich uranium. ETC is also involved in the design of ultracentrifugation enrichment plants to meet its customers' needs and in project management for the construction of these facilities.

Orano and Framatome (formerly New NP) have created a consortium known as SI-nerGIE to share a single information system (see Note 2.3).

Orano considers that it has a constructive obligation to ensure the continuity of operations of ETC and SIner-GIE; consequently, and in accordance with the provisions of IAS 28, Orano recognizes its share of negative equity under liabilities in its consolidated statement of financial position and its share of negative net income in its consolidated statement of income and statement of comprehensive income.

NON-SIGNIFICANT JOINT VENTURES

(in millions of euros)	December 31, 2018	December 31, 2017
Securities of non-significant joint ventures in assets	**1**	**10**
Securities of non-significant joint ventures in liabilities	**13**	**-**
Share of net income	(22)	(8)
Share of other items of comprehensive income	(1)	-
Share of comprehensive income	(23)	(7)

The non-significant joint ventures are COMINAK, ANADEC and Interim Storage Partners.

Orano considers that it has a constructive obligation to finance residual operations to complete operations and rehabilitate the Cominak site in proportion with its interest; consequently, and in accordance with the provisions of IAS 28, Orano recognizes the share of negative equity as a liability in its consolidated statement of financial position and its share of negative net income in its consolidated statement of income and statement of comprehensive income.

Note 14 – OTHER CURRENT AND NON-CURRENT ASSETS

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Derivatives on financing activities	37	52
Other	81	62
Total other non-current assets	**118**	**114**
Derivatives on financing activities	46	9
Pledged bank accounts	-	58
Other	20	-
Total other current financial assets	**66**	**67**

Other non-current assets include inventories of uranium capitalized to finance future expenditure for the redevelopment of mining sites internationally in the amount of 33 million euros as of December 31, 2018 (compared with 30 million euros as of December 31, 2017).

As of December 31, 2017, pledged bank accounts consist of bank deposits constituted in respect of contractual obligations related to the syndicated loan backed by certain future revenues of the Georges Besse II enrichment plant ("collateral"). This loan was repaid in 2018 (see Note 1.1).

Note 15 – INVENTORIES AND WORK IN PROCESS

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Raw materials and other supplies	277	368
In progress	802	928
Finished goods	390	179
Total gross amount	**1,468**	**1,475**
Provisions for impairment	(167)	(217)
Total net carrying amount	**1,301**	**1,258**
Inventories and work-in-process		
at cost	1,251	1,182
at fair value net of disposal expenses	50	76
	1,301	**1,258**

Note 16 – TRADE ACCOUNTS RECEIVABLE AND RELATED ACCOUNTS

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Gross amount	628	693
Impairment	(2)	(3)
Net carrying amount	**625**	**690**

At December 31, 2018, the gross amount of trade accounts receivable and related accounts does not include receivables maturing in more than one year.

Trade accounts receivable and related accounts (gross)

(in millions of euros)	**Net amount**	**Maturing in the future**	**Of which due**					
			Less than 1 month	1 to 2 months	2 to 3 months	3 to 6 months	6 months to 1 year	More than 1 year
December 31, 2018	**625**	556	19	3	4	4	4	36
December 31, 2017	**690**	591	20	28	4	3	15	29

Note 17 - OTHER OPERATING RECEIVABLES

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
French State receivables	345	306
Advances and down payments to suppliers	81	35
Miscellaneous accounts receivable	201	302
Financial instruments	25	142
Other	5	5
Other operating receivables	**657**	**791**

Government receivables mainly include VAT receivables and tax credits.

“Miscellaneous accounts receivable” includes prepaid expenses, receivables from suppliers and receivables from employees and benefit management bodies.

“Financial instruments” include the fair value of derivatives hedging market transactions and the fair value of the firm commitments hedged.

Other operating receivables maturing in more than one year amount to 69 million euros.

Note 18 – CASH AND CASH EQUIVALENTS

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Cash and cash equivalents	963	740
Cash equivalents	1,064	1,210
Total	**2,027**	**1,950**

At December 31, 2018, cash and cash equivalents included cash and cash equivalents not immediately available to the group amounted to 132 million euros (57 million euros at December 31, 2017), chiefly reflecting regulatory restrictions in the amount of 52 million euros and legal restrictions in international markets in the amount of 79 million euros.

Note 19 - EQUITY

Capital

At December 31, 2018, Orano's share capital broke down as follows:

	December 31, 2018	December 31, 2017
French State	50% + 1 share	50.16%
AREVA SA	20%	44.44%
Natixis (*)	10%	-
Caisse des Dépôts (*)	10%	-
CEA (**)	0%	5.4%
MHI	5%	-
JNFL	5%	-
Total	**100%**	**100%**

(*) At the end of March 2018, under a trust agreement and as security on behalf of certain AREVA SA lenders, AREVA SA transferred 10% of the capital of Orano SA to Caisse des Dépôts and 10% of the capital of Orano SA to Natixis. Pursuant to the shareholders' agreement concluded on February 21, 2018 and reconfirmed on July 13, 2018, it was nevertheless agreed that the voting rights held by *Caisse des Dépôts* and Natixis will be exercised exclusively in accordance with the instructions given by AREVA SA, pursuant to the provisions of the agreement.

(**) On December 4, 2018, the French State acquired 12,774,282 Orano shares from the CEA, which kept one share.

Stock option plan

There is no stock option plan.

Transactions with shareholders

In the statement of changes in shareholders' equity presented at December 31, 2017, transactions with shareholders reflected the 2.5 billion euro capital increase of new AREVA Holding subscribed by the French State (see Note 1.1). In addition, Orano bought back part of non-controlling interests in EURODIF (see Note 2).

In the year ended December 31, 2018, transactions with shareholders were the completion of the capital increase reserved for Japan Nuclear Fuel Limited (JNFL) and Mitsubishi Heavy Industries, Ltd. (MHI), in a total amount of 500 million euros (see Note 1.1).

Transactions with companies under joint control

In the statement of changes in shareholders' equity at December 31, 2017, transactions with companies under joint control amounted to (81) million euros in the year ended December 31, 2017. They chiefly reflected the acquisition from New AREVA NP of Orano Projets for 64 million euros and were recorded on the basis of the historical carrying amounts as recorded in AREVA's consolidated financial statements.

Note 20 – NON-CONTROLLING INTERESTS

Non-controlling interests consist of interests held by third parties in a subsidiary controlled by the group.

(in millions of euros)	December 31, 2018	December 31, 2017
KATCO	108	93
SET and SET Holding	87	87
Somair	49	57
IMOURAREN (*)	(419)	(412)
Other	(30)	(17)
TOTAL	**(204)**	**(192)**

(*) Imouraren is held by Orano Expansion, which is in turn held by CFMM.

Orano considers that it has a constructive obligation to assume the entire environmental and social liabilities of Eurodif and its subsidiaries; consequently, Orano recognizes all of these companies' losses and negative net equity in "net income attributable to owners of the part" and in "equity attributable to owners of the parent."

A subsidiary is considered significant if its revenue is greater than 200 million euros, if its total balance sheet is greater than 200 million euros or if its net assets exceed 200 million euros in absolute value.

Financial information on significant subsidiaries, required under IFRS 12, is presented before elimination of intercompany transactions.

December 31, 2018

(in millions of euros)	Imouraren	Somair	Katco	SET	Orano DS
	Mining	Mining	Mining	Front end	D&S
Country	Niger	Niger	Kazakhstan	France	France
Percentage stake in non-controlling interests	(*)	36.60%	49.00%	5.00%	26.14%
Revenue	**-**	**110**	**175**	**588**	**251**
EBITDA	**(8)**	**12**	**116**	**364**	**0**
Net income	**(47)**	**0**	**69**	**9**	**(2)**
Of which attributable to non-controlling interests	*(7)*	*0*	*34*	*0*	*(1)*
Current assets	5	124	136	654	139
Non-current assets	114	158	143	5,122	31
Current liabilities	(24)	(59)	(13)	(881)	(112)
Non-current liabilities	(2,114)	(71)	(22)	(3,076)	(20)
Net assets	**(2,018)**	**152**	**244**	**1,819**	**38**
Of which attributable to non-controlling interests	(554)	56	119	91	10
Cash flow from operating activities	(51)	17	116	154	1
Cash flow from investing activities	6	(15)	(33)	39	(4)
Cash flow from financing activities	44	-	(1)	(200)	(6)
Increase (decrease) in net cash	**(1)**	**2**	**76**	**(6)**	**(9)**
Dividends paid to non-controlling interests	-	-	(9)	(1)	(1)

(*) Imouraren is held directly by Orano Expansion, whose purpose is to finance its subsidiary. The data presented for Imouraren and Orano Expansion are aggregated. The share attributable to non-controlling interests in Imouraren is 42.34%, to those in Orano Expansion, it is 13.49%.

December 31, 2017

(in millions of euros)	**Imouraren**	**Somair**	**Katco**	**SET**	**Orano DS**
	Mining	Mining	Mining	Front end	D&S
Country	Niger	Niger	Kazakhstan	France	France
Percentage stake in non-controlling interests	(**)	36.60%	49.00%	5.00%	26.14%
Revenue (*)	**-**	**154**	**178**	**642**	**260**
EBITDA (*)	**(1)**	**31**	**104**	**446**	**26**
Net income (*)	**(1,127)**	**(41)**	**52**	**66**	**21**
Of which attributable to non-controlling interests	*(234)*	*(15)*	*25*	*3*	*6*
(*) for the 12-month period					
Current assets	10	141	98	664	156
Non-current assets	114	154	157	5,213	25
Current liabilities	(25)	(88)	(36)	(919)	(116)
Non-current liabilities	(2,070)	(57)	(21)	(3,121)	(19)
Net assets	**(1,971)**	**151**	**198**	**1,836**	**46**
Of which attributable to non-controlling interests	(547)	55	97	92	12
Cash flow from operating activities (*)	(47)	19	60	291	7
Cash flow from investing activities (*)	6	(24)	(31)	(75)	(2)
Cash flow from financing activities (*)	47	-	(59)	(206)	(7)
Increase (decrease) in net cash (*)	**6**	**(5)**	**(33)**	**10**	**13**
Dividends paid to non-controlling interests (*)	-	-	(20)	(1)	(2)

(**) Imouraren is held directly by Orano Expansion, whose purpose is to finance its subsidiary. The data presented for Imouraren and Orano Expansion are aggregated. The share attributable to non-controlling interests in Imouraren is 42.34%, to those in Orano Expansion, it is 13.49%.

Note 21 – EMPLOYEE BENEFITS

Depending on the prevailing laws and practices of each country, the group's companies make severance payments to their retiring employees. Long-service awards and early retirement pensions are paid, while supplementary pensions contractually guarantee a given level of income to certain employees.

The group calls on an independent actuary to evaluate its commitments each year.

In some companies, these commitments are covered in whole or in part by contracts with insurance companies or pension funds. In such cases, the obligations and the covering assets are valued independently.

The difference between the commitment and the fair value of the covering assets is either a funding surplus or a deficit. A provision is recorded in the event of a deficit, and an asset is recognized in the event of a surplus, subject to specific conditions.

The group's key benefits

The "CAFC plan" (*Congés Anticipation Fin de Carrières*, set up in 2012) is an early retirement plan consisting of a working time account with matching contributions from the employer for personnel who work at night or in certain jobs identified in the agreement. The system is partially covered by an insurance policy.

The group's second most material early retirement system (called "TB6") is also located in France. The beneficiaries are employees who work at night or in certain types of jobs identified in the agreement.

Renegotiation of the master health and accident/disability personal insurance plan

Following collective bargaining concluded in September 2018 with the signing by all parties of a new group medical expenses and accident/disability insurance agreement, the employer shares of certain plans were reduced or eliminated while maintaining the level of benefits offered by the plans to employees and former employees thanks to a larger contribution from the latter. These changes led to a reduction in employer commitments, resulting in a provision reversal of 246 million euros at December 31, 2018.

PROVISIONS RECOGNIZED ON THE BALANCE SHEET

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
TOTAL PROVISIONS FOR PENSION OBLIGATIONS AND OTHER EMPLOYEE BENEFITS	**1,088**	**1,382**
Medical expenses and accident/disability insurance	88	332
Retirement benefits	316	314
Job-related awards	7	7
Early retirement benefits	673	721
Supplemental retirement benefits	4	7

By region *(in millions of euros)*	**Eurozone**	**Other**	**TOTAL**
Medical expenses and accident/disability insurance	86	2	88
Retirement benefits	315	1	316
Job-related awards	7	-	7
Early retirement benefits	665	8	673
Supplemental retirement benefits	2	2	4
TOTAL	**1,075**	**13**	**1,088**

ACTUARIAL ASSUMPTIONS

	December 31, 2018	**December 31, 2017**
Long-term inflation		
- Eurozone	1.5%	1.5%
Discount rate		
- Eurozone	1.6%	1.5%
Pension benefit increases		
- Eurozone	1.5%	1.5%
Social security ceiling increase (net of inflation)	+0.5%	+0.5%

Mortality tables

	December 31, 2018	December 31, 2017
France		
- Annuities	Generation table	Generation table
- Lump sum payments	INSEE Men/Women 2000-2002	INSEE Men/Women 2000-2002

Retirement age in France

	December 31, 2018	December 31, 2017
Management personnel	65	65
Non-management personnel	62	62

The assumptions for average attrition reflect the natural rate of departure for employees prior to retirement age. These assumptions, set for each group company, are broken down by age bracket, with employees nearing retirement assumed to be less mobile than those early in their careers.
The rates in brackets indicate estimated maximum and minimum values in the group.

	Management personnel		Non-management personnel	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
France	[2.6%-0%]	[1.6%-0%]	[0.7%-0%]	[0.7%-0%]

Assumed rate of salary increase for the calculation of provisions include inflation.
The rates in square brackets show average revaluations at the beginning of the career, which are assumed to be higher, and those at the end of the career.

	Management personnel		Non-management personnel	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
France	[2.5%-1%]	[2.6%-1.1%]	[2.5%-1%]	[2.6%-1.1%]

FINANCIAL ASSETS

At December 31, 2018, financial assets consisted in the proportion of 90% in bonds and other monetary instruments in the proportion of 10% (unchanged vs. December 31, 2017).

Effective return on plan assets

	December 31, 2018	December 31, 2017
Europe	-0.42%	0.72%

NET AMOUNT RECOGNIZED

December 31, 2018 *(in millions of euros)*	Medical expenses and accident/disability insurance	Retirement benefits	Job-related awards	Early retirement benefits	Supplemental retirement benefits	Total
Defined benefit obligation	88	317	7	747	47	**1,205**
Fair value of plan assets	-	1	-	74	43	**118**
Total defined benefit obligation	**88**	**316**	**7**	**673**	**4**	**1,088**

Sensitivity of the actuarial value to changes in discount rate
An across-the-board decrease in the discount rate of 0.50% would increase the defined benefit obligation by 4.6%.

EXPENSE FOR THE YEAR

December 31, 2018 *(in millions of euros)*	Medical expenses and accident/disability insurance	Retirement benefits	Job-related awards	Early retirement benefits	Supplemental retirement benefits	Total
Current service cost	7	15	-	17	-	**40**
Accretion expense	5	5	-	12	1	**21**
Past service costs (including plan changes and reductions)	-	-	-	-	-	**-**
Interest income on assets	-	-	-	(1)	(1)	**(1)**
Recognition of actuarial gains and losses generated during the year on other long-term plans (long service medals, CATS, etc.)	-	-	-	-	-	**-**
TOTAL expense with statement of income impact	**12**	**20**	**-**	**28**	**0**	**61**
Actual yield on assets net of expected yield	-	-	-	(1)	(1)	**(1)**
Experience differences	3	2	-	(8)	1	**(2)**
Demographic assumption differences	-	-	-	-	-	**-**
Financial assumption differences (adjustment of discount rate)	(7)	(3)	-	(5)	-	**(16)**
TOTAL expense with impact on other comprehensive income items	**(4)**	**(1)**	**0**	**(13)**	**-**	**(19)**
Total expense for the year	**8**	**18**	**-**	**15**	**0**	**42**

CHANGE IN THE DEFINED BENEFIT OBLIGATION

(in millions of euros)	**Medical expenses and accident/disability insurance**	**Retirement benefits**	**Job-related awards**	**Early retirement benefits**	**Supplemental retirement benefits**	**Total**
Defined benefit obligation at December 31, 2017	**332**	**315**	**7**	**802**	**51**	**1,506**
Current service cost	7	15	-	17	-	**40**
Past service costs (including plan changes and reductions)	-	-	-	-	-	**-**
Disposals / Liquidation / Plan reductions	(246)	-	-	-	-	**(246)**
Accretion expense	5	5	-	12	1	**21**
Benefits paid during the year	(7)	(17)	-	(72)	(6)	**(102)**
Employee contributions	-	-	-	-	-	**-**
Mergers, acquisitions, transfers	-	-	-	-	-	**-**
Plan transfer	-	-	-	-	-	**-**
Actuarial differences	(4)	(1)	-	(13)	-	**(18)**
Foreign exchange differences	-	-	-	-	-	**-**
Defined benefit obligation at December 31, 2018	**88**	**317**	**7**	**747**	**47**	**1,205**

CHANGES IN PLAN ASSETS

(in millions of euros)	
December 31, 2017	**125**
Interest income on assets	2
Benefits paid by earmarked assets	(10)
Actual yield on assets net of expected yield	1
December 31, 2018	**118**

CHANGE IN PROVISION MEASURED

(in millions of euros)	
December 31, 2017	**1,382**
Total expense	42
Contributions collected/benefits paid	(92)
Disposals / Liquidation / Plan reductions	(246)
Change in method	-
Change in consolidated group	-
Currency translation adjustment	-
December 31, 2018	**1,088**

PROVISIONAL SCHEDULE OF USE OF THE PROVISION

(in millions of euros)	December 31, 2018
2019 – 2021	263
2022 – 2026	488
2027 and beyond	337

Note 22 – OTHER PROVISIONS

(in millions of euros)	December 31, 2017	Charges	Reversal (when risk has materialized)	Reversal (when risk has not materialized)	Other changes (*)	December 31, 2018
Restoration of mining sites and decommissioning of treatment facilities	270	21	(10)	(7)	5	279
Non-current provisions	**270**	**21**	**(10)**	**(7)**	**5**	**279**
Restructuring and layoff plans	126	9	(70)	(0)	(0)	63
Provisions for onerous contracts	99	92	(21)	(9)	-	161
Accrued costs	1,223	116	(44)	(0)	86	1,381
Other provisions	268	73	(19)	(6)	11	328
Current provisions	**1,716**	**290**	**(154)**	**(15)**	**96**	**1,933**
Total provisions	**1,986**	**311**	**(164)**	**(22)**	**101**	**2,212**

(*) including 98 million euros of unwinding

PROVISIONS FOR ONEROUS CONTRACTS

Enrichment market prices stabilized in the second half of 2018. Significant orders were contracted during the year, generating an additional provision for onerous contracts of 41 million euros.

For the conversion activity, the steady downward trend in spot prices reversed at the end of 2017. Significant orders were contracted at price levels still below the full cost in the first half of 2018, generating an additional provision for onerous contracts of 48 million euros.

In addition:

- the use of provisions for onerous contracts made in previous years relating to the enrichment business and the revision of the savings plan (2020-2030) resulted in provision reversals in the amount of 20 million euros;
- a provision reversal relating to onerous conversion contracts was recorded in the amount of 8 million euros. This reversal was essentially due to the hike in spot prices.

PROVISIONS FOR CONTRACT COMPLETION

The main allowances for the year relate to the increase in untreated operational waste to date, in particular on the Back End, as well as the re-estimate of the costs at termination of certain treatment channels in the Front End.

Reversals of provisions mainly cover the treatment of waste intended for near-surface storage, which has been processed and sent to the dedicated storage sites operated by ANDRA.

Main uncertainties

Uncertainties relating to provisions for contract completion bear notably on the definition of treatment channels for each item of waste, which are not all firmly established, the estimate of the cost of completion of the required facilities and the operational costs of future treatment, and on expenditure schedules. Provisions take into account risks and uncertainties.

Discount rate

Discount rates and inflation rates at December 31, 2018 were determined using the same methods as for end-of-lifecycle provisions (see notes 1.3.12 and 12).

OTHER CURRENT PROVISIONS

As of December 31, 2018 other current provisions include:

- provisions for disputes;
- provisions for customer guarantees;
- provisions for ongoing cleanup;
- provisions for contingencies;
- provisions for charges.

Note 23 – BORROWINGS

(in millions of euros)	Non-current liabilities	Short-term borrowings	**December 31, 2018**	**December 31, 2017**
Bond issues (*)	3,273	801	4,073	4,165
Bank borrowings	4	-	4	497
Interest-bearing advances	143	-	143	264
Short-term bank facilities and current accounts in credit	-	74	74	73
Financial derivatives	5	47	52	45
Miscellaneous debt	70	-	70	62
Total	**3,494**	**922**	**4,415**	**5,105**

(*) after hedging of the interest rate risk

At December 31, 2018, borrowings included in particular:

- outstanding bonds with a carrying amount of 4,021 million euros and accrued interest not yet due of 52 million euros,
- a financial current account credit balance for the ETC joint venture in the amount of 46 million euros.

CHANGE IN BORROWINGS

(in millions of euros)	
Borrowings at December 31, 2017	**5,105**
Cash flows	(713)
Non-cash flows:	
accrued interest not yet due on borrowings	63
Currency translation adjustments	(30)
Other changes	(10)
Borrowings at December 31, 2018	**4,415**

RECONCILIATION OF CASH FLOWS ON BORROWINGS BETWEEN THE NOTE ON BORROWINGS AND CASH FLOWS FROM FINANCING ACTIVITIES

(in millions of euros)	
Cash flows of borrowings	**(713)**
Interest paid	106
Financial instruments – Assets	(22)
Short-term bank facilities and current accounts in credit	(6)
Cash flows of borrowings included in net cash flows from financing activities	**(635)**

The cash flows of borrowings included in net cash flow from financing activities mainly include the prepayment of the bank loan backed by certain future income from the Georges Besse II enrichment plant in the amount of 486 million euros.

BORROWINGS BY MATURITY

(in millions of euros)	**December 31, 2018**
Maturing in one year or less	922
Maturing in 1-2 years	517
Maturing in 2-3 years	767
Maturing in 3-4 years	205
Maturing in 4-5 years	786
Maturing in more than 5 years	1,220
TOTAL	**4,415**

BORROWINGS BY CURRENCY

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Euro	4,352	4,973
US dollar	21	26
Yen	-	59
Other	43	47
TOTAL	**4,415**	**5,105**

BORROWINGS BY TYPE OF INTEREST RATE

(in millions of euros)	December 31, 2018	December 31, 2017
Fixed rate borrowings	3,973	4,192
Floating rate borrowings	346	809
TOTAL	**4,318**	**5,000**
Other non-interest-bearing debt	46	60
Financial derivatives	52	45
TOTAL	**4,415**	**5,105**

The maturities of the group's financial assets and borrowings at December 31, 2018 are presented in Note 28.

BOND DEBT

Issue date	**Balance sheet value***(in millions of euros)*	**Currency**	**Nominal** *(in millions of currency units)*	**Nominal rate**	**Term/Expiration**
September 23, 2009	1,022	EUR	1,000	4.875%	September 2024
November 6, 2009	748	EUR	750	4.375%	November 2019
September 22, 2010	760	EUR	750	3.5%	March 2021
April 4, 2012	199	EUR	200	TEC10 + 2.125%	March 2022
September 4, 2013	514	EUR	500	3.25%	September 2020
March 20, 2014	777	EUR	750	3.125%	March 2023
TOTAL	**4,021**				

The fair value of these bond issues was 4,013 million euros at December 31, 2018.

SCHEDULES OF CONTRACTUAL FLOWS AT DECEMBER 31, 2018

(in millions of euros)	Balance sheet value	**Total payment flows**	Less than 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years
Bond issues	4,073	**4,073**	801	514	760	199	777	1,022
Bank borrowings	4	**4**	-	-	-	-	-	4
Interest-bearing advances	143	**143**	-	-	-	-	-	143
Short-term bank facilities and current accounts in credit	74	**74**	74	-	-	-	-	-
Miscellaneous debt	70	**70**	-	2	7	5	8	47
Future interest on financial liabilities	-	**696**	153	125	107	75	72	164
Total borrowings (excluding derivatives)	**4,364**	**5,060**	**1,028**	**642**	**873**	**279**	**858**	**1,380**
Derivatives – assets	(83)	**(83)**						
Derivatives – liabilities	52	**52**						
Total net derivatives	**(31)**	**(31)**	(19)	11	(3)	(8)	(13)	
Total	**4,332**	**5,028**	**1,009**	**653**	**870**	**271**	**845**	**1,380**

SCHEDULES OF CONTRACTUAL FLOWS AT DECEMBER 31, 2017

(in millions of euros)	Balance sheet value	**Total payment flows**	Less than 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years
Bond issues	4,165	**4,165**	111	762	522	763	199	1,807
Bank borrowings	497	**497**	68	56	76	83	86	129
Interest-bearing advances	264	**264**	137	-	-	-	-	127
Short-term bank facilities and current accounts in credit	73	**73**	73	-	-	-	-	-
Miscellaneous debt	62	**62**	-	3	5	6	3	44
Future interest on financial liabilities	-	**1,409**	190	213	231	203	166	406
Total borrowings (excluding derivatives)	**5,060**	**6,469**	**580**	**1,034**	**834**	**1,055**	**454**	**2,513**
Derivatives – assets	(61)	**(61)**	**-**	**-**	**-**	**-**	**-**	**-**
Derivatives – liabilities	45	**45**	-	-	-	-	-	-
Total net derivatives	**(16)**	**(16)**	15	(13)	(3)	(6)	5	(14)
Total	**5,044**	**6,543**	**595**	**1,021**	**831**	**1,049**	**459**	**2,498**

Note 24 - ASSETS AND LIABILITIES ON CONTRACTS

Contract assets and liabilities are defined in Note 1.3.6.

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Contract assets	**97**	**99**

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Contract liabilities	**4,514**	**4,274**

Contract liabilities comprise prepaid income, and operating and investment advances and prepayments by customers. They are deducted from the revenue generated under the contracts under consideration, which bears primarily on investment financing for the treatment and recycling of spent fuels and uranium sales.

At December 31, 2018, contract liabilities include 3,755 million euros with maturities greater than one year.

Note 25 - OTHER OPERATING LIABILITIES

(in millions of euros)	**December 31, 2018**	**December 31, 2017**
Tax debt (excluding corporate income tax)	212	309
Social security liabilities	472	468
Financial instruments	67	37
Other	220	305
Other operating liabilities	**972**	**1,120**

As of December 31, 2018, other operating liabilities included 103 million euros maturing in more than one year.

Note 26 – CASH FROM OPERATING ACTIVITIES

CHANGE IN WORKING CAPITAL REQUIREMENT

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
Change in inventories and work-in-process	(44)	(59)
Change in accounts receivable and other receivables	131	57
Change in contract assets	3	(7)
Change in accounts payable and other liabilities	(120)	(5)
Change in contract liabilities	218	100
Change in advances and prepayments made	(47)	(3)
Change in Forex hedge of WCR	9	(19)
Change in other non-current non-financial assets	(3)	(7)
TOTAL	**147**	**56**

Note 27 - TRANSACTIONS WITH RELATED PARTIES

Transactions between the parent company, Orano SA, and its subsidiaries, which are related parties, are eliminated on consolidation and are therefore not disclosed in this note.

Related party transactions include:

- current transactions with non-consolidated companies, associates, joint ventures and, in particular, companies controlled by the French State;
- the gross compensation and benefits granted to directors and the members of the Executive Committee.

December 31, 2018

(in millions of euros)	Interests held by the French State	Joint ventures and associates	Total
Operating income	1,633	19	**1,652**
Operating expenses	47	132	**179**
Trade accounts receivable and other	491	122	**613**
Trade accounts payable and other	2,517	20	**2,536**

December 31, 2017 **(12 months)**

(in millions of euros)	Interests held by the French State	Joint ventures and associates	Total
Operating income	1,789	23	**1,812**
Operating expenses	175	108	**283**
Trade accounts receivable and other	1,095	98	**1,193**
Trade accounts payable and other	1,644	8	**1,652**

RELATIONS WITH THE FRENCH STATE AND STATE-OWNED COMPANIES

The French State was the majority shareholder, directly and indirectly, via AREVA SA, in the capital of Orano at December 31, 2018. The French State accordingly has the faculty, like any shareholder, to control the decisions requiring the approval of the shareholders. In accordance with the laws applicable to all companies in which the French State is a shareholder, Orano is subject to certain control procedures, in particular the economic and financial control of the French State, the control procedures of the Court of Auditors and the Parliament, and audits of the General Inspectorate of Finance.

The group has significant relationships with companies controlled by the French State, including:

- Transactions with the CEA pertain to the dismantling work on the CEA's nuclear facilities. In addition, the receivable related to the group's end-of-lifecycle operations is included in "trade and other receivables" in the table of related party transactions (see Note 12);
- In 2017, AREVA SA invoiced a brand fee, rents and associated services to the companies included in the consolidation. This billing no longer has any purpose in 2018;
  Other transactions with the AREVA group concern the invoicing of MOX fuel services resulting from Front End activities. At December 31, 2017, Framatome was sold to EDF; these transactions are now reported with EDF as of January 1, 2018;
- Transactions with EDF concern the front end of the nuclear fuel cycle (uranium sales, conversion and enrichment services) and the back end of the cycle (spent fuel shipping, storage, treatment and recycling services). The group has a master treatment/recycling agreement known as the "ATR Contract" with EDF, which specifies the terms of the industrial cooperation between them in the field of treatment/recycling until 2040. As part of this agreement, in February 2016 Orano and EDF signed a new implementation contract defining the technical and financial conditions for this master agreement for the 2016-2023 period.
- Transactions with ANDRA (National Agency for the Management of Radioactive Waste) cover the management, operation and monitoring of low- and intermediate-level radioactive waste disposal facilities at the ANDRA centers in the Manche and Aube departments.

ASSOCIATES AND JOINT VENTURES

The group's significant joint ventures are ETC and SIner-GIE (see notes 2 and 13).

Orano buys centrifuges from ETC's Georges Besse 2 enrichment plant, which is also maintained by ETC (see Note 13).

JOINT OPERATIONS

Transactions between group subsidiaries and related joint operations have been eliminated on consolidation, and are therefore not disclosed in this Note.

Orano Canada Inc holds uranium deposits and ore processing plants. These investments are classified as joint operations. They are accordingly consolidated in their respective shares. The most significant investments are:

Cigar Lake
Cigar Lake is owned by Cameco Corporation (50.025%), Orano (37.1%), Idemitsu Uranium Exploration Canada Ltd. (7.875%) and TEPCO Resources Inc. (5%). The deposit is operated by Cameco and the ore is processed at the JEB-McClean Lake mill, operated by Orano. This deposit is an underground mine. Mining uses land freezing techniques combined with high-pressure water-jet boring (jet bore mining).

McClean Lake
McClean Lake is owned and operated by Orano (70%), with Denison Mines Ltd (22.5%) and Ourd (7.5%) as partners. This joint activity operates the JEB mill, which processes the ore from Cigar Lake using the dynamic leaching method.

McArthur River

McArthur River is owned by Cameco Corporation (69.8%) and Orano (30.2%). The mined ore is processed at the Key Lake mill. This deposit is mined underground using ground freezing techniques combined with mechanical extraction (raise boring) or explosives (long hole stopping).

Key Lake

This plant is owned by Cameco Corporation (83.33%) and Orano (16.67%). It processes the ore from McArthur River. A decision was taken in 2018 to undertake temporary care and maintenance work on the McArthur River mine and its Key Lake mill (see Note 1.1).

COMPENSATION PAID TO KEY EXECUTIVES

(in millions of euros)	**December 31, 2018**	**December 31, 2017 (12 months)**
Short-term benefits	4,318	4,477
Termination benefits	0.040	0.860
Post-employment benefits	(0.016)	0.196
Other long-term benefits	-	-
TOTAL	**4,342**	**5,532**

Key executives are:

- the Chairman of the Board of Directors and the Chief Executive Officer appointed by the Board of Directors on July 27, 2017;
- members of the Executive Committee.

Note 28 – FINANCIAL INSTRUMENTS

Orano uses financial derivatives to manage its exposure to foreign exchange and interest rate risk. These instruments are generally qualified as hedges of assets, liabilities or specific commitments.

Orano manages all risks associated with these instruments by centralizing the commitment and implementing procedures setting out the limits and characteristics of the counterparties.

FOREIGN EXCHANGE RISK

The change in the exchange rate of the US dollar against the euro may affect the group's income in the medium term.

In view of the geographic diversity of its locations and operations, the group is exposed to fluctuations in exchange rates, particularly the dollar-euro exchange rate. The volatility of exchange rates may impact the group's currency translation adjustments, equity and income.

Currency translation risk: The group does not hedge the risk of translation into euros of financial statements of subsidiaries that use a currency other than the euro, to the extent that this risk does not result in a flow. Only dividends expected from subsidiaries for the following year are hedged as soon as the amount is known.

Financing risk: The group finances its subsidiaries in their functional currencies to minimize the foreign exchange risk from financial assets and liabilities issued in foreign currencies. Loans and advances granted to subsidiaries by the department of Treasury Management, which centralizes financing, are then systematically converted into euros through foreign exchange swaps or cross currency swaps.

To limit the currency risk for long-term investments generating future cash flows in foreign currencies, the group uses a liability in the same currency to offset the asset whenever possible.

Trade exposure: The principal foreign exchange exposure concerns fluctuations in the euro/U.S. dollar exchange rate. The group's policy, which was approved by the Executive Committee, is to systematically hedge foreign exchange risk generated by sales transactions, whether certain or potential (in the event of hedging during the proposal phase), so as to minimize the impact of exchange rate fluctuations on net income.

To hedge transactional foreign exchange risk, including trade receivables and payables, firm off-balance sheet commitments (customer and supplier orders), highly probable future flows (sales or purchasing budgets, projected margins on contracts) and tender proposals in foreign currencies, Orano purchases derivative financial instruments (mainly currency futures) or specific insurance contracts issued by Coface. Hedging transactions are accordingly backed by underlying transactions in identical amounts and maturities, and are generally documented and eligible for hedge accounting (excluding possible hedges of tenders submitted in foreign currencies).

Financial derivative instruments set up to hedge foreign exchange risk at December 31, 2018

	Notional amounts by maturity date							Market value
(in millions of euros)	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	Total	
Forward exchange transactions and currency swaps	1,580	77	525	303	17	-	**3,202**	**(50)**
Currency options	-	-	-	-	-	-	**-**	**-**
Cross-currency swaps	346	-	-	-	-	-	**346**	**34**
TOTAL	**1,926**	**777**	**525**	**303**	**17**	**-**	**3,548**	**(17)**

Financial derivative instruments set up to hedge foreign exchange risk at December 31, 2017

	Notional amounts by maturity date							Market value
(in millions of euros)	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	Total	
Forward exchange transactions and currency swaps	1,796	775	440	273	-	-	**3,284**	**98**
Currency options	-	-	-	-	-	-	**-**	**-**
Cross-currency swaps	59	359	-	-	-	-	**-**	**19**
TOTAL	**1,855**	**1,134**	**440**	**273**	**-**	**-**	**3,702**	**117**

At December 31, 2018, financial derivatives used to hedge foreign currency exposure broke down by type of hedging strategy as follows:

(in millions of euros)	Notional amounts in absolute value	Market value
Cash flow hedges	**2,498**	**(50)**
Forward exchange transactions and currency swaps	2,498	(50)
Fair value hedges	**971**	**33**
Forward exchange transactions and currency swaps	625	(0)
Cross-currency swaps	346	34
Derivatives not qualifying as hedges	**79**	**(0)**
Forward exchange transactions and currency swaps	79	(0)
Total	**3,548**	**(17)**

At December 31, 2017, financial derivatives used to hedge foreign currency exposure broke down by type of hedging strategy as follows:

(in millions of euros)	**Notional amounts in absolute value**	**Market value**
Cash flow hedges	**2,294**	**78**
Forward exchange transactions and currency swaps	2,294	78
Fair value hedges	**395**	**13**
Forward exchange transactions and currency swaps	395	13
Derivatives not qualifying as hedges	**1,013**	**27**
Forward exchange transactions and currency swaps	595	8
Currency options	-	-
Cross-currency swaps	418	19
TOTAL	**3,702**	**117**

LIQUIDITY RISK

Liquidity risk is managed by the Financing and Treasury Operations Department ("DOFT"), which provides the appropriate short- and long-term financing resources.

Cash management optimization is based on a centralized system to provide liquidity and manage cash surpluses. Management is provided by DOFT chiefly through cash-pooling agreements and intragroup loans, subject to local regulations. Cash is managed to optimize financial returns while ensuring that the financial instruments used are liquid.

The next significant maturity is November 6, 2019. It relates to a bond issued in a nominal amount of 750 million euros.
Orano had a gross cash position of 2,027 million euros as of December 31, 2018 to meet these commitments and ensure the continuity of its operations over the longer term. This cash position has been strengthened since July 11, 2018 by a confirmed and undrawn syndicated credit facility of 840 million euros. This new facility, signed with a pool of 10 international banks, has a term of three years, with two optional one-year extensions.

COUNTERPARTY RISK

Orano is exposed to counterparty risk in respect of cash deposits with banks and the use of derivative financial instruments to hedge its risks.

To minimize this risk, Orano deals with a diversified group of front-ranking counterparties confined to those with investment grade ratings awarded by Standard & Poor's and Moody's.

INTEREST RATE RISK

Orano hedges its exposure to changes in the value of its fixed rate debt through the use of fixed/variable interest rate swaps.

Financial derivative instruments set up to hedge interest rate risk at December 31, 2018

	Notional amounts by maturity date							
(in millions of euros)	**Total**	**< 1 year**	**1 to 2 years**	**2 to 3 years**	**3 to 4 years**	**4 to 5 years**	**> 5 years**	**Market value [1]**
Interest rate swaps – EUR variable lender								
EUR fixed borrower	**200**	-	-	-	200	-	-	**(4)**
EUR variable borrower	**100**	-	-	-	100	-	-	**-**
CAD variable borrower	**346**	346	-	-	-	-	-	**(1)**
Interest rate swaps – EUR fixed lender								
EUR variable borrower	**550**	50	150	150	-	200	-	**25**
Inflation rate swaps								
variable lender – USD fixed borrower	**153**	-	153	-	-	-	-	**(25)**
TOTAL	**1,349**	**396**	**303**	**150**	**300**	**200**	**-**	**(5)**

(1) foreign exchange portion

At December 31, 2018, financial derivatives used to hedge interest rate exposure broke down by type of hedging strategy as follows:

	Nominal amount of contract	**Market value of contracts[1]**			
(in millions of euros)		**Cash flow hedges (CFH)**	**Fair value hedges (FVH)**	**Not formally documented (Trading)**	**Total**
Interest rate swaps – EUR variable lender					
EUR fixed borrower	200	-	-	(4)	(4)
EUR variable borrower	100	-	-	(0)	(0)
CAD variable borrower	346	-	-	(1)	(1)
Interest rate swaps – EUR fixed lender					
EUR variable borrower	550	-	25	-	25
Inflation rate swaps – USD variable lender					
USD fixed borrower	153	-	-	(25)	(25)
TOTAL	**1,349**	**-**	**25**	**(30)**	**(5)**

(1) interest rate portion

The following tables summarize the group's net exposure to interest rate risk, before and after management transactions:

Maturities of the group's financial assets and borrowings at December 31, 2018

(in millions of euros)	**Less than 1 year**	**1 year to 2 years**	**2 years to 3 years**	**3 years to 4 years**	**4 years to 5 years**	**More than 5 years**	**Total**
Financial assets	**2,131**	**-**	**-**	**-**	**-**	**-**	**2,131**
including fixed rate assets	-	-	-	-	-	-	-
including floating rate assets	2,048	-	-	-	-	-	2,048
including non-interest-bearing assets	83	-	-	-	-	-	83
Borrowings	**(922)**	**(517)**	**(767)**	**(205)**	**(786)**	**(1,220)**	**(4,415)**
including fixed rate borrowings	(752)	(514)	(760)	(0)	(777)	(1,169)	(3,973)
including floating rate borrowings	(70)	(9)	(7)	(205)	(8)	(47)	(346)
including non-interest-bearing borrowings	(99)	7	-	-	-	(5)	(97)
Net exposure before hedging	**1,209**	**(517)**	**(767)**	**(205)**	**(786)**	**(1,220)**	**(2,285)**
share exposed to fixed rates	(752)	(514)	(760)	(0)	(777)	(1,169)	(3,973)
share exposed to floating rates	1,978	(9)	(7)	(205)	(8)	(47)	1,702
non-interest-bearing share	(17)	7	-	-	-	(5)	(14)
Off-balance sheet hedging							
on borrowings: fixed rate swaps	50	150	150	(200)	200	-	350
on borrowings: floating rate swaps	(50)	(150)	(150)	200	(200)	-	(350)
Net exposure after hedging	**1,209**	**(517)**	**(767)**	**(205)**	**(786)**	**(1,220)**	**(2,285)**
share exposed to fixed rates	(702)	(364)	(610)	(200)	(577)	(1,169)	(3,623)
share exposed to floating rates	1,928	(159)	(157)	(5)	(208)	(47)	1,352
non-interest-bearing share	(17)	7	-	-	-	(5)	(14)

On the basis of exposure at the end of December 2018, a 1% increase in interest rates over a full year would have an adverse impact of +14 million euros on net borrowing costs, and as such on the group's consolidated pre-tax income.

Maturities of the group's financial assets and borrowings at December 31, 2017

(in millions of euros)	Less than 1 year	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 5 years	More than 5 years	Total
Financial assets	**2,070**	**-**	**-**	**-**	**-**	**-**	**2,070**
including fixed rate assets	-	-	-	-	-	-	-
including floating rate assets	2,061	-	-	-	-	-	2,061
including non-interest-bearing assets	9	-	-	-	-	-	9
Borrowings	**(429)**	**(821)**	**(603)**	**(852)**	**(288)**	**(2,112)**	**(5,105)**
including fixed rate borrowings	(212)	(758)	(522)	(763)	-	(1938)	(4,194)
including floating rate borrowings	(118)	(63)	(81)	(89)	(288)	(169)	(807)
including non-interest-bearing borrowings	(100)	-	-	-	-	(5)	(105)
Net exposure before hedging	**1641**	**(821)**	**(603)**	**(852)**	**(288)**	**(2,112)**	**(3,035)**
share exposed to fixed rates	(212)	(758)	(522)	(763)	-	(1,938)	(4,194)
share exposed to floating rates	1,943	(63)	(81)	(89)	(288)	(169)	1,254
non-interest-bearing share	(91)	-	-	-	-	(5)	(96)
Off-balance sheet hedging							
on borrowings: fixed rate swaps	59	50	150	150	(200)	200	409
on borrowings: floating rate swaps	(59)	(50)	(150)	(150)	200	(200)	(409)
Net exposure after hedging	**1641**	**(821)**	**(603)**	**(852)**	**(288)**	**(2,112)**	**(3,035)**
share exposed to fixed rates	(153)	(708)	(372)	(613)	(200)	(1,738)	(3,785)
share exposed to floating rates	1,884	(113)	(231)	(239)	(88)	(369)	845
non-interest-bearing share	(91)	-	-	-	-	(5)	(96)

EQUITY RISK

The group holds a significant amount of publicly traded shares and is exposed to fluctuations in the financial markets. Those traded shares are subject to a risk of volatility inherent in the financial markets. They are presented in the investment portfolio earmarked for end-of-lifecycle operations (see Note 12).

Note 29 - ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

FINANCIAL ASSETS AND LIABILITIES BY CATEGORY

Taking into account the first-time application of IFRS 9 from January 1, 2018, the presentation of the statement of financial position at December 31, 2018 differs from that at December 31, 2017, pursuant to the provisions of Phase I of IFRS 9 (see Note 2).

December 31, 2018

Assets

(in millions of euros)	Balance sheet value	Non-financial assets	Assets at amortized cost	Assets at fair value through profit or loss	Assets at fair value through OCI	Fair value of financial assets
Non-current assets	**6,811**	**33**	**699**	**6,079**		**6,882**
Financial assets earmarked for end-of-lifecycle operations	6,693		658 (*)	6,035		6,797
Other non-current assets	118	33	41	44		85
Current assets	**3,424**	**625**	**2,167**	**632**		**2,799**
Trade accounts receivable and related accounts	625		625			625
Other operating receivables	657	579	56	22		78
Other non-operating receivables	48	46	2			2
Other current financial assets	66		21	46		66
Cash and cash equivalents	2,027		1,463	564		2,027
Total assets	**10,234**	**657**	**2,866**	**6,711**		**9,681**

(*) of which 372 million euros in held-to-maturity investment funds with a fair value of 476 million euros.

Breakdown of assets recognized at fair value by valuation technique

(in millions of euros)	**Level 1** Listed prices, unadjusted	**Level 2** Observable inputs	**Level 3** Non-observable inputs	**TOTAL**
Non-current assets	**6,308**	**240**	**7**	**6,555**
Financial assets earmarked for end-of-lifecycle operations	6,308	203		6,511
Other non-current financial assets		37	7	44
Current assets	**564**	**68**		**632**
Other operating receivables		22		22
Other current financial assets		46		46
Cash and cash equivalents	564			564
Total assets	**6,872**	**309**	**7**	**7,187**

Liabilities and equity

(in millions of euros)	**Balance sheet value**	**Non-financial liabilities**	**Liabilities at amortized cost**	**Liabilities at fair value through profit or loss (*)**	**Fair value of financial liabilities**
Non-current liabilities	**3,494**		**3,489**	**5**	**3,399**
Long-term borrowings	3,494		3,489	5	3,399
Current liabilities	**2,551**	**214**	**2,251**	**87**	**2,354**
Short-term borrowings	922		883	39	938
Trade accounts payable and related accounts	652		652		652
Other operating liabilities	972	213	710	48	758
Other non-operating liabilities	6	1	6		6
Total liabilities	**6,045**	**214**	**5,740**	**91**	**5,753**

(*) Level 2

December 31, 2017

Assets

(in millions of euros)	**Balance sheet value**	**Non-financial assets**	**Loans and receivables**	**Fair value recognized in profit or loss**	**Assets available for sale**	**Assets held to maturity**	**Derivatives**	**Fair value of financial assets**
Non-current assets	**7,226**	**29**	**887**		**5,765**	**492**	**52**	**7,333**
Financial assets earmarked for end-of-lifecycle operations	7,112		860		5,759	492		7,248
Other non-current assets	114	29	27		6		52	85
Current assets	**3,555**	**502**	**1,695**	**1,210**			**148**	**3,053**
Trade accounts receivable and related accounts	690		690					690
Other operating receivables	791	453	198				139	337
Other non-operating receivables	57	49	8					8
Other current financial assets	67		58				9	67
Cash and cash equivalents	1,950		740	1,210				1,950
Total assets	**10,781**	**531**	**2,582**	**1,210**	**5,765**	**492**	**200**	**10,386**

Breakdown of assets recognized at fair value by valuation technique

	Level 1 Listed prices, unadjusted	Level 2 Observable inputs	Level 3 Non-observable inputs	TOTAL
Non-current assets	**6,133**	**306**	**6**	**6,445**
Financial assets earmarked for end-of-lifecycle operations	6,133	254		6,388
Other non-current financial assets		52	6	58
Current assets	**1,210**	**148**		**1,358**
Other operating receivables		139		139
Cash and cash equivalents	1,210			1,210
Other current financial assets		9		9
Total assets	**7,343**	**454**	**6**	**7,803**

Liabilities and equity

(in millions of euros)	Balance sheet value	Non-financial liabilities	Liabilities at amortized cost	Fair value recognized in profit or loss	Derivatives (*)	Fair value of financial liabilities
Non-current liabilities	**4,676**		**4,671**		**5**	**4,852**
Long-term borrowings	4,676		4,671		5	4,852
Current liabilities	**2,179**	**314**	**1,816**		**49**	**1,865**
Short-term borrowings	429		389		40	**429**
Trade accounts payable and related accounts	564		564			564
Other operating liabilities	1,120	313	798		9	807
Other non-operating liabilities	66	1	65			65
Total liabilities	**6,855**	**314**	**6,487**		**54**	**6,717**

(*) Level 2

NET GAINS AND LOSSES ON FINANCIAL INSTRUMENTS

Securities at fair value through profit or loss

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)	
	Income	Income	Shareholders' equity (*)
Interest income and dividends	116	126	-
Other income and expenses	0	0	-
Change in fair value	(406)	-	142
Impairment	**-**	(19)	-
Gain (loss) from disposal	**-**	254	(166)

(*) excluding tax impact

At December 31, 2017, the net change in securities at fair value through other comprehensive income represented a total unrealized gain of 298 million euros.

Loans and receivables

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
	Income	Income
Interest	3	49
Impairment	9	6
Forgiveness of debt	(8)	(1)

Financial assets and liabilities at amortized cost

(in millions of euros)	December 31, 2018	December 31, 2017 (12 months)
	Income	Income
Interest income and expense and commissions	(135)	(208)
Other income and expenses	0	0
Gain (loss) from disposal	-	-
Impairment	-	-

Cash flow hedges

(in millions of euros)	Value before tax at December 31, 2017	New transactions	Change in value	Recognized in profit or loss	Value before tax at December 31, 2018
Cash flow hedging instruments	**127**	(15)	(85)	(39)	**(12)**

Note 30 – OFF-BALANCE-SHEET COMMITMENTS

(in millions of euros)	December 31, 2018	*less than 1 year*	*From 1 to 5 years*	*More than 5 years*	December 31, 2017
COMMITMENTS GIVEN	**426**	**150**	**204**	**72**	**343**
Operating commitments given	330	141	148	41	293
• *Contract guarantees given*	*296*	*138*	*118*	*41*	*267*
• *Other guarantees and guarantees related to operating activities*	*34*	*3*	*30*	*1*	*26*
Commitments given on financing	80	3	55	22	31
Other commitments given	16	6	1	9	18
COMMITMENTS RECEIVED	**108**	**95**	**8**	**5**	**119**
Operating commitments received	108	95	8	5	119
Commitments received on collateral	-	-	-	-	-
Other commitments received	-	-	-	-	-
RECIPROCAL COMMITMENTS (*)	**1,338**	**103**	**1,201**	**35**	**407**
(*) of which minimum future rentals	87	20	32	35	30

Reciprocal commitments bear chiefly on unused lines of credit and investment orders.

At December 31, 2018, minimum future rents included 50 million euros for property leases signed in 2018, but with an effective date after December 31, 2018.

Note 31 – DISPUTES AND CONTINGENT LIABILITIES

Orano may be party to certain regulatory, judicial or arbitration proceedings in the normal course of business. The group is also the subject of certain claims, lawsuits or regulatory proceedings outside the ordinary course of business, the most significant of which are summarized below.

GADOULLET

On October 6, 2016, Jean-Marc Gadoullet sued AREVA SA and Orano Cycle SA before the Nanterre Tribunal de Grande Instance to obtain payment of compensation that he claims to be due for services he claims to have rendered to the Orano group in Niger between September 2010 and October 2013. AREVA SA and Orano Cycle SA consider Mr. Gadoullet's claims to be unfounded and, as a preliminary point, challenged the jurisdiction of the Tribunal de Grande Instance to hear this dispute. The Tribunal rejected this argument and declared itself competent in a ruling handed down on February 6, 2018. This decision was upheld on appeal. The legal proceedings are still ongoing.

URAMIN CASE

In June 2018, Orano SA and Orano Mining entered into the "acquisition" part of the judicial investigation in the Uramin case. AREVA SA, the former holding company of the AREVA group, filed a civil suit as part of this investigation following a "notice to victim" received from the investigating magistrate in charge of the case in 2015. The Orano group intends to defend its interests through Orano SA and Orano Mining. The judicial investigation is still in progress and no date concerning a possible judgment has been put forward to date.

COMUF

On January 30, 2019, an association of former workers assigned COMUF (Compagnie Minière d'Uranium de Franceville), a subsidiary of Orano Mining, before the Civil Court of Libreville (Gabon) alleging a breach of the safety of former workers, who were allegedly exposed to chemicals and radiation from uranium matter. Orano has always made the protection of its employees a priority. The evidentiary items disclosed to date do not demonstrate the existence of damage attributable to COMUF, nor the admissibility of the action. However, given the partial nature of the evidence it has seen, Orano cannot exclude the possibility that it may have cause to reconsider its position in the light of further items.

INVESTIGATIONS

The company has been aware since November 28, 2017 of a preliminary investigation opened by the French National Financial Prosecutor's Office in late July 2015 concerning a uranium trading transaction performed in 2011, and since August 27, 2018 of an investigation into the circumstances surrounding the granting of mining licenses in Mongolia. No entity of the Orano group is currently implicated in these legal proceedings.

Moreover, since the group includes a great many entities located in other countries, it is regularly audited by the tax authorities. Several audits and tax-related proceedings or disputes have been initiated or are currently being conducted by those authorities or in the courts, but none are expected to give rise to or has given rise to material tax expense that could have a significant impact on the financial statements. The group considers that it has sound means of defense and that it employs the legal procedures available to it to prevent any unfavorable outcome.

NOTE 32 - AUDITORS' FEES

December 31, 2018

(in thousands of euros)	**PwC Audit**	**KPMG Audit**
	Amount excl. tax	Amount excl. tax
Independent audit, certification & examination of the separate and consolidated financial statements		
Orano SA	385	320
Consolidated French subsidiaries	726	730
Sub-total	**1,111**	**1,050**
Services other than auditing the financial statements		
Orano SA	-	9
Consolidated French subsidiaries	178	54
Sub-total	**178**	**63**
TOTAL	**1,289**	**1,113**

Services other than auditing the financial statements mainly concern:

- the review of environmental, social and societal information;
- declarations required by law;
- other services.

December 31, 2017

(in thousands of euros)	**Ernst & Young**	**Mazars**
	Amount excl. tax	Amount excl. tax
Independent audit, certification & examination of the separate and consolidated financial statements		
Orano SA	788	874
Consolidated French subsidiaries	488	1,231
Sub-total	**1,276**	**2,105**
Services other than auditing the financial statements		
Orano SA	28	28
Consolidated French subsidiaries	422	95
Sub-total	**450**	**122**
TOTAL	**1,725**	**2,227**

Note 33 – BACKLOG

At December 31, 2018, Orano’s backlog amounted to 31.8 billion euros.

Following the signing of a memorandum of understanding on January 9, 2018, the group and its Chinese partner China National Corporation (CNNC) pursued discussions on a commercial agreement for the prospective Chinese spent fuel treatment and recycling plant in 2018. To prepare the validation of the project by the Chinese supervisory authority, Orano and the CNLA (CNNC Long’An Co) subsidiary of the CNNC group signed an agreement for the preparation of the documentation associated with this validation and the detailed planning of the project in June 2018. Discussions continued at the same time, resulting in the finalization of the contract’s technical annexes. At a meeting held on January 29, 2019 in the presence of the two industrial groups Orano and CNNC, the Chinese supervisory authority and the French Atomic Energy Commission took note of the progress of the negotiations and reaffirmed their shared goal of convergence and the signature of an agreement.

Note 34 – SUBSEQUENT EVENTS

No events subsequent to the balance sheet date have been identified as likely to have a significant impact on the group's financial statements, including, and given the elements of which Orano is aware, the events set out in Notes 1.1 and 31.

Note 35 – TRANSITION FROM THE PUBLISHED 2017 FINANCIAL STATEMENTS TO THE ADJUSTED 2017 FINANCIAL STATEMENTS

This note summarizes the main impacts of the first-time applications of IFRS 15 at the beginning of the comparative year at January 1, 2017 and IFRS 9 at January 1, 2018.

For the first-time application of IFRS 15, the group has fine-tuned certain cost estimates and the balance sheet presentation of contracts. As a result, opening equity has been restated compared with that presented at June 30, 2018 by (2) million euros at January 1, 2017 and (15) million euros at December 31, 2017.

RESTATEMENT OF EQUITY

(in millions of euros)	Capital	Consolidated premiums and reserves	Actuarial gains and losses on employee benefits	Deferred unrealized gains and losses on financial instruments	Currency translation reserves	**Total equity attributable to owners of the parent**	Non-controlling interests	**Total equity and non-controlling interests**
December 31, 2016, as reported (*)	**53**	**(1,120)**	**(157)**	**136**	**113**	**(976)**	**(40)**	**(1,016)**
IFRS 15 adjustment Deferred taxes		(131) 0			(0)	(131) 0		(131) 0
January 1, 2017 restated	**53**	**(1,251)**	**(157)**	**136**	**112**	**(1,107)**	**(40)**	**(1,147)**

(*) Consolidated shareholders' equity published in Orano's consolidated financial statements at December 31, 2017

In establishing its tax consolidation, Orano was required to prepare consolidated financial statements for an eight-month period ended August 31, 2017, followed by a second period of four months ended December 31, 2017. In order to facilitate comparison, the Company has chosen to prepare these specific consolidated financial statements presenting financial information for the 12-month period ended December 31, 2017, and which represents the combination of the eight- and four-month periods of 2017.

(in millions of euros)	Capital	Consolidated premiums and reserves	Actuarial gains and losses on employee benefits	Deferred unrealized gains and losses on financial instruments	Currency translation reserves	**Total equity attributable to owners of the parent**	Non-controlling interests	**Total equity and non-controlling interests**
August 31, 2017, as reported	**119**	**960**	**(123)**	**265**	**(68)**	**1,154**	**(204)**	**950**
IFRS 15 adjustment Deferred taxes		(110) (0)			(0)	(110) (0)		(110) (0)
September 1, 2017 restated	**119**	**850**	**(123)**	**265**	**(68)**	**1,044**	**(204)**	**839**

(in millions of euros)	Capital	Consolidated premiums and reserves	Actuarial gains and losses on employee benefits	Deferred unrealized gains and losses on financial instruments	Currency translation reserves	**Total equity attributable to owners of the parent**	Non-controlling interests	**Total equity and non-controlling interests**
December 31, 2017, as reported	**119**	**963**	**(164)**	**305**	**(79)**	**1,144**	**(192)**	**952**
IFRS 15 adjustment		(127)				(127)		(127)
Deferred taxes		0				0		0
December 31, 2017, restated	**119**	**836**	**(164)**	**305**	**(79)**	**1,017**	**(192)**	**825**
IFRS 9 adjustment		230		(215)		15		15
Deferred taxes		-		-		-		-
January 1, 2018 restated	**119**	**1,066**	**(164)**	**90**	**(79)**	**1,032**	**(192)**	**840**

RESTATEMENT OF EBITDA

In accordance with IFRS 15, the comparative EBITDA of 946 million euros in the financial statements reported at December 31, 2017 (12 months) has been adjusted to 892 million euros.

TRANSITION FROM REPORTED STATEMENT OF INCOME TO RESTATED STATEMENT OF INCOME

(in millions of euros)	**December 2017 (12 months) Reported**	*IFRS 15 adjustments*	**December 2017 (12 months) Restated**
REVENUE	**3,926**	***(77)***	**3,848**
Cost of sales	(3,165)	*63*	(3,102)
GROSS MARGIN	**761**	***(14)***	**746**
Research and development expenses	(87)	-	(87)
Marketing and sales expenses	(52)	-	(52)
General expenses	(103)	-	(103)
Other operating income	81	-	81
Other operating expenses	(634)	-	(634)
OPERATING INCOME	**(34)**	**-**	**(48)**
Share in net income of joint ventures and associates	(4)	-	(4)
Operating income after share in net income of joint ventures and associates	**(38)**	***(14)***	**(53)**
Income from cash and cash equivalents	16	-	16
Gross borrowing costs	(221)	-	(221)
Net borrowing costs	**(205)**	**-**	**(205)**
Other financial income	427		427
Other financial expenses	(486)	*14*	(472)
Other financial income and expenses	**(59)**	***14***	**(44)**
NET FINANCIAL INCOME	**(264)**	***14***	**(250)**
Income tax	**(56)**	***0***	**(56)**
NET INCOME FROM CONTINUING OPERATIONS	**(358)**	***0***	**(358)**
Net income from operations sold or held for sale	(2)	-	(2)
NET INCOME FOR THE PERIOD	**(360)**	**-**	**(360)**
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	**(252)**	**-**	**(252)**
NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	**(108)**	-	**(108)**

TRANSITION FROM STATEMENT OF COMPREHENSIVE INCOME AS REPORTED TO RESTATED STATEMENT OF COMPREHENSIVE INCOME

(in millions of euros)	**December 2017 (12 months) Reported**	*IFRS 15 adjustments*	**December 2017 (12 months) Restated**
Net income	**(360)**	**-**	**(360)**
Items not recyclable to the statement of income	**(8)**	**-**	**(8)**
Items recyclable to the statement of income	**(34)**	**-**	**(34)**
Total other items of comprehensive income (net of income tax)	**(42)**	**-**	**(42)**
COMPREHENSIVE INCOME	**(401)**	**-**	**(401)**
- Attributable to owners of the parent	(281)	-	(281)
- Attributable to non-controlling interests	(121)	-	(121)

TRANSITION FROM THE STATEMENT OF FINANCIAL POSITION AS REPORTED AT DECEMBER 31, 2016 TO THE RESTATED STATEMENT OF FINANCIAL POSITION AT JANUARY 1, 2017

ASSETS (in millions of euros)	**December 31, 2016 Reported**	IFRS 15 adjustments	**January 1, 2017. Restated**
NON-CURRENT ASSETS	**17,004**	***825***	**17,829**
Goodwill	1,303	-	1,303
Intangible assets	1,601	-	1,601
Property, plant and equipment	7,554	825	8,379
End-of-lifecycle assets (third party share)	127	-	127
Financial assets earmarked for end-of-lifecycle operations	6,089	-	6,089
Investments in joint ventures and associates	17	-	17
Other non-current assets	135	-	135
Deferred tax assets	178	*0*	178
CURRENT ASSETS	**4,410**	***(81)***	**4,329**
Inventories and work-in-process	1,261	*(59)*	1,202
Trade accounts receivable and related accounts	841	*(114)*	727
Contract assets	-	*92*	92
Other operating receivables	661	-	661
Other non-operating receivables	62	-	62
Current tax assets	127	-	127
Other current financial assets	2	-	2
Cash and cash equivalents	1,434	-	1,434
Assets of operations held for sale	23	-	23
TOTAL ASSETS	**21,414**	***744***	**22,158**

SHAREHOLDERS' EQUITY AND LIABILITIES (in millions of euros)	December 31, 2016 Reported	IFRS 15 adjustments	January 1, 2017. Restated
EQUITY	**(1,016)**	***(131)***	**(1,147)**
NON-CURRENT LIABILITIES	**14,024**	-	**14,024**
Employee benefits	1,402	-	1,402
Provisions for end-of-lifecycle operations	7,341	-	7,341
Other non-current provisions	254	-	254
Share in negative net equity of joint ventures and associates	63	-	63
Long-term borrowings	4,851	-	4,851
Deferred tax liabilities	113	-	113
CURRENT LIABILITIES	**8,407**	***875***	**9,281**
Current provisions	1,733	-	1,733
Short-term borrowings	1,022	-	1,022
Advances and prepayments	2,894	*(2,894)*	-
Trade accounts payable and related accounts	619	-	619
Contract liabilities	-	*4,281*	4,281
Other operating liabilities	1,839	*(511)*	1,327
Other non-operating liabilities	72	-	72
Current tax liabilities	213	-	213
Liabilities of operations held for sale	15	-	15
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	**21,414**	***744***	**22,158**

TRANSITION FROM THE STATEMENT OF FINANCIAL POSITION AS REPORTED TO THE RESTATED STATEMENT OF FINANCIAL POSITION AT DECEMBER 31, 2017

ASSETS (in millions of euros)	**December 31, 2017 Reported**	IFRS 15 adjustments	**December 31, 2017 Restated**
NON-CURRENT ASSETS	**17,118**	***856***	**17,973**
Goodwill	1,193		1,193
Intangible assets	1,339		1,339
Property, plant and equipment	7,097	*855*	7,952
End-of-lifecycle assets (third party share)	153		153
Financial assets earmarked for end-of-lifecycle operations	7,112		7,112
Investments in joint ventures and associates	10		10
Other non-current assets	114		114
Deferred tax assets	101	*0*	101
CURRENT ASSETS	**5,095**	***(85)***	**5,010**
Inventories and work-in-process	1,316	*(58)*	1,258
Trade accounts receivable and related accounts	816	*(126)*	690
Contract assets	-	*99*	99
Other operating receivables	791	-	791
Other non-operating receivables	57	-	57
Current tax assets	98	-	98
Other current financial assets	67	-	67
Cash and cash equivalents	1,950	-	1,950
TOTAL ASSETS	**22,212**	***771***	**22,983**

SHAREHOLDERS' EQUITY AND LIABILITIES (in millions of euros)	December 31, 2017 Reported	IFRS 15 adjustments	December 31, 2017 Restated
EQUITY	**952**	***(127)***	**825**
NON-CURRENT LIABILITIES	**13,963**	-	**13,963**
Employee benefits	1,382	-	1,382
Provisions for end-of-lifecycle operations	7,545	-	7,545
Other non-current provisions	270	-	270
Share in negative net equity of joint ventures and associates	57	-	57
Long-term borrowings	4,676	-	4,676
Deferred tax liabilities	33	-	33
CURRENT LIABILITIES	**7,298**	***897***	**8,195**
Current provisions	1,730	*(14)*	1,716
Short-term borrowings	429	-	429
Advances and prepayments	2,865	*(2,865)*	-
Trade accounts payable and related accounts	569	*(5)*	564
Contract liabilities	-	*4,274*	4,274
Other operating liabilities	1,612	*(492)*	1,120
Other non-operating liabilities	66	-	66
Current tax liabilities	27	-	27
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	**22,212**	***771***	**22,983**

TRANSITION FROM REPORTED CF STATEMENT TO RESTATED CF STATEMENT

(in millions of euros)	**December 2017 (12 months) Reported**	*IFRS 15 adjustments*	**December 2017 (12 months) Restated**
Net income for the period	**(360)**		**(360)**
Less: income from discontinued operations	2		2
Net income from continuing operations	**(358)**		**(358)**
Share in net income of joint ventures and associates	4		4
Net amortization, depreciation and impairment of PP&E and intangible assets and marketable securities maturing in more than 3 months	1,078	*(32)*	1,046
Net charges to provisions	(239)	*(14)*	(253)
Net effect of unwinding of assets and provisions	334		334
Income tax expense (current and deferred)	56		56
Net interest included in borrowing costs	206		206
Loss (gain) on disposals of fixed assets and marketable securities maturing in more than 3 months; change in fair value	(277)		(277)
Other non-cash items	14		14
Cash flow from operations before interest and taxes	**818**	***(47)***	**771**
Net interest received (paid)	(210)		(210)
Income tax paid	(309)		(309)
Cash flow from operations after interest and tax	**299**	***(47)***	**252**
Change in working capital requirement	13	*43*	56
NET CASH FROM OPERATING ACTIVITIES	**312**	***(4)***	**309**
Investment in PP&E and intangible assets	(490)	*4*	(486)
Disposals of PP&E and intangible assets	55		55
Acquisitions of shares of consolidated companies, net of acquired cash	(62)		(62)
Disposals of shares of consolidated companies, net of disposed cash	4		4
Acquisitions of financial assets earmarked for end-of-lifecycle operations	(3,269)		(3,269)
Disposals of financial assets earmarked for end-of-lifecycle operations	2,515		2,515
Repayment of loans from joint ventures and associates	2		2
Acquisitions of other financial assets	(61)		(61)
Disposals of other financial assets	1		1
NET CASH FLOW FROM INVESTING ACTIVITIES	**(1,305)**	***4***	**(1,301)**
NET CASH FLOW FROM FINANCING ACTIVITIES	**1,506**		**1,506**
Decrease (increase) in securities at fair value through profit and loss	0		0
Impact of foreign exchange movements	(21)		(21)
Net cash from operations sold	2		2
CHANGE IN NET CASH	**494**		**494**
Opening net cash	**1,382**		**1,382**
Closing net cash	**1,877**		**1,877**

Note 36 – TRANSITION FROM THE 2017 FINANCIAL STATEMENTS (8 MONTHS AND 4 MONTHS) TO THE 2017 SPECIFIC FINANCIAL STATEMENTS (12 MONTHS)

Web link to the financial disclosures bearing on the 4- and 8-month periods, which are accordingly incorporated by reference:

https://www.orano.group/docs/default-source/orano-doc/finance/publications-financieres-et-reglementees/2017/rapport_annuel_activite-exercice_clos_au_31-08-2017.pdf?sfvrsn=35ee6bdc_8

https://www.orano.group/docs/default-source/orano-doc/finance/publications-financieres-et-reglementees/2017/orano_rapport-annuel-activite_31-12-17_avec-annexes.pdf?sfvrsn=14d9a171_10

STATEMENT OF INCOME

(in millions of euros)	**August 31, 2017** (8 months)	**December 31, 2017** (4 months)	Foreign exchange impact	**December 31, 2017** (12 months)
REVENUE	**2,339**	**1,585**	**2**	**3,926**
GROSS MARGIN	**403**	**355**	**2**	**761**
OPERATING INCOME	**(281)**	**244**	**3**	**(34)**
Share in net income of joint ventures and associates	9	(13)	0	(4)
NET FINANCIAL INCOME	**(58)**	**(207)**	**0**	**(264)**
Income tax	(49)	(4)	(3)	(56)
NET INCOME FROM CONTINUING OPERATIONS	**(378)**	**20**	**0**	**(358)**
Net income from operations sold or held for sale	(2)	0	-	(2)
NET INCOME FOR THE PERIOD	**(380)**	**20**	**0**	**(360)**

COMPREHENSIVE INCOME

(in millions of euros)	**August 31, 2017** (8 months)	**December 31, 2017** (4 months)	Foreign exchange impact	**December 31, 2017** (12 months)
Net income	**(380)**	**20**	**0**	**(360)**
Items not recyclable to the statement of income	**35**	**(43)**	**0**	**(8)**
Items recyclable to the statement of income	**(63)**	**31**	**(1)**	**(34)**
Total other items of comprehensive income (net of income tax)	**(29)**	**(12)**	**(1)**	**(42)**
COMPREHENSIVE INCOME	**(409)**	**8**	**0**	**(401)**