

**CONSOLIDATED FINANCIAL
STATEMENTS**

Orano

December 31, 2019

Consolidated statement of income

<i>(in millions of euros)</i>	Note	December 31, 2019 (*)	December 31, 2018 (**)
REVENUE		3,787	3,623
Cost of sales		(2,991)	(3,007)
GROSS MARGIN		796	617
Research and development expenses		(101)	(97)
Marketing and sales expenses		(39)	(38)
General expenses		(112)	(103)
Other operating income	5	107	344
Other operating expenses	5	(183)	(206)
OPERATING INCOME		468	517
Share in net income of joint ventures and associates	14	(19)	(10)
Operating income after share in net income of joint ventures and associates		449	506
Income from cash and cash equivalents		24	24
Gross borrowing costs		(222)	(176)
Net borrowing costs	7	(198)	(152)
Other financial income		865	191
Other financial expenses		(627)	(1,017)
Other financial income and expenses	7	238	(826)
NET FINANCIAL INCOME		40	(978)
Income tax	8	(36)	(70)
NET INCOME FOR THE PERIOD		452	(542)
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT		408	(544)
NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS		44	2

(*) Application of IFRS 16 as of January 1, 2019 (see Note 1.3.1).

(**) The comparative figures as of December 31, 2018 have been restated to take into account the change in the presentation of end-of-lifecycle operations (see Notes 1.3.1 and 36).

Comprehensive income

<i>(in millions of euros)</i>	<i>Note</i>	December 31, 2019 (*)	December 31, 2018
Net income		452	(542)
Other items not recyclable to the statement of income		(57)	26
Actuarial gains and losses on employee benefits		(54)	18
Income tax related to non-recyclable items		1	(0)
Share in other non-recyclable items from joint ventures and associates, net of tax		(4)	8
Other items recyclable to the statement of income		75	(96)
Currency translation adjustments		73	4
Change in value of cash flow hedges		7	(138)
Income tax related to recyclable items		(4)	38
Share in other recyclable items from joint ventures and associates, net of tax		-	-
Total other items of comprehensive income (net of income tax)	8	18	(70)
COMPREHENSIVE INCOME		470	(613)
- Attributable to owners of the parent		423	(604)
- Attributable to non-controlling interests		47	(9)

(*) Application of IFRS 16 as of January 1, 2019 (see Note 1.3.1).

Consolidated statement of financial position

Assets

<i>(in millions of euros)</i>	<i>Note</i>	December 31, 2019 (*)	December 31, 2018
NON-CURRENT ASSETS		18,761	17,681
Goodwill	9	1,247	1,229
Intangible assets	10	1,247	1,278
Property, plant and equipment	11	8,380	8,120
Right of use – leases	12	77	-
End-of-lifecycle assets (third party share)	13	121	139
Financial assets earmarked for end-of- lifecycle operations	13	7,471	6,693
Investments in joint ventures and associates	14	4	1
Other non-current assets	15	106	118
Deferred tax assets	8	109	104
CURRENT ASSETS		4,820	4,859
Inventories and work-in-process	16	1,511	1,301
Trade accounts receivable and related accounts	17	617	625
Contract assets	18	95	97
Other operating receivables	19	518	657
Other non-operating receivables		45	48
Current tax assets	8	93	37
Other current financial assets	15	448	66
Cash and cash equivalents	20	1,492	2,027
TOTAL ASSETS		23,582	22,540

(*) Application of IFRS 16 as of January 1, 2019 (see Notes 1.3.1 and 36).

SHAREHOLDERS' EQUITY AND LIABILITIES

<i>(in millions of euros)</i>	<i>Note</i>	December 31, 2019 (*)	December 31, 2018
Capital		132	132
Consolidated premiums and reserves		1,370	1,007
Actuarial gains and losses on employee benefits		(195)	(138)
Unrealized gains and losses on financial instruments		(7)	(10)
Currency translation reserves		(18)	(64)
Equity attributable to owners of the parent		1,282	927
Noncontrolling interests	23	(34)	(204)
EQUITY	22	1,248	723
NON-CURRENT LIABILITIES		12,974	12,799
Employee benefits	24	1,111	1,088
Provisions for end-of-lifecycle operations	13	8,010	7,881
Other non-current provisions	25	316	279
Share in negative net equity of joint ventures and associates	14	69	45
Long-term borrowings	26	3,407	3,494
Long-term lease liabilities	12	62	-
Deferred tax liabilities	8	0	13
CURRENT LIABILITIES		9,359	9,017
Current provisions	25	2,003	1,933
Short-term borrowings	26	746	922
Short-term lease liabilities	12	20	-
Trade accounts payable and related accounts		842	652
Contract liabilities	18	4,781	4,514
Other operating liabilities	27	940	972
Other non-operating liabilities		6	7
Current tax liabilities	8	20	19
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		23,582	22,540

(*) Application of IFRS 16 as of January 1, 2019 (see Notes 1.3.1 and 36).

Consolidated statement of cash flows

<i>(in millions of euros)</i>	Note	December 31, 2019 (*)	December 31, 2018
Net income		452	(542)
Net amortization, depreciation and impairment of PP&E and intangible assets and marketable securities maturing in more than 3 months		531	424
Net increase in (reversal of) provisions	13, 24 and 25	(312)	(293)
Net effect of unwinding of assets and provisions		471	498
Income tax expense (current and deferred)		36	70
Net accrued interest included in financial debt		197	165
Loss (gain) on disposals of fixed assets and change in fair value of financial assets	5 and 7	(663)	404
Share in net income of joint ventures and associates	14	19	10
Dividends received from joint ventures and associates and share of income from consortiums		0	(5)
Other non-cash items		35	(15)
Cash flow from operations before interest and taxes		766	716
Net interest received (paid)		(158)	(205)
Net interest paid on lease liabilities		(2)	-
Income tax paid		(110)	3
Cash flow from operations after interest and tax		497	514
Change in working capital requirement	21	352	147
NET CASH FLOW FROM OPERATING ACTIVITIES		849	661
Investment in PP&E and intangible assets		(564)	(460)
Disposals of PP&E and intangible assets		8	7
Acquisitions of shares of consolidated companies, net of acquired cash		(3)	(1)
Acquisitions of financial assets earmarked for end-of-lifecycle operations		(3,744)	(1,349)
Disposals of financial assets earmarked for end-of-lifecycle operations		3,625	1,396
Change in cash management financial assets	15	21	-
Loans granted to joint ventures and associates		0	(32)
Repayment of loans from joint ventures and associates		25	1
Acquisitions of other financial assets		(4)	(6)
Disposals of other financial assets		0	59
NET CASH FLOW FROM INVESTING ACTIVITIES		(637)	(384)
Parent company capital increases	22	-	499
Capital increases subscribed by non-controlling interests		47	-
Dividends paid to non-controlling interests		(3)	(62)
Repayment of lease liabilities		(15)	-
Increase in borrowings	26	745	7
Decrease in borrowings	26	(1,068)	(565)
Change in other borrowings	26	5	(77)
NET CASH FLOW FROM FINANCING ACTIVITIES		(290)	(199)
Impact of change in classification of non-monetary funds	20	(460)	-
Impact of foreign exchange movements		4	(2)
CHANGE IN NET CASH		(534)	77
Net cash at the beginning of the period		1,953	1,877
Net cash at the end of the period	20	1,492	2,027
(-) short-term bank facilities and non-trade current accounts in credit	26	(72)	(74)
Net cash at the end of the period		1,420	1,953

(*) Application of IFRS 16 as of January 1, 2019 (see Note 1.3.1).

Consolidated statement of changes in equity

<i>(in millions of euros)</i>	<i>Note</i>	Number of shares outstanding	Capital	Consolidated premiums and reserves	Actuarial gains and Losses on employee benefits	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, 2018		237,737,500	119	1,066	(164)	90	(79)	1,032	(192)	840
Net income for the financial year				(544)				(544)	2	(542)
Other items of comprehensive income	8				26	(100)	14	(60)	(10)	(70)
Comprehensive income				(544)	26	(100)	14	(604)	(9)	(613)
Dividends paid									(3)	(3)
Other changes (**)	22	26,415,278	13	486				499	-	499
DECEMBER 31, 2018		264,152,778	132	1,007	(138)	(10)	(64)	927	(204)	723
JANUARY 1, 2019 (*)		264,152,778	132	1,007	(138)	(10)	(64)	927	(204)	723
Net income for the financial year				408				408	44	452
Other items of comprehensive income	8				(56)	2	68	14	3	18
Comprehensive income				408	(56)	2	68	423	47	470
Dividends paid									(3)	(3)
Other changes (**)	22			(46)			(22)	(68)	126	59
DECEMBER 31, 2019		264,152,778	132	1,370	(195)	(7)	(18)	1,282	(34)	1,248

(*) Application of IFRS 16 as of January 1, 2019 (see Notes 1.3.1 and 36).

(**) Including other transactions with shareholders (see Note 22).

Notes to the consolidated financial statements for the year ended December 31, 2019

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.

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, 2019 have been prepared in accordance with IFRS. They were approved by the Board of Directors of Orano SA on February 27, 2020.

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

1.1 HIGHLIGHTS

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 US grid. Orano, a minority partner of the MOX Services consortium in charge of building the plant, was in charge of supplying recycling equipment.

The mediation procedure requested by the U.S. Department of Justice (DoJ) in June 2019 concluded with an agreement signed in November 2019 terminating the contract and requiring both parties to discontinue proceedings and NNSA to pay MOX Services a sum in full and final settlement.

Philippe Coste plant

The ramp-up of the Philippe Coste plant was disrupted by a technical incident affecting the crystallizers, one of the key items of the plant's equipment. These act as a heat exchanger for crystallizing or liquefying the material produced by the process before transfer into transport packaging.

Work by on-site teams cushioned the impact on the plant's ramp-up and demonstrated the capacity of the other parts of the facility to operate at their nominal point of production. The UF₆ (uranium hexafluoride) produced by the Philippe Coste plant has been approved (ASTM standards) and has started to supply the Georges Besse 2 enrichment plant. The replacement of the crystallizers with new equipment is planned for the first half of 2020.

The plant's ramp-up continues in 2020, with the connection and start-up of a new electrolysis unit doubling installed UF₆ production capacity to 15,000 metric tons of UF₆ annualized.

Cominak

In October 2019, the Board of Directors of the Akouta Mining Company (Cominak) set the date for the end of production at the Akouta site at March 31, 2021. This decision results from the depletion of mine reserves.

Creation of a joint venture in Uzbekistan

In December 2019, Orano Mining established a partnership with the State Committee for Geology and Mineral Resources of the Republic of Uzbekistan through the creation of the Nurlikum Mining LLC joint venture, controlled by Orano. The agreement formalizes the desire of both parties to work together on uranium mining projects in Uzbekistan, particularly in the Navoiy region in a desert area at the heart of the uranium-rich province of Kyzylkum. Once exploration permits have been granted, Nurlikum Mining will carry out surveys to improve the classification level of the resources already identified by the Uzbek partner and to identify new uranium reserves.

Funding

On April 9, 2019, Orano successfully issued a maiden 750 million euros 7-year bond (maturity 2026) bearing an annual coupon of 3.375% (yield of 3.50% on issue).

In parallel with this issue, Orano launched a partial redemption offer on the 2023 and 2024 bonds issued by Areva and contributed to Orano in 2016. The maximum amount of acceptance of redeemed securities was 250 million euros, allocated entirely to the 2024 bond.

With these transactions, Orano was able to strengthen the group's liquidity position, renew its long-term funding and as such optimize its borrowing profile.

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. As a function of changes in these assumptions or in circumstances, the amounts appearing 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 25), 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 24);
- all assumptions used to measure provisions for end-of-lifecycle operations (see Notes 1.3.12 and 13) 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 estimated costs of those operations, the provisional payment schedule, the inflation rate and the discount rate (see Notes 1.3.11 and 25);
- 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 25);
- 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, 2019 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, 2019. 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 2019.

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.

Standards applicable from January 1, 2019

IFRS 16 “Leases”

First-time application

IFRS 16 “Leases”, adopted by the European Union on October 31, 2017, replaces IAS 17. It is mandatory for fiscal years beginning on or after January 1, 2019.

IFRS 16 requires all leases to be recognized in the lessee’s balance sheet as a “right-of-use” asset offsetting a financial liability.

The group has elected to apply the modified retrospective transition method, as well as the simplification measures provided by the standard. These measures allow the exclusion of:

- low-value leases;
- leases whose remaining term is less than one year from the date of first-time application; and
- the initial direct costs of leases.

The transition method selected requires the recognition of:

- a lease liability in the amount of remaining rent payments discounted at the rate applicable on the date of transition; and
- a right-of-use asset in an amount equal to the lease liability, less prepaid rent.

In addition, for the determination of discount rates, the lease term selected on the transition date is the remaining term of the lease. The weighted average incremental borrowing rate as of January 1, 2019 was 4.3%.

Lease agreements mainly relate to the rental of real estate, light and heavy vehicles, industrial equipment and IT equipment.

The impact of the first-time application of IFRS 16 as of January 1, 2019 results in the recording of a lease liability and a right-of-use asset of 50 million euros (see Note 36).

Reconciliation between minimum future lease payments as of December 31, 2018 and the lease liability as of January 1, 2019:

<i>(in millions of euros)</i>	
Minimum future rents as of December 31, 2018	87
Exempt contracts (*)	(12)
Effect of discounting of the lease liability	(6)
Other effects (**)	(19)
Lease liability as of January 1, 2019	50

() Exempt contracts mainly include the rent on Orano’s former registered office, the remaining term of which was less than 12 months as of January 1, 2019.*

*(**) Other effects mainly include leases whose effective date is after December 31, 2018 (which were included in minimum future lease payments taking into account the commitment made on December 31, 2018) and off-balance sheet commitments not presented as of December 31, 2018.*

The accounting and measurement principles for leases are described in Note 1.3.7.3.

Other standards, amendments and interpretations that came into force on January 1, 2019

- IFRIC 23 “Uncertainty over Income Tax Treatments” clarifies the application of the provisions 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 IAS 28 “Investments in Associates and Joint Ventures.”
- Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement.”
- 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.”

Amendments and interpretations with mandatory application from January 1, 2019 did not have an impact on the group’s consolidated financial statements.

New standards and interpretations adopted by the European Union that do not yet have a mandatory effective date

The amendments to IAS 1 and IAS 8 relating to the definition of material and the amendment “Amendments to References to the Conceptual Framework in IFRS Standards” were not applied in advance.

The Group has applied the amendments to IFRS 9, IAS 39, and IFRS 7 (interest rate benchmark reform), published on September 26, 2019 in advance. The application of these amendments removes the threat of consequences from interest rate benchmark reform on the classification of the group’s hedging relationships.

Change of presentation of end-of-lifecycle operations

In 2019, the group made a change in the organization of end-of-lifecycle operations, under which the end-of-lifecycle activities for regulated nuclear facilities at a standstill are now directly linked to “Corporate and other operations” and leading to a change in the segment information. At the same time, and taking into account the delegation of management of end-of-life cycle assets to the “Corporate and other operations” segment, these earmarked assets are presented within this segment in the segment information.

In addition, it has been decided to modify the presentation of end-of-lifecycle operations in the statement of income so as to reflect the performance on the dismantling of facilities separately from commercial activities. Dismantling and waste treatment costs, as well as changes in the corresponding provisions, are accordingly presented under “Other operating income and expenses” from January 1, 2019. The amortization of the end-of-lifecycle assets is maintained in the gross margin.

The statement of income for the financial year 2018 has been restated to reflect the impact of this change over the comparative period (see Note 36).

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;
- dismantling and waste treatment costs, as well as changes in the corresponding provisions;
- the effects of restructuring plans;
- the effects of amendments to pension plans and other post-employment benefits.

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 items of 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 statement of income.

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. Information relating to Orano Med, as well as end-of-life-cycle activities for regulated nuclear facilities at a standstill and earmarked assets 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 (UF₆), followed by the enrichment of UF₆ by centrifugation.

Lastly, Back End activities include used 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 "Inventories and work-in-progress", receivables (excluding tax) and non-current assets, with the exception of "deferred tax assets" and "investments in joint ventures and associates." 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 UF₆. 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 useful life 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 relating to development projects are recognized as intangible assets if the project meets the following criteria:

- the project is clearly defined and its costs are identified separately and measured reliably;
- the project's technical feasibility has been demonstrated;
- it is the group's intention to complete the project with a view to its use or sale;
- adequate technical and financial resources are available for the completion of the project;
- it is likely that the future economic benefits associated with the project will accrue to the group.

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 are valued 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 financial year;
- pre-mining development expenses that concern a project which, as of the date of the financial statements, has a strong chance of technical success and commercial profitability, 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 metric 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 impairment 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 recognized in the balance sheet as soon as they come into effect, by the recognition of right-of-use assets under "Right-of-use assets – Leases" and a liability recorded under "Lease liabilities." A contract contains a lease if it gives the group the right to control the use of an identified asset for a specified period in exchange for the payment of a consideration.

On the effective date of the contract, the lease liability is the present value of future payments.

Lease payments are discounted at the incremental borrowing rate. The rate used, determined by currency and by maturity, is the rate that the lessee would have had to pay to borrow, over a similar period and with a similar guarantee, the funds necessary to obtain a good of similar value to the right to use the leased asset in a similar economic environment.

The value of the right of use is determined on the effective date of the lease from the initial amount of the lease liability, plus, where applicable:

- advance payments made to the lessor, net of advantages received from the lessor;
- initial direct costs: the incremental costs incurred by the lessee for the conclusion of the contract;
- the estimated costs of repairing the leased property; this amount is discounted and recorded against a provision for remediation.

In the statement of income, rental expense is replaced by an amortization charge for the right of use and an interest charge. This restatement results in the recognition of deferred taxes. In the statement of cash flows, only the interest expense impacts the cash flows generated by the activity; the repayment of the principal of the lease liability affects the cash flows linked to financing operations.

Leases on contracts for assets with a low unit value or for short terms are expensed directly.

The right of use and the lease liability are amortized over the term of the lease, which is the firm period of the commitment taking into account optional periods that are reasonably certain to be exercised. The probability of exercising a renewal option or not exercising a termination option is determined by type of contract or on a case-by-case basis based on contractual and regulatory provisions, the nature of the underlying asset, its specific features and its location, as appropriate.

For impairment testing, right-of-use assets are allocated to the CGU or group of CGUs to which they belong. To this end, the value of the right-of-use asset is integrated into the carrying amount of the CGU or group of CGUs and the rent payments used to calculate the lease liability are excluded from the future cash flows used for the

determination of the value in use of the CGU or group of CGUs tested. These procedures for carrying out impairment testing in connection with the application of IFRS 16 did not have a material impact on the results of testing in view of the amount of right-of-use assets.

1.3.7.4. Inclusion of borrowing costs

In accordance with IAS 23 revised, 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

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.

Impairment tests are performed on property, plant and equipment and intangible assets with finite useful lives whenever there is an indication of impairment. Impairment losses on property, plant and equipment or intangible assets may be reversed later if there has been a change in the estimates used to determine the recoverable value of the asset and if that amount again comes to be greater than the 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.

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 the 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 financial year.

Other than government bonds and the claim on the CEA, which are recognized at amortized cost, the entire portfolio of earmarked assets 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 based on (a) the amount of exposure at default, (b) the associated loss-given-default rate and (c) the probability of default.

1.3.9.6. Other current financial assets

Cash management financial assets include negotiable debt securities with a maturity of more than three months and shares of non-monetary UCITS with a short-term management horizon that can be easily mobilized and do not strictly meet the criteria for classification as cash equivalents laid down by IAS 7. Debt securities are measured using the amortized cost method, and UCITS at fair value through profit or loss.

1.3.9.7. 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 almost immediately into a known amount of cash and which are subject to negligible risk of change as per the criteria set out in IAS 7. 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.

1.3.9.8. 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;
- bond debts 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 debts 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.

1.3.9.9. Derivatives and hedge accounting

The group elected to continue applying the hedge accounting provisions of IAS 39.

1.3.9.9.1. 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.

1.3.9.9.2. 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 hedges, hedges of net investments in foreign operations, or do not qualify as hedging items.

Fair value hedges

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.

Cash flow hedges

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.

Hedges of net investments in foreign operations

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.

Derivatives not qualifying as hedges

When derivatives do not qualify as hedging instruments, fair value gains and losses are recognized immediately in the statement of income.

1.3.9.3. 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 commercial 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 net 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.

1.3.9.10. 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 statement of income 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 expenses, 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 (Back End segment), Tricastin and Malvesi (Front End segment) for waste treatment and other operations resulting from the operating cycle. For the Back End segment, the work mainly covers the warehousing, treatment, packaging, transport and storage of technological and process waste, and, for the Front End segment, nitrate effluent and dust treatment and packaging.

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 investment grade 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 and inflation rates, and payment schedules are recognized in profit or loss.

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 foreseeable expenses stemming from the cost of rehabilitating mining sites borne by the group. 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 dismantling to bring the facility to the final state of decommissioning, including the costs of treatment and packaging of the waste resulting from the dismantling operations;
- 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);
- costs related to the long-term management of radioactive waste (warehousing, transport and storage);
- costs relating to the monitoring of storage sites after their closure.

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 reversed at the end of each financial year: 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 year-end market conditions and the specific characteristics of the liability. It is accordingly 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 investment grade 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 revision of the discount rate is accordingly a function of market rates and structural changes in the economy resulting in sustainable medium- and long-term changes.

According to decree 2007-243 of February 23, 2007 and decree of December 29, 2017 amending the decree of March 21, 2007 relating to the securing of the funding of nuclear expenses, a deficit or excess of coverage (ratio of earmarked assets to the fair value of the provisions for end-of-lifecycle operations within the scope of the law) is calculated on the basis of the discount rate determined in that manner, as long as it is lower:

- than the expected rate of return on the hedging assets; and
- the regulatory rate determined as the four-year arithmetic average of the TEC 30, plus 100 basis points. However, as a transitional measure, from December 31, 2017 until December 31, 2026, it is determined on the basis of the weighted average between 4.3% and the new formula, with the weighting of the rate of 4.3% declining on a straight-line basis over the transition period.

In the event that the discount rate is higher than the regulatory rate, the latter rate is used to determine the deficit or surplus of coverage.

Treatment of changes in assumptions

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

In application of 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 in Other operating income and expenses; the impact of changes in discount and inflation rates related to changes in market conditions and changes in the payment schedules is reflected in net 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.

It is reduced as the contractual work is performed.

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 statement of income, with the exception of those relating to "other items of 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.

Recoverability of deferred tax assets

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).

Offsetting of deferred taxes

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

BREAKDOWN OF CONSOLIDATED COMPANIES IN FRANCE AND INTERNATIONALLY

<i>(number of companies)</i>	December 31, 2019		December 31, 2018	
	French	Foreign	French	Foreign
Full consolidation	22	41	24	42
Joint operations	-	6	-	6
Equity method	1	4	1	5
Sub-Total	23	51	25	53
Total	74		78	

MAIN OPERATIONS IN 2019

Creation of Nurlikum Mining LLC joint venture in Uzbekistan

(see Note 1.1)

MAIN OPERATIONS IN 2018

Creation of the Interim Storage Partners LLC joint venture

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

SCOPE OF CONSOLIDATED COMPANIES

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

Name of unit or controlling entity: Company name, legal form	Country	December 31, 2019		December 31, 2018	
			Percentage of interest		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
Orano Expansion		FC	95.28	FC	86.51
EURODIF SA (2)		FC	100	FC	90
EURODIF PRODUCTION (*)				FC	90
SOFIDIF (2)		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
Orano DA – Diagnostic Amiante		FC	74		
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
Orano UK Ltd.	United Kingdom	FC	100	FC	100

Name of unit or controlling entity: Company name, legal form	Country	December 31, 2019		December 31, 2018	
			Percentage of interest		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
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	FC	100
Orano CIS LLC	United States	FC	100	FC	100
Interim Storage Partners LLC	United States	EM	51	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
Nurlikum Mining LLC	Uzbekistan	FC	51		
Orano Holdings Australia Pty Ltd	Australia	FC	100	FC	100
Orano Australia Pty Ltd.	Australia	FC	100	FC	100
AFRICA/MIDDLE EAST					
SOMaIR	Niger	FC	63.40	FC	63.40
IMOURAREN SA	Niger	FC	63.50	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
Orano Gabon	Gabon	FC	100	FC	100
COMUF	Gabon	FC	68.42	FC	68.42
JORDAN AREVA RESSOURCES	Jordan	FC	50	FC	50

(*) Mergers between consolidated entities/(**) Liquidation

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

(2) Following the recapitalization of Eurodif SA, Sofidif no longer holds a stake in any group companies

UNCONSOLIDATED COMPANIES

At December 31, 2019, the net carrying amount of securities held in the 13 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 - OPERATING SEGMENTS

BY BUSINESS SEGMENT

2019 result

(in millions of euros)	Mining	Front End	Back End	Corporate, other operations and eliminations	Total
Gross revenue	1,285	930	1,678	(107)	3,787
Inter-segment sales	(6)	(29)	(90)	124	-
Contribution to consolidated revenue	1,279	901	1,588	18	3,787
Operating income	446	191	(122)	(46)	468
Share in net income of joint ventures and associates	-	-	-	-	(19)
Net financial income	-	-	-	-	40
Income tax	-	-	-	-	(36)
Net income	-	-	-	-	452
EBITDA (*)	634	244	119	(97)	899
<i>% of gross revenue</i>	<i>49.3%</i>	<i>26.2%</i>	<i>7.1%</i>	<i>n/a</i>	<i>23.7%</i>

(*) See note 6

In the year ended December 31, 2019, the group generated approximately 41% of its revenue with EDF.

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

2019 statement of financial position

<i>(in millions of euros)</i>	Mining	Front End	Back End	Corporate, other operations and eliminations	Total
Property, plant and equipment and intangible assets (including goodwill and right-of-use assets on leases)	2,750	4,282	3,808	110	10,950
Assets earmarked for end-of-lifecycle operations	-	121	63	7,408	7,592
Other non-current assets	-	-	-	219	219
Subtotal: Non-current assets	2,750	4,403	3,871	7,738	18,761
Inventories and receivables (excluding tax receivables)	630	1,317	722	117	2,787
Other current assets	-	-	-	2,033	2,033
Subtotal: Current assets	630	1,317	722	2,150	4,820
TOTAL ASSETS	3,380	5,720	4,593	9,888	23,582

2018 Result

<i>(in millions of euros)</i>	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 net income of joint ventures and associates	-	-	-	-	(10)
Net financial income	-	-	-	-	(978)
Income tax	-	-	-	-	(70)
Net income	-	-	-	-	(542)
EBITDA	584	164	166	(94)	821
<i>% of gross revenue</i>	51.8%	18.3%	9.7%	n/a	22.7%

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

The change in the presentation of end-of-lifecycle operations has no impact on segment information as of December 31, 2018.

2018 STATEMENT OF FINANCIAL POSITION

<i>(in millions of euros)</i>	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 (*)	-	136	66	6,630	6,831
Other non-current assets	-	-	-	222	222
Subtotal: Non-current assets	2,724	4,360	3,693	6,903	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	5,509	4,369	9,281	22,540

(*) The comparative figures as of December 31, 2018 have been restated to take into account the change in the organization of end-of-lifecycle operations (see Note 1.3.1).

BY REGION

2019

Contribution to consolidated revenue by business segment and customer location

<i>(in millions of euros)</i>	Mining	Front End	Back End	Corporate and other operations	Total
France	318	395	1,080	17	1,811
Europe (excluding France)	67	141	164	0	373
North & South America	223	157	195	-	576
Asia-Pacific	629	196	145	0	969
Africa and Middle East	42	12	4	-	58
TOTAL	1,279	901	1,588	18	3,787

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

<i>(in millions of euros)</i>	Mining	Front End	Back End	Corporate and other operations	Total
France	7	160	311	20	498
Europe (excluding France)	26	-	3	0	29
North & South America	24	0	21	5	50
Asia-Pacific	0	-	-	0	0
Africa and Middle East	28	-	-	-	28
TOTAL (*)	84	160	335	26	605

(*) see Notes 10 and 11

Financial year 2018

Contribution to consolidated revenue by business segment and customer location

<i>(in millions of euros)</i>	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) by business segment and region of origin of the units

<i>(in millions of euros)</i>	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

Note 4 ADDITIONAL INFORMATION BY TYPE OF EXPENSE

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Payroll expenses (*)	(1,345)	(1,376)
Average full-time equivalent workforce	17,609	17,552

(*) Excluding pension obligations

Note 5 OTHER OPERATING INCOME AND EXPENSES

OTHER OPERATING INCOME

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Gain on disposals of assets other than financial assets	6	6
Reversal of impairment on assets	63	70
Other income	38	269
Total other operating income	107	344

In 2019 and 2018, the reversal of impairment relates mainly to the Philippe Coste plant.

In 2018, other income includes the provision reversal related to the renegotiation of the master health and accident/disability personal insurance plan.

OTHER OPERATING EXPENSES

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018 (*)
Restructuring and early retirement plan costs	(13)	(23)
Reversal of impairment on assets (excluding goodwill)	(61)	(17)
Loss on disposals of assets other than financial assets	(1)	(5)
Dismantling costs net of provisions/reversals of provisions for end-of-lifecycle operations	(16)	(45)
Other expenses	(92)	(116)
Total other operating expenses	(183)	(206)

(*) The comparative figures as of December 31, 2018 have been restated to take into account the change in presentation in the statement of income of end-of-lifecycle operations (see Notes 1.3.1 and 36).

Asset impairment is described in Notes 10 and 11.

In the year ended December 31, 2019, other expenses related mainly to the postponement of the start of mining operations on the Imouraren and Trekkopje sites, as well as 24 million euros in infrastructure maintenance (22 million euros at December 31, 2018).

In the year ended December 31, 2018, other expenses include 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

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Operating income	468	517
Net increase in depreciation and impairment of intangible assets, net of reversals	157	71
Net increase in depreciation and impairment of property, plant and equipment, net of reversals	355	362
Net increase in amortization and impairment of right-of-use assets on leases, net of reversals (*)	18	-
Impairment of current assets, net of reversals	(6)	(36)
Provisions, net of reversals (**)	(313)	(291)
Costs of end-of-lifecycle operations performed	219	199
EBITDA	899	821

(*) Application of IFRS 16 as of January 1, 2019.

(**) 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, 2019 include interest expense on bond debts in the amount of 162 million euros (157 million euros in the year ended December 31, 2018) and the balance of 32 million euros following the partial redemption of the 2024 bond carried out in April 2019.

The interest expense related to IFRS 16 incurred in the financial year 2019 was 3 million euros.

OTHER FINANCIAL INCOME AND EXPENSES

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Change in fair value through profit or loss of earmarked assets	659	(405)
Dividends received	191	116
Income from receivables and accretion gains on earmarked assets	10	50
Impact of changes in discount rates and inflation rates	(8)	(79)
Impact of revisions of payment schedules	-	3
Unwinding expenses on end-of-lifecycle operations	(311)	(309)
Share related to end-of-lifecycle operations	541	(624)
Foreign exchange gain (loss)	2	11
Change in fair value through profit or loss of non-earmarked assets	(1)	(1)
Impairment of financial assets net of reversals	(0)	8
Interest on advances	(54)	(47)
Financial income from pensions and other employee benefits	(18)	(21)
Accretion expenses of debt and other provisions	(140)	(100)
Other financial income	2	5
Other financial expenses	(95)	(58)
Share not related to end-of-lifecycle operations	(303)	(202)
Other financial income and expenses	238	(826)

Other financial expenses consist chiefly of premiums/discounts on currency hedging instruments.

Note 8 – INCOME TAX

ANALYSIS OF INCOME TAX EXPENSE

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Current taxes (France)	(37)	(32)
Current taxes (other countries)	(20)	(20)
Total current taxes	(57)	(51)
Deferred taxes	21	(19)
Total Taxes	(36)	(70)

The main French subsidiaries in the scope of consolidation, which are at least 95% owned, established a tax consolidation group effective 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 group at December 31, 2019.

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

It should also be noted that certain subsidiaries were part of the tax consolidation group formed around AREVA SA until December 31, 2016 inclusive. As such, the tax credits that the companies transmitted to the parent company during the tax consolidation period and that were not used within the consolidation were refunded in full by AREVA SA in 2019.

Reconciliation of income tax expense and income before taxes

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Net income for the period	452	(542)
<i>Less</i>		
Net income from operations sold, discontinued or held for sale	-	-
Share in net income of joint ventures and associates	19	10
Tax expense (income)	36	70
Income before tax	508	(462)
Theoretical tax income (expense) at 34.43%	(175)	159
<u>Impact of tax consolidation</u>		
Operations taxed at a rate other than the full statutory rate	7	(37)
Unrecognized deferred taxes	183	(141)
Other change in permanent differences	(52)	(51)
Effective tax income (expense)	(36)	(70)
Effective tax rate	8%	n/a

Breakdown of other change in permanent differences

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Parent/subsidiary tax treatment and inter-company dividends	(3)	2
Impact of permanent differences for tax purposes	11	(9)
Differences between the French tax rate and tax rates applicable abroad	12	5
CVAE business tax	(19)	(14)
Impact of change in tax rate		
Impact of changes in temporary differences in the payment schedules for calculating the impact of the reduction in rates in France	(48)	(33)
Other	(4)	(3)
Total other change in permanent differences	(52)	(51)

DEFERRED TAX ASSETS AND LIABILITIES

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Deferred tax assets	109	104
Deferred tax liabilities	-	13
Total deferred tax assets and (liabilities)	109	91

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

2020	2021	>2022
32.02%	28.41%	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

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
<u>Tax impact of temporary differences related to:</u>		
Property, plant and equipment, intangible assets and non-current assets	77	56
Working capital assets	12	16
Employee benefits	8	11
Provisions for restructuring	0	0
Tax-driven provisions	(154)	(146)
Provisions for end-of-lifecycle operations	34	30
Impact of loss carry-forwards and deferred taxes	101	93
Other temporary differences	31	31
Total net deferred tax assets and (liabilities)	109	91

Change in consolidated deferred tax assets and liabilities

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
At January 1	91	68
Tax on continuing operations, recognized in profit or loss	21	(19)
Tax recognized in operations held for sale	-	-
Tax expense recognized directly in other items of comprehensive income	(4)	38
Change in consolidated group	-	-
Currency translation adjustments	0	5
Total deferred tax assets and (liabilities)	109	91

Deferred tax income and expenses by category of temporary difference

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Property, plant and equipment, intangible assets and non-current assets	(187)	48
Working capital assets	15	(8)
Employee benefits	(40)	(22)
Provisions for restructuring	(15)	(17)
Tax-driven provisions	(15)	(11)
Provisions for end-of-lifecycle operations	-	-
Net loss carry-forwards and deferred taxes	35	128
Impairment of deferred taxes	183	(141)
Other temporary differences	44	4
Total deferred tax income (expenses)	21	(19)

Breakdown of deferred tax recognized in other items of comprehensive income

<i>(in millions of euros)</i>	December 31, 2019			December 31, 2018		
	Before tax	Income tax	After tax	Before tax	Income tax	After tax
Actuarial gains and losses on employee benefits	(54)	1	(53)	18	(0)	18
Currency translation adjustments	73	-	73	4	-	4
Change in value of cash flow hedges	7	(4)	2	(138)	38	(100)
Share in comprehensive income of associates (net of income tax)	(4)	-	(4)	8	-	8
Total gains and (losses) in other comprehensive income after tax	21	(4)	18	(108)	38	(70)

UNRECOGNIZED DEFERRED TAX ASSETS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Tax credits	-	-
Tax losses	613	589
Other temporary differences	1,028	1,177
Total unrecognized deferred taxes	1,641	1,766

Note 9 - GOODWILL

<i>(in millions of euros)</i>	December 31, 2018	Increases	Disposals	Impairment	Currency translation adjustments and other	December 31, 2019
Mining	840				17	858
Front End	161					161
Back End	227				0	228
Total	1,229	-	-	-	18	1,247

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 (market 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, 2019	Discount rate after tax	Growth rate of the standard year	Standard year
Mining	7.55%-12.00%	N/A	N/A
Front End	6.60%	N/A	N/A
Back End	6.65%-7.75%	1.50%	2040

December 31, 2018	Discount rate after tax	Growth rate of the standard 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

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 its 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 2043), rather than on a normative year. The value in use is determined by discounting estimated future cash flows per mine at rates between 7.55% and 12.00% (7.65% and 11.60% at December 31, 2018) and based on exchange rates at December 31, 2019.

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 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 2019 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 value in use determined in this manner is greater than the net carrying amount, and therefore does not result in any impairment of goodwill.

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: 98 million euros;
- a euro/US dollar exchange rate 5 eurocents higher (i.e., 1.17 instead of 1.12): 216 million euros;
- sales price assumptions US\$5 per pound of uranium below Orano's projected price curves over the entire period of the business plans: 390 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.

Taken individually or on a cumulative basis, 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 6.60% (6.70% at December 31, 2018) and on the basis of a euro-US dollar exchange rate of 1.12, in line with the closing rate as of December 31, 2019 (1.15 at 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 (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). Assumptions in respect of the construction of revised price curves have prompted Orano to consider that prices will be determined in euros from 2030.

Impairment testing performed at December 31, 2019 did not result in the recognition of any impairment of goodwill.

Testing is sensitive to the discount rate, long-term price expectations for separative work units (SWU) and the euro/US dollar exchange rate. 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: 296 million euros;
- sales price assumptions €1 per SWU below Orano's projected price curves: 50 million euros.
- a euro/US dollar exchange rate 5 eurocents higher (i.e. 1.17 instead of 1.12): 48 million euros;

Of these three sensitivities, only the reduction of the discount rate would result in impairment of goodwill.

Back End

In the Back End segment, goodwill was carried by the Recycling BU in the amount of 172 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, 2019 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

<i>(in millions of euros)</i>	Pre-mining expenses	R&D expenses	Mineral rights	Concessions & patents	Software	Intangible assets in progress	Other	Total
Gross amount at December 31, 2018	1,882	71	1,200	409	366	295	189	4,411
CAPEX	34	6	-	-	-	19	-	59
Disposals	-	-	-	(3)	(29)	-	(3)	(35)
Currency translation adjustments	82	1	15	-	-	7	1	107
Change in consolidated group	12	-	(60)	-	-	-	-	(48)
Other changes	45	(21)	-	2	4	(255)	(2)	(227)
Gross amount at December 31, 2019	2,054	56	1,155	408	342	65	186	4,267
Amortization and provisions at December 31, 2018	(1,147)	(4)	(1,200)	(91)	(332)	(241)	(118)	(3,133)
Net charges to amortization/impairment ⁽¹⁾	(77)	(52)	-	(8)	(5)	-	(16)	(157)
Disposals	-	-	-	3	28	-	3	34
Currency translation adjustments	(41)	-	(15)	-	-	(6)	(1)	(63)
Change in consolidated group	-	-	60	-	-	-	-	60
Other changes	(5)	-	-	(2)	-	242	1	237
Amortization and provisions at December 31, 2019	(1,268)	(56)	(1,155)	(98)	(309)	(4)	(130)	(3,020)
Net carrying amount at December 31, 2018	735	67	-	318	34	54	71	1,278
Net carrying amount at December 31, 2019	786	-	-	311	34	61	55	1,247

(1) Including 61 million euros in impairment losses.

BACK END SEGMENT

Capitalized R&D costs have been impaired by 52 million euros in the Back End segment.

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 group's assets in Namibia include both 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 discounted at a rate of 7.55% (7.65% at December 31, 2018). No impairment was recognized at December 31, 2019.

Impairment in the amount of 7 million euros was recorded on the carrying amount of intangible assets and property, plant and equipment of the Trekkopje mine at December 31, 2018, and additional impairment of 1 million euros was recorded at December 31, 2019 based on their fair value, determined based on a multiple of uranium resources in

the ground. After recognition of impairment of the mining assets, the carrying amount of the Trekkopje mining assets was 47 million euros at December 31, 2019 (48 million euros at December 31, 2018).

Mining assets in Canada – Midwest

Impairment in the amount of 8 million euros was recorded on the carrying amount of the intangible assets and property, plant and equipment of the Midwest deposit at December 31, 2019 based on their fair value, determined based on a multiple of uranium resources in the ground. After recognition of that impairment, the carrying amount of the Midwest project's assets was 46 million euros at December 31, 2019 (compared with 51 million euros at December 31, 2018).

Note 11 – PROPERTY, PLANT AND EQUIPMENT

<i>(in millions of euros)</i>	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, 2018	154	1,905	19,948	1,172	1,436	2,148	26,763
CAPEX	-	4	29	-	5	508	546
Disposals	(1)	(18)	(83)	0	(60)	(10)	(172)
Currency translation adjustments	2	16	57	0	20	4	99
Change in consolidated group	-	-	-	-	-	-	-
Other changes	(1)	101	543	30	75	(697)	51
Gross amount at December 31, 2019	155	2,009	20,492	1,202	1,476	1,954	27,287
Depreciation and provisions at December 31, 2018	(82)	(1,012)	(14,742)	(597)	(1,170)	(1,040)	(18,643)
Net charges to depreciation /impairment ⁽¹⁾	(1)	(91)	(526)	(27)	(34)	325	(355)
Disposals	0	18	81	0	42	-	142
Currency translation adjustments	0	(7)	(22)	0	(15)	(1)	(46)
Change in consolidated group	-	-	-	-	-	-	-
Other changes	0	(2)	1	0	(8)	2	(6)
Depreciation and provisions at December 31, 2019	(82)	(1,094)	(15,208)	(623)	(1,185)	(715)	(18,908)
Net carrying amount at December 31, 2018	73	893	5,205	575	265	1,109	8,120
Net carrying amount at December 31, 2019	73	914	5,284	579	291	1,239	8,380

(1) including 63 million euros in reversals of impairment losses.

INDUSTRIAL ASSETS OF THE CONVERSION CGU

The Conversion CGU includes the industrial assets of Malvési and Philippe Coste.

The value in use of property, plant and equipment was estimated as of December 31, 2019, using a discount rate of 7.1% (6.7% at December 31, 2018), a euro-US dollar exchange rate of 1.12 in line with the rate as of December 31, 2019 (1.15 as of December 31, 2018) and sales price assumptions for the conversion units resulting from Orano's analysis of expected medium- and long-term supply and demand trends. Assumptions in respect of the construction of revised price curves have prompted Orano to consider that prices will be determined in euros from 2030.

Favorable trends in market conditions and the commissioning of the Philippe Coste plant justified the carrying out of value testing insofar as these factors constitute an indication that the impairment observed to date may have diminished. Value testing performed as of December 31, 2019 resulted in the recognition of a reversal of impairment of 62 million euros. The net carrying amount of the industrial assets was 405 million euros. At December 31, 2018, a reversal of 45 million euros had been recognized.

Moreover, the test result is sensitive to the discount rate, long-term conversion price expectations and the euro/US dollar exchange rate. The value in use of the industrial assets of the Conversion CGU would fall by the following amounts if any of the following assumptions were used:

- a discount rate 50 basis points higher (i.e. 7.6% instead of 7.1%): 30 million euros;
- sales price assumptions per kilogram of converted uranium 1 euro below Orano's projected price curves: 83 million euros;
- a euro/US dollar exchange rate 5 eurocents higher (i.e. 1.17 instead of 1.12): 22 million euros.

Any variation in these assumptions would imply additional loss of value.

INDUSTRIAL ASSETS OF THE ENRICHMENT CGU

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

Note 12 - LEASES

RIGHT-OF-USE ASSETS

<i>(in millions of euros)</i>	January 1, 2019	New leases	Reduction/withdrawal from leases	Net increase in depreciation/impairment	Other changes	Currency translation adjustments	December 31, 2019
Property assets	34	41	(2)	(12)	2	0	63
Other assets	16	5	(0)	(7)	(0)	(0)	15
Total	50	46	(2)	(18)	2	0	77

New leases bearing on property assets relate to the group's new head office in France and a major lease in the United States. No impairment was recognized when IFRS 16 was first applied or in the financial year 2019.

LEASE LIABILITIES

The following table presents the provisional disbursement schedule:

<i>(in millions of euros)</i>	December 31, 2019
Maturing in one year or less	20
Maturing in 1-2 years	14
Maturing in 2-3 years	11
Maturing in 3-4 years	10
Maturing in 4-5 years	7
Maturing in more than 5 years	35
TOTAL	97

The amounts represent future disbursements expressed before discounting.

Note 13 - END-OF-LIFECYCLE OPERATIONS

PROVISIONS FOR END-OF-LIFECYCLE OPERATIONS

<i>(in millions of euros)</i>	Net carrying amount at December 31, 2018	Reversal (when risk has materialized)	Accretion	Change in assumptions, revised budgets, etc.	Net carrying amount at December 31, 2019
Provisions for dismantling	5,051	(123)	198	(56)	5,069
Provisions for waste retrieval and packaging	1,156	(70)	45	50	1,182
Provisions for long-term waste management and site monitoring	1,367	(16)	56	31	1,438
Provisions for end-of- lifecycle operations (regulated*)	7,575	(209)	299	24	7,689
Provisions for end-of-lifecycle operations (non-regulated*)	306	(8)	12	12	322
PROVISIONS FOR END-OF- LIFECYCLE OPERATIONS	7,881	(217)	311	36	8,010

(*) Scope of application of the law of June 28, 2006.

At December 31, 2019, used provisions in the amount of 217 million euros correspond to the expenses relating to the end-of-lifecycle operations incurred by the group.

Changes in assumptions, revisions of estimates and other variations in the positive amount of 36 million euros include:

- the impacts of the change in the discount and inflation rates for positive 39 million euros (of which positive 38 million euros on the regulated scope) allocated in the amount of 31 million euros to end-of-lifecycle assets and 8 million euros in expenses to net financial income;
- changes in payment schedules in the amount of (7) million euros;
- changes in estimates in the positive amount of 25 million euros;
- expenditure on works carried out on facilities financed by third parties in the amount of (20) 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 (HA-MAVL technological waste) and dismantling activities. The group must also assume financial obligations to monitor storage sites after their closure.

In December 2004, the CEA, EDF and Orano Cycle signed an agreement concerning the Marcoule site, which transfers the responsibilities of site owner-operator to the CEA, which will be responsible for funding the dismantling of the site facilities. 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 within the regulated scope (regulated nuclear facilities, "INB") 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 INBs 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.

Measuring of provisions for dismantling and for waste retrieval and packaging

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 and WRP operations (costing resulting from estimates for each operation envisaged: volume and cost of the required units of work, collection of quotes from subcontractors, etc.).

The dismantling scenarios adopted by Orano are compliant with the French Environmental Code, which imposes the shortest possible time between the final shutdown of the facility and its dismantling under economically acceptable conditions and in compliance with the principles set out in the French Code of Public Health.

The group measures its provisions on the basis of a reference scenario, which notably defines the final state of the site. When Orano considers that the industrial reuse of buildings after the decommissioning of facilities is compatible with possible industrial use, the provisions exclude the cost of their deconstruction. In some situations, however, Orano provides for the deconstruction of the buildings and so sets aside the associated costs. Orano also provides for the cost of treating radiologically marked soils when characterization studies of these soils make such operations likely.

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,
 - Receipt of an exemption or a release threshold allowing the recycling of very low activity metallic materials resulting from the dismantling of facilities in the Front End segment;

- Uncertainties:
 - Revision of scenarios of certain WRP (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,
 - Change in regulations, particularly in terms of safety, security and respect for the environment,
 - Changes in financial parameters (discount and inflation rates).

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;
- amounts for risks identified through risk analyses conducted in accordance with the Orano standard and updated regularly as the projects advance;
- amounts to cover unidentified risks.

Measurement of provisions for long-term waste management and monitoring of storage sites after their closure

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

These expenses include:

- disposal and surface storage of very low-level waste (VLLW) and low-level short-lived waste (LL-SLW) from dismantling;
- ,
- the warehousing, removal and underground disposal of long-lived low-level waste (LL-LLW);
- the warehousing, disposal and storage of high- and medium-level long-lived waste (HL-LLW and ML-LLW) covered by the law of December 30, 1991 (today codified in Articles L. 542-1 et seq. of the French Environment Code);
- the share of post-closure monitoring of the various ANDRA storage sites.

The volumes of waste giving rise to provision include packages relating to legacy waste, all waste coming from the dismantling of facilities, and HL- and ML-LLW technological waste from the operation of facilities. These volumes are periodically reviewed in line with the data declared within the framework of the national waste inventory.

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 takes notably into account the cost estimate of the project established by ANDRA, the ASN opinion and the observations made by nuclear operators. In application of this order, it is expected that the cost of the CIGEO project may be updated as the key stages in its development are completed (authorization of creation, commissioning, end of the "pilot industrial phase", safety reviews), in accordance with the ASN opinion. 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, 2019 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, and waste coming from dismantling operations. 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 by value before discounting would result in an additional expense at present value of approximately 34 million euros for Orano, based on the methodology used to establish the existing provision.

Discount and inflation rates (see principles laid out in Note 1.3.12)

At December 31, 2019, Orano applied a long-term inflation assumption of 1.40% and a discount rate of 3.70% (1.60% and 3.95% respectively at December 31, 2018).

At December 31, 2019, the use of a discount rate 25 basis points higher or lower than that used would have the effect of changing the closing balance of provisions for end-of-lifecycle operations by negative 382 million euros with a rate of 3.95% or positive 420 million euros with a rate of 3.45%.

Provisional 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:

<i>(in millions of euros)</i>	December 31, 2019
2020	311
2021 – 2023	1,386
2024 – 2028	1,662
2029 – 2038	1,963
2039 and beyond	8,605
TOTAL PROVISIONS BEFORE DISCOUNTING	13,927

The amounts represent the future disbursement of provisions expressed before discounting and aligned with the economic conditions prevailing in 2019.

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.

<i>(in millions of euros)</i>	Net carrying amount at December 31, 2018	Decrease from period expense	Acc- retion	Change in assumptions, revised budgets, etc.	Net carrying amount at December 31, 2019
<i>End-of-lifecycle assets – third party share (regulated*)</i>	135	(20)	5	-	120
<i>End-of-lifecycle assets – third party share (non- regulated*)</i>	4	(3)	-	-	1
TOTAL THIRD-PARTY SHARE	139	(23)	5	-	121

(*) *Scope of application of the law of June 28, 2006.*

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

<i>(in millions of euros)</i>	December 31, 2019		December 31, 2018	
	Net carrying amount	Market value	Net carrying amount	Market value
Portfolio of earmarked securities	7,408	7,582	6,457	6,561
Receivables related to end-of-lifecycle operations	63	63	236	236
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	7,471	7,645	6,693	6,797
of which earmarked assets (regulated scope*)	7,408	7,582	6,630	6,734
of which earmarked assets (outside the regulated scope*)	63	63	63	63

(*) Scope of application of the law 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.

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.

On December 30, 2019, Orano made a voluntary contribution of 134 million euros to the dismantling funds. Following this contribution, at December 31, 2019 for the end-of-lifecycle obligations falling within the scope of Articles L. 594-1 et seq. of the French Environment Code, the legal entities comprising Orano had earmarked assets representing 100.2% of end-of-lifecycle liabilities (compared with 90.7% at December 31, 2018). This coverage ratio is determined as follows:

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Provisions for end-of-lifecycle operations (regulated*)	7,689	7,575
Third party assets (regulated*)	120	135
Financial assets at market value (regulated*)	7,582	6,734
Earmarked for end-of-lifecycle operations (regulated*)	7,702	6,869
(Deficit)/Surplus of earmarked assets (regulated*)	14	(706)
Coverage ratio (regulated*)	100.2%	90.7%

(*) Scope of application of the law of June 28, 2006.

The regulatory discount rate for end-of-life liabilities was 3.76% as of December 31, 2019 (3.97% at December 31, 2018). Insofar as the discount rate used is below the regulatory discount rate, the coverage ratio is calculated using the discount rate determined by Orano for discounting provisions for end-of-lifecycle operations within the regulated scope.

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:

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
In market value or net asset value		
Equity mutual funds and listed equities	2,924	2,409
Bond and money market mutual funds	3,522	3,466
Unlisted mutual funds	505	210
At amortized cost		
Bonds and bond funds	457	372
Portfolio of securities earmarked for end-of-lifecycle operations	7,408	6,457
Receivables related to end-of-lifecycle operations	63	236
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	7,471	6,693

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
By region		
Eurozone	5,969	6,137
Non-euro Europe	380	260
Other	1,122	296
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	7,471	6,693

Financial assets held as securities or mutual funds represent 99% of all hedging assets at December 31, 2019. They are classified as follows: 46% equity, 53% bonds and money-market instruments and 1% receivables.

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

Asset class	December 31, 2019	December 31, 2018
Shares	+26.2%	-9.8%
Rate products (including receivables related to end-of-lifecycle operations)	+5.1%	-0.2%
TOTAL FINANCIAL ASSETS EARMARKED FOR END-OF-LIFECYCLE OPERATIONS	+13.9%	-3.9%

(*) The performance shown for these asset classes only covers the portion of earmarked assets 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 mainly reflect two claims, one on the CEA and the other on EDF, resulting from the over-funding of ANDRA assumed by Orano between 1983 and 1999 (payment by Orano of contributions divided between nuclear operators above its share).

Pursuant to an agreement concluded in 2018, the CEA reimbursed in December 2019 the residual balance of 173 million euros of its receivable relating to a December 2004 agreement (modified in 2015 and 2018) for it to assume a share of the costs of dismantling workshops in the La Hague plants and the costs of waste retrieval and packaging from the UP2 400 plant.

Risk description and assessment

Equity investments in the portfolio of earmarked securities include mainly:

- a mandate of publicly traded shares, which includes about 50 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 assets, 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:

<i>(in millions of euros)</i>	December 31, 2019
Assumption: declining equity markets and rising interest rates	
-10% on equities	(343)
+100 basis points on fixed income	(86)
TOTAL	(429)
Assumption: rising equity markets and declining interest rates	
+10% on equities	+343
-100 basis points on fixed income	+86
TOTAL	+429

Note 14 - INFORMATION ON JOINT VENTURES AND ASSOCIATES

2019

<i>(in millions of euros)</i>	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	(31)	-	45
ETC	13	-	23
SI-nerGIE	(1)	-	1
ANADEC	0	0	-
Interim Storage Partners	0	4	-
TOTAL	(19)	4	69

The share of net income of Cominak is mainly attributable to the costs associated with the decision to close the mine (see Note 1.1).

Orano considers that it has a constructive obligation to finance the residual operations to complete operations and rehabilitate the Cominak site in proportion with its interest; 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.

Enrichment Technology Company (ETC) is a joint venture held in equal shares by Orano and URENCO (see Note 28).

Orano and Framatome have created a consortium known as SI-nerGIE (see Note 28).

Orano considers that it has a constructive obligation to ensure the continuity of operations of ETC and Siner-GIE; 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.

2018

<i>(in millions of euros)</i>	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

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.

<i>(in millions of euros)</i>	December 31, 2019		December 31, 2018	
	ETC	SIner-GIE	ETC	SIner-GIE
Country % held	Front End UK 50%	Corporate France 50%	Front End UK 50%	Corporate France 50%
Revenue	126	161	136	167
EBITDA	37	10	38	13
Net income	18	(1)	25	0
Including increases to amortization and depreciation	(6)	(9)	(4)	(19)
Including interest income/expense	-	-	-	-
Including tax income/expense	-	-	-	-
Other items of comprehensive income	(8)	0	18	-
Comprehensive income	10	(1)	43	0

<i>(in millions of euros)</i>	December 31, 2019		December 31, 2018	
	ETC	SIner-GIE	ETC	SIner-GIE
	Front End UK 50%	Corporate France 50%	Front End UK 50%	Corporate France 50%
Current assets	172	59	156	78
Including cash and cash equivalents	17	19	20	44
Non-current assets	46	32	40	23
Current liabilities	108	76	96	76
Including current financial liabilities	-	-	-	-
Non-current liabilities	14	16	14	25
Including non-current financial liabilities	-	14	-	20
Net assets	96	(2)	86	0

<i>(in millions of euros)</i>	December 31, 2019		December 31, 2018	
	ETC	SIner-GIE	ETC	SIner-GIE
	Front End UK 50%	Corporate France 50%	Front End UK 50%	Corporate France 50%
Share of net equity before eliminations at the beginning of the year	43	0	22	(5)
Share of comprehensive income	5	(1)	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	48	(1)	43	0
Consolidation adjustments	(71)	-	(75)	-
Investments in joint ventures at the end of the year	-	-	-	-
Share of negative net equity	(23)	(1)	(32)	-

NON-SIGNIFICANT JOINT VENTURES

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Securities of non-significant joint ventures in assets	4	1
Securities of non-significant joint ventures in liabilities	45	13
Share of net income	(31)	(22)
Share of other items of comprehensive income	0	(1)
Share of comprehensive income	(31)	(23)

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

Note 15 - OTHER CURRENT AND NON-CURRENT ASSETS

OTHER NON-CURRENT ASSETS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Derivatives on financing activities	29	37
Other assets	77	81
Total Other non-current assets	106	118

Other assets include inventories of uranium and deposits to finance future expenditure for the redevelopment of mining sites internationally in the amount of 52 million euros as of December 31, 2019 (45 million euros as of December 31, 2018).

OTHER CURRENT FINANCIAL ASSETS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Derivatives on financing activities	2	46
Cash management financial assets	439	-
Other financial assets	7	20
Total Other current financial assets	448	66

The increase in cash management financial assets is attributable to the reclassification of funds classified as cash equivalents as of December 31, 2018 in the amount of 460 million euros (see Note 20).

Note 16 - INVENTORIES AND WORK IN PROCESS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Raw materials and other supplies	444	277
In progress	814	802
Finished goods	411	390
Total gross amount	1,669	1,468
Provisions for impairment	(158)	(167)
Total Net carrying amount	1,511	1,301
Inventories and work-in-process:		
at cost	1,489	1,251
at fair value net of disposal expenses	22	50
	1,511	1,301

Note 17 – TRADE ACCOUNTS RECEIVABLE AND RELATED ACCOUNTS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Gross amount	623	628
Impairment	(6)	(2)
Net carrying amount	617	625

At December 31, 2019, the gross amount of Trade accounts receivable and related accounts does not include unmatured receivables maturing in more than one year.

Breakdown of trade accounts receivable and related accounts

<i>(in millions of euros)</i>	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, 2019	617	508	71	22	3	2	4	8
December 31, 2018	625	556	19	3	4	4	4	36

Note 18 - ASSETS AND LIABILITIES ON CONTRACTS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Contract assets	95	97

At December 31, 2019, contract liabilities include 45 million euros with maturities greater than one year.

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Contract liabilities	4,781	4,514

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 used fuels and uranium sales.

At December 31, 2019, contract liabilities include 3,800 million euros with maturities greater than one year.

Note 19 – OTHER OPERATING RECEIVABLES

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
French State receivables	218	345
Advances and down payments to suppliers	103	81
Miscellaneous accounts receivable	174	201
Financial instruments	23	25
Other	1	5
Other operating receivables	518	657

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 do not include receivables maturing in more than one year.

Note 20 - CASH AND CASH EQUIVALENTS

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Cash and cash equivalents	941	963
Cash equivalents	551	1,064
Total	1,492	2,027

At December 31, 2019, cash and cash equivalents included cash and cash equivalents not immediately available to the group in the amount of 270 million euros (160 million euros at December 31, 2018), chiefly reflecting regulatory restrictions in the amount of 76 million euros and legal restrictions in international markets in the amount of 194 million euros.

Following the entry into force on January 21, 2019 of EU Regulation 2017/1131, funds classified as cash equivalents as of December 31, 2018 have been reclassified as cash management financial assets in the amount of 460 million euros (see Note 15 and the statement of cash flows).

Note 21 – CASH FROM OPERATING ACTIVITIES

CHANGE IN WORKING CAPITAL REQUIREMENT

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Change in inventories and work-in-process	(206)	(44)
Change in accounts receivable and other receivables	165	131
Change in contract assets	2	3
Change in accounts payable and other liabilities	191	(120)
Change in contract liabilities	246	218
Change in advances and prepayments made	(21)	(47)
Change in Forex hedge of WCR	(21)	9
Change in other non-current non-financial assets	(5)	(3)
TOTAL	352	147

NOTE 22 - EQUITY

CAPITAL

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

	December 31, 2019	December 31, 2018
French State	50% + 1 share	50% + 1 share
AREVA SA	20%	20%
Natixis(*)	10%	10%
Caisse des Dépôts(*)	10%	10%
CEA	1 share	1 share
MHI	5%	5%
JNFL	5%	5%
Total	100%	100%

(*) 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, 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.

Stock option plan

There is no stock option plan.

OTHER TRANSACTIONS WITH SHAREHOLDERS

In the year ended December 31, 2018, other 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.

In the year ended December 31, 2019, other transactions with shareholders were the capital increase of Orano Expansion unequally subscribed by its shareholders, with a dilutive effect for KIUI, and the creation of the Nurlikum Mining LLC joint venture.

Note 23 - NON-CONTROLLING INTERESTS

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

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Orano Expansion and IMOURAREN	(306)	(419)
SOMaIR	42	49
KATCO	150	108
SET and SET Holding	93	87
Orano DS	5	6
Other	(17)	(36)
TOTAL	(34)	(204)

A subsidiary is considered significant if its revenue is greater than 200 million euros, if its total statement of financial position 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, 2019

<i>(in millions of euros)</i>	IMOURAREN	SOMAIR	KATCO	SET	Orano DS
	Mining	Mining	Mining	Front End	DS
Country	Niger	Niger	Kazakhstan	France	France
Percentage stake in non-controlling interests	(*)	36.60%	49.00%	5.00% (**)	26.14%
Revenue	-	120	181	568	292
EBITDA	(0)	20	112	367	12
Net income	(38)	(15)	78	105	2
<i>of which attributable to non-controlling interests</i>	(2)	(6)	38	5	1
Current assets	15	138	225	642	151
Non-current assets	115	153	149	5,010	36
Current liabilities	(5)	(85)	(18)	(916)	(127)
Non-current liabilities	(1,043)	(69)	(26)	(2,827)	(26)
Net assets	(919)	138	329	1,909	35
<i>of which attributable to non-controlling interests</i>	(354)	50	161	95	9
Cash flow from operating activities	(41)	31	109	293	(4)
Cash flow from investing activities	2	(22)	(27)	(22)	(3)
Cash flow from financing activities	48	(9)	(0)	(272)	(6)
Increase (decrease) in net cash	10	(1)	85	(1)	(13)
Dividends paid to non-controlling interests	-	-	-	(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 36.50%, to those in Orano Expansion, it is 4.72%.

(**) SET is held directly by SET Holding, whose purpose is to finance of its subsidiary. The data presented for SET and SET Holding are aggregated.

December 31, 2018

<i>(in millions of euros)</i>	IMOURAREN	SOMAIR	KATCO	SET	Orano DS
	Mining	Mining	Mining	Front End	DS
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)
<i>of which attributable to non-controlling interests</i>	(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
<i>of which attributable to non-controlling interests</i>	(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%.

(**) SET is held directly by SET Holding, whose purpose is to finance of its subsidiary. The data presented for SET and SET Holding are aggregated.

Note 24 - 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 recognized 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*) 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.

PROVISIONS RECOGNIZED ON THE STATEMENT OF FINANCIAL POSITION

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
TOTAL PROVISIONS FOR PENSION OBLIGATIONS AND OTHER EMPLOYEE BENEFITS	1,111	1,088
Medical expenses and accident/disability insurance	101	88
Retirement benefits	349	316
Job-related awards	8	7
Early retirement benefits	647	673
Supplemental retirement benefits	6	4

By region <i>(in millions of euros)</i>	Eurozone	Other	December 31, 2019
Medical expenses and accident/disability insurance	99	3	101
Retirement benefits	348	1	349
Job-related awards	8	0	8
Early retirement benefits	637	9	647
Supplemental retirement benefits	3	3	6
TOTAL	1,095	16	1,111

ACTUARIAL ASSUMPTIONS

	December 31, 2019	December 31, 2018
Long-term inflation		
- Eurozone	1.3%	1.5%
Discount rate		
- Eurozone	0.6%	1.6%
- US zone	2.6%	4.0%
Pension benefit increases		
- Eurozone	1.3%	1.5%
Social security ceiling increase (net of inflation)	+0.5%	+0.5%

Mortality tables

	December 31, 2019	December 31, 2018
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, 2019	December 31, 2018
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, 2019	December 31, 2018	December 31, 2019	December 31, 2018
France	[3.0% - 0.0%]	[2.6% - 0.0%]	[0.36% - 0.0%]	[0.7% - 0.0%]

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, 2019	December 31, 2018	December 31, 2019	December 31, 2018
France	[2.3% - 0.8%]	[2.5% - 1.0%]	[2.3% - 0.8%]	[2.5% - 1.0%]

FINANCIAL ASSETS

At December 31, 2019, financial assets consisted of bonds in the proportion of 98%, and other money market instruments in the proportion of 2% (90% and 10% respectively at December 31, 2018).

Effective return on plan assets

	December 31, 2019	December 31, 2018
Europe	-0.7%	-0.42%

NET AMOUNT RECOGNIZED

(in millions of euros)	Medical expenses and accident/d isability insurance	Retirement benefits	Job-related awards	Early retirement benefits	Supplemental retirement benefits	December 31, 2019	December 31, 2018
Defined benefit obligation	101	349	8	719	46	1,224	1,205
Fair value of plan assets		1		72	40	113	118
Total defined benefit obligation	101	348	8	647	6	1,111	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 5.4%.

TOTAL EXPENSE FOR THE FINANCIAL YEAR

December 31, 2019 <i>(in millions of euros)</i>	Medical expenses and accident/disability insurance	Retirement benefits	Job-related awards	Early retirement benefits	Supplemental retirement benefits	Total
Current service cost	1	14	1	17	-	33
Accretion expense	1	5	(0)	12	1	18
Past service costs (including plan changes and reductions)	-	-	-	-	-	-
Interest income on assets	-	-	-	(1)	(1)	(2)
Recognition of actuarial difference generated during the year on other long-term plans (long-service medals, CATS, etc.)	0	-	1	-	-	1
TOTAL expense with statement of income impact	3	19	2	28	0	51
Actual yield on assets net of expected yield	-	-	-	-	1	1
Experience differences	(2)	(2)	-	(32)	-	(36)
Demographic assumption differences	-	-	-	-	-	-
Financial assumption differences (adjustment of discount rate)	14	27	-	44	2	87
TOTAL expense with impact on other comprehensive income items	12	26	-	12	4	54
Total expense for the year	15	44	2	40	4	104

CHANGE IN THE DEFINED BENEFIT OBLIGATION

<i>(in millions of euros)</i>	Medical expenses and accident/dis ability insurance	Retirement benefits	Job-related awards	Early retirement benefits	Supplemental retirement benefits	Total
Defined benefit obligation At December 31, 2018	88	317	7	747	47	1,205
Current service cost	1	13	0	17	-	32
Past service costs (including plan changes and reductions)	-	-	-	-	-	-
Disposals / Liquidation / Plan reductions	-	-	-	-	-	-
Accretion expense	1	5	-	12	1	18
Benefits paid during the year	(1)	(12)	-	(68)	(4)	(85)
Employee contributions	-	-	-	-	-	-
Mergers, acquisitions, transfers	-	-	-	-	-	-
Plan transfer	-	-	-	-	-	-
Actuarial differences	12	26	-	12	2	54
Foreign exchange differences	-	-	-	-	-	-
Defined benefit obligation December 31, 2019	101	349	8	719	46	1,224

CHANGE IN FAIR VALUE OF HEDGING ASSETS

<i>(in millions of euros)</i>	
December 31, 2018	118
Interest income on assets	2
Benefits paid by earmarked assets	(4)
Actual yield on assets net of expected yield	(2)
December 31, 2019	113

CHANGE IN PROVISION MEASURED

<i>(in millions of euros)</i>	
December 31, 2018	1,088
Total expense	104
Contributions collected/benefits paid	(82)
Disposals/Liquidation/Plan reductions	-
Change in method	-
Change in consolidated group	-
Currency translation adjustment	-
December 31, 2019	1,111

PROVISIONAL SCHEDULE OF USE OF THE PROVISION

<i>(in millions of euros)</i>	
2020 – 2022	255
2023 – 2027	456
2028 and beyond	400
December 31, 2019	1,111

Note 25 - OTHER PROVISIONS

<i>(in millions of euros)</i>	December 31, 2018	Charges	Reversal (when risk has materialized)	Reversal (when risk has not materialized)	Other changes (*)	December 31, 2019
Restoration of mining sites and decommissioning of treatment facilities	279	15	(12)	(2)	34	313
Other non-current provisions	-	3	-	-	-	3
Non-current provisions	279	18	(12)	(2)	34	316
Restructuring and layoff plans	63	-	(54)	(4)	(2)	3
Provisions for onerous contracts	161	35	(25)	(22)	0	150
Accrued costs	1,381	107	(80)	(0)	112	1,520
Other current provisions	328	26	(33)	(12)	22	330
Current provisions	1,933	168	(192)	(38)	132	2,003
Total provisions	2,212	186	(204)	(40)	165	2,319

(*) including 140 million euros in accretion and change in discount and inflation rates.

PROVISIONS FOR ONEROUS CONTRACTS

Provisions for onerous contracts mainly concern the Front End segment. For the conversion business, the backlog of orders over the year and the increase in price curves resulted in reversals of provisions in the amount of 30 million euros. In addition, the re-estimate of the quantities of a sales contract gave rise to an allowance of 25 million euros.

PROVISIONS FOR CONTRACT COMPLETION

The main allowances for the financial year relate to the waste and discharges generated by operations, as well as storage costs, particularly in the Back End.

Reversals of provisions mainly cover the treatment of waste that 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 category of waste and operating discharges, 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. The measurement of provisions takes risks into account.

Discount rate

For the year ended December 31, 2019, Orano adopted a long-term inflation assumption of 1.40% and discount rates of between 3.22% and 3.54% (see Note 1.3.11).

At December 31, 2019, the use of a discount rate 25 basis points higher or lower than that used would have the effect of changing the closing balance of provisions for work yet to be carried out by negative 67 million euros or positive 72 million euros.

OTHER CURRENT AND NON-CURRENT PROVISIONS

As of December 31, 2019, other current provisions include:

- provisions for disputes;
- provisions for customer guarantees;
- provisions for ongoing cleanup;
- provisions for the restoration of leased assets;
- provisions for contingencies;
- provisions for charges.

Note 26 - BORROWINGS

<i>(in millions of euros)</i>	Non-current liabilities	Short-term borrowings	December 31, 2019	December 31, 2018
Bond issues (*)	3,237	578	3,815	4,073
Bank borrowings	5	-	5	4
Interest-bearing advances	157	-	157	143
Short-term bank facilities and current accounts in credit	-	72	72	74
Financial derivatives	6	62	68	52
Miscellaneous debt	1	34	36	70
Total	3,407	746	4,153	4,415

(*) after hedging of the interest rate risk

At December 31, 2019, borrowings included in particular:

- bond debts with a carrying amount of 3,743 million euros and accrued interest not yet due of 72 million euros;
- a financial current account credit balance for the ETC joint venture in the amount of 56 million euros.

CHANGE IN BORROWINGS

<i>(in millions of euros)</i>	
Borrowings at December 31, 2018	4,415
Cash flows	(375)
Non-cash flows:	
Accrued interest not yet due on borrowings	72
Currency translation adjustments	39
Other changes	1
Borrowings at December 31, 2019	4,153

Reconciliation of cash flows on borrowings between the note on borrowings and cash flows from financing activities:

<i>(in millions of euros)</i>	
Cash flows of borrowings	(375)
Interest paid	68
Balance on redemption of the bond	(32)
Financial instruments	21
Cash flows of borrowings included in net cash flows from financing activities	(318)

The cash flows on borrowings included in net cash flows from financing activities mainly include the redemption of the 2019 bond for 743 million euros, the partial redemption of the 2024 bond for 250 million euros and the new bond issue for 750 million euros.

BORROWINGS BY MATURITY (*)

<i>(in millions of euros)</i>	December 31, 2019
Maturing in one year or less	746
Maturing in 1-2 years	755
Maturing in 2-3 years	205
Maturing in 3-4 years	773
Maturing in 4-5 years	769
Maturing in more than 5 years	904
TOTAL	4,153

(*) present value

BORROWINGS BY CURRENCY

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Euro	4,090	4,352
US dollar	42	21
Other	21	43
TOTAL	4,153	4,415

BORROWINGS BY TYPE OF INTEREST RATE

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Fixed rate borrowings	3,171	3,973
Floating rate borrowings	843	346
TOTAL	4,014	4,318
Other non-interest-bearing debt	72	46
Financial derivatives	68	52
TOTAL	4,153	4,415

The maturities of the group's financial assets and borrowings at December 31, 2019 are presented in Note 29.

BOND DEBTS

<i>Issue date</i>	Balance sheet value (in millions of euros)	Currency	Nominal (in millions of currency units)	Nominal rate	Term/Expiration
September 23, 2009	769	EUR	750	4.875%	September 2024
September 22, 2010	756	EUR	750	3.5%	March 2021
April 4, 2012	199	EUR	200	TEC10 + 2.125%	March 2022
September 4, 2013	506	EUR	500	3.25%	September 2020
March 20, 2014	773	EUR	750	3.125%	March 2023
April 23, 2019	740	EUR	750	3.375%	April 2026
TOTAL	3,743				

The fair value of these bond debts was 3,975 million euros at December 31, 2019.

PAYMENT FLOWS

December 31, 2019

<i>(in millions of euros)</i>	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 debts (*)	3,815	3,815	578	756	199	773	769	740
Bank borrowings	5	5	-	-	-	-	-	5
Interest-bearing advances	157	157	-	-	-	-	-	157
Short-term bank facilities and current accounts in credit	72	72	72	-	-	-	-	-
Miscellaneous debt	36	36	34	-	-	-	-	2
Future interest on financial liabilities	-	642	133	117	87	85	62	159
Total borrowings (excluding derivatives)	4,085	4,727	816	872	286	858	831	1,063
Derivatives – assets	(31)	(31)						
Derivatives – liabilities	68	68						
Total net derivatives	37	37	34	11	6	(14)		
Total	4,122	4,764	850	883	292	844	831	1,063

(*) including 72 million euros in accrued interest not yet due.

December 31, 2018

<i>(in millions of euros)</i>	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 debts (*)	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

(*) including 52 million euros in accrued interest not yet due .

Note 27 – OTHER OPERATING LIABILITIES

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Tax debt (excluding corporate income tax)	247	212
Social security liabilities	455	472
Financial instruments	39	67
Other	199	220
Other operating liabilities	940	972

As of December 31, 2019, other operating liabilities included 97 million euros maturing in more than one year.

Note 28 - RELATED PARTY TRANSACTIONS

Transactions between the parent company Orano SA and its subsidiaries, as well as those between the group's subsidiaries and joint activities are eliminated on consolidation, and are therefore not presented in the tables below.

Related party transactions presented below include:

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

December 31, 2019

<i>(in millions of euros)</i>	Interests held by the French State	Associates and joint ventures	Total
Operating income	1,746	16	1,762
Operating expenses	88	124	212
Trade accounts receivable and other	236	123	359
Trade accounts payable and other	2,471	22	2,493

December 31, 2018

<i>(in millions of euros)</i>	Interests held by the French State	Associates and joint ventures	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

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, 2019. 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 close relationships with companies controlled by the French State, including:

- Transactions with the CEA pertain to the dismantling work on the CEA's nuclear facilities. The CEA receivable related to the end-of-lifecycle operations at December 31, 2018 was reimbursed in 2019 (see Note 13);
- Transactions with AREVA relate in particular to tax, IT and real estate services;
- 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, as well as the funding of CIGEO via the additional tax and the special contribution.

ASSOCIATES AND JOINT VENTURES

The group's significant joint ventures are ETC and SI-ner-GIE (see Note 14).

ETC's 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 buys the centrifuges of its enrichment plant Georges Besse 2 from ETC; ETC also maintains this plant.

SI-nerGIE is a consortium (*groupement d'intérêt économique* – GIE) created at the time of the restructuring of AREVA; it is owned by Orano and Framatome (owned by EDF). Its purpose is to share the infrastructure and certain applications of a joint information system, and as such to avoid the additional costs and operational risks relating to information systems.

JOINT OPERATIONS

Orano Canada Inc. holds interests in uranium deposits and ore processing plants. These investments are classified as joint operations. They are accordingly consolidated in proportion to the share held by Orano Canada Inc. 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.

COMPENSATION PAID TO KEY EXECUTIVES

<i>(in thousands of euros)</i>	December 31, 2019	December 31, 2018
Short-term benefits	5,068	4,318
Termination benefits	680	40
Post-employment benefits	212	(16)
TOTAL	5,960	4,342

Key executives are:

- the Chairman of the Board of Directors and the Chief Executive Officer appointed by the Board of Directors;
- members of the Executive Committee.

Note 29 - 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 MANAGEMENT

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 currency translation risk into euros of consolidated 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/US 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 calls for proposals in foreign currencies, Orano purchases financial derivatives (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 derivatives set up to hedge foreign exchange risk at December 31, 2019

<i>(in millions of euros)</i>	Notional amounts by maturity date						Total	Market value
	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years		
Forward exchange transactions and currency swaps	1,967	737	482	208	0	-	3,395	(83)
Currency options	-	-	-	-	-	-	-	-
Cross-currency swaps	-	-	-	-	-	-	-	-
TOTAL	1,967	737	482	208	0	-	3,395	(83)

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

<i>(in millions of euros)</i>	Notional amounts by maturity date						Total	Market value
	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years		
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)

At December 31, 2019, financial derivatives used to hedge foreign currency exposure broke down by type of hedging strategy as follows:

<i>(in millions of euros)</i>	Notional amounts in absolute value	Market value
Cash flow hedges	2,517	(74)
Forward exchange transactions and currency swaps	2,517	(74)
Fair value hedges	754	(9)
Forward exchange transactions and currency swaps	754	(9)
Cross-currency swaps	-	-
Derivatives not qualifying as hedges	124	0
Forward exchange transactions and currency swaps	124	0
Total	3,395	(83)

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

<i>(in millions of euros)</i>	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)

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 September 4, 2020. It relates to a bond issued in a nominal amount of 500 million euros.

Orano had a gross cash position of 1,492 million euros as of December 31, 2019 to meet these commitments and ensure longer-term operating continuity (see Note 20) and cash management financial assets of 439 million euros (see Note 15). The group also has a syndicated line of credit with a pool of 11 international banks in the amount of 940 million euros maturing in July 2022, with a one-year extension option.

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 derivatives set up to hedge interest rate risk at December 31, 2019

(in millions of euros)	Notional amounts by maturity date							Market value ⁽¹⁾
	Total	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	
Interest rate swaps – EUR variable lender								
EUR fixed borrower	200	-	-	200	-	-	-	(4)
EUR variable borrower	100	-	-	100	-	-	-	(1)
CAD variable borrower	-	-	-	-	-	-	-	-
Interest rate swaps – EUR fixed lender								
EUR variable borrower	500	150	150	-	200	-	-	18
Inflation rate swaps								
variable lender – USD fixed borrower	159	-	159	-	-	-	-	(13)
TOTAL	959	150	309	300	200	-	-	(1)

(1) Foreign exchange portion

At December 31, 2019, financial derivatives used to hedge interest rate exposure broke down by type of hedging strategy as follows:

(in millions of euros)	Nominal amount of contract	Market value of contracts ⁽¹⁾			Total
		Cash flow hedges (CFH)	Fair value hedges (FVH)	Not formally documented (Trading)	
Interest rate swaps – EUR variable lender					
EUR fixed borrower	200	-	-	(4)	(4)
EUR variable borrower	100	-	-	(1)	(1)
CAD variable borrower	-	-	-	-	-
Interest rate swaps – EUR fixed lender					
EUR variable borrower	500	-	18	-	18
Inflation rate swaps – USD variable lender					
USD fixed borrower	159	-	-	(13)	(13)
TOTAL	959	-	18	(19)	(1)

(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, 2019

<i>(in millions of euros)</i>	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	1,529	-	-	-	-	-	1,529
including fixed rate assets	-	-	-	-	-	-	-
including floating rate assets	1,527	-	-	-	-	-	1,527
including non-interest-bearing assets	2	-	-	-	-	-	2
Borrowings	(746)	(755)	(205)	(773)	(769)	(904)	(4,153)
including fixed rate borrowings	(511)	(755)	(199)	(773)	(769)	(904)	(3,912)
including floating rate borrowings	(103)	-	-	-	-	-	(103)
including non-interest-bearing borrowings	(133)	-	(6)	-	-	-	(138)
Net exposure before hedging	783	(755)	(205)	(773)	(769)	(904)	(2,624)
share exposed to fixed rates	(511)	(755)	(199)	(773)	(769)	(904)	(3,912)
share exposed to floating rates	1,424	-	-	-	-	-	1,424
non-interest-bearing share	(130)	-	(6)	-	-	-	(136)
Off-balance sheet hedging							
on borrowings: fixed rate swaps	150	150	(200)	200	-	-	300
on borrowings: floating rate swaps	(150)	(150)	200	(200)	-	-	(300)
Net exposure after hedging	783	(755)	(205)	(773)	(769)	(904)	(2,624)
share exposed to fixed rates	(361)	(605)	(399)	(573)	(769)	(904)	(3,612)
share exposed to floating rates	1,274	(150)	200	(200)	-	-	1,124
non-interest-bearing share	(130)	-	(6)	-	-	-	(136)

On the basis of exposure at the end of December 2019, a 1% increase in interest rates over a full year would have an adverse impact of 11 million euros on financial net debt, and as such on the group's consolidated pre-tax income.

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

<i>(in millions of euros)</i>	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)

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 13).

Note 30 - ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

FINANCIAL ASSETS AND LIABILITIES BY CATEGORY

December 31, 2019

Assets

<i>(in millions of euros)</i>	Balance sheet value	Non- financial assets	Financial assets at amortized cost	Financial assets at fair value through profit or loss	Fair value of financial assets
Non-current assets	7,577	37	690	6,850	7,714
Financial assets earmarked for end- of-lifecycle operations	7,471		657 (*)	6,815	7,646
Other non-current assets	106	37	33	35	68
Current assets	3,120	490	2,092	538	2,630
Trade accounts receivable and related accounts	617		617		617
Other operating receivables	518	446	51	21	72
Other non-operating receivables	45	44	1		1
Other current financial assets	448		7	441	448
Cash and cash equivalents	1,492		1,416	76	1,492
Total assets	10,697	527	2,782	7,388	10,345

(*) of which 457 million euros in investment funds with a fair value of 632 million euros.

Breakdown of assets recognized at fair value by valuation technique

<i>(in millions of euros)</i>	Level 1 Listed prices, unadjusted	Level 2 Observable inputs	Level 3 Non- observable inputs	TOTAL
Non-current assets	6,669	806	7	7,482
Financial assets earmarked for end- of-lifecycle operations	6,669	778	-	7,446
Other non-current financial assets		29	7	35
Current assets	515	23	-	538
Other operating receivables	-	21	-	21
Other current financial assets	439	2	-	441
Cash and cash equivalents	76	-	-	76
Total assets	7,184	830	7	8,020

Liabilities and equity

<i>(in millions of euros)</i>	Balance sheet value	Non-financial liabilities	Financial liabilities at amortized cost	Financial liabilities at fair value through profit or loss (*)	Fair value of financial liabilities
Non-current liabilities	3,468		3,462	6	3,694
Long-term borrowings	3,407		3,401	6	3,633
Long-term lease liabilities	62		62		62
Current liabilities	2,555	248	2,203	104	2,307
Short-term borrowings	746		675	71	746
Short-term lease liabilities	20		20		20
Trade accounts payable and related accounts	842		842		842
Other operating liabilities	940	247	660	33	693
Other non-operating liabilities	6	1	5		5
Total liabilities	6,023	248	5,665	110	6,001

(*) Level 2

December 31, 2018

Assets

<i>(in millions of euros)</i>	Balance sheet value	Non-financial assets	Financial assets at amortized cost	Financial assets at fair value through profit or loss	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 investment funds with a fair value of 476 million euros.

Breakdown of assets recognized at fair value by valuation technique

<i>(in millions of euros)</i>	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

<i>(in millions of euros)</i>	Balance sheet value	Non-financial liabilities	Financial liabilities at amortized cost	Financial 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

NET GAINS AND LOSSES ON FINANCIAL INSTRUMENTS

Securities at fair value through profit or loss

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Interest income and dividends	191	116
Other income and expenses	0	0
Change in fair value	659	(406)

Loans and receivables

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Interest	3	3
Impairment	(4)	9
Forgiveness of debt	0	(8)

Financial assets and liabilities at amortized cost

<i>(in millions of euros)</i>	December 31, 2019	December 31, 2018
Interest income and expense and commissions	(200)	(135)
Other income and expenses	0	0
Gain (loss) from disposal	(0)	-
Impairment	-	-

Cash flow hedges

<i>(in millions of euros)</i>	Value before tax at December 31, 2018	New transactions	Change in value	Recognized in profit or loss	Value before tax at December 31, 2019
Cash flow hedging instruments	(12)	8	(2)	(1)	(6)

Note 31 - OFF-STATEMENT OF POSITION COMMITMENTS

<i>(in millions of euros)</i>	December 31, 2019	<i>Less than 1 year</i>	<i>From 1 to 5 years</i>	<i>More than 5 years</i>	December 31, 2018
Commitments given	491	62	243	186	426
Operating commitments given	429	56	227	147	330
• <i>Contract guarantees given</i>	376	53	176	147	296
• <i>Other guarantees and guarantees related to operating activities</i>	53	2	51	-	34
Commitments given on financing	49	5	14	30	80
Other commitments given	13	2	2	9	16
Commitments received	97	93	4	-	108
Operating commitments received	97	93	4	-	108
Commitments received on collateral	-	-	-	-	-
Other commitments received	-	-	-	-	-
Reciprocal commitments	1,378	149	1,229	-	1,338

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

Note 32 - BACKLOG

At December 31, 2019, Orano's backlog amounted to 29.9 billion euros, and its breakdown by maturity is as follows:

<i>(in billions of euros)</i>	Total	Less than 1 year	From 1 to 5 years	From 6 to 10 years	More than 10 years
December 31, 2019	29.9	3.6	12.0	10.3	4.0

Note 33 - 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 which go beyond the ordinary course of business, the most significant of which are summarized below.

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.

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. Orano is collaborating with the judicial authorities in the context of these legal proceedings. No entity of the Orano group has been implicated to date.

APPEALS AGAINST CERTAIN ADMINISTRATIVE DECISIONS CONCERNING THE ACTIVITIES OF THE ORANO GROUP

The activities of the Orano Group require the receipt of various authorizations or administrative decisions (such as prefectural orders, building permits, etc.). These decisions are sometimes challenged, in France and on the part of NGOs, which in certain cases can have an impact on the timetable for carrying out the relevant activities.

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. By a judgment of May 14, 2019, the suit brought by MATRAC was dropped due to a procedural irregularity in the summons. However, as this decision did not reflect the merits, the NGO has the possibility of filing again subject to the statute of limitations. 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.

RELEASE OF ARLIT HOSTAGES

On October 6, 2016, the manager of a protection company 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 AREVA group in Niger between September 2010 and October 2013. AREVA SA and Orano Cycle SA consider these 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 ruling was upheld on appeal. AREVA and Orano have brought an appeal in cassation. In parallel with these proceedings, the parties attempted to settle their dispute by means of judicial mediation, which, despite the efforts of AREVA and Orano to find a compromise, was unsuccessful. The substantive proceedings will therefore resume in 2020. Even if the court were not to accept the Orano group's position, the financial impact would be limited. However, there could be other indirect consequences such as negative media coverage.

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 as 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 34 - AUDITORS' FEES

December 31, 2019

<i>(in thousands of euros)</i>	PwC Audit	KPMG Audit
	Amount excl. tax	Amount excl. tax
Independent audit, certification & examination of the separate and consolidated financial statements		
Orano	516	371
Consolidated French subsidiaries	782	712
Sub-Total	1,298	1,083
Services other than auditing the financial statements		
Orano SA	38	36
Consolidated French subsidiaries	21	169
Sub-total	58	204
TOTAL	1,356	1,287

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, 2018

<i>(in thousands of euros)</i>	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

Note 35 – SUBSEQUENT EVENTS

On February 12, 2020, Orano was informed by letter from the Minister of ecological and solidary transition and the Minister of the economy and finances of their decision to amend certain regulatory provisions relating to the securing of the funding of nuclear expenses. These changes will relate to:

- the regulatory ceiling for the discount rate, which will henceforth be expressed as an actual value (discount rate net of inflation) based on the Ultimate Forward Rate applicable on the date in question as published by the European Insurance and Occupational Pensions Authority, plus 150 basis points. This change will take place gradually over five years;
- the maximum delay granted to the operator to rectify its situation in the case of insufficient cover: this period will be changed to five years;
- removal of the requirement to increase earmarked assets when the rate of cover is between 100% and 110% in certain cases of changes in provisions. However, the threshold above which withdrawals from earmarked funds will be possible will be changed to 120%.

These amendments have no impact on the group's financial statements as of December 31, 2019.

NOTE 36 - TRANSITION OF 2018 FINANCIAL STATEMENTS AS REPORTED TO RESTATED 2018 FINANCIAL STATEMENTS

This note summarizes the main impacts of the first-time application of IFRS 16 as of January 1, 2019, as well as the change in presentation of end-of-lifecycle operations in the statement of income, with the reclassification of dismantling costs net of provisions/reversals of provisions for end-of-lifecycle operations from “gross margin” to “other operating expenses” (see Note 1.3.1).

TRANSITION FROM THE STATEMENT OF FINANCIAL POSITION AS REPORTED AT DECEMBER 31, 2018 TO THE RESTATED STATEMENT OF FINANCIAL POSITION AT JANUARY 1, 2019

Assets <i>(in millions of euros)</i>	December 31, 2018 Reported	IFRS 16 adjustments	JANUARY 1, 2019 Restated
NON-CURRENT ASSETS	17,681	50	17,731
Goodwill	1,229		1,229
Intangible assets	1,278		1,278
Property, plant and equipment	8,120		8,120
Right of use – leases	-	50	50
End-of-lifecycle assets (third party share)	139		139
Financial assets earmarked for end-of-lifecycle operations	6,693		6,693
Investments in joint ventures and associates	1		1
Other non-current assets	118		118
Deferred tax assets	104		104
CURRENT ASSETS	4,859		4,859
Inventories and work-in-process	1,301		1,301
Trade accounts receivable and related accounts	625		625
Contract assets	97		97
Other operating receivables	657		657
Other non-operating receivables	48		48
Current tax assets	37		37
Other current financial assets	66		66
Cash and cash equivalents	2,027		2,027
TOTAL ASSETS	22,540	50	22,590

SHAREHOLDERS' EQUITY AND LIABILITIES	December 31, 2018	IFRS 16	JANUARY 1, 2019
<i>(in millions of euros)</i>	Reported	adjustments	Restated
EQUITY	723		723
NON-CURRENT LIABILITIES	12,799	34	12,834
Employee benefits	1,088		1,088
Provisions for end-of-lifecycle operations	7,881		7,881
Other non-current provisions	279		279
Share in negative net equity of joint ventures and associates	45		45
Long-term borrowings	3,494		3,494
Long-term lease liabilities	-	34	34
Deferred tax liabilities	13		13
CURRENT LIABILITIES	9,017	16	9,033
Current provisions	1,933		1,933
Short-term borrowings	922		922
Short-term lease liabilities	-	16	16
Trade accounts payable and related accounts	652		652
Contract liabilities	4,514		4,514
Other operating liabilities	972		972
Other non-operating liabilities	7		7
Current tax liabilities	19		19
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	22,540	50	22,590

TRANSITION FROM REPORTED STATEMENT OF INCOME TO RESTATED STATEMENT OF INCOME FOR THE YEAR ENDED DECEMBER 31, 2018

<i>(in millions of euros)</i>		Change in presentation	
Revenue	3,623	-	3,623
Cost of sales	(3,047)	40	(3,007)
Gross margin	576	40	617
Research and development expenses	(97)	-	(97)
Marketing and sales expenses	(38)	-	(38)
General expenses	(103)	-	(103)
Other operating income	344	-	344
Other operating expenses	(186)	(40)	(206)
Operating income	517	-	517
Share in net income of joint ventures and associates	(10)	-	(10)
Operating income after share in net income of joint ventures and associates	506	-	506
Net financial income	(978)	-	(978)
Income tax	(70)	-	(70)
Net income from continuing operations	(542)	-	(542)
Net income for the period	(542)	-	(542)