Annual Activity Report 2018

orano

Summary

Elements of the Statement of non-financial performance are identified by the pictogram SNFP

Annual Activity Report 2018

THE ANNUAL ACTIVITY REPORT OF ORANO FOR 2018 INCLUDES:

- the management report of the Company's Board of Directors including the management report of Orano, including:
  - the group's vigilance plan and the report on its implementation (article L. 225-102-4 of the French Commercial Code),
  - the statement of non-financial performance (article L. 225-102-1 of the French Commercial Code).
  - *A cross-reference table of the data required in the statement of non-financial performance and the data required by the French Duty of Care law is provided in Appendix 8.9;*
  - the report of the Board of Directors on corporate governance (article L. 225-37 of the French Commercial Code); and
- the Board of Directors' report on the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional components of the total compensation and benefits of any kind attributable to the officers of the Company (article L. 225-37-2 of the French Commercial Code).

The purpose of this report is to present the situation of Orano (the Company, previously known as New AREVA Holding) and its subsidiaries during the financial year running from January 1 to December 31, 2018.

The terms "group" or "Orano" refer to the group of companies formed by Orano and its subsidiaries and interests, both direct and indirect. The change of the Company's name took place on January 22, 2018.

A French law public limited company entitled to issue financial securities admitted for trading on a regulated market, the Company is subject to the obligation to draw up a management report including the information stipulated by the French Commercial Code, as well as the specific information required of a company issuing debt instruments listed for trading on a regulated market.

Editorials

Philippe Varin
Chairman of the Board of DIrectors

"Orano is a major player in the nuclear industry, producing the low-carbon energy of the future."

The latest IPCC report published in October 2018 confirmed that there is an urgent need for action on a global scale to tackle climate change effectively. It is a simple equation: the rise in temperatures must be limited to a maximum of +1.5°C, with the aim of being "carbon-neutral" by 2050.

The solutions already exist, such as implementing a low-carbon electricity mix based on renewables and nuclear energy. France is at the forefront of this, with electricity that is already more than 95% carbon-free. The decisions taken by the French President last November as part of the Multiannual Energy Program confirm this strategy: nuclear energy, which has the dual advantage of not producing CO_2 emissions and of being continuously available, will serve as the backbone for power generation in France. It will be supported by an industry with more than 220,000 employees and 2,500 companies across France, to which Orano brings its recognized know-how in fuel production and the recycling of nuclear materials.

"In 2018, Orano has confirmed both its recovery and its ability to perform over the long term."

At a time when nuclear energy is becoming increasingly essential for power generation, Orano outperformed its targets in its first year of trading.

There has been a marked improvement in the key performance indicators for safety and security. In economic terms, Orano's first year saw a return to positive net cash flow of €158 million in 2018 – higher than the target set – and the start of the group's deleveraging. In parallel with the recovery of the uranium and conversion markets, our group secured nearly €2 billion in new orders across all of its businesses, particularly in Asia, which now accounts for 24% of our revenue. Earnings from the Group's operating performance rose sharply, with operating income of €517 million in 2018. The net income has been impacted by the negative performance of the financial markets. Lastly, all of our teams rallied behind the "Value 2020" performance plan to deliver €102 million in savings.

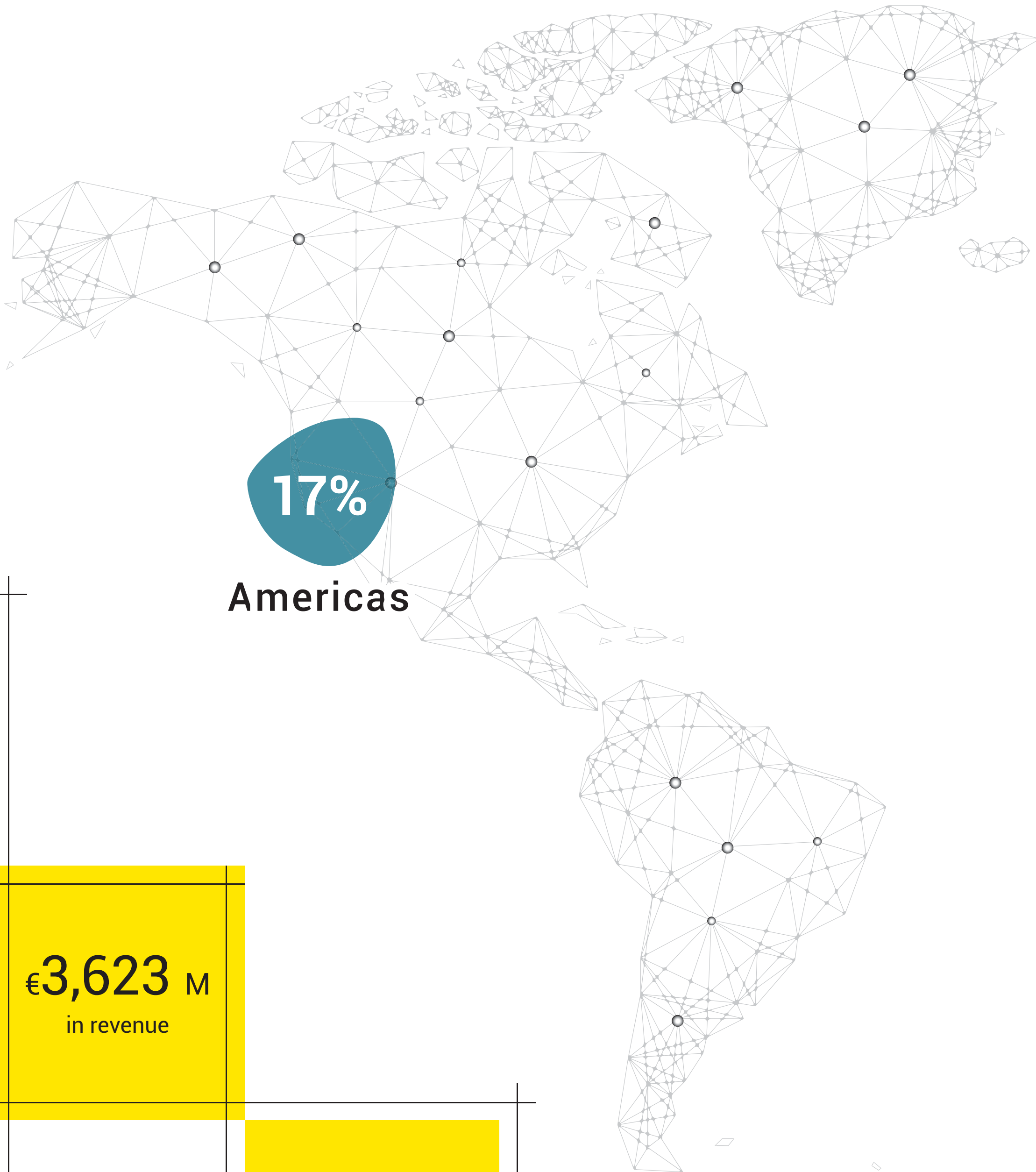
With these results, Orano confirms its recovery, but its ability to perform over the long term. It is backed by a diversified mining portfolio, the most modern conversion and enrichment facilities in the world, flagship recycling plants and internationally renowned expertise in services (transportation, manufacturing of packages, dismantling, operations support and engineering).

It relies upon the confidence of its customers, the know-how of its people, who contribute on a daily basis to producing safe, sustainable nuclear electricity.

Philippe Knoche
Chief Executive Officer

Business card

BREAKDOWN OF 2018 REVENUE BY REGION



€31.8 bn
Order baklog
i.e. nearly 9 years
of revenue

€3,623 M
in revenue

16,000
employees
across the world

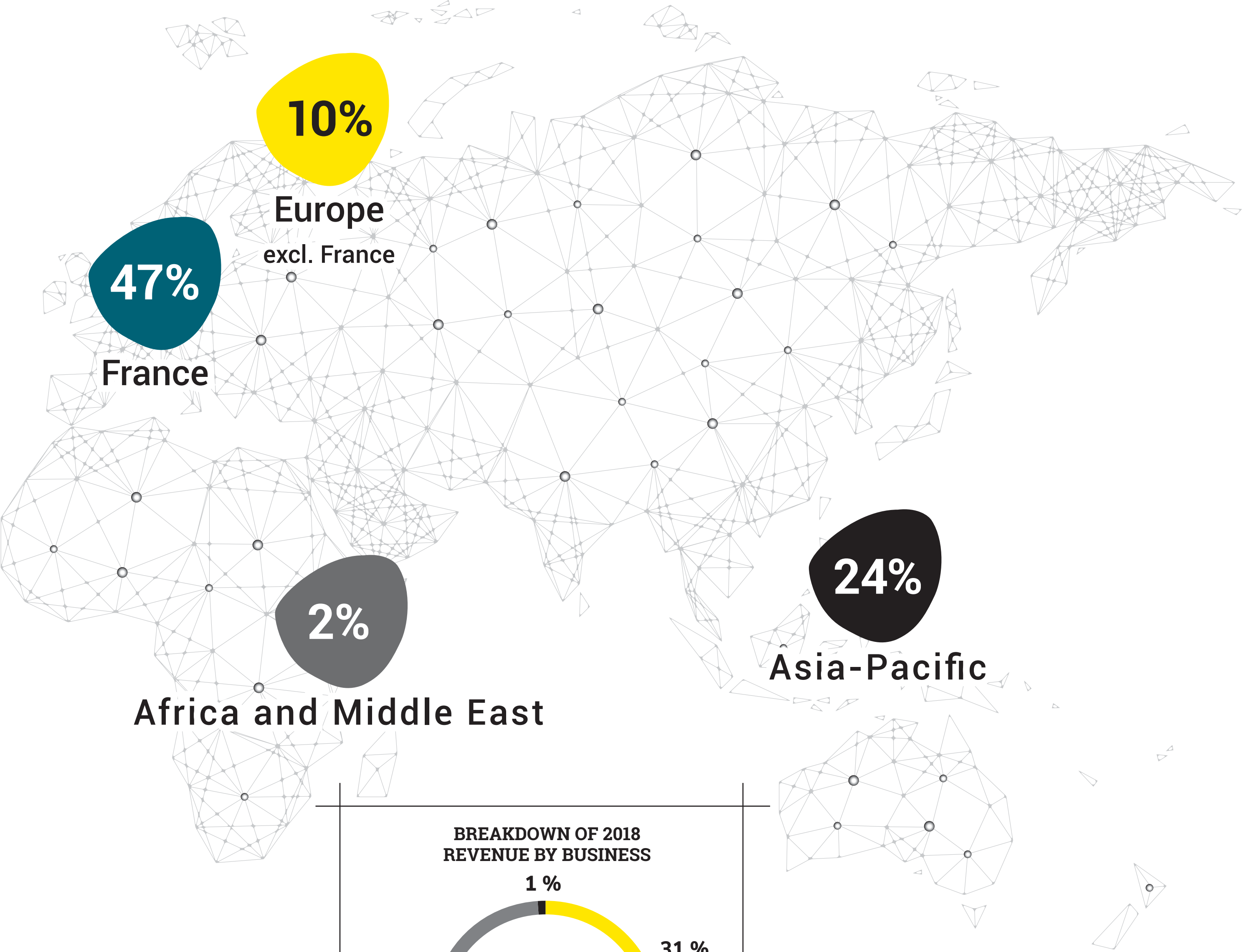
TOP 3
worlwide
in our key activities

NON-FINANCIAL INDICATORS

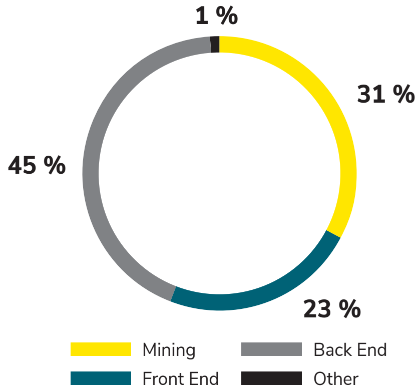
More than **800** new hires on permanent contracts in France in 2018

12% Greenhouse gas emissions reduced in 2018

1.5 Accident frequency rate with lost time in 2018



BREAKDOWN OF 2018 REVENUE BY BUSINESS



Business model

Safe, competitive solutions thanks to unique know-how and updated industrial assets

NUCLEAR, AN APPROPRIATE RESPONSE TO CLIMATE AND ENERGY CHALLENGES

Emission ÷2 — Need to cut CO_2 emissions in half by 2050 to limit the temperature increase to 1.5°C

Demand x2 — Demand for power doubling by 2050

40% of CO_2 emissions Worldwide come from power generation

Low-carbon, competitive, and continuously operated power-generation technology

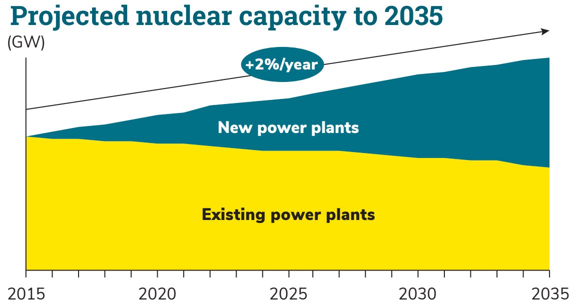
440
Reactors in operation worldwide

Nuclear is a key energy for limiting the temperature increase to 1.5°C

(Source: IPCC report, Oct. 2018)

NUCLEAR, A GROWING MARKET ON THE FRONT AND BACK ENDS OF THE CYCLE

Projected nuclear capacity to 2035



An increase in the global nuclear fleet driving demand for mining (uranium), Front End (conversion and enrichment), and Back End of the cycle (spent fuel management, logistics)

Back End opportunities due to the closure of nuclear sites (dismantling, logistics, waste management, and more)

OUR MISSION AND OUR AMBITION

- Make nuclear an increasingly reliable and competitive energy
- Transform nuclear materials so that they can be used to support the development of society through recycling
- Remain the leading player in the production and recycling of nuclear materials, waste management, and dismantling
- Continue reducing our carbon footprint and pursue our policy as a responsible player

OUR DNA

- A culture of uncompromising security and safety
- A client portfolio unique in the nuclear industry
- Operational excellence as the core of our day-to-day management
- World-leading technology and updated plants
- Recognized multidisciplinary expertise
- Innovation in every area, to serve our customers

A diverse and resilient business model throughout the nuclear fuel cycle

OUR BUSINESS PORTFOLIO

Mining

Mining

- Search for new deposits
- Extraction
- Ore remediation
- Site reclamation

7 950 MTU produced in 2018

A responsible mining player with a diversified portfolio

Front End

Conversion and Enrichment

- Conversion: Malvési & Philippe Coste plants

15,000 MTUF6 capacity

- Enrichment: Georges Besse II plant

7.5 MSWU capacity

The most modern plants in the world

Back End

Recycling

- Used fuel treatment: la Hague plant

1,100 MTML treated/year

- Recycling recoverable materials (MOX): Melox plant

125 MTMOX/year

Recovery of 96% of used nuclear fuel

Dismantling and Services

- Dismantling of nuclear facilities
- Waste management
- Operator services

4,000 employees
160 dismantling and declassification projects already completed worldwide

Experience gained from 50 years in the business

Nuclear Packages and Services

- Packaging design
- Transportation
- Logistics management

5,000 shipments per year

- Storage

1,500 dry storage packages loaded worldwide

One of the world leaders in designing nuclear packaging

Engineering

- Studies and designs
- Consulting

OTD > 90%

- Nuclear & non-nuclear project

40 years' experience in designing and conducting complex projects in France and abroad

oranomed

- Production of high purity Lead-212
- Alpha-therapy treatments

Development of new cancer treatments

HIGHLIGHTS OF THE YEAR 1

1.1 Highlights of the year

1.1.1 Constitution and recapitalization of the Orano group

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

In this connection, on July 26, 2017 the Company received a capital increase of 2.5 billion euros reserved for the French State and authorized in principle by the European Commission on January 10, 2017. From July 26, 2017, the French State became the majority shareholder in New AREVA Holding (parent of the New AREVA group), which ceased to be consolidated within AREVA SA.

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

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

1.1.2 Capital increases reserved for JNFL and MHI

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

These capital increases were carried out on February 26, 2018. Following these transactions, Orano SA's shareholding structure was as follows: 45.2% for the French State, 4.8% for the CEA, 40% for AREVA SA, 5% for JNFL and 5% for MHI.

1.1.3 Changes in share capital

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

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

Additionally, on December 4, 2018 the French State acquired 12,774,282 shares, or 4.8% of Orano's equity, from the CEA.

Since then, Orano's equity [(1)] has been held by the French State (50% plus one share), the CEA (one share), AREVA SA (20%), JNFL (5%), MHI (5%), Caisse des Dépôts (10%) and Natixis (10%).

1.1.4 Multi-Year Energy Program

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

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

(1) Figures rounded to the nearest whole number.

1.2 Other highlights of the year

1.2.1 Mining

- The spot price of uranium averaged 24.7 US dollars/lb in 2018. Since summer 2018, the spot price gradually rose to 28.50 US dollars/lb at the end of 2018 (versus 23.80 US dollars/lb at the end of 2017), while the long-term indicator remained stable at 32 US dollars/lb at the end of 2018 (versus 31 US dollars/lb at the end of 2017).
- In February Somaïr held its 50th anniversary celebration, attended by employees, former employees, management and representatives of local governmental and other authorities. Since its founding in February 1968, Somaïr has produced over 70,000 metric tons of uranium.
- In July, on account of the deteriorated conditions on the uranium market, the mothballing, effective since February 2018, of the McArthur River mine (69.8% held by Cameco and 30.2% by Orano) and the Key Lake processing plant (83.3% owned by Cameco and 16.7% by Orano) was extended for an indefinite period.
- In November, Badrakh Energy LLC (formerly AREVA Mines LLC), a subsidiary 66% owned by AREVA Mongol LLC (AREVA Mongol LLC is 66% owned by Orano Mining and 34% owned by Mitsubishi Corporation) and 34% owned by the state enterprise Mon-Atom, completed construction of the pilot ISR facility at Zuuvch Ovoo in the Sainshand basin in Mongolia. The results of this pilot will allow to confirm and optimize its technical and economic specifications with a view to future operation.
- On December 28, 2018, the new Somaïr and Cominak mining agreements, renegotiated for five years (2019-2023) were approved by an order in the council of ministers in Niamey.
- In January 2018, two American mining companies launched a petition (Petition Section 232) to limit foreign uranium imports under Section 232 on American national interests. At the moment, this petition aims for 25% of US uranium requirements to come once again from American production (vs. the current 5%). The consequences of this procedure may result in additional import taxes and/or quotas. After a commenting process open to the public (in which Orano participated by sending its comments to the DOC on September 25, 2018), the US President may make a decision at any time until the end of July 2019, following the recommendations of the DOC (Department of Commerce) which should be forthcoming at the end of April 2019. Actions are being carried out to manage this situation for both contracts in progress and future contracts.

1.2.2 Front End

- The decline in enrichment market indicators continued during the year owing to persistent excess capacity. The benchmark spot price published by UxC fell sharply, from 38 US dollars per SWU at the end of 2017 to 35 US dollars before edging up to 39 US dollars by the end of 2018. The long-term SWU price fell once again, down to 41 US dollars at the end of 2018, its lowest level since the price was first published in 2004.

  As regards the conversion market, the December 2017 announcement by Converdyn that it would be mothballing its plant made the price resurgence in 2018 more dramatic. The spot price jumped from 6 US dollars/kgU at the end of 2017 to 13.75 US dollars at the end of 2018 (the European conversion price published by UxC), and the long-term price rose from 13.50 US dollars per kgU at the end of 2017 to 15.50 US dollars at the end of 2018.
- Since in early 2018, the US Department of Energy (DOE) informed the company of its decision not to renew its original commitment to guarantee the loan necessary to build the plant, the decision was made to abandon the project, put the land that had been acquired in Idaho up for sale, and to make this known to the public.
- On September 10, 2018, the group's new conversion plant was inaugurated on the Orano Tricastin site. This plant, known as Philippe Coste, integrates technological innovations in terms of safety, the environment and improvement of industrial performance. It is part of the Orano Tricastin site's industrial tools renewal program.

  The first UF_6 was produced there on December 12. The operating tests of the Philippe Coste plant were still in progress at the end of the reporting period; it is expected that the facility will be commissioned in the first half of 2019. The ramp-up of the plant's production will continue in the coming months until it reaches its nominal capacity of 15,000 metric tons in 2021.
- On December 31, 2018, Orano Cycle became the sole nuclear operator of the regulated nuclear facilities at Orano Tricastin site, marking the culmination of a major simplification program that has helped improve both safety and competitiveness.
- After starting the "Sunset review" process in 2018, the US Department of Commerce, in the absence of claimants, is expected in 2019 to announce the revoking of the anti-dumping duty order that since 2002 has been imposed on enriched uranium from France. This announcement will presuppose a return to a normally functioning US government after the shutdown.

1.2.3 Back End

Recycling

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

Nuclear Packages and Services

- In October, the group's Nuclear Logistics business changed its name to Nuclear Packages and Services. This name highlights its core business of designing and manufacturing packaging, and its services to electric utilities, from transportation to managing the aging of packages.
- In 2018, Orano won contracts worth several hundreds of millions of euros in the areas of dry storageof used fuel with US customers, including OPPD (Omaha Public Power District).
- In late October 2018, Orano signed a contract with JAEA (the Japanese Atomic Energy Agency) for the preparation of shipments to France of 731 used fuel assemblies from Japan's Fugen reactor, planned for 2023-2026. The contract also calls for engineering studies prior to acceptance and processing/recycling the used fuel at the la Hague plant.
- Orano obtained several approvals in 2018 from the French nuclear safety authority (ASN) for new-generation shipping packages for used fuel (TNG3, TN 17MAX). In March 2018, Orano applied to the US NRC for a license on NUHOMS® MATRIX.

Dismantling and Services (DS)

- At the World Nuclear Exhibition (WNE) held in June in Le Bourget (Paris – France), Orano signed several partnerships with non-French entities, in particular with the United Kingdom's National Decommissioning Authority (NDA), which operates in the field of dismantling of civil nuclear installations, and with EDF, with a view to a supplier cooperation agreement for the dismantling and cleanup of the Monju experimental reactor in Japan.
- In the United States, the group continues to develop its ADP (Accelerated Decommissioning Partners) joint venture with the US Company NorthStar to acquire shut down nuclear power plants and all of the associated financial provisions, for the purpose of dismantling them.
- The Dismantling and Services business, in partnership with ARIS, won two large contracts in October in a call for bids from EDF to manage as of January 1, 2019 all operations related to the scaffolding and insulated ductwork of the Dampierre (Loiret) and Penly (Seine Maritime) nuclear power plants.
- In November, DS was also awarded a maintenance contract for hoisting equipment at the Saclay site, making Orano CEA's principal partner for all maintenance on hoisting equipment at its sites in the Ile-de-France region.
- The technological developments by Dismantling and Services staff won several awards during the year, including the SFEN Innovation Award for IRIS biological shielding and the WNE Technological Innovation Award for the NanoPix miniature gamma camera developed in collaboration with the List Institute of the CEA.

Engineering

- In preparation for the Chinese used-fuel treatment and recycling plant project, for which negotiations are under way, Orano and its Chinese partner CNLA, a subsidiary of the China National Nuclear Corporation (CNNC), signed a contract in June 2018 for the preparatory work on that plant. This contract was carried out in a satisfactory manner until its end date of December 31, 2018, with the aim of enabling the client to have in hand the documentation and scheduling necessary to submit the project for approval to the oversight authority.
- From completion of the detailed Preliminary Design in 2006, to the supervision of cold testing between 2016 and 2018, the Comurhex II project, now known as the Philippe Coste plant, has been a working program for the Engineering business line with nearly three million hours of engineering.
- In November, Orano Projets took up residence at the Malvési site, assisting with the group's Conversion projects. Aware importance of the industrial issues facing Malvési and the engineering work they require, the melding of operating and engineering teams on the site is intended to improve the performance of the projects in terms of cost and timing.

1.2.4 Other operations

Nuclear medicine

- In January 2018, Orano Med, in partnership with RadioMedix, began a Phase 1 clinical trial of AlphaMedix™ for the treatment of neuroendocrine tumors, and in August 2018 obtained designation as an orphan drug by the United States FDA (Food and Drug Administration).
- In August 2018, Orano Med signed a partnership with Cellectar Biosciences to develop new cancer therapies.

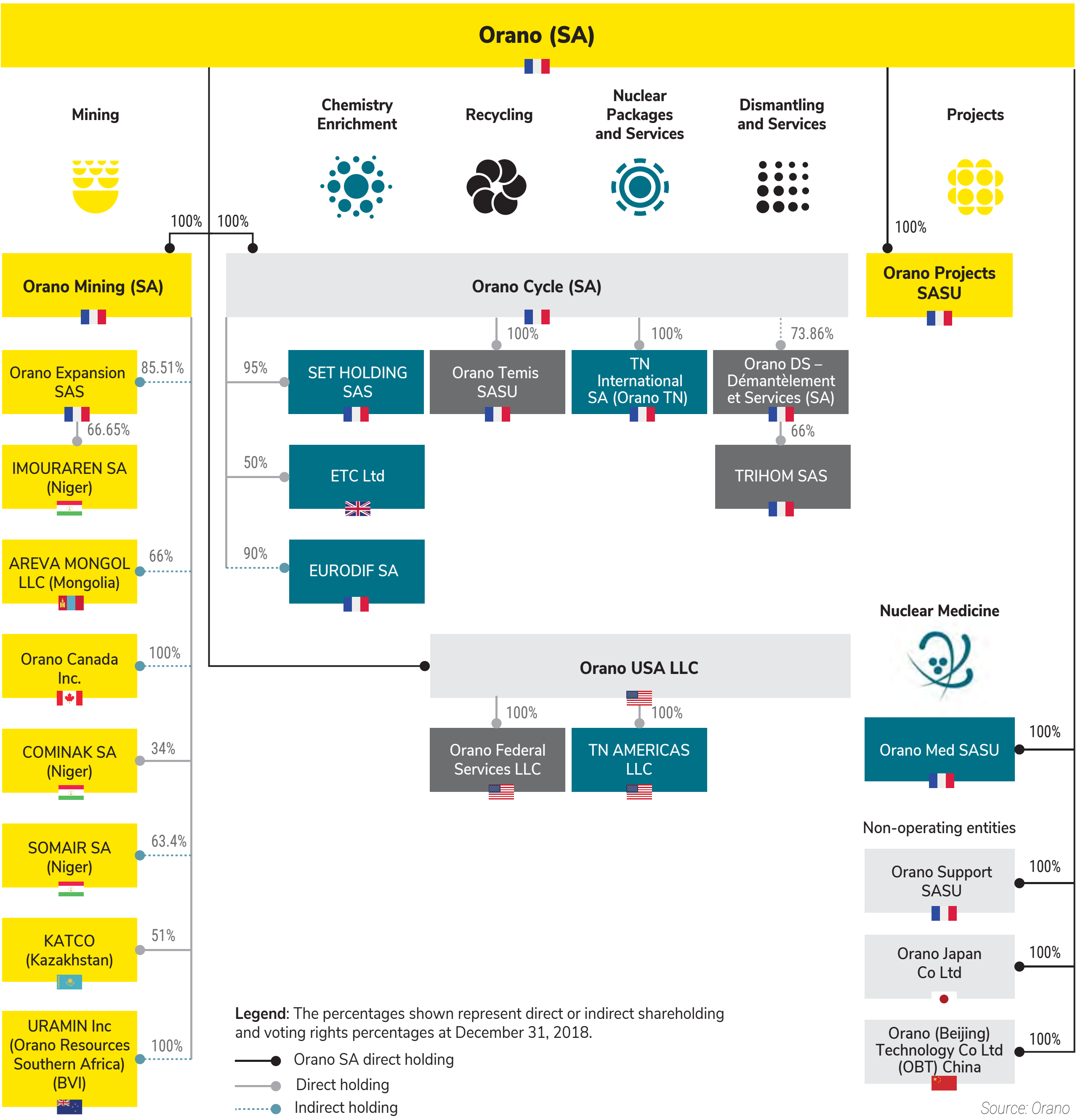
Please refer to Section 2.6 of this report for the highlights since the date of closing.

SITUATION AND ACTIVITIES OF THE COMPANY AND ITS SUBSIDIARIES DURING THE PAST YEAR

2

2.1 Simplified organization chart of the group – Subsidiaries, interests and branch offices

2.1.1 Simplified organization chart of the group at December 31, 2018



Source: Orano

2.1.2 Acquisitions of equity interests and takeovers during the past year

Acquisitions of equity interests

Pursuant to Article L. 233-6 of the French Commercial Code, Orano made no investments in companies headquartered in the French Republic that represent more than a twentieth, a tenth, a fifth, a third or a half of the equity in such a company.

Takeovers

On November 23, 2018, Orano formed two French simplified joint-stock companies (*sociétés par actions simplifiées*), Orano 7 and Orano 8. These entities are 100% owned by the Company.

Pursuant to Article L. 233-6 of the French Commercial Code, Orano has not taken controlling interests in companies headquartered in the French Republic that represent more than a twentieth, a tenth, a fifth, a third or a half of the equity in such a company.

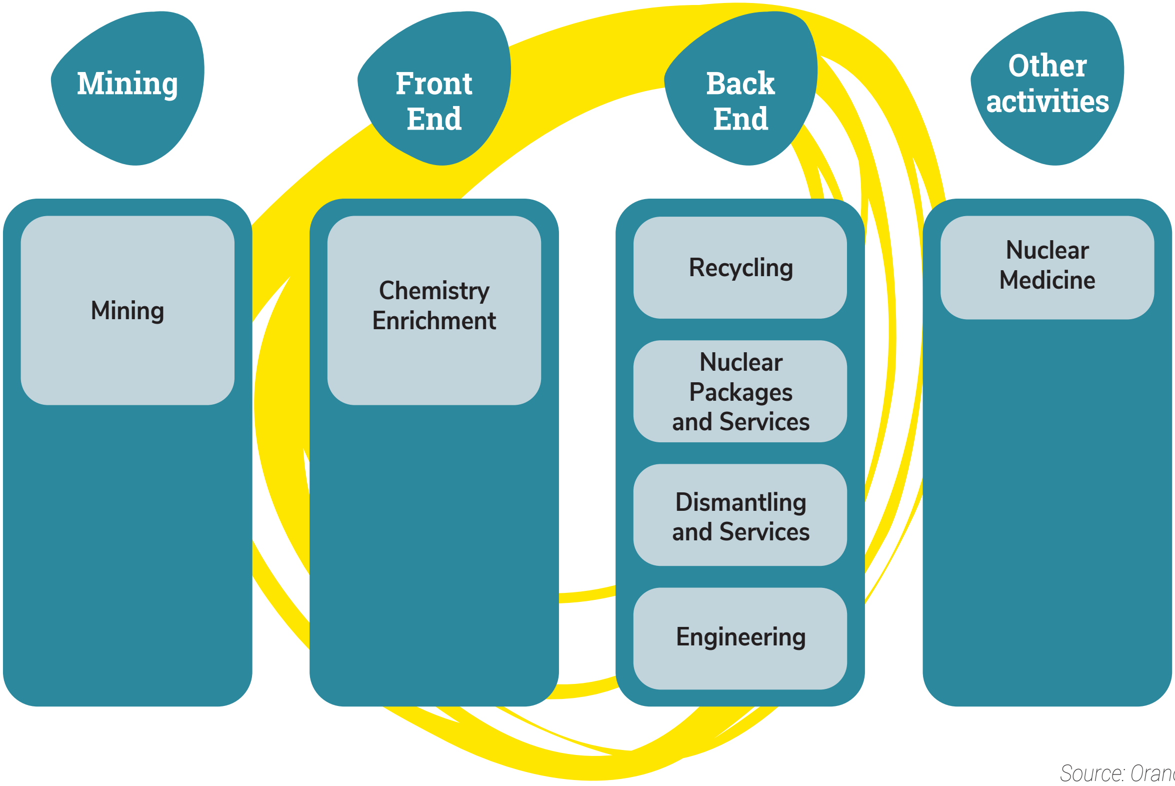
2.1.3 Branch offices and representation offices

In accordance with the provisions of Article L. 232-1 II of the French Commercial Code, please note that the Company has a liaison office in Turkey and a representation office in Belgium.

2.2 The group's businesses

Refocused on nuclear fuel cycle operations, Orano operates in Mining, at the Front End and the Back End of the cycle, and in other activities.

SCOPE OF ORANO OPERATIONS AT DECEMBER 31, 2018



Source: Orano

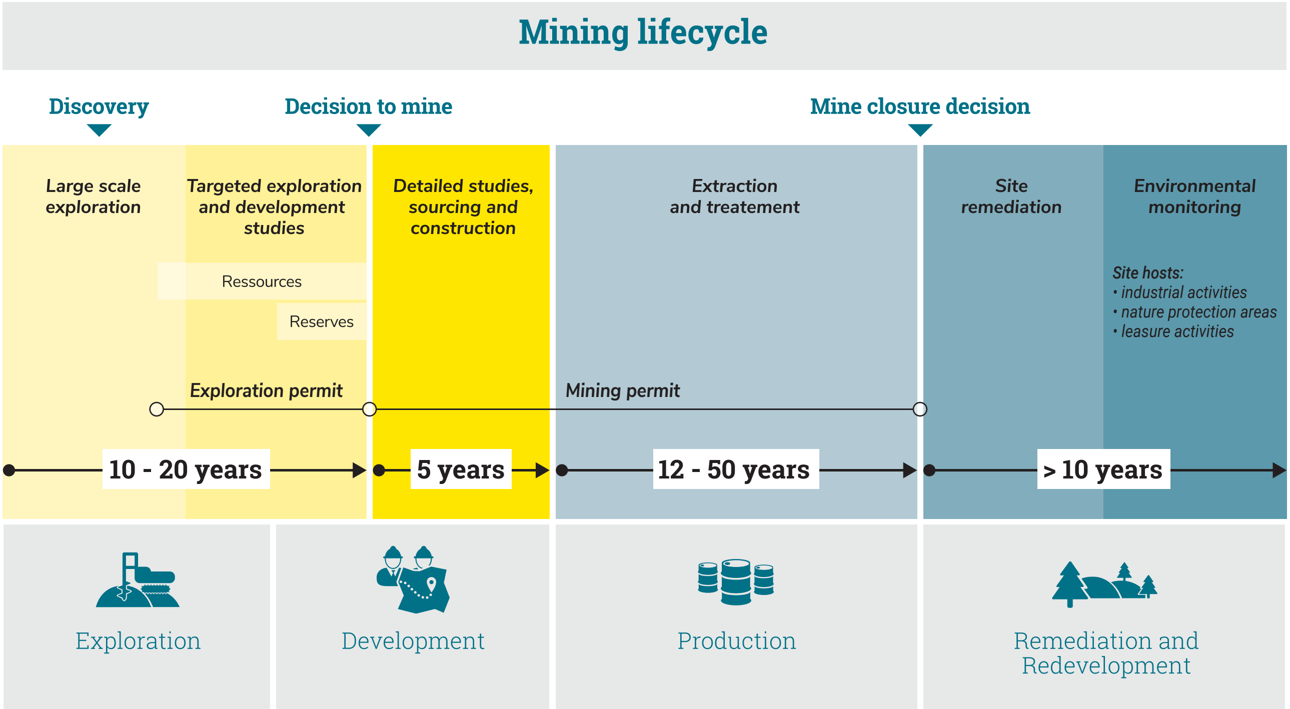
2.2.1 Mining

The group's mining activities concern the production and commercialization of natural uranium used after enrichment to make fuel for nuclear reactors.

The principal line operations of the Mining Business Unit follow the lifecycle of a mine, *i.e.*:

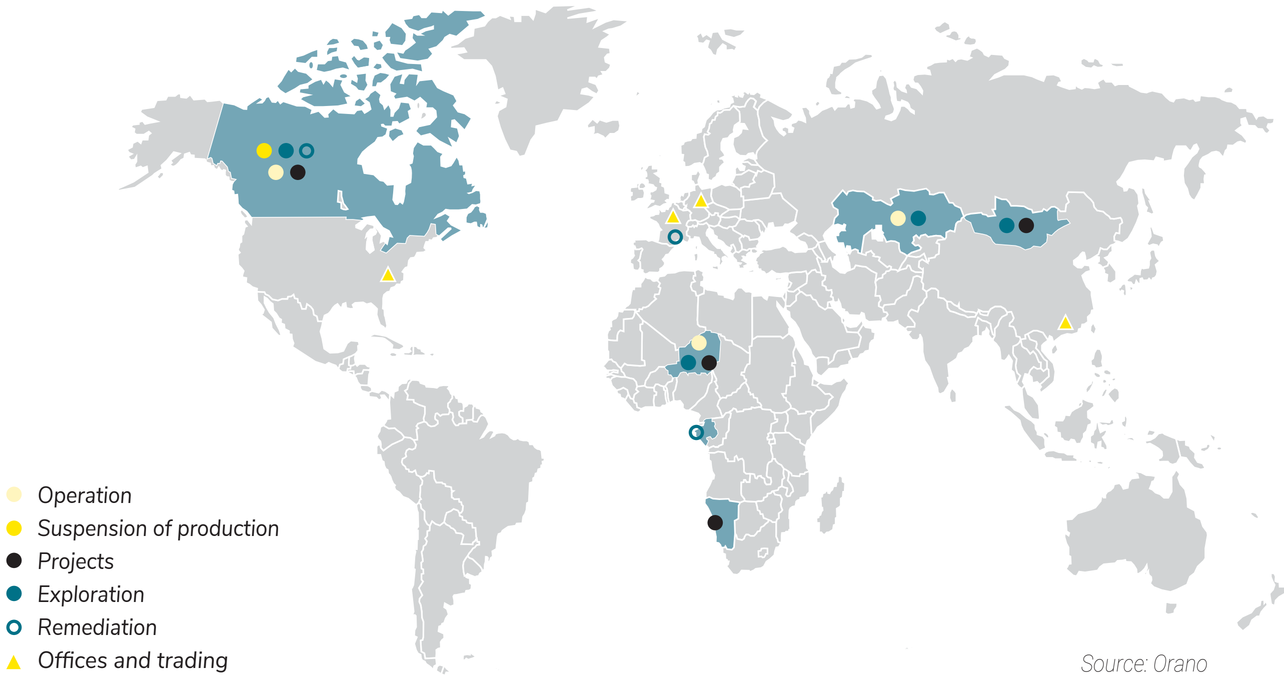
- exploration: search for new deposits;
- developing mining projects: detailed studies, procurement and construction;
- production: extraction of uranium ore using various mining techniques, and ore processing (concentration of natural uranium by chemical means); and
- site rehabilitation after operations: restoration of mining sites in accordance with environmental standards followed by environmental monitoring.

The lifecycle of a mine is shown in the graph below.



Source: Orano

MAIN SITES OF THE MINING BUSINESS UNIT



Source: Orano

Orano's diversified portfolio of mining assets and resources is a big source of security for utilities seeking long-term guarantees of uranium supply.

91% percent of the Mining workforce is located outside of France, and 98% work in their country of origin. The main uranium production sites are located in three countries: Canada, Niger and Kazakhstan. Orano conducts its mining activities responsibly, following the principles of the International Council on Mining and Metals (ICMM) and its own CSR policies. Orano is also a supporter of the Extractive Industries Transparency Initiative (EITI).

Canada

Orano has operated in Canada through its different mining operations for more than 50 years.

Canadian production comes from the McArthur River and Cigar Lake mines operated by Cameco. These sites are located approximately 700 kilometers north of Saskatoon in Saskatchewan Province. The group is conducting a major exploration program and holds majority interests in several deposits. Additional studies are required to determine the development schedules for these deposits, which will depend on uranium market conditions.

McArthur River is operated as a joint venture by Cameco, which holds a 69.805% interest (Orano's share: 30.195%). The McArthur ore is processed in the Key Lake mill (83.3% owned by Cameco and 16.7% by Orano), which has a capacity of approximately 6,900 metric tons per year. Since January 31, 2018, at the request of its majority shareholder, operations at the McArthur mine and the Key Lake mill have been suspended indefinitely due to the market conditions for uranium.

Cigar Lake is owned by a joint venture consisting of Cameco Corporation (50.025%), Orano (37.1%), Idemitsu Uranium Exploration Canada Ltd (7.875%) and Tepco Resources Inc. (5%). This deposit, the richest in the world, is mined by Cameco. The ore is processed in the McClean Lake mill operated by Orano. The McClean Lake mill is 70% owned and operated by Orano alongside Denison Mines Ltd (22.5%) and Overseas Uranium Resources Development Company Ltd of Japan (OURD, 7.5%). The mill, designed to process very high-grade ore (>15%), processes all of the ore from Cigar Lake. The Cigar Lake mine and the McClean mill have reached full capacity since 2017, recording annual production of 6,935 Metric tons of uranium in 2018 (18 million pounds of U_3O_8).

Located in the province of Saskatchewan, Orano has signed several partnership agreements with local communities, in particular to establish educational, health and cultural programs. In 2018, 488,000 Canadian dollars were invested in societal projects. Orano's corporate citizenship also involves reducing its environmental footprint. In that regard, in 2018 Orano improved the energy efficiency of the McClean Lake plant, which among other things reduced propane consumption by 21% and so significantly reduced greenhouse gas emissions.

Niger

Exploration teams from the CEA detected the presence of uranium in Niger at the end of the 1950s. The uraniferous area is located west of the Aïr granitic body near the city of Arlit. Orano is present on three sites, namely Somaïr, Cominak and Imouraren.

Somaïr and Cominak have delivered uranium to their customers without interruption since operations began in the 1970s.

Close to 1,500 people work at Somaïr and Cominak, not including subcontractors. Along with jobs, the operating companies provide health, social and educational services to the local communities in this isolated area.

Somaïr (Société des mines de l'Aïr) was established in 1968. Orano, the operator, holds 63.4% of the shares; the remaining 36.6% (SOPAMIN) is held by Société du Patrimoine des Mines du Niger. Given the current characteristics of processed ore, capacity is in the order of 2,000 metric tons per year (2018 production: 1,783 Metric tons of uranium).

Cominak (Compagnie Minière d'Akouta) is 34% owned by Orano, which operates it. The other shareholders are SOPAMIN (31%), OURD (25%) and Enusa Industrias Avanzadas SA (ENUSA, Spain, 10%). The ore is extracted underground and then processed in the site's mill, with capacity, considering the current characteristics of the ore processed, of approximately 1,400 Metric tons of uranium per year (3.6 million pounds of U_3O_8) (2018 production: 1,128 Metric tons of uranium).

Imouraren SA is 66.65% owned by Orano Expansion, 10% by the Republic of the Niger and 23.35% by SOPAMIN. It holds the operating license for the Imouraren deposit (174,196 Metric tons of uranium of reserves – 100% share – at December 31, 2018, after application of the ore yield with an average grade of 700 ppm). In view of market conditions, production startup work was suspended in 2014. The project will restart when uranium prices permit. A Strategy Committee set up by the Niger government and Orano regularly reviews these conditions. Project optimization studies are underway.

Every year, the mining companies and Orano take on social projects in the Arlit region and nationally. In 2018, 2 million euros were invested in this way, including for example the IRHAZER hydro-agricultural and livestock improvement project in North Niger.

Just in terms of mining companies, the undertaking by the Bilateral Orientation Council (a decision-making body for social projects that includes the mining companies, the local authorities and stakeholders surrounding the mining sites) since its creation in 2006 has been 5 billion CFA francs (equivalent to 7.6 million euros), primarily for access to water, healthcare and education.

Kazakhstan

Katco was established in 1997 to develop and mine the Muyunkum and Tortkuduk deposits in southern Kazakhstan, approximately 250 kilometers north of Shymkent.

Its shareholders are Orano Mining (51%) and KazAtomProm (49%), Kazakhstan's national natural uranium producer. Katco's annual capacity is around 4,000 Metric tons of uranium per year (2018 production: 3,212 Metric tons of uranium).

In April 2017, Orano and KazAtomProm signed a strategic agreement aimed at strengthening their long-standing cooperation in the uranium mining sector in Kazakhstan including the development of the South Tortkuduk project, which will ensure its production over the next two decades. In July 2017, the Kazakh Geology Board validated the registration of the extent of the South Torkuduk reserves. The mining license for the South Tortkuduk deposit was obtained on January 22, 2018, and the project is in development. In 2016, Katco produced 4,003 metric tons of uranium, and then in 2017, 3,546 metric tons of uranium due to a delayed transition to the South Tortkuduk deposit. Katco is going to maintain production of 3,200MT/year over the 2018-2020 period, a 20% decrease from its Underground Contract, in phase with KazAtomProm's announcement early in 2018 to reduce Kazakhstan's production by 20%. The Katco head office was transferred from Almaty to Astana in September 2018.

Katco is thus the largest ISR (In Situ-Recovery)-operated uranium mine in the world. While one may cite the safety of employees and subcontractors as a major issue, respecting the environment is also a priority. Improvement programs are implemented every year. In 2018, a special effort was made to reduce and recycle conventional and hazardous waste, such as hydrocarbons and batteries.

Namibia

In Namibia, Orano owns the entire Trekkopje deposit in the Swakopmund region, as well as a water desalination plant, purpose built for the deposit, with capacity of 20 million cubic meters per year. The deterioration of uranium market conditions prompted Orano to mothball the Trekkopje project in October 2012. The desalination plant is operating at 47% of capacity and selling its production to Namwater, the Namibian water distributor, for the needs of mines and local communities.

Mongolia

In June 2017, in accordance with the Atomic Energy law, Mongolia, through the state-owned company Mon-Atom, acquired a 34% stake in Badrakh Energy LLC (formerly AREVA Mines LLC). The remaining 66% is held by AREVA Mongol LLC. The latter company is jointly owned with Mitsubishi Corporation, which owns 34% of it.

Badrakh Energy LLC houses the mining licenses awarded in July 2016 for the Dulaan Uul and Zuuvch Ovoo deposits in the Sainshand basin, discovered by Orano. A pilot plant was built in 2018 in order to confirm and optimize the technical and economic characteristics of a future operation.

In 2018, the signing of a CDA (Community Development Agreement) marked a milestone in stakeholder relations in that it formalizes the approach to governance and the commitments of the Badrakh Energy subsidiary in terms of support to local communities during the pilot period.

Reserves and resources

The mineral reserves in Orano's deposits amounted to 187,060 Metric tons of uranium at December 31, 2018 (Orano's equity share), compared with 188,947 Metric tons of uranium at December 31, 2017.

The volume of the best-known resources (measured and indicated resources) was 142,552 Metric tons of uranium at December 31, 2018 (Orano's equity share), compared with 131,616 Metric tons of uranium at December 31, 2017. The volume of inferred resources was 158,999 Metric tons of uranium at December 31, 2018 (Orano's equity share), compared with 153,525 Metric tons of uranium at December 31, 2017.

Estimating methods

The estimates of the group's resources and reserves are based on internal work by the Mining Business Unit or from external reports audited by the business's internal experts. The estimates are based on the NI 43101 standard.

The mission of the Resources and Reserves Committee, which reports to Management, is to validate the schedule for updating resources and reserves; to validate the resources and reserves reported by Orano each year; and to ensure that the means, organization, and internal and external estimating methods enable a comprehensive and objective estimate of resources and reserves, in accordance with international practices.

MINERAL RESERVES IN THE GROUND IN METRIC TONS OF URANIUM (METRIC TONS OF URANIUM) (YEAR-END 2018 ESTIMATES)

	Proven reserves			Probable reserves			Total reserves		
Deposit	Ore *(KT)*	Grade *(‰)*	Metal *(MTU)*	Ore *(KT)*	Grade *(‰)*	Metal *(MTU)*	Metal *(MTU)*	Recovery *(%)*	Orano's equity share *(MTU)*
Cigar Lake	171	133.51	22,834	382	118.00	45,088	67,922	99%	24,821
Key Lake	61	4.41	270	0	0.00	0	270	99%	44
McArthur	2,034	60.55	123,149	538	51.21	27,578	150,726	99%	44,920
McClean	88	3.00	262	1	40.45	22	284	96%	190
TOTAL CANADA	**2,354**	**62.25**	**146,515**	**921**	**78.91**	**72,687**	**219,202**	**99%**	**69,976**
Katco	0	0.00	0	25,151	0.96	24,232	24,232	87%	10,772
TOTAL KAZAKHSTAN	**0**	**0.00**	**0**	**25,151**	**0.96**	**24,232**	**24,232**	**87%**	**10,772**
Cominak	132	3.73	494	249	4.06	1,010	1,504	93%	473
Imouraren	0	0.00	0	306,048	0.70	213,722	213,722	82%	100,439
Somaïr	221	0.64	141	8,879	1.14	10,125	10,266	83%	5,400
TOTAL NIGER	**353**	**1.80**	**635**	**315,176**	**0.71**	**224,857**	**225,492**	**82%**	**106,312**
TOTAL	**2,707**	**54.36**	**147,149**	**341,248**	**0.94**	**321,777**	**468,926**		**187,060**

MINERAL RESOURCES IN THE GROUND IN METRIC TONS OF URANIUM (METRIC TONS OF URANIUM) (YEAR-END 2018 ESTIMATES)

	Measured resources			Indicated resources			Total measured + indicated resources	
Deposit	Ore *(KT)*	Grade *(‰)*	Metal *(MTU)*	Ore *(KT)*	Grade *(‰)*	Metal *(MTU)*	Metal *(MTU)*	Orano's equity share *(MTU)*
Cigar Lake	14	101.01	1,438	307	123.00	37,813	39,252	14,563
Dawn Lake	0	0.00	0	184	37.47	6,886	6,886	1,590
Kiggavik	0	0.00	0	10,418	4.70	48,953	48,953	32,367
McArthur	98	21.79	2,130	35	24.00	851	2,982	900
McClean	82	30.23	2,479	242	14.13	3,424	5,903	4,132
Midwest	0	0.00	0	1,060	18.53	19,652	19,652	13,591
Read Lake	0	0.00	0	0	0.00	0	0	0
Shea Creek	0	0.00	0	526	27.00	14,014	14,014	7,133
TOTAL CANADA	**194**	**31.18**	**6,048**	**12,772**	**10.00**	**131,593**	**137,642**	**74,277**
Bagombe	0	0.00	0	0	0.00	0	0	0
TOTAL GABON	**0**	**0.00**	**0**	**0**	**0.00**	**0**	**0**	**0**
Katco	0	0.00	0	7,492	1.00	7,492	7,492	3,821
TOTAL KAZAKHSTAN	**0**	**0.00**	**0**	**7,492**	**1.00**	**7,492**	**7,492**	**3,821**
Zuuvch Ovoo	0	0.00	0	63,649	0.20	12,836	12,836	5,591
TOTAL MONGOLIA	**0**	**0.00**	**0**	**63,649**	**0.20**	**12,836**	**12,836**	**5,591**
Trekkopje	0	0.00	0	60,100	0.12	7,320	7,320	7,320
TOTAL NAMIBIA	**0**	**0.00**	**0**	**60,100**	**0.12**	**7,320**	**7,320**	**7,320**
Arlit Concession	0	0.00	0	0	0.00	0	0	0
Cominak	1,288	3.11	4,001	1,029	2.63	2,711	6,713	2,282
Imouraren	0	0.00	0	108,668	0.58	62,584	62,584	36,085
Somaïr	0	0.00	0	14,520	1.43	20,782	20,782	11,843
TOTAL NIGER	**1,288**	**3.11**	**4,001**	**124,217**	**0.69**	**86,077**	**90,078**	**51,543**
Bakouma	0	0.00	0	0	0.00	0	0	0
TOTAL CAR	**0**	**0.00**	**0**	**0**	**0.00**	**0**	**0**	**0**
TOTAL	**1,482**	**6.78**	**10,049**	**268,231**	**0.95**	**245,319**	**255,368**	**142,552**

	Inferred resources			Total inferred resources
Deposit	Ore *(KT)*	Grade *(‰)*	Metal *(MTU)*	Orano's equity share *(MTU)*
Cigar Lake	180	50.63	9,109	3,379
Dawn Lake	46	8.68	396	91
Kiggavik	731	2.82	2,059	1,361
McArthur	81	19.05	1,534	463
McClean	38	10.07	382	267
Midwest	831	8.41	6,983	4,829
Read Lake	387	67.74	26,195	5,700
Shea Creek	631	22.47	14,185	7,220
TOTAL CANADA	**2,924**	**20.81**	**60,842**	**23,312**
Bagombe	2,000	2.71	5,420	5,420
TOTAL GABON	**2,000**	**2.71**	**5,420**	**5,420**
Katco	33,252	1.02	34,066	17,374
TOTAL KAZAKHSTAN	**33,252**	**1.02**	**34,066**	**17,374**
Zuuvch Ovoo	255,395	0.24	60,809	26,488
TOTAL MONGOLIA	**255,395**	**0.24**	**60,809**	**26,488**
Trekkopje	114,100	0.11	12,682	12,682
TOTAL NAMIBIA	**114,100**	**0.11**	**12,682**	**12,682**
Arlit Concession	12,845	1.59	20,403	20,403
Cominak	735	3.13	2,297	781
Imouraren	4,394	0.66	2,879	1,660
Somaïr	13,877	1.64	22,718	14,403
TOTAL NIGER	**31,851**	**1.52**	**48,297**	**37,247**
Bakouma	17,974	2.03	36,475	36,475
TOTAL CAR	**17,974**	**2.03**	**36,475**	**36,475**
TOTAL	**457,496**	**0.57**	**258,591**	**158,999**

2.2.2 Front End

Nuclear fuel cycle front-end operations occur after extraction and processing of the natural uranium ore. They include uranium conversion and enrichment services, which are steps prior to manufacturing the fuel assemblies that will go in the nuclear reactors.

Conversion of natural uranium (U_3O_8) into uranium hexafluoride (UF_6)

Conversion is a key step that gives the uranium the purity required and the form of a gaseous chemical (uranium hexafluoride or UF_6) that is suited to enrichment processes.

The uranium concentrate is converted in a two-stage process:

- the Malvési plant in Aude, France purifies and transforms the uranium mine concentrate into uranium tetrafluoride (UF_4). The annual capacity is approximately 15,000 metric tons;
- the Philippe Coste plant in Tricastin, France then transforms the UF_4 into uranium hexafluoride (UF_6) through the addition of two more fluorine atoms. The fluorine used in this process is produced through electrolysis of anhydrous hydrofluoric acid.

The first production of UF_6 was successfully carried out on December 12, 2018 following a series of trials. The capacity of the plant will be 15,000 metric tons in 2021, to serve a worldwide market of about 65,000 metric tons.

Orano is the only converter in the West to have invested massively in upgrading its conversion capacity, which was done to the latest standards in terms of safety, technology and the environment. This investment strengthens Orano's competitive position by guaranteeing its customers a competitively priced, reliable, long-term security of supply.

This new production plant includes such environmental innovations as the recycling of chemical reagents (up to 75% in the case of ammonia) and a 90% reduction in water consumption through the use of closed loops.

Enrichment of natural uranium in uranium-235

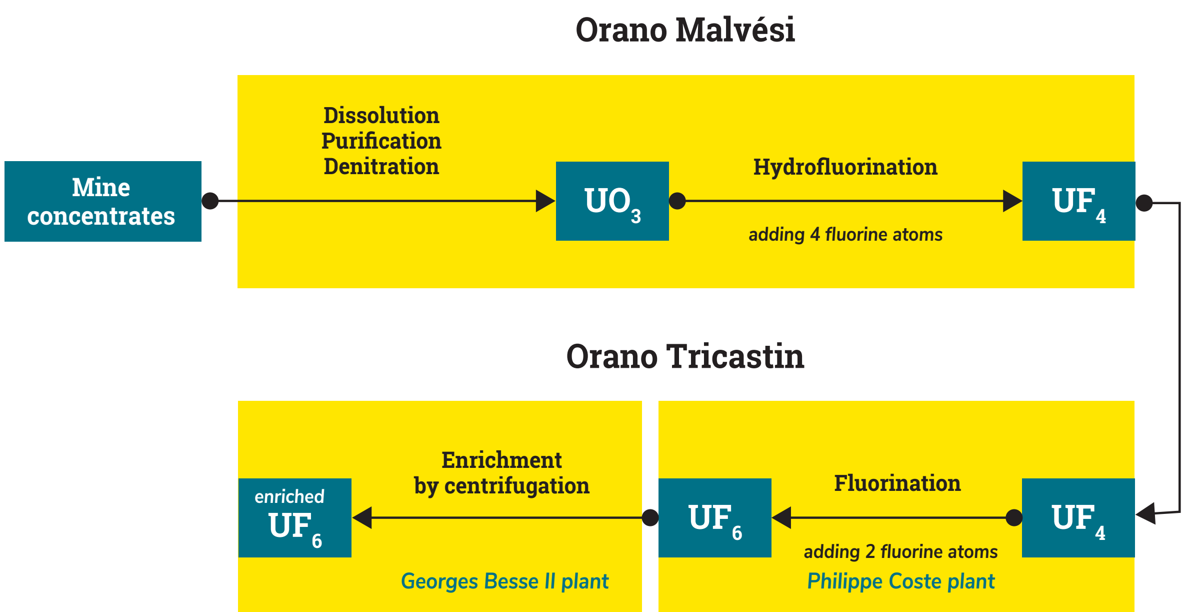
Enrichment, which is done in the Georges Besse II plant in Tricastin, France, consists of increasing the U^{235} content of the natural uranium from its initial 0.7% in the uranium ore up to a level specified by its electric utility customers, ranging from 3% to 5% depending on the type and operating mode of the reactor. Molecules of gaseous uranium hexafluoride (UF_6) undergo isotopic separation to achieve the desired enrichment assay. Orano provides the enrichment service to its customers, which generally retain ownership of their material.

Following the shutdown of Eurodif's gaseous diffusion enrichment plant in 2012, Orano invested in the new Georges Besse II plant and has now deployed centrifuge enrichment technology, which meets increasingly stringent nuclear safety, environmental protection and competitiveness requirements. Located on the Tricastin site, the Georges Besse II plant of Société d'Enrichissement du Tricastin (SET), indirectly 95% owned by Orano, has an annual capacity of approximately 7.5 million SWU, for a worldwide market of about 50 million SWU. This nominal capacity was reached at the end of 2016, and the plant's production has since matched expectations.

Other operations related to uranium chemistry

Specializing in uranium chemistry, the Chemistry-Enrichment Business Unit also has deflorination facilities (Plant W in Tricastin, France) for depleted uranium coming out of the enrichment process and denitration facilities (Plant TU5 in Tricastin, France) for reprocessed uranium from the la Hague plant in Manche, France.

CONVERSION AND ENRICHMENT PROCESS OF NATUREL URANIUM



Source : Orano

2.2.3 Back End

The Back End operations of the fuel cycle consist of the Recycling, Nuclear Packages and Services, Dismantling and Services, and Engineering Business Units.

Recycling

The Recycling business uses processes allowing its customers to recycle used fuel into fresh fuel and to package final waste in standardized containers in a safe and stable manner.

The Recycling business makes use worldwide of the technical and industrial expertise developed in its facilities at the sites of the group and of its French customers. In particular, it supports the development of new recycling plants in the framework of international partnerships with countries seeking to acquire their own production plants.

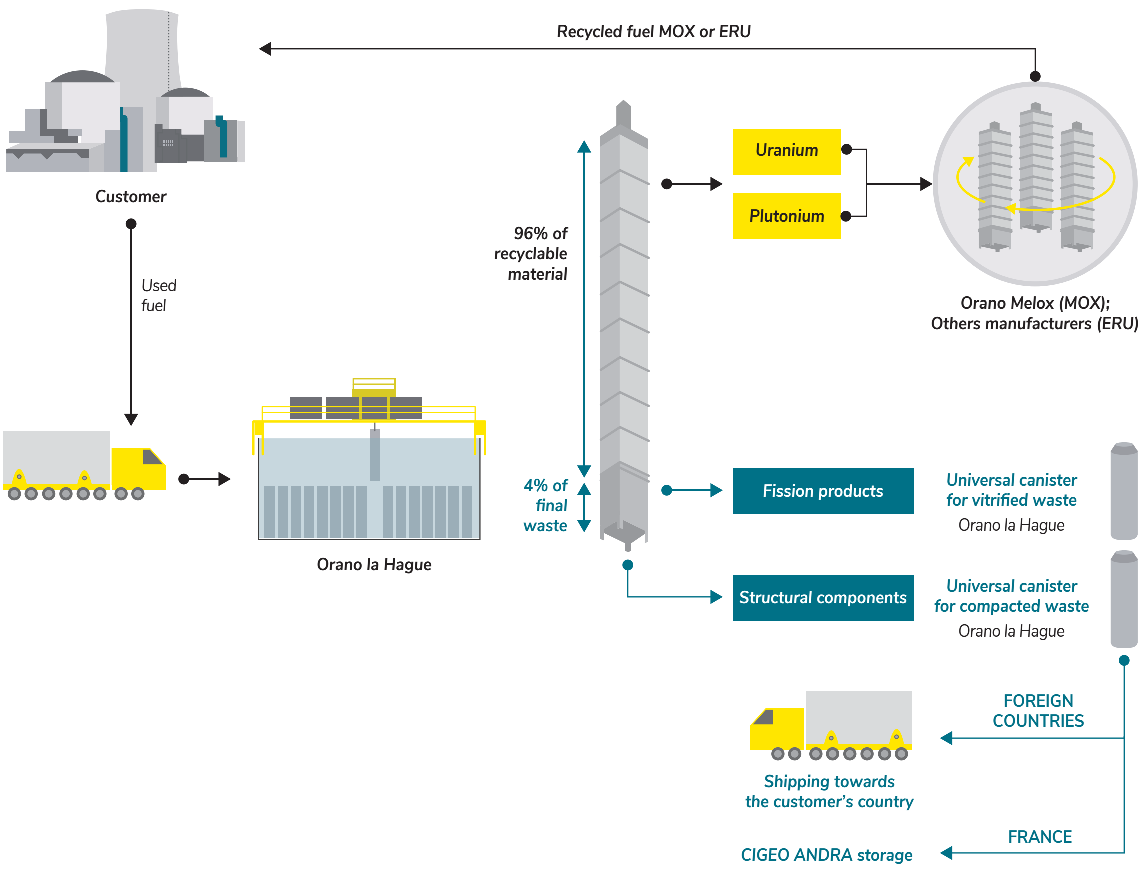
This activity's principal base consists of the industrial platforms of la Hague and Melox, respectively located in the Manche and Gard departments of France. These two sites represented close to 6,000 employees and subcontractors in 2018.

The installed capacity of the la Hague and Melox plants along with the group's cumulative experience make the group number one worldwide in recycling:

- the la Hague site provides the first stage of the recycling operations: the recyclable materials are first separated from the waste in the used fuel of French and foreign power plants and research reactors, and then these recyclable materials and final waste are packaged in a safe and stable form. The plant has two production lines, UP2 800 and UP3, which have a combined licensed capacity of 1,700 metric tons of used fuel per year, corresponding to the generation of 600 TWh per year of electricity;
- Melox is the leading site worldwide for the fabrication of MOX recycled nuclear fuel, with a workload of 150 metric tons per year. Made from a mixture of uranium and plutonium oxides, MOX fuel makes possible to recycle plutonium from the used fuel recycling process at la Hague. In France, 10% of nuclear power is produced from MOX.

2

RECYCLING PROCESS OF USED FUEL



Source : Orano

The Recycling business also draws on the skills of Orano Temis, which develops and offers a selection of technical skills and know-how for all high value-added industrial projects, mainly nuclear. In particular, the Company provides automated systems, designs and manufactures mechanical equipment in specialty metals, and produces fiber-reinforced concrete containers.

Nuclear Packages and Services

Working in both the front and back ends of the nuclear cycle, for industry and reactors and research labs, Nuclear Packages and Services, whose commercial name is Orano TN, has two main lines of business:

- designing and manufacturing storage containers for the transportation and/or dry storage of nuclear materials; and
- organizing and carrying out the transportation of nuclear material. Orano TN carries out 5,000 transportation operations each year. It is also tasked with the supervision of the transportation operations of the group and its customers, ensuring that they meet the highest safety levels.

Nuclear Packages and Services operates in the key markets of the nuclear industry:

- in Europe, TN International is responsible for the design, approval and manufacture of storage containers *via* a network of subcontractors as well as transport commissioning. In this area, it calls on LMC, its specialized nuclear transportation subsidiary, and approved subcontractors;
- in the United States, TN Americas and its subsidiary CHT design and manufacture dry storage containers for US nuclear power plants. Orano TN is the leading producer in the US market. The entity also operates transportation at the front end of the cycle;
- in Asia, Transnuclear Ltd carries out engineering studies and transportation, as well as container maintenance work for the Japanese market. Orano TN also has teams in China and South Korea;
- lastly, TN International operates in Niger, as part of Orano's mining activities.

Nuclear Packages and Services has a fleet of transportation equipment, including casks and road and rail resources, and it operates road, rail and sea terminals.

To accomplish its mission of supervising the group's transportation operations, the business has an organization that manages risks and sets up appropriate action plans to manage any emergency at any location, in liaison with the public authorities. Its real-time transportation tracking center gives it a continuous stream of information on transportation operations.

NUCLEAR PACKAGES AND SERVICES: A UNIQUE SET OF COMPETENCES

Engineering
Design of packaging systems and associated equipment
Material, shielding, criticality, mechanical and thermal behavior

Licensing
Safety analysis reports
Licensing process management

Supply of transport and storage solutions
Manufacturing of packages
Supply chain management

Logistics
Transport commissioning, leasing of casks and transport means

Services
Technical assistance, loading operations, «Pool to Pad» services, maintenance activities, training

Source: Orano

Dismantling and Services (DS)

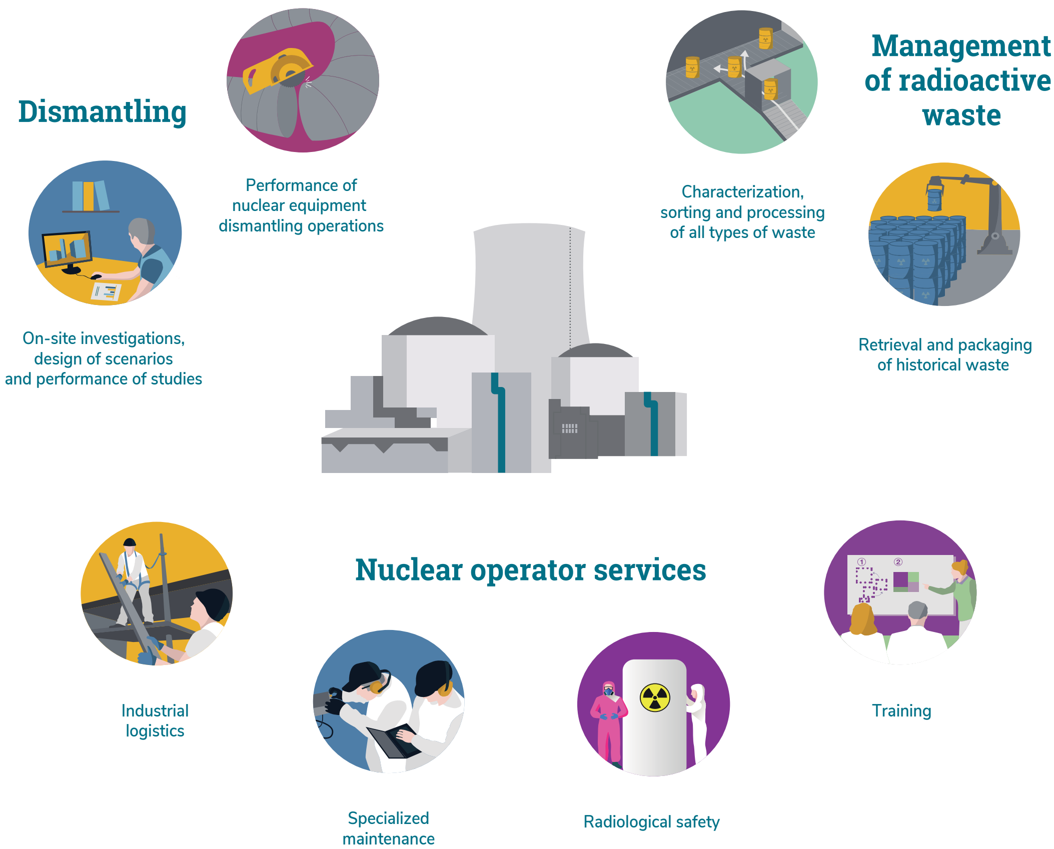
The Dismantling and Services business offers customers a broad range of services covering three main types of operations:

- dismantling of nuclear facilities throughout the value chain, from designing intervention scenarios to actualizing them on the ground: technical studies, radiological characterization of the facilities to be dismantled, cleanup, deconstruction of the nuclear process, operation of facilities during dismantling and of the support facilities, and redevelopment of the land and buildings.

  Numerous facilities built in the 1950s and 1960s have reached the end of their operating period. Their dismantling and the rehabilitation of their host sites, in particular to allow new projects to be located there, represent a major industrial challenge. The Dismantling and Services business (DS) is a managing contractor for facilities that have been shut down, provides dismantling studies and project management, and carries out dismantling operations.

  DS is also responsible for dismantling the former group facilities on the Tricastin and la Hague sites, including the UP2-400 spent fuel processing plant. The entity offers its skills and resources to its customers CEA and EDF;
- waste management operations, whether the waste comes from the production and operation of nuclear facilities, from dismantling operations, or from major maintenance operations. The Dismantling and Services business also contributes to major projects for the retrieval and packaging of legacy waste stored at the sites pending the availability of other storage channels;
- services to nuclear operators: nuclear logistics and project support, facility maintenance, radiological safety of workers and facility operations. These operations mostly involve nuclear facilities currently in production, which must ensure the best nuclear safety performance at all times, preserve assets, plan for the future and control costs. The Dismantling and Services business also has a subsidiary dedicated to training in the nuclear business and personal development, TRIHOM, a reference player in its sector in France.

THE 3 TYPES OF OPERATIONS OF THE DISSAMBLING AND SERVICES BUSINESS



Source : Orano

The Dismantling and Services business provides services to practically all of the French nuclear sites operated by Orano, CEA, EDF and ANDRA. It also has operational counterparts abroad, whether through the group's subsidiaries (Orano GmbH and Orano DSR in Germany, Orano LLC in the United States) or partnerships forged with local entities.

To aid in its development, Dismantling and Services has made social dialogue a force for unity and cohesion among its employees. Alongside its transformation and growth plan, throughout 2018 the Business Unit conducted a broad effort to consult with labor and its representatives (30 working meetings totaling over 200 hours). This social dialogue resulted in the signing by a wide majority of the labor unions' representatives of a new labor agreement offering harmonious, competitively paid and balanced employment to all of the 3,300 employees of Orano DS. At the end of 2018, this work earned an award during the *Victoires du Capital Humain* event.

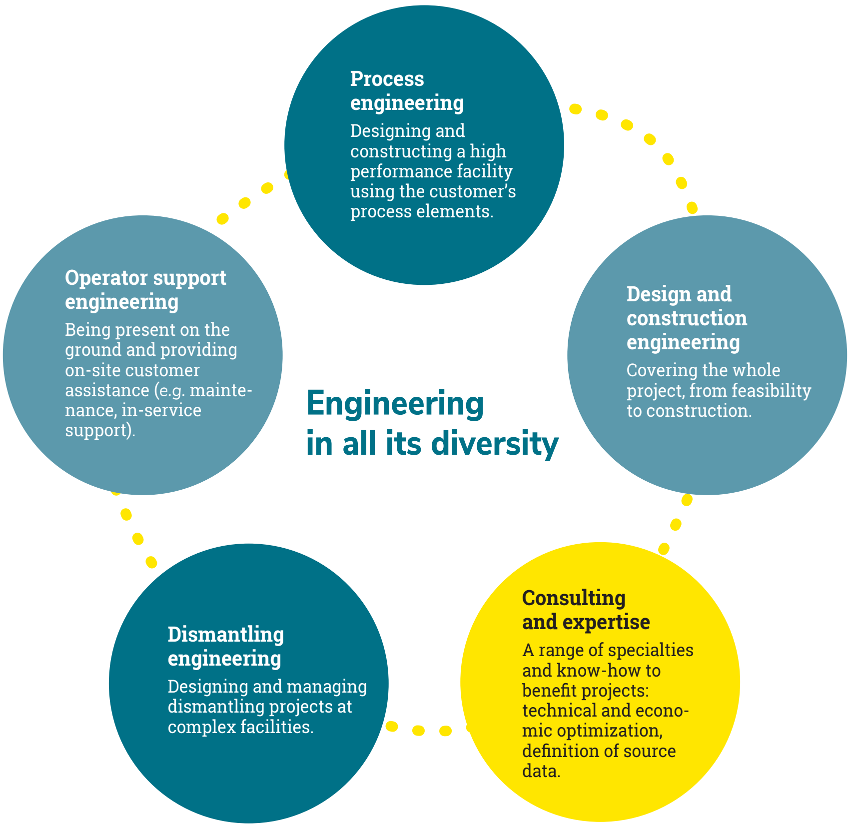
Engineering

The engineering business provides nuclear fuel cycle engineering expertise for the group's facilities and for external customers. Services range from operator support engineering to full engineering, procurement, construction and management (EPCM) assignments.

Its areas of intervention cover all of the group's operations: mining, uranium chemistry, enrichment, nuclear fuel, recycling of used fuel, dismantling and waste management. Orano Projets also aims to contribute to the group's growth targets by gradually expanding in the fields of non-fuel nuclear and non-nuclear applications.

The engineering activity draws on more than 40 years' experience and feedback from designing and building plants that are unique in the world (la Hague, Melox, *etc.*), but also from the flagship renovation projects concerning Orano's industrial facilities in France, *i.e.* the waste retrieval and packaging facilities at la Hague, the Georges Besse II enrichment plants and the uranium chemistry facilities in Tricastin and Malvési.

It also has recognized expertise in the management and realization of international projects such as Rokkasho-Mura, a recycling plant in Japan built on the model of la Hague.



Source : Orano

2.2.4 Orano's other operations

Orano's other operations include the other cross-business functions, as well as Nuclear medicine.

Nuclear medicine

Orano's nuclear medicine business is carried out by Orano Med, its medical subsidiary. Orano Med has developed a unique process making it possible to extract lead-212 (^{212}Pb), which is a particularly rare radioactive isotope, at a very high degree of purity. Orano Med's ^{212}Pb is currently at the heart of promising nuclear medicine research projects for the development of new cancer treatments. This novel approach is called targeted alpha therapy or radioimmunotherapy when it implies using antibodies.

Orano Med's ambition is to develop effective and targeted anticancer therapies, with two prime objectives:

- participate in the development of innovative treatments using Orano Med's lead-212, in particular through scientific partnerships (Roche, RadioMedix, Morphotek, Nordic Nanovector, *etc.*); and
- produce high-purity lead-212 at its two production sites based in Bessines-sur-Gartempe (France) and Plano (Texas, United States) to meet the needs of clinical development.

2

ORANO MED'S ONCOLOGY PIPELINE

Partner	Indication / Target	Compound	Preclinical	Phase 1	Phase 2	Phase 3
oranomed	*Intra-abdominal HER-2 expressing cancers*	*^{212}Pb-TCMC-Trastuzumab*				
RadioMedix	*Neuroendocrine tumors*	*^{212}Pb-labeled peptide targeting somatostatin receptors*				
Roche	*Undisclosed*	*^{212}Pb-PRIT*				
Nordic Nanovector	*Leukemia*	*^{212}Pb-labeled monoclonal antibody targeting CD37*				
Université de Limoges CHU de Limoges	*Hematological malignancies*	*^{212}Pb-labeled monoclonal antibodies*				
Cellectar Biosciences	*Up to 3 indications*	*^{212}Pb-labeled phospholipid ether*				

Source : Orano

2.3 Research and Development activities

The group's main Research and Development programs in the 2018 financial year focused:

- On startup support and operations optimization for conversion plants;
- for recycling-processing, on upholding and improving the performance of the present plants and the collection of waste, the construction of a road map for the recycling of plutonium in the pressurized water reactors (PWRs) and the concomitant launch of an R&D program to identify a new process for the production of MOX fuel and its qualification in a reactor;
- on the development of new shipping casks for nuclear materials and waste; and
- on the development of methods and tools to support dismantling operations.

Key figures

Research and Development expenses are capitalized if they meet the capitalization criteria established by IAS 38 and are recognized as Research and Development expenses if they do not. In the income statement, Research and Development expenses appear below gross margin and represent non-capitalizable expenses incurred exclusively by the group; expenses relating to programs funded wholly or partially by customers, together with projects carried out in partnerships where Orano has commercial rights of use of the results, are recognized in the cost of sales. The total Research and Development expenditure consists of the combination of amounts spent on Research and Development, whether capitalized or expensed during the period.

(in millions of euros)	Year ended December 31, 2018 (12 months)	Year ended December 31, 2017 (12 months)
TOTAL	**101**	**89**
Number of registered patents	18	16

At December 31, 2018, the Research and Development expenses amounted to 101 million euros, *i.e.* 2.79% of the period's revenue, up compared to 2017 (2.30% of revenue).

The group registered 18 patents in 2018 and 16 patents in 2017.

2

2.4 Financial position of the Company and the group during the past year

2.4.1 Summary of key figures and segment information

The high volatility in net financial income due to the application of IFRS 9 at January 1, 2018 led the group to consider the use of an indicator to reflect Orano's industrial performance independent of the financial markets' impact on the return on earmarked assets (this should be appraised over the long term) and the impact of regulatory changes related to end-of-lifecycle commitments. Consequently, to facilitate the analysis of operating performance, the group is using a new alternative performance indicator: adjusted net income attributable to owners of the parent. This new indicator is not defined by IFRS and does not appear in a direct reading of the group's consolidated statement of income. The definition of the adjusted net income attributable to owners of the parent, as well as of the components involved (adjusted operating income and adjusted net financial income), is available in Appendix 8.13 to this report.

In accordance with IFRS 15, which is mandatory from January 1, 2018, comparative data have been restated since the previous year's reported figures. The impact of these restatements is explained in Note 35 of the annual consolidated financial statements as of December 31, 2018 (see Appendix 8.1 to this report). All the changes commented on below are calculated using 2017 data restated as per the application of this standard.

2.4.1.1 Summary of key data at group level

(in millions of euros, except workforce)	December 31, 2018**	December 31, 2017*	Change 2018/2017
INCOME			
Revenue	3,623	3,848	-255
Gross margin	576	746	-170
Operating income	517	(48)	+565
Share in net income of joint ventures and associates	(10)	(4)	-6
Net financial income	(978)	(250)	-728
Adjusted net financial income	*(362)*	*(409)*	*+47*
Income tax	(70)	(56)	-14
Adjusted income tax	*(70)*	*(66)*	*-4*
Net income from operations sold or held for sale	-	(2)	+2
Net income attributable to owners of the parent	(544)	(252)	-292
Adjusted net income attributable to owners of the parent	*72*	*(421)*	*+493*
Comprehensive income	(613)	(401)	-212
Comprehensive income attributable to owners of the parent	(604)	(281)	-323
CASH FLOWS			
EBITDA	821	892	-71
Change in operating working capital requirement	185	95	+90
Net operating CAPEX	(451)	(599)	+148
Operating cash flow	554	363	+192
Net cash flow from company operations	158	(1,066)	+1,224
MISCELLANEOUS			
Net cash (debt)	(2,306)	(3,036)	+730
Equity attributable to owners of the parent	927	1,017	-90
Workforce at year end	18,793	19,145	-18.4%

* *The comparative data for 2017 (12 months) are the combination of the eight- and four-month accounting periods of the 2017 calendar year. Pursuant to IFRS 15, they have been restated in relation to the data reported in the 2017 financial statements (except workforce).*

** *Application of IFRS 9 at January 1, 2018 (except workforce).*

2.4.1.2 Summary data by business segment

2018 *(in millions of euros)*	Mining	Front End	Back End*	Corporate and other operations*	Total
INCOME					
Contribution to consolidated revenue	1,124	846	1,638	14	3,623
Operating income	393	56	140	(73)	517
Percentage of contribution to consolidated revenue	*35.0%*	*6.6%*	*8.6%*	*insig.*	*14.3%*
CASH FLOWS					
EBITDA	584	164	166	(94)	821
Percentage of contribution to consolidated revenue	*52%*	*19.4%*	*10.1%*	*insig.*	*22.7%*
Change in operating WCR	(119)	12	287	5	185
Net operating CAPEX	(57)	(128)	(262)	(3)	(451)
Operating cash flow	405	49	191	(91)	554
MISCELLANEOUS					
Property, plant and equipment and intangible assets (including goodwill)	2,724	4,224	3,627	51	10,627
Assets earmarked for end-of-lifecycle operations	-	2,393	4,243	195	6,831

* *"Corporate and other operations" notably includes Corporate and Orano Med operations.*

2017 *(in millions of euros)*	Mining	Front End	Back End*	Corporate and other operations*	Total
INCOME					
Contribution to consolidated revenue	1,274	893	1,652	30	3,848
Operating income	107	14	71	(241)	(48)
Percentage of contribution to consolidated revenue	*8.4%*	*1.6%*	*4.3%*	*insig.*	*insig.*
CASH FLOWS					
EBITDA	639	281	200	(228)	892
Percentage of contribution to consolidated revenue	*50.1%*	*31.5%*	*12.1%*	*insig.*	*23.2%*
Change in operating WCR	(51)	-	185	(39)	95
Net operating CAPEX	(106)	(242)	(185)	(66)	(599)
Operating cash flow	480	(38)	177	(334)	363
MISCELLANEOUS					
Property, plant and equipment and intangible assets (including goodwill)	2,845	4,191	3,397	51	10,483
Assets earmarked for end-of-lifecycle operations	-	1,798	5,196	271	7,265

* *"Corporate and other operations" notably includes Corporate and Orano Med operations.*
Since January 1, 2018, the Projects Business Unit has been included in the "Back End" segment and is no longer reported in "Corporate and other operations." Consequently the information concerning 2017 has been restated.

SUMMARY OF REVENUE BY REGION AND BUSINESS

(in millions of euros)	2018	2017	Change 2018/2017
France	**1,696**	**1,735**	**-2.2%**
Mining	347	324	+7.1%
Front End	357	315	+13.3%
Back End	978	1,072	-8.8%
Corporate and other operations*	14	24	-41.7%
Europe (excluding France)	**358**	**436**	**-17.9%**
Mining	64	82	+22.0%
Front End	113	143	-21.0%
Back End	180	207	-13.0%
Corporate and other operations*	0	4	-100%
North and South America	**611**	**668**	**-8.1%**
Mining	187	186	+0.5%
Front End	170	215	-20.9%
Back End	253	266	-4.9%
Corporate and other operations*	0	1	insig.
Asia-Pacific	**874**	**926**	**-5.6%**
Mining	464	633	-26.7%
Front End	188	190	-1.0%
Back End	221	103	+114.6%
Corporate and other operations*	0	0	insig.
Africa and Middle East	**85**	**84**	**+1.2%**
Mining	61	49	+24.5%
Front End	18	30	-40.0%
Back End	5	5	+0.0%
Corporate and other operations*	0	0	insig.
TOTAL	**3,623**	**3,848**	**-5.8%**

* *"Corporate & Other operations" notably includes Corporate and Orano Med operations.*
Since January 1, 2018, the Projects Business Unit has been included in the "Back End" segment and is no longer reported in "Corporate and other operations." Consequently the information concerning 2017 has been restated.

2.4.2 Consolidated financial statements for the past year

The consolidated financial statements for the financial year ended can be found in Appendix 8.1 of this report.

2.4.2.1 Backlog

(in millions of euros)	2018	2017	Change 2018/2017
Backlog	31,789	33,597	-1,809

The group's backlog amounted to 31.8 billion euros at December 31, 2018, compared with 33.6 billion euros at December 31, 2017, representing almost nine years of revenue.

The order intake for the 2018 year stood at 1.9 billion euros, mainly related to contracts signed with Asian and American customers.

2.4.2.2 Income statement

Revenue

(in millions of euros)	2018	2017	Change 2018/2017
Consolidated revenue	**3,623**	**3,848**	**-225**
Mining	1,124	1,274	-150
Front End	846	893	-47
Back End	1,638	1,652	-13
Corporate and other operations*	14	30	-15

* *"Corporate & Other operations" notably includes Corporate and orano Med operations.*

The group's consolidated revenue amounted to 3,623 million euros at December 31, 2018, compared with 3,848 million euros at December 31, 2017.

Gross margin

(in millions of euros)	2018	2017	Change 2018/2017
Gross margin	**576**	**746**	**-170**
Percentage of consolidated sales	*15.9%*	*19.4%*	*-3.5 pts*

The group's gross margin amounted to 576 million euros at December 31, 2018, compared with 746 million euros at December 31, 2017.

Research and Development

The group's Research and Development investments amounted to 101 million euros in 2018, *i.e.* 2.79% of the period's revenue, compared with 89 million euros for 2017 (2.30% of revenue).

Marketing and sales, general and administrative expenses

Group marketing, sales, general and administrative expenses totaled 141 million euros in 2018, compared with 155 million euros in 2017.

Other operating income and expenses

Other operating income and expenses represented net income of 178 million euros for 2018, compared with a net expense of 553 million euros for 2017.

The restructuring costs are described in Note 5 to the consolidated financial statements. Intangible assets and property, plant and equipment are described respectively in Notes 10 and 11 to the consolidated financial statements.

Operating income

The group's gross margin amounted to 517 million at December 31, 2018, compared with negative 48 million euros at December 31, 2017. At December 31, 2017, operating income was impacted notably by impairment losses on mining assets in the amount of 308 million euros, impairment losses on Comurhex II, now called the Philippe Coste plant, industrial assets in the amount of 172 million euros and provision for risks and uncertainties relating to dismantling and waste retrieval and packaging from front end facilities in the amount of 80 million euros.

Share in net income of joint ventures and associates

The share in net income of joint ventures and associates was negative 10 million euros at December 31, 2018, compared with negative 4 million euros at the end of 2017.

(in millions of euros)	2018	2017
Cominak	(22)	(8)
ETC	11	10
Si-nerGiE	0	(7)
TOTAL	**(10)**	**(4)**

Net financial income

Net financial expense was 978 million euros for the period ended December 31, 2018, compared with an expense of 250 million euros for the period ended December 31, 2017. The deterioration in net financial income derives largely from the share of financial expenses related to end-of-lifecycle operations. The return on assets earmarked for dismantling obligations dropped sharply in 2018 due to the financial markets' negative performance for the year and the application of the change in IFRS 9, effective since January 1, 2018.

(in millions of euros)	2018	2017
Net borrowing costs [(expense) / income]	**(152)**	**(205)**
Other financial income and expenses	**(826)**	**(44)**
of which share related to end-of-lifecycle operations	(624)	153
of which share not related to end-of-lifecycle operations	(202)	(197)
NET FINANCIAL INCOME	**(978)**	**(250)**

Adjusted net financial income was -362 million euros in 2018, compared with -409 million euros in 2017, due to the lower cost of debt.

Income tax

Tax expense was 70 million euros at December 31, 2018, compared with 56 million euros at December 31, 2017.

Adjusted net tax expense amounted to negative 70 million euros, compared with negative 66 million euros in 2017.

Net income from operations sold or held for sale

Net income from operations sold or held for sale was 0 million euros at December 31, 2018, compared with a loss of 2 million euros at December 31, 2017.

Net income attributable to minority interests

The share of minority interests in the group's profit at December 31, 2018 was 2 million euros, compared with negative 108 million euros at December 31, 2017. This share mainly includes the contribution of minority shareholders in the mining and enrichment businesses.

Net income attributable to owners of the parent

Net income attributable to owners of the parent was negative 544 million euros in 2018, compared with negative 252 million for 2017, despite the improvement in operating income. This trend was due primarily to the negative return on assets earmarked for end-of-lifecycle commitments, reflecting the poor performance of the financial markets in 2018 and which had a significant impact on the statement of income, in view of the application of IFRS 9 at January 1, 2018.

The following table reconciles published net income attributable to owners of the parent with adjusted net income attributable to owners of the parent, accounting for the financial impacts of end-of-lifecycle commitments:

CHANGE FROM REPORTED NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT TO ADJUSTED NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT

(in millions of euros)	2018	2017	Change 2018 -2017
REPORTED NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	**(544)**	**(252)**	**-292**
Accretion on end-of-lifecycle liabilities	298	256	+42
Impact of changes in rates	79	0	+79
Return on earmarked assets	239	(415)	+654
Tax impact of adjustments	0	(10)	+10
ADJUSTED NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	**72**	**(421)**	**+493**

Adjusted net income attributable to owners of the parent amounted to 72 million euros at December 31, 2018, compared with negative 421 million in 2017. This trend mainly reflects the improvement in operating income over 2018

Comprehensive income attributable to owners of the parent

Including recyclable and non-recyclable items in the statement of income, comprehensive income attributable to owners of the group was a loss of 604 million euros at December 31, 2018, compared with a loss of 281 million euros at December 31, 2017. This trend is due mainly to the change in net income described above.

2.4.2.3 Cash flows

Change in net debt

Items contributing to the change in the group's net debt for the year are presented below. It was calculated according to the French Accounting Board definition (sum of "cash and cash equivalents" less "current and non-current borrowings").

(in millions of euros)	2018
Net debt at the beginning of the period (at December 31, 2017)	**(3,036)**
Operating cash flow	554
End-of-lifecycle cash flow	(12)
Cash flow from financing activities	(283)
Income tax paid	3
Dividends paid to minority interests	(62)
Other items	31
Capital increase reserved for Japanese minority shareholders	500
(NET DEBT)/NET CASH AT THE END OF THE PERIOD (AT DECEMBER 31, 2018)	**(2,306)**
CHANGE IN NET DEBT OVER THE PERIOD ENDED DECEMBER 31, 2018	**+730**

The group had total net borrowings of 2.3 billion euros at December 31, 2018, compared with 3 billion euros at December 31, 2017. This fall in net debt of -0.7 billion euros largely corresponds to the proceeds of the capital increases reserved for Japan Nuclear Fuel Ltd (JNFL) and Mitsubishi Heavy Industries (MHI), in the total amount of 500 million euros carried out on February 26, 2018 and positive net cash flow from company operations in the amount of 158 million euros.

Comparative table of operating cash flows and consolidated cash flows

The group analyzes cash flows from operating activities separately from flows relating to end-of-lifecycle operations and other cash flows.

RECONCILIATION OF OPERATING CASH FLOWS AND CONSOLIDATED CASH FLOWS

The following table distinguishes operating cash flows from the other cash flows presented in the consolidated statement of cash flows for the period ended December 31, 2018.

(in millions of euros)	Operating	End-of-lifecycle operations [1]	Other [2]	Total
EBITDA (i)	821			
Income from the sale of non-current operating assets and other non-cash operating items (ii)	(1)			
Cash flow from operations after interest and taxes (i + ii)	**820**	**(57)**	**(248)**	**514**
Change in working capital requirement (iii)	185	-	(38)	147
Net cash flow from operating activities (i + ii + iii)	**1,005**	**(57)**	**(286)**	**661**
Cash from (used in) investing activities, net of disposals (iv)	(451)	45	22	(384)
Net cash from (used in) financing activities (v)	-	-	(199)	(199)
Impact of changes in scope, interest rates, and marketable securities (vi)	-	-	(2)	(2)
Net cash from discontinued operations (vii)	-	-	-	-
CASH FLOW (I + II + III + IV + V + VI+ VII)	**554**	**(12)**	**(465)**	**(77)**

(1) Includes expenses for end-of-lifecycle operations incurred on-site and for final waste disposal, flows relating to the financial asset portfolio earmarked for end-of-lifecycle operations, and flows resulting from the signature of agreements with third parties for the funding by such parties of a share of end-of-lifecycle operations.

(2) That is, non-operating cash flows unrelated to end-of-lifecycle operations and mainly corresponding to financial cash flows, including cash flows related to exceptional external growth operations, dividends paid, and cash flows of a tax nature.

Operating cash flow

Earnings before interest, taxes, depreciation and amortization (EBITDA)

EBITDA fell from 892 million euros at the end of 2017 to 821 million euros at the end of 2018. This decrease is mainly due to (i) the unfavorable impact on revenue of the structure of the backlog schedule in Mining and Front End, (ii) the reduction in production volumes due to the transition from Comurhex I to Comurhex II (new Philippe Coste plant), and (iii) production losses (social conflicts and technical problems) in the Recycling business, partially offset by (iv) the growth in business with foreign customers in the Back End, and (v) the positive contribution of the new performance plan "Value 2020".

Change in operating working capital requirement (WCR)

The change in operating WCR was 185 million euros at the end of 2018, compared with 95 million euros at the end of 2017. The increase in net working capital is primarily attributable to prepayments from foreign customers and investments financed in the Back End, partially offset by the rebuilding of Mining inventories.

Net operating Capex

The group's net operating capex totaled 451 million euros at the end of 2018, compared with 559 million euros at the end of 2017. This figure included the purchase of Orano Projets shares from Framatome and the acquisition of minority interests in subsidiaries of the Tricastin platform, for a total of 174 million euros. Beyond these exceptional items, productive investments are under control, while taking account of the renewal and replacement program for the la Hague evaporator capacities.

Operating cash flow

As a result of the items described above, operating cash flow amounted to 554 million euros at the end of 2018, compared with 363 million euros at the end of 2017, *i.e.* a sharp increase of +192 million euros.

Net cash flow from company operations

(in millions of euros)	2018	2017	Change 2018 -2017
Operating cash flow	**554**	**363**	**+192**
End-of-lifecycle cash flow	(12)	(823)	+811
Income tax	3	(309)	+312
Cost of borrowed capital	(283)	(273)	-10
Other items	(105)	(24)	-81
Non-operating cash flow	**(397)**	**(1,429)**	**+1,032**
NET CASH FLOW FROM COMPANY OPERATIONS	**158**	**(1,066)**	**+1,224**

Net cash flow from company operations stood at 158 million euros at December 31, 2018 (vs. -1,066 million euros the previous year), in keeping with the group's target of generating positive net cash flow from company operations starting in 2018. In addition to the contribution of earmarked assets totaling 812 million euros made in 2017 and not repeated in 2018, a large part of this increase is due to good operating momentum, particularly in the front end of the cycle, as well as to the 2018 deployment of the new performance plan, "Value 2020". This enabled savings of 102 million euros over the year, including 22 million euros relating to investments.

Cash flows related to end-of-lifecycle operations

In 2018, cash flows related to end-of-life operations were a negative 12 million euros, compared with a negative 823 million euros in 2017, which mainly included the 812 million euro contribution to end-of-lifecycle assets.

Consolidated statement of cash flows

The condensed consolidated statement of cash flows is presented below.

(in millions of euros)	2018	2017	Change 2018/2017
Cash flow from operations before interest and taxes	716	771	-55
Interest expense and taxes paid	(202)	(519)	+317
Cash flow from operations after interest and taxes	**514**	**252**	**+262**
Change in working capital requirement	147	56	+91
Cash from operating activities	**661**	**309**	**+352**
Cash used in investing activities	(384)	(1,301)	+917
Cash from (used in) financing activities	(199)	1,506	-1,705
Impact of foreign exchange movements	*(2)*	*(21)*	*-19*
Cash from operations sold, discontinued or held for sale	-	2	-2
INCREASE (DECREASE) IN NET CASH	**77**	**494**	**-417**
Net cash at the beginning of the period	1,877	1,382	+495
NET CASH AT THE END OF THE YEAR	**1,953**	**1,877**	**+77**

2.4.2.4 Balance sheet items

CONDENSED BALANCE SHEET

(in millions of euros)	December 31, 2018	December 31, 2017
Net goodwill	1,229	1,193
Property, plant and equipment (PP&E) and intangible assets	9,398	9,291
End-of-lifecycle assets	6,832	7,265
Operating working capital requirement – assets	2,680	2,834
Net cash	2,027	1,950
Deferred tax assets	104	102
Other assets	270	384
TOTAL ASSETS	**22,540**	**22,983**
Equity and minority interests	723	825
Employee benefits	1,088	1,382
Provisions for end-of-lifecycle operations	7,881	7,545
Other current and non-current provisions	2,211	1,985
Operating working capital requirement – liabilities	4,640	4,437
Borrowings	4,416	5,105
Other liabilities	1,582	1,704
TOTAL LIABILITIES	**22,540**	**22,983**

Non-current assets

Net goodwill

Net goodwill went from 1,193 million euros at December 31, 2017 to 1,229 million euros at December 31, 2018, an increase of 36 million euros.

Net property, plant and equipment and intangible assets

Net property, plant and equipment and intangible assets increased from 9,291 million euros at December 31, 2017 to 9,398 million euros at December 31, 2018.

Operating working capital requirement

The group's operating working capital requirement (operating WCR) was negative (*i.e.* a source of funds) in the amount of negative 1,960 million euros at December 31, 2018, compared with a negative 1,603 million euros at December 31, 2017.

Net cash and borrowings

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

At December 31, 2018, Orano had a net cash balance of 1.95 billion euros. This cash position is strengthened by a confirmed, undrawn syndicated credit facility of 840 million euros, signed with 10 banking partners.

Furthermore, Orano's short-term borrowings at December 31, 2018 amounted to 918 million euros and mainly include a bond whose repayment is due in November 2019 in the amount of 750 million euros.

The group's net financial debt totaled 2.3 billion euros at December 31, 2018, compared with 3.0 billion euros at December 31, 2017. The decrease of 0.7 billion euros corresponds chiefly to the proceeds of the capital increases reserved for Japan Nuclear Fuel Ltd (JNFL) and Mitsubishi Heavy Industries (MHI), in the total amount of 500 million euros carried out on February 26, 2018, together with the net cash flow from company operations for 158 million euros.

RECONCILIATION BETWEEN NET CASH REPORTED IN THE STATEMENT OF CASH FLOWS AND NET CASH (DEBT) ON THE BALANCE SHEET

(in millions of euros)	2018	2017	Change 2018/2017
Net cash per statement of cash flows	**1,953**	**1,877**	**+76**
Short-term bank facilities and current accounts in credit	74	73	+1
Net cash from operations held for sale	-	-	-
Financial instruments, margin calls and collateral	83	119	-36
Borrowings	(4,416)	(5,105)	+689
NET CASH (DEBT)	**(2,306)**	**(3,036)**	**+730**

Orano's equity

Group equity totaled 723 million euros at December 31, 2018, compared with 825 million euros at December 31, 2017.

Assets and provisions for end-of-lifecycle operations

The change in the financial position from December 31, 2017 to December 31, 2018 with regard to assets and liabilities for end-of-lifecycle operations is summarized in the table below.

(in millions of euros)	December 31, 2018	December 31, 2017
ASSETS		
End-of-lifecycle assets	**714**	**662**
of which Orano's share (to be amortized in future years)	575	509
of which third-party share	139	153
Financial assets earmarked for end-of-lifecycle operations	**6,693**	**7,112**
SHAREHOLDERS' EQUITY AND LIABILITIES		
Provisions for end-of-lifecycle operations	**7,881**	**7,545**
of which provisions for end-of-lifecycle operations to be funded by Orano	7,575	7,276
of which provisions to be funded by third parties	306	269

The change in assets and provisions for end-of-lifecycle operations is described in Note 12 to the consolidated financial statements.

2.4.2.5 Key figures by business segment

Orano consists largely of the nuclear fuel lifecycle operations housed in the Orano Mining and Orano Cycle subsidiaries: Mining, Front End (Chemistry and Enrichment) and Back End (Recycling, Nuclear Packages and Services, Dismantling and Services, Engineering) and the Corporate operations provided primarily by Orano Support.

The key figures of Orano for the period ended December 31, 2018 are presented by business segment below.

(in millions of euros)	2018	2017	Change 2018/2017
Revenue	**3,623**	**3,848**	**-225**
Mining	1,124	1,274	-150
Front End	846	893	-47
Back End	1,638	1,652	-13
Corporate and other operations*	14	30	-15
EBITDA	**821**	**892**	**-71**
Mining	584	639	-55
Front End	164	281	-117
Back End	166	200	-33
Corporate and other operations*	(94)	(228)	+134
Operating income	**517**	**(48)**	**+565**
Mining	393	107	+286
Front End	56	14	+42
Back End	140	71	+69
Corporate and other operations*	(73)	(241)	+168
Operating cash flow	**554**	**363**	**+192**
Mining	405	480	-75
Front End	49	38	+11
Back End	191	177	+14
Corporate and other operations*	(91)	(334)	+242

* *"Corporate and other operations" notably includes Corporate and Orano Med operations.*

Since January 1, 2018, the Projects Business Unit has been included in the "Back End" segment and is no longer reported in "Corporate and other operations." Consequently the information concerning 2017 has been restated.

You are reminded that in accordance with IFRS 15 the 2017 comparative data have been restated in relation to the data reported last year.

2.4.3 Parent company financial statements for the past year

Please refer to Appendix 8.2 of this report.

2.4.4 Dividends

In accordance with Article 243 *bis* of the General Tax Code, we hereby remind you that no dividend has been paid for the past three fiscal years.

2.4.5 Non-deductible expenses

In addition, we hereby inform you, in accordance with Article 223 *quater* of the General Tax Code, that no sum has been recorded in the past year for expenses or charges which are not deductible for tax purposes, as referred to in Article 39-4 of the General Tax Code.

2.5 Foreseeable developments and future prospects

2.5.1 Outlook

In 2018, the group continued the roll-out of its strategic action plan, built around three objectives and their markers:

Profitability (cash flow from company operations with effect from 2018)

This objective will be achieved through:

- the extended managerial transformation of the group and the industrial platforms, through operational excellence, including industry 4.0, with the aim of improving safety, quality, costs and delivery times for customers;
- continuation of the "Value 2020" performance program for the 2018-2020 period.

Balanced development (more than one in every two employees in the service businesses from 2020)

This evolution will primarily concern the back end of the cycle: engineering, logistics, dismantling-waste, but also the ancillary services of the group's industrial platforms.

This balance with the service businesses will notably involve the development of operations and new sources of profitability, on the basis of the group's businesses and without increasing exposure to risk.

Partnerships outside France (30% of revenue from Asia in 2020)

This objective will be achieved thanks to the implementation of an ambitious business development plan in Asia, and in particular in China, Japan and South Korea, whilst continuing to work satisfactorily with our partners elsewhere in the world, and in the United States in particular.

2.5.2 Orano's financial outlook

The outlook presented below does not include the proposed spent fuel treatment and recycling plant in China which is currently under negotiation.

2.5.2.1 2019 outlook

The group intends to achieve the following in 2019:

- stabilization of revenue, in line with the expected production recovery;
- consolidation of EBITDA margin between 20% and 23%.

2.5.2.2 2020 outlook

The group confirmed its financial targets for 2020:

- return to revenue growth;
- increase in EBITDA margin to between 21% and 24%.

In line with these 2019 and 2020 outlooks, Orano confirms its objective of generating sustainably positive net cash flow from company's operations.

2.6 Significant events since the date of closing

2.6.1 Significant events between the date of closing and the date of preparation of the management report

No events subsequent to the balance sheet date have been identified as likely to have a significant impact on the group's financial statements, including, and given the elements of which Orano is aware, the events mentioned above in Sections 1.2.3 and 3.3.4 of this report.

2.6.2 Important events between the date of report preparation and the date of the General Meeting

No significant future events liable to have an impact on the group's financial statements have been identified between the date of this report and the date of the General Meeting.

RISKS AND SAFEGUARDS

3

In a constantly evolving environment, the diversity of Orano's business activities exposes the group to risks of all kinds which, if realized, could have an unfavorable impact on its operations, financial position and prospects for the future. This chapter lays out the principal risks to which the group believes it is exposed as of this writing, as well as the system adopted to recognize them, the actions taken to limit them and the organization of the internal control system.

Moreover, other risks of which the group is unaware or that it does not consider significant as of this writing may exist or may arise and have an equally unfavorable effect.

The aim of Orano's risk management and internal control system is to give a reasonable assurance as to the extent to which risks are limited and as to the compliance of the group's business activities with regulatory requirements.

The methodology means the group can meet its obligations in terms of the consolidated statement of non-financial performance (Articles L. 225-102-1 and R. 225-104 to R. 225-105-2 of the French Commercial Code) and the French Corporate Duty of Care law (Article L. 225-102-4 of the French Commercial Code). The risks in question are those identified at the start of Section 3.3 *Risk factors*.

The cross-reference table of the data required in the statement of non-financial performance (Articles L. 225-102-1 and R. 225-104 to R. 225-105-2 of the French Commercial Code) and those required by the French Corporate Duty of Care law (Article L. 225-102-4 of the French Commercial Code) can be found in Appendix 8.9 of this Annual Activity Report.

The reporting methodology is presented in Appendix 8.10 of this Annual Activity Report and the report of the independent third-party organization on the statement of non-financial performance is in Appendix 8.11.

3.1 Risk mapping and risk management processes

3.1.1 Risk management policy

The group has created a risk management system in keeping with the recommendations of the Autorité des marchés financiers (AMF, the French financial market authority), the professional standards of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and the advances in regulations concerning the statement of non-financial performance and the duty of care.

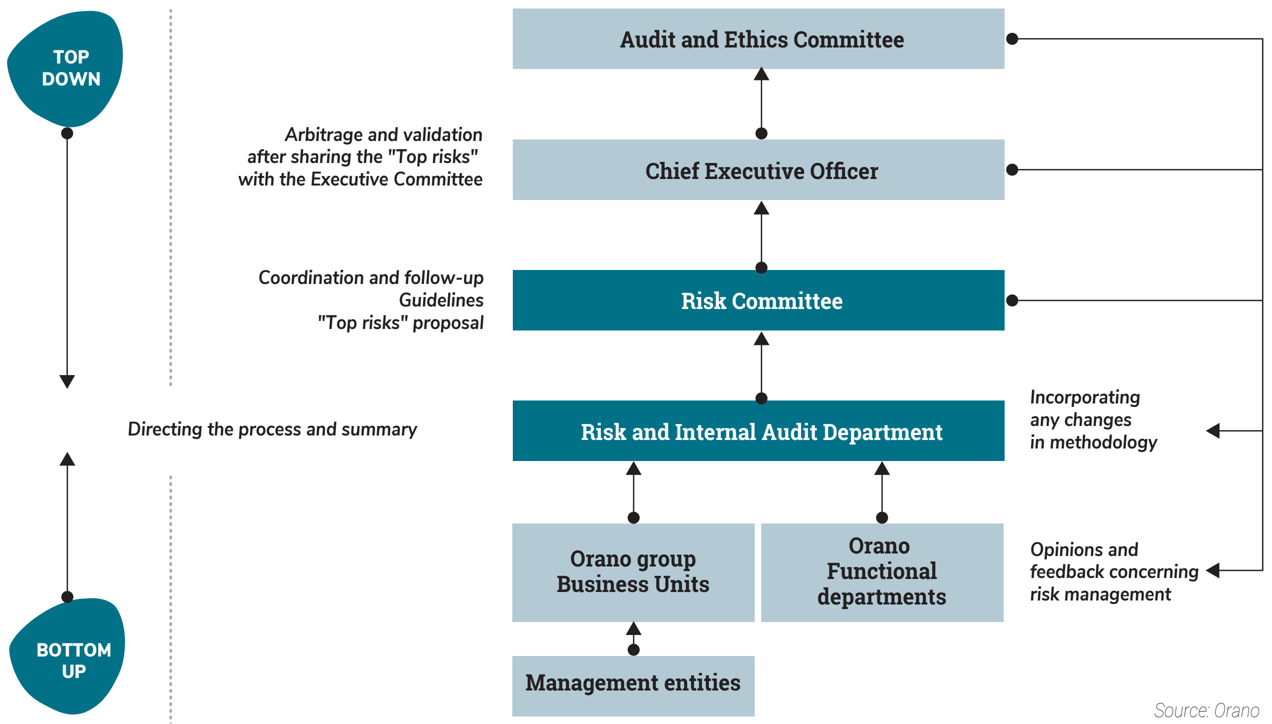
A risk-assessment campaign is mounted annually to take into account the potential impact of events on the achievement of the group's strategic and operational objectives. Its main objectives are:

- the formal identification of every type of risk;
- the characterization of these risks in order to prioritize them;
- the definition and implementation of action plans to limit them.

The Risk and Internal Audit Department, reporting to group Executive Management, works out the methodological tools used in common throughout the group. Risks are identified using a Business Risk Model (BRM) drawn up for the use of the operating units. The BRM lists, in a set number of families of risks, all of the situations or foreseeable or unexpected events that may impact on the health and safety of the staff, the environment, operations, strategy or financial results of the group, its compliance with current regulations, as well as its reputation or image. The BRM is designed to evolve over time by incorporating best practices and feedback from users, and changes made to regulations.

In 2018, the group made particularly sure that the BRM matched the requirements of the duty of care and included in the annual campaign a portion dedicated to the risk of corruption and influence peddling.

ORANO GROUP RISK MAPPING PROCESS IN 2018



Source: Orano

The Orano Risk and Internal Audit Department, in collaboration with the Risk Managers of the Business Units (each of which has a network of risk managers in their operating entities), coordinates the deployment of the risk mapping process, and consolidates the risk assessment at group level. The risks identified are analyzed and ranked on three axes: impact, likelihood and degree of control. This mapping makes it possible gather the elements of proposals and decisions on the implementation of action plans intended to optimize the management of each risk and make the residual risk acceptable to the group.

Operational units have the responsibility of identifying, analyzing and prioritizing their risks and then managing them by implementing action plans and allocating the appropriate resources.

The Risk Committee coordinates, for all operations and on a worldwide basis, the analysis of the group's key risks and the implementation of the action plans necessary to limit those risks. As part of its mission, the Risk Committee makes use of all of the expertise of the group. Its composition brings together the key functional areas in the Company that can provide special expertise or knowledge, enabling it to assess the criticality of the risks and their potential consequences.

The members of the Executive Committee [1] identify and formalize a list of the group's major risks and appoint, for each risk, a "designated" member. More specifically, the latter is responsible for ensuring that there are appropriate action plans and for reporting on its progress to the Risk Committee. The mapping is presented annually to the Audit and Ethics Committee of the Board of Directors.

Based on this work, the main risk factors identified are described in Sections 3.3 below.

3.1.2 Risk coverage and insurance

To limit the consequences of certain potential events on its operations and financial position, the group uses risk transfer techniques with leading insurers and re-insurers on the international markets. Orano has accordingly acquired insurance coverage for its industrial risks, its civil liability and other risks related to its operations, both nuclear and non-nuclear. The amount of the respective guarantees varies according to the type of risk and the group's exposure.

Some risk factors, were they to materialize, could be covered by one or several of the insurance policies taken out by the group as part of its insurance programs.

The insurance program is led by the group's Insurance Department, which:

- proposes to the Executive Management of the group and its subsidiaries internal financing solutions or the transfer of these risks to the insurance market;
- negotiates, implements and manages the worldwide insurance programs for the entire group and reports to group Executive Management on the actions undertaken and costs incurred; and
- negotiates, in support of the subsidiaries concerned, the payment of claims.

3.1.2.1 Worldwide group insurance programs

Civil liability

The group is covered by a "worldwide" civil liability program with limits appropriate to its size and operations. The program covers:

- operating liability, relating to operating activities and services rendered on customer premises;
- post-delivery civil liability;
- professional civil liability, which deals with the financial consequences of damage following the provision by a group company of an intellectual service.

It is also covered for liability for environmental damage, for damage to property held on behalf of third parties and for product recall expenses, among others.

The program covers the financial consequences of civil liability that may be incurred by the operational entities due to their operations, in respect of physical harm, material and immaterial damages caused to third parties, outside of the responsibility of the nuclear facilities operator and with the exception of certain losses traditionally excluded from the scope of the insurance, such as the collapse of land, damage related to asbestos, or damage resulting from computer viruses. The coverage levels for liability insurance are based on the amounts of coverage available on the insurance market, and the quantification of the risks reasonably foreseen by the group and identified by the operational units when the risk mapping is done.

(1) As at the date hereof, the Executive Committee is composed of:
the Chief Executive Officer;
the Director of Marketing and Sales;
the Director of Innovation and R&D;
the Chief Legal and Financial Officer, Information Systems and Digital Transformation;
the Director of People and Communications;
the Director of Performance;
the Senior Executive Vice-President of the Mining Business Unit;
the Senior Executive Vice-President of the Chemistry-Enrichment Business Unit;
the Senior Executive Vice-President of the Recycling Business Unit;
the Senior Executive Vice-President of the Dismantling and Services Business Unit;
the Senior Executive Vice-President of the Nuclear Packages and Services Business Unit;
the Senior Executive Vice-President of the Projects Business Unit.

Insurance specifically covering the activities of a nuclear facility operator

International nuclear liability law is distinct from general liability law in that the operator of the nuclear facility causing the damage has sole liability. Its liability is objective ("no fault"), for which there are few exemptions. The operator of a nuclear installation is therefore required to compensate the victims for any physical injury and property damage they have suffered and for this purpose must maintain a financial guarantee (generally, an insurance policy), in order to cover its liability, for a limited amount.

This arrangement is defined by international conventions, including the Paris Convention of July 29, 1960 as amended, supplemented by the Brussels Supplementary Convention of January 31, 1963. Orano's nuclear facilities are all located in France, where, since February 18, 2016, pursuant to law No. 2015-992 of August 17, 2015 on the Energy Transition for Green Growth in France, the TECV law, the operator's liability is capped at 700 million euros per nuclear accident in a nuclear facility, at 70 million euros in a reduced-risk facility (Article L. 597-28 of the French Environmental Code) and at 80 million euros per nuclear accident during transportation (Article L. 597-32 of the Environmental Code).

One group ICPE (STMI in Bollène) appears on the list of sites benefiting from reduced liability amounts, pursuant to Decree No. 2016-333 of March 21, 2016 implementing Article L. 597-28 of the French Environmental Code related to liability in the field of nuclear energy.

For its regulated nuclear facilities (INB) in France and its other facilities abroad, as well as for its nuclear transportation operations, group companies are covered by the insurance program to which Orano has subscribed. These insurance policies comply with the international conventions governing nuclear operator liability, as well as the aforementioned law no. 2015-992, including in terms of liability limits.

Property and business interruption insurance for nuclear operations

Due to the nature of the potential damage to the facilities, this type of insurance is available only through pools or through specialized mutual insurance companies capable of providing the necessary coverage. The limits of coverage for this type of insurance are based on the estimated replacement value or on an estimate of the maximum possible loss (MPL). Insurance coverage for some facilities can be up to one billion euros.

Mining operations are not covered by property and business interruption guarantees for the nuclear process, but rather are covered by specific programs controlled by Orano's Insurance Department.

The risk that the coverage terms of the insurance policies are not met or that the ceilings for this coverage are met and that thus the policies are insufficient to fully cover the consequences of a disaster cannot be ruled out.

3.1.2.2 Outlook and trends in 2019

The Orano group insurance programs will be renewed in April 2019.

The group plans to study in 2019 ways to add to its anti-fraud measures in terms of cyber security, together with the action plan implemented by the group.

3.2 System of internal controls

Internal control, described below, is the responsibility of group management. It concerns every employee in the group and applies to Orano as parent company and to all of the companies it controls, regardless of their legal form.

3.2.1 Commitments of the Orano group

The Code of Ethics, published on the group's intranet and its website, lists the commitments of the Orano group in terms of, *inter alia*, safety, security, compliance and quality risks. "As a responsible company, our actions are governed by two basic principles considered to be a matter of priority:

- compliance with the most demanding requirements as appropriate to accomplish our goals in matters of nuclear and occupational safety in the conduct of our activities, and with those for the protection of health and the environment; and
- compliance with the strictest standards of integrity and an unfailing commitment in the fight against corruption, fraud and in compliance with antitrust rules.

It is the responsibility of each and every one of us, both managers and employees, across all entities of the group, as well as those of our industrial and commercial partners, to ensure that these values are properly disseminated and that our principles are respected."

3.2.2 Internal control objectives

The Orano group internal control system is consistent with the commitments made as to the conduct of its business, particularly those written into its Code of Ethics, the demanding requirements in terms of safety and security, and compliance with the regulations applicable to activities.

The internal control system helps to manage risks and operations. In particular, it aims to ensure:

- compliance with applicable regulations;
- the implementation of instructions and directions set by management bodies;
- the proper functioning of the group's internal processes, particularly those helping to safeguard its assets;
- the reliability and the quality of the information produced and communicated, especially financial information.

Nonetheless, however well designed and applied they may be, the internal control mechanisms can only provide a reasonable assurance as to the attainment of the aforementioned objectives.

In the "Frame of Reference for Internal Control" of the Autorité des marchés financiers (AMF), to which the group defers (guidelines based on the COSO), the internal control system is characterized by:

- an organization with a clear definition of responsibilities, sufficient resources and expertise, and appropriate information systems, procedures, tools and practices;
- the internal distribution of relevant and reliable information, enabling each person to carry out his or her duties;
- a risk identification, analysis and management system;
- control activities designed to reduce these risks;
- continuous oversight of the internal control system.

The group has adopted a mechanism whereby all group entities conduct their own assessment of their level of internal control using a self-assessment questionnaire (known as INCOME for INternal COntrol Management Evaluation). This questionnaire, used by all entities, brings together 370 points of control, broken into 17 sets:

- 4 operational sets, including one on product quality;
- 1 set on compliance and ethics;
- 1 set on information systems;
- 3 sets on sales, purchasing, legal and intellectual property processes; and
- 8 sets on financial processes and human resources.

All of these sets are covered over two years, in alternation, except for the compliance and ethics set, which is reviewed yearly. This system, which is reviewed by the joint Statutory Auditors, allows each group entity to compare its internal control with best practices and improve it to that level, and with the group's expectations in terms of controls designated as crucial. Management then commits to action plans to respond to the weaknesses identified.

The Risk and Internal Audit Department includes in its yearly audit plan a review of the self-assessments to ensure their accuracy.

3.2.3 Organization of the internal control system

Orano's internal control system is modeled on a triple line of defense.

First line of defense

By definition, control is specific to each organization. It involves the mobilization of human, material and financial resources, the organization of these assets, the deployment of specific objectives within the organizations and the implementation of prevention or detection controls. These activities are carried out by the employees and managers of each group entity, representing the first line of defense to the risks facing the Company.

The preventive controls are carried out according to specific manual or automated procedures, involving, amongst other things, validations at appropriate levels of the organization. The controls for detection consist of *ex-post* checks carried out as part of specific oversight of performance, variances and anomalies (and facilitated by the existence of information systems, indicators, *etc.*)

Second line of defense

The internal control function, led by the Finance Department in collaboration with the Risk and Internal Audit Department within the Internal Control Committee (COCI), relies on a network of internal control coordinators appointed in each of the Business Units, whose main objectives are:

- to disseminate information concerning decisions made and their application by the entities (top/down);
- to roll up specific points requiring attention from the entities to the Internal Control Committee ("bottom-up").

This second line of defense also involves other Corporate functions, such as the General Inspectorate for the safety and security of nuclear installations, the Quality, Protection, Compliance and Insurance Departments and Financial Control.

Anti-fraud system

For a few years, the risk of fraud has changed dramatically, with the surge in fraud by identity theft, heightened use of "social engineering" with attempts at intrusion and data theft. Aware of this risk, which is growing with the inventiveness of perpetrators and the increasing digitization of transactions, especially financial ones, Orano has continued the vigilance work that it initiated several years ago, primarily by adjusting its internal procedures in light of these new identified risks and by repeating awareness campaigns on a regular basis. These procedures and alerts are the basis of the anti-fraud system.

Each unit is obliged to report all attempts at fraud or evidence of fraud to the Finance Department and the Protection Department, so that lessons can be learned from the situations encountered. The fraud scenarios suggested by these events or any others of which the group might become aware, especially through communications from government agencies and other stakeholders, are also taken into consideration.

When necessary, the existing procedures are amended to reflect the corrective measures identified in these analyses, which are then shared across the group, particularly with the employees most exposed to the risk.

Third line of defense

Orano's Risk and Internal Audit Department intervenes everywhere in the group and in any area relevant for internal controls. This department is placed under the responsibility of the Chief Executive Officer and reports horizontally to the Chairwoman of the Audit and Ethics Committee. In 2018, it conducted its activities completely independently in accordance with the Audit Charter and international professional standards.

During the period, its assignments were carried out in accordance with the annual audit plan approved by the Chief Executive Officer and reviewed by the Audit and Ethics Committee. This department is responsible among other things for reporting to the management bodies on its assessment of compliance and the effectiveness of the internal control systems deployed throughout the group. This audit plan takes particular account of the risks identified by the set of tools used by the group (risk mapping, internal control self-assessment, interviews conducted by the Audit Department with the General Inspectorate, Compliance, Quality, and all the principal top managers of the group, as well as with the Statutory Auditors and others). The recommendations resulting from its work lead to progress plans, which are monitored in consultation with the managers concerned. In this way the Risk and Internal Audit Department helps with the continuous improvement of the internal control system.

Each year, the Risk and Internal Audit Director presents his internal controls review report and a summary of the department's activities to the Chief Executive Officer and to the Audit and Ethics Committee.

The responses of the entities to the INCOME self-assessment questionnaire are shared with the Statutory Auditors and the network of internal control liaisons. This review and sharing contribute to the monitoring of the overall system, and the results are presented to the various appropriate levels of the organization (Executive Committee, Business Units and functional departments in particular). The main elements are summarized in the annual report by the Risk and Internal Audit Director on the review of the internal controls.

3.3 Risk factors

The list of the group's risk factors is given in this chapter. The methodology by which they were identified is described in Section 3.1. The order of appearance reflects the priority attached by the Orano group to these risks, as follows:

Risk Families in the Orano Manual	Major risks presented in the 2018 Annual Activity Report	Sections of the Activity Report of 12/31/2018
External risks	Political and economic conditions	3.3.1
	Commercial and legal risks	3.3.4
Financial risks	Financial risks	3.3.6
Human resources risks	Risks related to health and safety Risks related to human resources	3.3.3 3.3.7
Operational risks	Nuclear safety and environmental impacts	3.3.2
Risks related to subcontracting and suppliers	Risks related to the group's business activities	3.3.5
Compliance, integrity and ethics	Risks associated with corruption risk and influence peddling	3.3.8

Measures combating food waste, food scarcity, animal welfare and responsible, fair and sustainable food policy are not relevant to Orano's operations. Consequently, they are not treated in this document.

The risks referring to the group's obligations in terms of the statement of non-financial performance (Articles L. 225-102-1 and R. 225-104 to R. 225-105-2 of the French Commercial Code) and those required by the French Corporate Duty of Care law (Article L. 225-102-4 of the French Commercial Code) are presented below.

	Statement of non-financial performance *Article L. 225-102-1 of the French Commercial Code*	Corporate Duty of Care *Article L. 225-102-4 of the French Commercial Code*	Sections of the Activity Report of 12/31/2018
Political and economic conditions	√	-	3.3.1
Nuclear safety and environmental impacts	√	√	3.3.2
Risks related to health and safety	√	√	3.3.3
Commercial and legal risks	-	-	3.3.4
Risks related to the group's business activities	-	-	3.3.5
Risks related to subcontracting and suppliers	√	√	3.3.5.7
Financial risks	-	-	3.3.6
Risks related to human resources	√	√	3.3.7
Risks associated with corruption risk and influence peddling	√	-	3.3.8
Risks of tax evasion	√	-	3.3.9

The cross-reference table of the data required in the statement of non-financial performance (Articles L. 225-102-1 and R. 225-104 to R. 225-105-2 of the French Commercial Code) and those required by the French Corporate Duty of Care law (Article L. 225-102-4 of the French Commercial Code) can be found in Appendix 8.9 of this Annual Activity Report.

The report of the independent third-party organization on the statement of non-financial performance is found in Appendix 8.11 to this Annual Activity Report.

3.3.1 Political and economic conditions

Orano's operations are sensitive to policy decisions in certain countries, especially as regards energy.

The risk of a change in energy policy by some States cannot be excluded and could have a significant negative impact on the group's financial position. The debates on the future of nuclear power which have begun or lie ahead in various countries could evolve in a manner that is unfavorable to the group's operations, particularly under the influence of pressure groups or following events that give the public a negative image of nuclear power (*e.g.* accidents or incidents, violations of non-proliferation rules, diplomatic crises).

As a result of events at the Fukushima facility in Japan in March 2011, the German government decided to phase out nuclear power while other European Union countries, including France, decided to perform stress tests on their facilities (see the ASN report of January 3, 2012 on the supplementary safety assessments of nuclear facilities).

More generally, events of this nature are likely to affect the positions of certain States *vis-à-vis* nuclear energy and could for example lead to:

- new thinking on the share of nuclear power and renewable energies in the energy mix;
- the early shutdown of certain nuclear power plants;
- the slowdown or freezing of investment in new nuclear construction projects;
- the reconsideration of programs to extend the operation of existing power plants;
- changes in policies for the end of the cycle, particularly as concerns used fuel recycling;
- lesser acceptance of nuclear energy by the public.

In addition, the group is present in several countries, including countries marked by various degrees of political instability. Some of the group's mining operations, for example, are located in countries where political change could affect those operations. Political instability can lead to civil unrest, expropriation, nationalization, changes in legal or tax systems, monetary restrictions, and renegotiation or cancellation of currently valid contracts, leases, mining permits and other agreements. Acts of terrorism can also generate socio-political turmoil and impair the physical safety of the group's personnel and/or facilities.

Lastly, the group's products and services are sold on international markets characterized by intense competition on price, financial terms, product or service quality, and the capacity for innovation. In some of its businesses, the group has powerful competitors that are much larger than the group or have access to more resources. Moreover, these competitors may sometimes make decisions that are influenced by extraneous considerations other than profitability or have access to financing at advantageous terms.

Risks related to the Multi-Year Energy Program (Programmation Pluriannuelle de l'Énergie – PPE)

The Multi-Year Energy Program (PPE), which is revised every five years, is the management tool provided for in the French law on energy transition for green growth (LTECV). It sets, for each type of energy, the broad objectives of France's energy policy and its energy mix. The main points of the next PPE were presented by the President of the French Republic on November 27, 2018. The PPE is expected to be approved legislatively during the first half of 2019. As part of the diversifying the electrical mix towards renewable energies, the objective to reducing the nuclear portion of the French electricity mix to 50% was set for 2035 (this same objective had been set for 2025 in 2015 when the Energy Transition law was voted in). Attaining this objective would mean closing 14 nuclear reactors, out of a total 58 in France, by 2035, including the closing of two Fessenheim reactors in the spring of 2020 and 4 to 6 other reactors by 2030. France will not in the near future be deciding to build more new-generation EPR nuclear reactors. EDF has to work out a new nuclear program, making firm commitments as to price, so that a decision can be made in 2021.

The strategic nature for France of recycling used fuel was reaffirmed.

These factors incorporated into the reactor scenario used by the Orano group could have an impact in the middle of the next decade. However, the financial trajectories of the Business Units could change depending on the impact of the announcements by the PPE about the market price and/or about export markets.

Risks related to the national plan for managing radioactive materials and waste (French acronym PNGMDR)

As announced by France's Commission Nationale du Débat Public (CNDP) in its decision of April 4, 2018, the substance of the fifth triennial edition of the PNGMDR will be open to a four-month public debate in 2019.

The financial outcomes of the end-of-lifecycle commitments could be affected in the event of so-called disruptive risks such as the reclassification of reclaimable materials as waste, or a shift to more restrictive regulations on the final condition of facilities and land.

3.3.2 Nuclear safety and environmental impacts

The group's environmental safety policy, renewed for the 2017-2020 period, aims to continuously improve its safety culture and to increase its preventive actions in light of risks related to:

- the occurrence of a nuclear or industrial accident classified as Level 2 or higher on the INES or ARIA scales and which could cause a significant contamination of protected interests (*e.g.* significant contamination of the environment); and
- the consequences of a natural phenomenon (such as an earthquake) or of climate disruption which could generate extremely violent effects on the sites (such as a tornado or flood).

This environmental safety policy has been disseminated to the entire group.

It sets the priorities for action in terms of:

- safety of the facilities;
- safety of the operations;
- performance of management.

Although a serious event with major consequences around our sites cannot be completely ruled out, the extra measures taken to improve a culture of safety directly among our people on the ground make us confident in our ability to control any such occurrence. Furthermore, an additional factor in the overall improvement of the safety of our activities has been a reinforcement of our crisis organization and our procedures for limiting consequences and supporting a site in difficulty.

The main indicators of prevention and outcomes are stable.

Concerning the special case of natural phenomena and climate disruption, the group will continue in 2019 the investment projects initiated as part of the Additional Safety Assessments carried out after the Fukushima accident, which consist of building on the Melox site a crisis building, which is resistant to extreme contingencies (earthquake-tornado-flood), on the model of the crisis command post put in service on the Tricastin site in 2017 and la Hague in 2018.

3.3.2.1 Internal nuclear and industrial hazards

Risks of nuclear origin relate to the characteristics of radioactive substances. They thus concern all industrial facilities of the group where these substances are found, whether it be regulated nuclear facilities (INB), secret regulated nuclear facilities (INBS) or industrial facilities covered by the legislation on facilities classified for environmental protection (ICPE).

Risk prevention is based on a systemic and systematic analysis of the risks specific to each facility or activity undertaken and on the definition of means for preventing events of concern, for detecting and managing incidents and accidents, and for limiting their potential consequences, based on defense-in-depth principles. These principles involve a systematic analysis of potential technical, human or organizational failures, and definition and implementation of a series of independent lines of defense to protect against the consequences of those failures. These principles are implemented during the facility design phase, during the industrial production phase, and during cleanup and dismantling after the end of production operations.

These risks are the following:

The risk of a criticality accident corresponds to the risk of an uncontrolled chain reaction with a brief and intense emission of neutrons, accompanied by radiation. This risk, should it materialize, would result in irradiation of workers or individuals located near the event, causing lesions proportional in seriousness to the intensity of the radiation received. This risk is addressed in any facility likely to receive fissile materials.

The prevention of this risk is based on limiting the factors leading to uncontrolled chain reactions. This limitation is factored into the design (*e.g.* equipment geometry) or operating requirements (*e.g.* mass limitation). In areas of facilities representing the greatest risk, prevention measures are strengthened with the use of shielding to sharply reduce the consequences of a potential criticality incident for personnel, and with the installation of a criticality accident detection, alarm and measurement system.

Thermal releases and radiolysis: Matter absorbs the energy produced by intense radiation, which can lead to increased temperatures. The energy is removed to control the temperature increase and prevent the dispersion of radioactive materials. Cooling is provided by redundant cooling systems with heat exchangers and ventilation systems.

Radiolysis corresponds to the decomposition of a hydrogenated compound (especially water) when exposed to radiation, leading to the release of hydrogen. In normal operations, the facilities are designed to limit hydrogen concentrations by flushing the equipment with air. A backup system is added if a loss of flushing capacity causes concentrations to rise significantly.

The typical risks of all industrial operations:

- risks associated with the handling and use of hoisting, transfer and positioning equipment;
- risks of fire and internal explosion;
- risks related to the use of chemical reagents or toxic raw materials such as HF or UF_6;
- risks associated with the use of pressurized equipment;
- risks associated with utilities (electricity, water, steam, industrial gases, *etc.*).

These risks are managed using a risk management approach tailored, as in the case of nuclear-based risks, to the nature of the risk and in compliance with the regulatory requirements defined for each technical field: safety systems, fire containment, detection, ATEX rules for explosive atmospheres, separation of incompatible chemicals, *etc.* These technical measures are supplemented as necessary by compliance inspections, periodic verifications and maintenance, and operator training and/or certification.

3.3.2.2 External risks that could lead to nuclear risk

This risk concerns the crash of an airplane or part of an airplane on a facility. Its probability of occurrence depends on the number of aircraft that could reach the site without being detected; its potential severity depends on the type of aircraft and the surface area of sensitive areas in each facility. Each site is located:

- away from controlled airspace;
- away from airspace used by military aircraft; and
- far from any airport.

Safety studies are carried out to assess the risk of an airplane crash, including the risk of deliberate attack, and to determine the means for limiting its consequences (factoring in the organization of airspace use, types of flights, known crash statistics, *etc.*).

Earthquakes and their possible repercussions, such as a tsunami, can cause damage that could disable nuclear safety systems.

For facilities in which nuclear materials are handled, the risk of an earthquake is factored into the design of equipment, systems and buildings. Risk analysis consists of demonstrating that no damage affecting the nuclear safety of the facility is likely to occur for the event scenario considered.

Climate disruption, particularly unfavorable weather conditions and floods:

This is factored into the design based on potential local conditions. Advance warning is given for any threatening weather conditions, and there are instructions for each facility concerning additional measures to be taken, such as increased monitoring or specific actions.

The possible causes of external flooding (rain, river flooding, breach of levies, tsunami) are factored into the design of the facilities and operating measures. The risk of a thousand-year flood is taken into account, in particular by locating facilities above the thousand-year flood plain.

Other risks caused by potential external events, such as the loss of power supply or utilities (water, steam, compressed air, *etc.*), are addressed through redundant or independent backup systems.

Following the accident at the Fukushima Daiichi nuclear power plant in Japan, in addition to measures taken in the design of the facilities or during operations, supplementary safety assessments (SSA) were carried out to evaluate the facilities' ability to withstand a malfunction. Based on these assessments, special programs to improve the level of facility protection led to work and actions. Other measures are being implemented in accordance with regulatory decisions by ASN applicable to the group's nuclear facilities.

Transportation of radioactive and nuclear materials

Faced with the risk of incidents during the transportation of radioactive and nuclear materials, these are subject, as are other nuclear operations, to the concept of "defense in depth" in order to ensure their safety and protect people, goods and the environment on public land. This system of defense consists of setting up a series of barriers (packaging performance, observance of safety requirements and arrangements for crisis management) to prevent accidents and limit their consequences. The design of the shipping cask is the main component of this system. As with any nuclear activity, these operations are governed by stringent international regulations.

To accomplish its mission of supervising the group's transportation operations, Orano has an organization that analyzes risks, establishes action plans, oversees shipping operations and manages emergencies around the globe. Its tracking center is able to access in real time all necessary information on shipments under its supervision at any moment.

The protection and safeguard of nuclear materials and facilities

Faced with the risk of malicious acts, special measures are taken to protect nuclear facilities from terrorism. These measures are strengthened under national security plans (such as the French "*Vigipirate*" plan). For security reasons, these measures may not be disclosed to the public.

In addition to the measures adopted to prevent the risks of an incident or accident and limit the consequences to the greatest possible extent, sites in possession of nuclear materials must take measures to prevent the loss, theft or diversion of the materials held in the facilities, or any act that might result in their dispersal in the environment. As with nuclear safety, the measures taken are based on the principle of "defense in depth".

The competent authorities, including for France inspectors reporting to the Senior Defense and Security Official of the Ministry for Ecological and Solidarity Transition, regularly verify compliance with and proper application of these measures.

3.3.3 Risks related to health and safety

In terms of a health and safety, the main risks for the group are:

- serious or fatal accident of an employee of the group or an outside company;
- contamination or irradiation of an employee of the group or outside company;

Although there is no such thing as zero risk, the involvement of all line management in improving our performance, from Executive Management down to first-level supervisors, strongly supports our goal of eradicating serious or fatal accidents, and achieving a sustainable frequency rate of accidents with lost time of less than 1 by the year 2020.

The main indicators of prevention and outcomes in 2018 show improvement.

Renewed for the 2017-2020 period, the group's health, safety and radiation protection policy aims to continuously improve the group's performance in this regard and to increase its preventive actions. The constant goal is to strive for zero lost time injuries and zero impacts from Orano's operations on the health and safety of its employees, subcontractor personnel and the local communities near its sites. This policy has been initialed by the Chief Executive Officer and disseminated to the entire group.

Each entity of the group has adopted this policy and adapted it by integrating the risks related to its own activities identified in the Single Document for the Evaluation of Risks, factoring in reports of accidents or events occurring within its purview.

This policy covers three major areas:

- primary prevention;
- obtaining and circulating feedback;
- operational controls.

Orano's commitments are to:

- ensure appropriate monitoring of occupational health for all employees by:
  - defining and applying international medical standards for medical surveillance of occupational hazards,
  - strengthening the governance of occupational health actions and by giving increased attention to the quality of working life, especially as concerns the prevention of occupational stress,
  - deploying the group's occupational health service in France,
  - including specific issues associated with expatriation in the medical follow up of employees;
- in the field of occupational safety, prevent and manage all industrial risks associated with operations for employees and subcontractor personnel.

Regarding security, a network of site- or entity-based prevention personnel, who are the local leaders of the security improvement actions, and led in turn by the HSE Department, allow for feedback on accidents or events that have occurred.

With regard to radiation protection, the application of the ALARA approach (As Low As Reasonably Achievable) allows the lowest possible dosimetry absorbed by the personnel. Monitoring of facilities with radioactivity tracking devices has helped limit the hazard of ionizing radiation, as well as to maintain facilities' radiological cleanliness.

Individual dose objectives are defined for each job in the monitored area.

A network of radiation protection specialists throughout the group is led by the corporate Safety, Health, Security and Environment Department. The tracking indicators used are the different dose limits and in particular the effective whole-body dose. The regulatory limit is 20 mSv per year for this concept. The group has set an observed indicator of 14 mSv as a forwarding threshold.

3.3.4 Commercial and legal risks

3.3.4.1 Contractual and commercial risks

3.3.4.1.1 Risk associated with dependency on the group's customers

Orano's loss of one of its main customers or a reduction in their purchases or an erosion of contract terms or conditions could have a significant negative impact on the group's operations and financial position.

Orano has very substantial commercial relations with the EDF group. EDF (including Framatome) accounted for approximately 40% of revenue in 2018 and 38% in 2017. In the fuel cycle, the relationship between EDF and Orano is governed by multi-year contracts.

In its operating segments, these contracts give Orano operating visibility beyond 2020, with the regular renewal of multi-year contracts.

In addition, the impacts of the French Energy Transition law of August 17, 2015 (Articles L. 311-5-5 and L. 100-4-5) on EDF's operations were specified in the Multi-year Energy Program (PPE) presented by the President of the French Republic on November 27, 2018. For additional information on the impact of the PPE, see Section 3.3.1 *Risks related to the multi-year energy program* (PPE).

The group's 10 biggest customers, including the EDF group, represented close to 69% of its revenue during the financial year.

3.3.4.1.2 Breach of contractual commitments

The Orano group is exposed to the risk of default by its customers for the payment of its products and services and/or by its suppliers for the performance of certain services or for the delivery of certain products.

In such instances, the group may not be able to recover the expenses incurred for a project, a service or provision of material, and consequently may fail to achieve the operating margins factored in when the contract was signed.

Though the group endeavors to control its exposure to contractual risk, it is not possible to guarantee that all risks of non-payment or non-execution can be eliminated.

3.3.4.1.3 Non-renewal or termination of concessions related to the group's mining operations

The group's mining operations involve concessions (or other legal arrangements to that effect) or partnerships formed under legal systems specific to each country. Despite the relatively long terms of these partnerships or concessions, the group is exposed to the risk of non-renewal or termination of its partnerships and concessions, in particular in countries that suffer from a certain degree of political instability as mentioned in Section 3.3.1.

3.3.4.1.4 Long-term contracts

The Company signs long-term contracts that may prevent the group from taking advantage of increases in the market price of certain products or services. This is the case for certain natural uranium sales contracts, in particular, or for conversion or enrichment services.

In addition, the profitability of certain long-term contracts in which the group commits to providing deliverables at a fixed price, adjusted based only on general indices, could be affected by certain additional costs that cannot be passed on to customers, such as unanticipated increases, technical difficulties, or subcontractor default. The performance of this type of contract could therefore reduce the group's anticipated profitability, or even cause an operating loss.

3.3.4.1.5 Warranties

The warranties provided in the group's contracts or financing are limited in duration and capped in value, and exclude consequential or indirect damages. However, the group could under certain circumstances give warranties exceeding those limits (in compliance with its governance rules), particularly in competitive markets.

3.3.4.1.6 Early termination clauses

Commercial contracts sometimes include clauses allowing the customer to terminate the contract or reject the products or service if contract clauses concerning schedule or performance have not been met, including if the ceiling on late penalties has been reached. Difficulties concerning products and services provided under this type of contract could thus result in unexpected costs.

In addition to the above-mentioned negative financial consequences, contract performance difficulties could harm the group's reputation with existing or potential customers, particularly in the nuclear sector.

3.3.4.1.7 "Requirements" contracts

Some contracts signed by entities of the group, in particular in the Chemistry-Enrichment Business Unit, are for variable quantities, depending on customers' reactor requirements. These are known as "requirements contracts". The estimates provided by Orano's customers in connection with these contracts may therefore be revised downwards in certain circumstances, with a corresponding reduction in the revenue anticipated by the Company for the contracts in question.

3.3.4.1.8 Outsourcing

The group makes use of many subcontractors, particularly for dismantling end-of-life facilities on its sites or for building new facilities. Those contracts contain clauses for adjusting the scope of work and the price, which are necessary given the nature of this work. The group is therefore exposed to claims by its subcontractors should it fail to reach agreement with them as to the application of these adjustment provisions.

3.3.4.2 Risks and disputes involving the group

The Company is exposed to the risk of disputes that could lead to civil and/or criminal penalties.

3.3.4.2.1 Mr. Jean-Marc Gadoullet

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

3.3.4.2.2 Uramin

In June 2018, Orano SA and Orano Mining entered the "acquisition" part of the judicial investigation into the Uramin case, as civil parties. 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 the civil proceedings by 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.

3.3.4.2.3 COMUF

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

3.3.4.2.4 Investigations

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

3.3.4.2.5 Contingent liabilities

In Canada, Orano is faced with uncertainty as to the method of calculating mining royalties, since the legislation of the Province of Saskatchewan refers to "market prices", although the government provides no instructions or guidance on how to set or demonstrate a market price.

3.3.4.2.6 Tax proceedings and disputes

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

3.3.5 Risks related to the group's business activities

3.3.5.1 Obsolescence risk of plant

The obsolescence of production plants, and their ability to function in a nominal way and in compliance with the regulatory commitments, represents a major challenge for the Orano group. The industrial installations are covered by preventive and curative maintenance programs. Regarding regulatory commitments, the group's "regulated nuclear facilities" undergo safety inspections every 10 years. Their purpose is twofold: to ensure that compliance with regulatory requirements is maintained and to provide a checklist on the obsolescence of the facility. Each site accordingly devises its own monitoring program to catch any obsolescence in its equipment.

3.3.5.2 Risks related to end-of-lifecycle operations

As operators of regulated nuclear facilities (*installations nucléaires de base*, INB) and industrial facilities covered by legislation on environmentally regulated sites (*installations classées pour la protection de l'environnement*, ICPE), the group's legal entities have an obligation to ensure the safety and dismantling of those facilities during their final shutdown, in whole or in part; to restore the sites; and to manage the products resulting from these operations.

The group plans for the dismantling of its new facilities from the beginning of the design phase. Computer programs were developed to facilitate the adoption of new traceability standards, thus reducing the research necessary for characterization at the end of operations (radiological, physico-chemical, *etc.*) as well as the impacts of dismantling work.

In France, the law provides a mechanism for ensuring that the operators of INBs have sufficient assets to fund long-term expenses associated with the dismantling of these facilities and/or the management of used fuel and radioactive waste.

Future expenses associated with the end-of-lifecycle commitments of nuclear facilities and with the remediation of regulated industrial facilities have been identified, and specific provisions have been constituted by the legal entities which operate those facilities. Rules related to provisions for end-of-lifecycle operations are described in Appendix 8.1 *Consolidated financial statements*, Note 12 *End-of-lifecycle operations*.

End-of-lifecycle liabilities are quantified in two principal ways, depending on the lifecycle phase of the nuclear facility. The first is to evaluate the future costs before the INB is put in service and the second is to draw up an operating estimate at the start of the project phase of the dismantling operations. These figures also include margins for risks and contingencies, which are included in

Orano's provisions for end-of-lifecycle expenses. It cannot be stated with certainty, however, that those amounts currently provisioned will equal the actual costs that will finally be incurred by the group. It is therefore possible that these future obligations and potential expenses or potential additional future liability of a nuclear or environmental nature that the group may later have to bear could have a significant negative impact on its financial position.

The main risks that could have a significant impact on the cost of end-of-lifecycle operations are in particular:

- differences between the initial estimated condition of legacy facilities or waste and their actual condition;
- changes in regulations, particularly with respect to dismantling, the target final condition of the facilities and soils after dismantling, the storage solutions used or the requalification as waste of radioactive materials currently still considered to be reusable;
- the appreciable increase in radioactive waste packaging and disposal costs, particularly for waste destined for geologic disposal (cost of the future CIGEO geologic repository) and for which no final disposal method has yet been identified;
- on December 21, 2018, the government agency sent a follow-up letter about the fourth triennial report concerning the 2015 financial year plus its updates for the 2016 and 2017 financial years. At this point the operator has not found any significant impact on the amount of its provisions and will respond within two months as required.

3.3.5.3 Risks of cyber attack

Given the emergence of cyber attacks in recent years, concerns about information system risk have grown considerably.

The risk of cyber attacks was given the highest level of importance in Orano's assessment scale (very high severity with a likelihood remaining "infrequent").

To deal with these concerns, a plan for a cyber security program was devised in late 2017 and early 2018, then presented to and approved by the Executive Committee in March 2018.

This plan deals with the following six major risks:

- compromised confidentiality of business and technical data;
- compromised integrity of business and technical data;
- unavailability of business services;
- loss of ability to detect/investigate;
- massive, widespread compromise of the information system; and
- inability to meet legal and industry obligations.

The plan was devised along the lines of: prevention and protection (identifying the risk and preventing its occurrence), detection and reaction (detecting the incident and eliminating/thwarting it), and resilience (reducing the impact and maintaining essential services).

It consists of a number of areas for continuous improvement, including adding staff in information systems security, improving the cyber security culture, upgrading the in-depth defense systems, improving the protection of data centers and industrial sites, as well as business continuity.

3.3.5.4 Risk related to major projects

Generally, the revenue, cash flow and profitability recognized for a project can vary significantly according to the percentage of completion of the project in question.

They may depend on a certain number of items such as the occurrence of unforeseen technical problems inherent in the complexity of major projects and/or relative to the equipment supplied; loss of skills or questions about technologies; postponements or delays in the execution of contracts or capital projects; and changes in the position of customers or the geopolitical context of the countries where they are carried out.

Projects may also have to cope with financial difficulties or payments withheld; the default or financial difficulties of suppliers, subcontractors or partners in a consortium in which the Company is jointly responsible; and additional unforeseen costs resulting from changes in the technical scope of work, in project databases or in regulations.

The profit margins on some of the Company's client contracts may prove to be very different from those initially anticipated insofar as costs and productivity may vary significantly during the execution of these long-term projects. This phenomenon can also be observed regarding the costs to complete major projects relative to investments.

Orano's industrial projects

The group cannot ensure that industrial projects, mining projects or dismantling projects can be implemented within the planned budgets and schedules or that they are consistent with the operating requirements of the sites involved.

The group cannot guarantee that the income from mining, industrial or dismantling projects will enable it to cover its operating, depreciation and amortization expenses or give the expected return on investment, particular if the competitive situation in the target market changes.

Similarly, in the case of transitions between two industrial plants, the group cannot guarantee that facility shut-down and start-up schedules will be optimized to minimize the financial and social impacts.

In addition, the group cannot guarantee that suppliers associated with the different projects will provide their products or services on time and as required in the contracts.

Such risk could have a negative impact on the group's operations and, especially, its financial position.

3.3.5.5 Uranium resources and reserves

Orano's uranium reserves and resources derive from estimates made up by the group in accordance with NI43-101, based on geological assumptions (*e.g.* core drilling results) and economic assumptions; there is no guarantee that actual mining operations will produce the same results.

The group could be led to modify these estimates if there is a change in evaluation methods or geological assumptions, and/or a change in economic conditions.

It is not possible to guarantee that the projected quantities of uranium will be produced or that the group will receive the expected price for these ores, which is indexed to market performance, in accordance with the contractual terms agreed upon with the customers.

There is no assurance that other resources will be available. Moreover, uranium price fluctuations, production cost increases and declining mining and milling recovery rates can affect the profitability of reserves and require their adjustment.

3.3.5.6 Risks related to transport security

The international agreements concerning the various modes of transportation of hazardous materials define the categories of transportation and the types of models of packages, according to the safety issues involved. Each country writes these principles into its national regulations (for example in France: the TMD Decree -French acronym for hazardous materials transportation- issued by the Ministry of Ecological and Inclusive Transition). Every subsidiary of the Nuclear Packages and Services BU manages itself in a way that complies with these provisions.

For the highest risk shipments, the design, manufacture and use of packaging for the transportation of nuclear and radioactive materials undergo an assessment process by the competent authorities (in France: the ASN, the Nuclear Safety Authority).

To keep a close watch on its transportation activities, the Nuclear Packages and Services BU employs a "transportation oversight" process at the group level whose purpose is ensure that the transportation, safety, physical protection, media coverage and industrial risks involving Orano are under control.

The approach consists, firstly, of identifying and analyzing all the transportation flows that may present a risk to Orano. An exhaustive collection of information about all the transportation flows carried out or supervised by the group's Nuclear Packages and Services BU is made to assess the level of risk and, if necessary, to recommend actions to take.

The transportation oversight is physical and is performed, on the ground (shippers' sites, recipients' sites and trans-shipment zones, including ports and airports), by a team of qualified auditors and inspectors who review the operations of the Orano sites and group's shipping providers, including its subsidiaries, in every country where the group makes shipments. In 2018, 197 inspections and 39 audits were performed.

"Transportation oversight," through close monitoring of all shipping and the crisis unit that can be mobilized in the event of any incidents, makes it possible to take better account of any risks identified.

Nonetheless, despite all the resources deployed to ensure transportation security, the group cannot guarantee a complete lack of transportation incidents or of impacts on its operations.

3.3.5.7 Risks related to subcontracting and suppliers

Purchasing contributes greatly to the group's attainment of its economic performance objectives, in interface with the other functions in the supply chain, *i.e.* order management, supplier claims, procurement, inventory management, front-end transport and major project logistics. Purchasing also has a key responsibility in limiting supplier risk.

By the nature of the Orano group's business, the main risks to do with the procurement chain to which the group could be exposed are identified in the following areas:

- Human Rights and Fundamental Freedoms;
- occupational health and safety;
- nuclear safety and the Environment.

Lastly, for SOC suppliers (Sourcing Opportunity Countries), a poorly run SOC effort could result in procurements that do not meet the required quality standards, and potentially in financial losses.

In order to identify the suppliers and subcontractors that can potentially present risks, the group uses three basic criteria:

- the volume of annual purchases made with the supplier or sub-contractors;
- the business segment;
- the geographic location of the activity.

3.3.6 Financial risks

Orano has an organization dedicated to implementing market risk management policies approved by Executive Management for centralized management of the exposure to foreign exchange, commodity, rate and liquidity risks.

In the Finance Department, the Financial Operations and Treasury Management Department (DOFT) engages in transactions on financial markets and acts as a central desk that provides services and manages the group's financial exposure. The organization of this department ensures the separation of functions and the necessary human, technical, and information system resources. Transactions handled by DOFT cover foreign exchange and commodities trading, interest rates, centralized cash management, internal and external financing, borrowings and investments, and asset management.

3.3.6.1 Management of assets involved in end-of-lifecycle operations

The group holds a portfolio of financial assets (equities, bonds, investment funds and third-party receivables) to fund operations related to its future end-of-lifecycle obligations.

Despite the group's prudent management strategy for earmarked assets, outside economic factors may have an unfavorable impact on the coverage ratio of end-of-lifecycle liabilities by earmarked assets, and thus the group's financial position. Such factors may involve:

- an unfavorable development in the financial markets that could pose a risk of lower performance of the assets versus the assumptions currently retained;
- a reduction in the discount rate or any other change in regulations related to the earmarked assets.

An unfavorable change in end-of-lifecycle provisions (see risks related to end-of-lifecycle operations in 3.3.5.2) can also impact the coverage ratio of these end-of-lifecycle liabilities.

If the earmarked assets are insufficient coverage for the liabilities, the group has a maximum of three years, after notification by the Administrative Authority, to supplement the earmarked funds so as to restore the liability coverage ratio above 100%. The additional funding would result in an unfavorable effect on the group's cash flow and net financial debt.

3.3.6.2 Counterparty risk related to the use of derivatives and to the investment of cash management

The group is exposed to the risk of counterparties linked to cash deposited with banking institutions and the use of financial derivatives to cover its risks.

The group uses different types of financial derivatives to manage its exposure to foreign exchange and interest rate risks. The group primarily uses forward buy/sell currency contracts and rate derivative products, such as swaps, futures and options, to cover these types of risk. These transactions involve exposure to counterparty risk when the contracts are concluded over the counter.

In addition, almost all of the group's cash is centrally managed, in accordance with an internal policy which defines authorized products and placements. The group's cash is exposed to counterparty risk, primarily banking risk.

To minimize these risks, the group's Treasury Management Department deals with diversified, top-quality counterparties based on their ratings in the Standard & Poor's and Moody's rating systems, with a rating of Investment Grade. Moreover, a framework agreement, for example, is systematically put in place with counterparties likely to deal with derivatives.

The limits allowed for each counterparty are determined based on its rating and the type and maturity of the instruments traded. Assuming the rating of the counterparty is not downgraded earlier, the limits are reviewed at least once a year and approved by the group's Chief Financial Officer. The limits are verified in a specific report produced by the internal control team of the Treasury Management Department. During periods of significant financial instability which may entail an increased risk of bank default and which may be underestimated by ratings agencies, the group tries to monitor advanced indicators such as the value of the credit default swaps (CDS) of the eligible counterparties to determine if limits should be adjusted.

To limit the counterparty risk on the market value of its commitments, the group has set up a mechanism for margin calls with its most significant counterparties concerning interest rate transactions (including foreign exchange and interest terms and conditions).

3.3.6.3 Risk on shares and other financial instruments

The group holds publicly traded shares in a significant amount and is thus exposed to changes in the equity markets.

Publicly traded shares held by the group are exposed to the risk of volatility inherent in equity markets.

At December 31, 2018, there was in particular a significant number of shares in the investment portfolio earmarked for end-of-lifecycle operations.

The risk of a decrease in the price of shares and of other non-current financial assets is not systematically hedged.

The risk on shares held in the portfolio of assets earmarked for end-of-lifecycle operations is an integral component of asset management, which uses shares to increase long-term returns as part of its allocation between bonds and equities.

In addition, the group is exposed to changes in the value of other financial instruments in its portfolio, in particular bonds and investment funds held in the portfolio earmarked for end-of-lifecycle obligations.

For more information, please refer to Appendix 8.1 *Notes to the consolidated financial statements*, Note 28. Financial instruments.

3.3.6.4 Foreign exchange risk management

In view of the geographic diversity of its locations and operations, the group is exposed to fluctuations in exchange rates, particularly the euro/US dollar exchange rate. The volatility of exchange rates may impact the group's currency translation adjustments, equity and income. The value of the US dollar in relation to the euro appreciated by approximately 5% between December 31, 2017 and December 31, 2018.

The Business Units with significant exposure to the risk of the US dollar's depreciation against the euro are Mining and Chemistry–Enrichment, due to their geographically diversified locations (local currencies: euro/FCFA, Canadian dollar, tenge kazakh) and to their operations denominated primarily in US dollars, which is the reference currency for worldwide prices for natural uranium and uranium conversion and enrichment services. The foreign exchange risk to be hedged is managed globally by Business Unit and is net (some requirements in different directions of the same currency are offset, providing a natural hedge). For medium/long-term exposure, the amount of the hedge is set up according to a gradual scale for a duration based on the highly probable nature of exposure, generally not to exceed five years.

As provided in the group's policies, operating entities responsible for identifying foreign exchange risk must initiate hedges for currencies other than their own accounting currency exclusively with the group's Treasury Department, except as otherwise required by specific circumstances or regulations. DOFT thus centralizes the currency risk for all entities and hedges its position directly with banking counterparties. A system of limits, particularly concerning authorized foreign exchange positions and results, marked to market, is monitored daily by specialized teams which are also in charge of valuation of the transactions.

For more information, please refer to Appendix 8.1 *Notes to the consolidated financial statements*, Note 28 *Financial instruments*.

3.3.6.5 Interest rate risk management

The group's exposure to fluctuations of interest rates encompasses two types of risk:

- a risk of change in the value of fixed-rate financial assets and liabilities; and
- a risk of change in cash flows related to floating-rate financial assets and liabilities.

The group uses several types of derivatives, depending on market conditions, to allocate its borrowings and investments between fixed rates and floating rates, with the goal being mainly to reduce its borrowing costs while optimizing the management of its cash surpluses. The group's rate risk management policy, approved by Executive Management, is supplemented by a system of specific limits for asset management and the management of rate risk on borrowings. In particular, the system defines authorized limits for portfolio sensitivity, authorized derivatives for managing financial risk, and subsequent positions that may be taken.

For more information, please refer to Appendix 8 .1 *Notes to the consolidated financial statements*, Note 28 *Financial instruments*.

3.3.6.6 Price movements of uranium, enrichment and conversion

Fluctuations in the prices of uranium, uranium conversion and uranium enrichment could have a significant negative or positive impact on the financial position of the group's mining, enrichment and conversion operations.

Historically, the prices of uranium and of conversion and enrichment services have undergone significant fluctuations. These relate to factors outside the group's control. These factors include demand for nuclear power; economic and political conditions in countries which produce or consume uranium, including Canada, the United States, Russia, other CIS republics, Australia, and some African countries; nuclear materials and used fuel treatment; and sales of surplus civilian and defense inventories (including for example those from the dismantling of nuclear weapons).

If the prices for natural uranium, conversion and enrichment were to remain below production costs over a prolonged period, this could have a negative impact on the group's mining operations and uranium conversion and enrichment operations.

3.3.7 Risks related to human resources

Securing critical skills, attracting new talent at all levels of experience, adapting the workforce to needs, and also identifying the skills which the group will need tomorrow for its development, are all fundamental challenges for human resources. To take full account of this risk, the group has taken a comprehensive approach primarily involving tightly coordinated skills management; a proactive, diverse and conspicuous hiring policy; an expanded and digitized set of training courses; and development of a pool of experts in conjunction with the other leaders in the nuclear industry (EDF, the CEA, *etc.*) (see details in Section 4.1 of Chapter 4).

Now that the major re-organizations have been achieved (2015-2017), the group strives to remain attractive, in a context of global mobilization against climate change, of public debate on nuclear energy and of internal transformation. The group thus started recruiting again in 2018, with a target of 1,500 recruitments including 800 permanent employees and 500 on work-study contracts. It also is developing a wage policy that rewards individual and group commitment and takes into account employees' special hardships and individual situation.

3.3.8 Risks associated with corruption and influence peddling

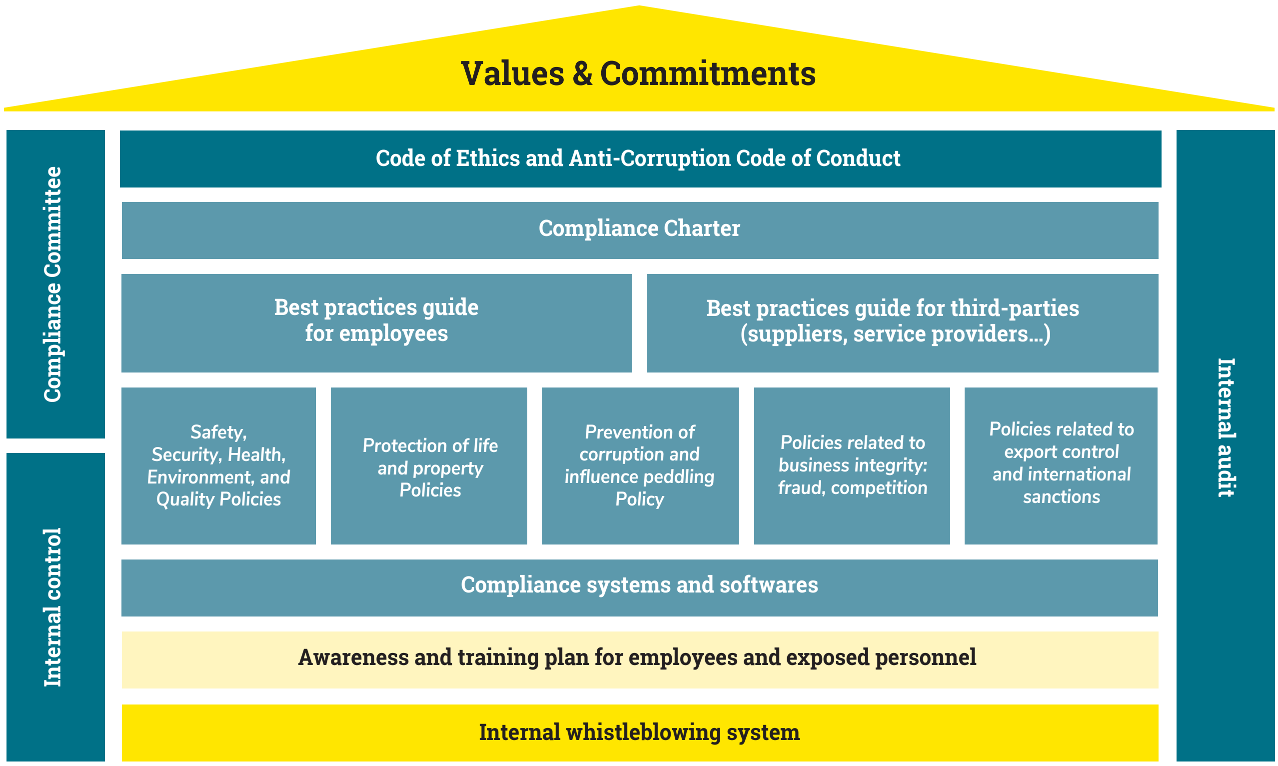
Orano seeks to be an exemplary group in terms of Ethics and Compliance. Accountability, fairness and openness to dialogue characterize the group's conduct.

The group's geographic footprint and nature of operations, could expose Orano to the risks of violating applicable laws and regulations, including those related to corruption and influence peddling, as well as risks of failing to comply with its internal ethical and anti-corruption rules. Such failures might expose the group or its employees to criminal or administrative sanctions and could harm its reputation and financial results.

To prevent Orano from such risks, the group implements an approach based on a culture of integrity, a compliance program, strict rules of conduct and in-depth training and awareness plan that support compliance with current regulations (particularly the French *Devoir de Vigilance (Corporate Duty of Care)* and Sapin II laws).

Specifically, the Compliance Department, with the support of the management and its compliance correspondents network, defines and oversees the implementation of a corruption and influence peddling prevention program, with policies and associated procedures. Its implementation is detailed in Chapter 4.2 *Societal information*, Section 4.2.1 *System for the prevention of corruption and influence peddling*.

ORANO'S COMPLIANCE PROGRAM



Source: Orano

3.3.9 Risks of tax evasion

In every country and region where it does business, the group ensures that it complies with applicable tax laws and that, pursuant to applicable regulations, the right amount of tax based on the taxable income it earns is paid. It further ensures that the principles enunciated by the OECD, as written into national legislation, are observed whenever it undertakes cross-border transactions.

Against this backdrop, the group holds equity securities in two companies established in low-tax countries:

- a very minor stake in a holding company based in Jersey, with no participation in its financing. Its purpose is financing the development of a mining company in Africa, which has yet to begin operating;
- all of the capital in a holding company established in the British Virgin Islands. Today, it holds only the securities of the group's Namibian subsidiaries, but does not finance them.

Both associates are inherited from acquisitions completed in 2001 and 2007, and these structures are not meant to last.

Also note that the group owns three companies in Namibia, a country that the European Union has placed on its NCST list (Non Cooperative States or Territories), all three created to conduct industrial or commercial business on the local market and not for tax purposes.

SOCIAL, SOCIETAL, AND ENVIRONMENTAL ISSUES

4

The commitments of the Orano group, which includes Orano SA and the consolidated companies, are deployed through various policies in the fields of human resources – diversity – security – occupational health and safety – environment as well as in ethics matters. For its corporate plan, Orano has defined the values that must be embodied by all of its employees. Of these values, integrity governs Orano's practices and decisions in all circumstances. These various policies and codes serve to organize the company's activity in accordance with Human Rights and the interests associated with environmental protection and the laws that govern them. Orano strives for the continuous improvement of its performance in all these areas, specifically safety and security, and considers the expectations of its stakeholders directly or indirectly involved in the group's activities.

Orano also upholds its proactive progressive approach to mining activities by following international CSR best practices as conveyed by the ICMM (International Council on Mining and Metals).

The results of the vigilance plan as required by the Corporate Duty of Care law are presented in the various sections on the prevention of serious abuses of human rights and basic freedoms, infringements of personal health and safety, and damage to the environment, related to Orano's activities, as well as to our subcontractors and suppliers (see cross-reference table in Appendix 8.9).

4.1 Workforce present in France and internationally

4.1.1 Total workforce and distribution by gender, age and region

The Orano group had 18,793 employees at December 31, 2018, versus 19,145 employees at the end of 2017.

BREAKDOWN OF REGISTERED EMPLOYEES BY BUSINESS WITHIN THE GROUP'S CONSOLIDATION SCOPE	2018	2017
Mining	2,819	3,179
Front End (Chemistry, Enrichment)	2,550	2,693
Back End (Recycling, Dismantling and Services, Logistics, Projects)	12,388	12,212
Corporate and other operations (incl. Medical)	1,036	1,061
TOTAL	**18,793**	**19,145**

More than 98% of the group's workforce is spread over five countries: France, Kazakhstan, Niger, USA and Canada.

EMPLOYEES BY GENDER*	2018	2017
Women (global)	21.5%	20.9%
Men (global)	78.5%	79.1%
Women in management positions	27.7%	27.2%
Women in non-management positions	18.9%	18.2%
EMPLOYEES BY AGE GROUP*		
Less than age 21	0.1%	0.04%
21 to 30 years old	13.6%	12.0%
31 to 40 years old	29.6%	29.8%
41 to 50 years old	26.1%	26.3%
51 to 60 years old	28.8%	29.8%
More than 60 years old	1.9%	2.0%
EMPLOYEES BY REGION*		
France	79.8%	78.4%
Asia-Pacific	7.9%	8.0%
North and South America	6.5%	6.7%
Africa and Middle East	4.9%	6.0%
Europe (excluding France)	0.9%	0.9%
EMPLOYEES BY OCCUPATIONAL CATEGORY*		
Engineers and management staff	30.0%	29.2%
Technical and administrative personnel	51.9%	52.1%
Skilled workers	18.2%	18.6%

* *Percentage calculated based on employees working under open-ended employment contracts.*

4.1.2 Tighter steering of skills

In 2018, the skills management initiative, begun in 2016 during the group's restructuring, adjusted to more mature context in which the company displayed its new identity and "employer brand" to a degree not achieved over the previous three years. The resumption of hiring begun in 2017, due specifically to turnover stimulated by the voluntary departure plans, was stepped up in 2018 with a volume exceeding 900 hires on permanent contracts in France, driving a slight net growth in capacities in France.

A key action in the strategic action plan of New AREVA, now Orano, and its annual Master Plan, skills management is now developed in four well-established action areas:

- skills steering process;
- hiring policy;
- training, digitization, and skills transfer; and
- development of the "expertise" network.

Continuing to supplement these four areas is a cooperation initiative with CEA, EDF, Framatome, and several companies in the segment, involved within the framework of the PFN (French Nuclear Platform) and the GIFEN (French Nuclear Energy Industry Group). GIFEN was recently established with manufacturers in the industry and is pursuing measurable results.

In addition, spearheaded by the French National Industrial Council (CNI), the French nuclear industry has developed an action plan around some high-stakes infrastructure projects including the guarantee of the skills and expertise required for an attractive, reliable, and competitive nuclear industry. On January 28, 2019, these commitments resulted in the signature of an industry contract between the French State, EDF, CEA, several labor unions, and Orano, as an active contributor to the development of a sustainable, innovative nuclear industry rich in highly technical jobs in the territories.

Skills steering process

Since 2016, the critical skills management initiative has been based on a network of "Key Discipline Leaders" tasked with diagnosing the situation of the company's main disciplines and spurring the necessary action plans with the Human Resources Department.

In 2018, the skills initiative was further developed with the systematization of annual skills reviews, conducted by management with the support of the Key Discipline Leaders and experts at each of the company's sites. The initiative now fits perfectly within Orano's management cycle, with annual reviews supplying the preparation phase of professional development, training, and hiring plans.

During the annual skills reviews, the degree of mastery (or "criticality") of each of the technical business lines, fields, and sub-fields is measured on the basis of a common benchmark, constructed around five criteria:

- workforce shortages;
- level of experience and skills required with regard to need;
- demographic risks (age pyramid, *etc.*);
- attractiveness of the business line; and
- significant technological developments.

The report prepared in December 2018 shows a number of changes from the previous year. The overall impact of the demographics, the combination of organizational changes for cost control, regulatory or Safety authority requirements, and efforts at team stabilization or skills enhancement remain a source of observable shortages in most of the business lines.

The actions carried out in 2018 have relieved the business lines of any "urgent" criticality. Seven business lines are at a "high" level of criticality compared to eight last year.

A dynamic hiring policy

In 2018, there were 1,174 new hires on permanent contracts, of which 951 in France, *i.e.* 233 more than the previous year. This hiring volume allowed for a slight net increase in the active permanent workforce in France over the period (12,703 vs. 12,424), focused on two Business Units, namely Projects (+108) and DS (+137). Of these new hires, 415 were in business lines considered "critical."

In 2018, in France, the percentage of management hires rose by nearly 10 points to more than 40%, reflecting the recovery in work-study (nearly 700 work-study personnel of which some 430 new hires in 2018) and the development of relationships with 26 target schools and universities, with the establishment of a network of ambassadors and participation in fifty-odd forums. On November 6, a forum dedicated mainly to engineering business lines ("Orano hiring"), held in the Velodrome of Saint-Quentin-en-Yvelines, drew more than 800 candidates, more than 150 of whom passed the initial screening.

Generally speaking, weekly application volumes have withstood the group's name change on January 23, 2018, with an average of close to 500. The attention paid to the "employer brand," the use of social media and associated tools (Facebook, LinkedIn, *etc.*) are new areas to watch and invest in over the long term.

4.1.3 A proactive policy for developing and digitizing the training offer

To make Orano a "learning company," a proactive training development policy is under way. In 2018, AREVA University refocused on managerial programs, becoming École du Management (Management Institute), when the field of technical training programs was entrusted to École des Métiers (Technical Institute), reporting to the Training Department.

In 2017, an initial inventory of the training offer afforded greater exposure to 250 training programs through a digital platform, using architecture re-engineered for the group's new scope. Sixteen career entry paths were created around the cycle's business lines in Safety, Engineering, Project Management, and more. In 2018 an important step was taken in four respects:

- a single training management tool was launched in mid-September 2018 and became fully operational as a result of the launch of the 2018-2019 annual interview campaign. In addition to traceability and the matching of training histories with employees regardless of which company they belong to, the tool is now used to better align the annual interview with the training plan. Consultation of the catalog, and the training goals agreed on during the annual interview, are brought directly into the year's training plan, to closely align the achievement with the need;
- a group training catalog, the backbone of the tool, has been developed with a little over 2,700 internal and external actions, classified in 12 topics, eight of which are technical. The offer will be updated over time through combined steering between a cross-cutting Key Discipline Leader and a task leader from the Shared Services Centers. A monthly schedule is currently in place to ensure the greatest consistency between training supply and demand while promoting the convergence of actions;
- the process of digitizing and modernizing the offer was pursued with the construction of a dozen new career paths and the use of Massive Open Online Courses (MOOC). A MOOC entitled "*Culture digitale tout public*" (All Access Digital Culture) including three virtual classes had 549 enrollments with 207 employees certified at the end of the three-week program. Preparation of a "*Procédés du Cycle*" [Processes of the Cycle] MOOC was begun with Orano's Experts. Some 40 modules are planned from 2018 to 2020; a pilot was launched in the summer with three modules. For each of the process-oriented modules, three sequences of about 10 minutes are planned: one on the scientific phenomena at work, one on the processes implemented, and one illustrating the feedback on the choices made, with a focus on the 'why' of the in-depth topics;
- finally, the population of internal training staff underwent a support program. An initial inventory of the internal training staff (who are involved for a total of at least two to three days per year) was taken and a day-long event was held in each of the group's three employment areas in October and November. Almost 200 employees acting as trainers in various capacities, shift supervisors, specialists, and experts, participated in this event and its dedicated workshops designed to create a network, to strengthen the educational standard of internal training, and to introduce trainers to the proper use of digital tools. A certification program for the internal training staff is under review for 2019.

Total hours of training

In France, more than 465,000 hours of training were provided in 2017, giving an average of 34 hours of training per employee (compared to 33.6 in 2016). This figure is expected to remain stable in 2018 based on the course completions on record at the end of the year.

4.1.4 A wage policy that emphasizes individual and collective commitment factors, particular constraints and individual situations of employees

Compensation and trends

The compensation policy, meant not only to reward the employees around the world but also to attract and retain people with skills useful to the group, is based on three pillars: compensate performance, provide fairness within the group, and contribute to Orano's attractiveness, particularly on the market for technicians, managers and engineers.

In France, total compensation is broken down into:

- fixed compensation: base salary, seniority benefits, *etc.*;
- variable compensation: that may be job based (hardship allowances, on call pay, *etc.*) or based on individual performance (bonus/variable component or allowance) or based on collective performance;
- employee benefits: health and insurance benefits that are identical for all companies;

- mandatory and optional profit-sharing based on criteria for rewarding collective performance and involving the employees in the financial performance of the Company.

In the United States, the variable portion takes several forms:

- Short-Term Incentives, which corresponds to the French variable portion;
- Long-Term Incentives, which is a program for retaining executive talent;
- the All Employee Incentive Plan, which applies to all employees not covered by the two previous points.

Compensation, particularly in France, is based on industry agreements and collective bargaining agreements. Every year, the budget for wage increases is negotiated with the labor unions. In France, after two years of stringent budget restrictions, a budget of wage measures amounting to 1.6% of the payroll was negotiated for 2017 across the Orano group within the framework of New AREVA's 2017 labor agreement. This rate was brought up to 2% for the 2018 year.

Variable compensation

The group's variable compensation program, based on both collective financial performance and individual objectives, is gradually being brought into alignment and expanded to include all of Orano's entities around the world. The target percentages for variable compensation depend on local practices and are structured by level of responsibility.

In view of the group's financial and economic situation, the policy for the variable component was adjusted for the collective component and guidelines were given for the individual component as a reminder of the importance of selectivity and of the employee's performance level in his or her evaluation.

A suite of HR software interfaced with the annual performance interview is used to collect individual objectives. It is used by a majority of group entities in the following countries: Canada, China, United States, France and the United Kingdom.

Employee savings plans and collective performance

The group establishes collective compensation systems based on economic indicators and entity-specific criteria, according to local practices and legislation.

In France, compensation based on collective performance takes the form of optional profit-sharing agreements and of mandatory profit-sharing plans applicable to the group's companies. The sums distributed in 2018 for 2017 represented a total of close to 10.3 million euros for all the companies in the Orano group. Employees chose to invest 69.7% of the optional profit sharing and 70.1% of the mandatory profit sharing paid in 2018 into the AREVA SA savings plan (see below).

Furthermore, in all of the group companies, optional profit sharing was capped at 4% of payroll, with the trigger for calculating optional profit sharing based on a financial criterion.

2018 brought the first group profit-sharing payout for 12.7 million euros and the implementation of the "better fortunes clause," allowing the distribution to employees, in the form of added profit sharing, of a portion of any positive difference between the net cash flow realized and the net cash flow expected in the budget and in the financial projections. This measure represented 22.1 million euros.

Corporate savings plan and investment vehicles

In France, a Group savings plan (AREVA GSP) common to all of the AREVA SA group's companies was created in 2005. The AREVA GSP consists of a complete range of funds covering all asset categories. It includes a money market fund, a bond fund, an equity fund, a social responsibility fund and three diversified funds. A diversified pool of fund managers was sought to optimize investor returns. This plan is still in force at Orano for the period post July 27, 2017. The Orano group's share of funds outstanding in the AREVA GSP represented more than 319 million euros at December 31, 2018.

On January 1, 2019, an Orano GSP was established following the signature of an agreement with labor and management.

In the United States, a "401(K)" retirement plan allows employees to voluntarily save for their retirement. Orano's contribution to the plan comes to 3% of each employee's salary. The company also matches 100% of the employee's contributions for the first five percentage points of the employee's contributions.

4.1.5 Quality of work life, a constant focus of attention for the group

Orano places particular importance on the working conditions of its employees, by being attentive to their well-being and aware of the impact the quality of work life has on performance. The group considers these topics to be an essential component of social dialogue and as such are part of regular discussions and negotiations with the employee representatives.

4.1.5.1 Organization of social dialogue, in particular procedures for information and consultation of personnel

The group's labor relations are founded on mutual respect and dialogue. They take into account the requirement for competitiveness, performance improvement and the well-being of employees. In that spirit, management and the labor partners met on a regular basis throughout 2018, in various bodies:

- the new works committee created at Orano; and
- regular meetings with central union coordinators on the PPE, the information and consultation procedure for special negotiations or negotiations that are carried out in the group's different entities (Prisme project, information and consultation of employee representatives on the grouping of companies in the DS BU and its impact on employee status, *etc.*).

4.1.5.2 In search of better work/life balance

In countries in which the group is based, the average number of working hours per week is generally set by law.

France set up initiatives for a better balance between work and personal life by offering flexible work hours at the site or work at home.

For example:

- in France, on July 4, 2013, AREVA SA signed a telecommuting addendum to the group's agreement on the Quality of Working Life of May 31, 2012. This addendum regulates the use of telecommuting. It promotes a better balance between work and personal life. It helps improve the quality of working life and keeps disabled employees at work or in therapeutic part-time. It continues to apply to the activities of Orano. At the end of 2016, nearly 280 employees from all of the Orano group's sites benefited from this new work organization. A telecommuting survey was conducted with the 485 managers and employees concerned. The answers obtained (61% participation rate) will go into the discussions leading up to the renegotiation of this agreement in 2019. In addition, a significant number of facilities employ a variable schedule;
- in the United Kingdom, full-time employees work an average of 37 hours per week. Overtime is not paid. Orano authorizes telecommuting in exceptional circumstances. This working-hour arrangement is possible under certain conditions for employees who have completed their trial period;
- in the United States and China, the standard work schedule is 8 hours per day, *i.e.* 40 hours per week.

Status of collective bargaining agreements

In France, labor unions and management pursued the contractual policy in 2018 by signing:

At group level:

- a unanimous agreement on the introduction of a new group health and accident/disability insurance scheme (September 7, 2018);
- a unanimous agreement on the introduction of an Orano group savings plan (October 1, 2018);
- an agreement on the measures to be introduced to accompany the transfer of employees from the home office to Prisme (October 2, 2018) as well as an agreement on methods. This agreement stipulates the expansion of teleworking, improvement in the CESU policy, and bonuses design to promote mobility;
- a unanimous agreement on supporting people with disabilities (May 14, 2018);
- a unanimous agreement on the introduction of the workplace health facility (June 20, 2018); and
- a mobility agreement in January 2018.

At Orano Projets:

- an agreement on transport conditions within the Orano Projets company signed on October 5, 2018.

As well as:

- agreements on the introduction of the first CSE (Economic and Social Committee) at Orano Cycle, Temis, Orano Projets, and TNI; and
- agreements within the DS BU for the introduction of a single status for all employees in the BU.

Employee satisfaction

In 2017, Orano established an annual commitment barometer called OranoVox, distributed to 15,000 employees in 13 countries, virtually the entire group.

The second annual barometer conducted in the spring of 2018 showed a seven-point jump on average over 2017, including +8 points for engineers and management staff and +6 points for skilled workers and significant improvement on nearly all the 33 items. Orano employees showed greater satisfaction with managerial opportunities (+10 points), interest in their work (+6 points), managerial communication (+9 points), and security/safety standards (+9 points).

4.1.5.3 A company that is attentive to the fight against discrimination, promotion of equality, and inclusion

As a socially committed corporate citizen, Orano places particular importance on eliminating all risk of discrimination and violations of human rights. It has developed its own provisions for reporting and whistleblowing.

In terms of discrimination and human rights violations, the three main categories of risk factors are:

- non-compliance with the obligations of the Labor Code and collective agreements;
- discrimination, per the 24 criteria defined by the French Labor Code, along with a special whistleblowing system; and
- occurrences of occupational stress (OS), sexual or non-sexual harassment, and sexist behaviors.

Regarding discrimination, a risk mapping has been drawn up at the Orano France level, showing where the 24 discrimination factors intersect with the four main HR areas. These are recruitment/hiring, career development, training and compensation, plus the employment climate of the Company.

Concerning OS, a grid showing the human impact of corporate change is drawn up in the event of significant change in the organization, in terms of the factors of occupational stress, with an associated plan of action (for example, as part of the voluntary departure plans and associated reorganizations, some one hundred grids were drawn up).

In accordance with the Code of Ethics of Orano, the group has and implements a process of ethics and respect for Human Rights and the fundamental conventions of the International Labour Organization (ILO). The Code of Ethics is updated regularly to include best practices in light of changes in the group's national and international environment. Individual behaviors and management activities may be audited for compliance with the Code, which serves as a set of standards and a code of conduct in this regard, and also introduces the group's internal whistleblowing system which will be reinforced in 2019.

By explicitly reiterating these tenets, Orano underscores its commitment to these international values and principles, which every employee is expected to uphold.

Orano respects the principles of the United Nations Global Compact, and, as such:

- respects the freedom of association and the right to collective bargaining;
- works for "the elimination of all forms of forced or compulsory labor"; and
- works for "the effective abolition of child labor".

In general, HR processes concern the diversity and non-discrimination policy as a whole and particularly verification that managerial decisions affecting employees are made according to the principle of equal treatment.

In France, an audit was carried out in the first quarter of 2014 for the renewal of the Diversity Label granted to the AREVA group (of which Orano was a part until July 27, 2017). The certification was confirmed for a four-year period on July 6, 2014. In particular, the auditors validated the sustainability and maturity of the group's approach to diversity and appreciated its evolutionary nature and its alignment with changes in the group. The follow up audit initially scheduled for mid 2016 was postponed to the first half of 2019 due to the transformation plan. It will be carried out solely for the Orano scope of consolidation.

In the United States, Orano is recognized as an Equal Opportunity Employer (EOE) by the US Equal Employment Opportunity Commission. A proactive anti-discrimination and anti-harassment policy is also carried out, and the Human Resources Department offers special training in this regard. It expresses its commitment to minorities, women, seniors, veterans and people with disabilities through various measures, such as partnerships with subcontractors committed to diversity, membership in Direct Employers (an employment agency dedicated to helping recruit minorities, women, veterans and persons with disabilities), and participation in training and employment initiatives.

Gender equality

In France, AREVA SA signed its first group agreement in favor of gender equality on December 12, 2012. This three year agreement addresses all of the issues covered by the French law of November 9, 2010: promoting gender equality in hiring and employment, guaranteeing equivalent career paths to men and women, guaranteeing equivalent compensation and promotions, ensuring equal access to training, improving the work life balance, increasing employee awareness, and communicating with employees. It was renewed on June 28, 2016. Negotiations for its renewal began at the end of 2018.

The agreement provides for an equal opportunity budget used to offset unjustified compensation gaps at equal levels of responsibility.

Orano sets a particularly high value on women's career development. In addition to having women join their teams, Orano takes care to ensure their fair promotion for equivalent skills throughout their careers. As such, an investigation of the data extracted at the end of May 2018 by APEC reveals that the wage gap between women and men with identical profiles at Orano is 1 point for executives and 2.7 points for non-executives, compared to 9 points nationwide.

Employment of and support for the disabled

Since 2006, the AREVA group has led a group policy in favor of developing all talents and of openness to difference in the workplace. A disability mission was integrated into the Social Strategy, School Relations and Diversity Department in 2010, and this policy is deployed within each establishment by a diversity/disability leader. Through the policy for integrating people with disabilities, the group integrated more than 500 employees with disabilities between 2006 and 2017, despite the major restructuring plan the group underwent between 2015 and 2017.

On April 25, 2017, a fourth agreement was signed with the labor partners, covering the whole of the AREVA group, but only for 2017 (interim one-year agreement). A first three-year agreement solely covering the Orano scope was signed unanimously in May 2018 and was later approved by DIRECCTE.

Anti-discrimination: Whistleblowing system

As set out in the Code of Ethics, employees have multiple paths of recourse in connection with the group's anti-discrimination measures. They may contact their local HR manager, their manager, the occupational health unit, the Compliance Director, or the labor partners.

To facilitate the reporting of any discrimination or discriminatory behavior and to comply with the obligations under the Diversity Label, Orano's Human Resources Department has deployed an Alerts and Claims Procedure in France. This system supplements other internal corporate systems to report actual or alleged discrimination in the group. It follows rules and a process and is the subject of authorization by the National Commission on Informatics and Liberty (CNIL).

In 2019, these whistleblowing provisions are to be integrated into a more general Orano internal ethics alert procedure (see 4.2.1.6).

Principal gender equality indicators	2018	2017
Recruitment of women on permanent contracts	27%	27%
of which Engineers & Management personnel	35%	40%
BU Management Committees and support functions	25%	25%

To find out more about the gender balance and diversity policy applied to the members of the Board of Directors, see Section 5.2.3.

In terms of the employment and inclusion of people with disabilities, a proactive policy allowed the achievement of an employment rate of 5.12% in 2017, compared to 2.7% in 2007. The 2018 figure will be known in March 2019.

In the area of fair treatment, in 2016 and 2017 nearly 250,000 euros were spent on reducing unjustified discrepancies. A special purpose budget was again included under the New AREVA 2017 labor agreement "*Contrat social New AREVA 2017*".

In terms of the fight against discrimination in France, four alerts were reported in 2018 (including two through the Alerts and Claims Procedure), compared to eight in 2016 and ten in 2017. After review of the two alerts from the procedure, one alert was unsubstantiated, and the second is currently under police investigation.

Concerning occupational stress, a process for including these in the "corporate single document" (French acronym DUE) is under way. The process and training are now in effect, and task leaders are about to be hired.

4.1.6 Occupational health and safety

The 2017-2020 health, safety, and radiation protection policy applies to all entities of the Orano group.

There are provisions for monitoring the occupational health of expatriate or long-term contract employees. They cover medical follow-up before, during, and on return from expatriation. In case of injury or illness, a global insurance contract through Europ-Assistance provides employees with assistance and/or repatriation.

Workplace health in France is coordinated in a group Health Department, which, to be more effective, has national responsibilities. This service covers more than 60% of employees. The other employees are monitored either by CEA or by inter-firm medical providers.

The functioning of the group's Occupational Health Service has reached maturity, and feedback is being used to arrange the employee supervisory grid. These updates are made within the framework of the governance of the Health Service (National Commission for Follow-up and Control and Standing National Committee on Occupational Health), which includes management and labor.

The prevention of occupational stress is integral to this initiative. As part of its OS prevention policy, Orano has set up approximately 35 drop-in centers open to all employees in France. A specific program has been set up in coordination with the Insurance Department for expatriate personnel and their families.

Occupational health and safety data

Occupational safety data	2018	12 months 2017
Accident frequency rate with lost time (excluding commuting accidents)	1.5	2.4
Accident severity rate (accidents reported during the year, excluding commuting accidents)	0.03	0.07
Number of fatal accidents	0	1

Radiation protection and occupational disease* data	2018	2017
Average employee exposure over 12 consecutive months to radiation (mSv)	0.86	0.8
Total individual external dose over 12 consecutive months for Orano employees (man-mSv)	8,360	8,016
Total individual internal dose over 12 consecutive months for Orano employees (man-mSv)	3,374	3,259
Average exposure over 12 consecutive months of subcontractors to radiation (mSv)	0.47	0.5
Occupational disease	16	10

* *Due to the time needed to get the results of passive dosimetry analyses (also called benchmark dosimetry) and the half-year schedule for rolling up these data in the group's reporting software, the annual results are always expressed from July 1 of year n-2 to June 30 of year n-1.*

4.2 Societal issues

4.2.1 System for the prevention of corruption and influence peddling

Orano has adopted an initiative for the prevention and the continuous improvement regarding the fight against corruption and influence peddling.

Based on its corruption and influence peddling risk mapping updated in 2018, as well as on the of the ISO 37001 standard recommendations, and in compliance with the Sapin II law, Orano has established a corruption and influence peddling prevention program, steered and deployed by the Compliance Department, relying on a network of Compliance Correspondents.

This program, is dedicated to and for the application of the group's employees, managers, and executives in their relations with third-parties, and is built on the appropriation and application of the internal rules of conduct and policies and procedures, and external laws and regulations.

4.2.1.1 Tone from the Top and organizational reinforcement

The group's management, particularly the Chief Executive Officer and all members of the Executive Committee, spearhead and enforce the group's compliance policy and program.

A strong commitment, set out in the Code of Ethics, is made directly by the Chairman of the Board and the Chief Executive Officer and is to be relayed by all departments and management.

As a responsible company, the group's actions are governed by two basic principles considered to be a matter of priority, namely:

- compliance with the most demanding requirements as appropriate to accomplish our goals in matters of nuclear and occupational safety in the conduct of our activities, as well as for the protection of health and the environment; and
- compliance with the strictest standards of integrity and a commitment in fighting against corruption, fraud and anti-competitive practices without compromise.

On behalf of the Board of Directors, the Audit and Ethics Committee ensures Orano's implementation of the program through enabling the group to comply with the applicable laws and regulations related to its activities and to conduct all business ethically and responsibly.

In 2018, at the initiative of the Executive Management, to which it reports directly, the Compliance Department was reinforced with an increased workforce and greater responsibilities. This department defines and steers the implementation of its program as approved by the Executive Committee. It reports on the progress of its implementation on a regular basis, to the Executive Committee, as well as to the Audit and Ethics Committee.

This program includes:

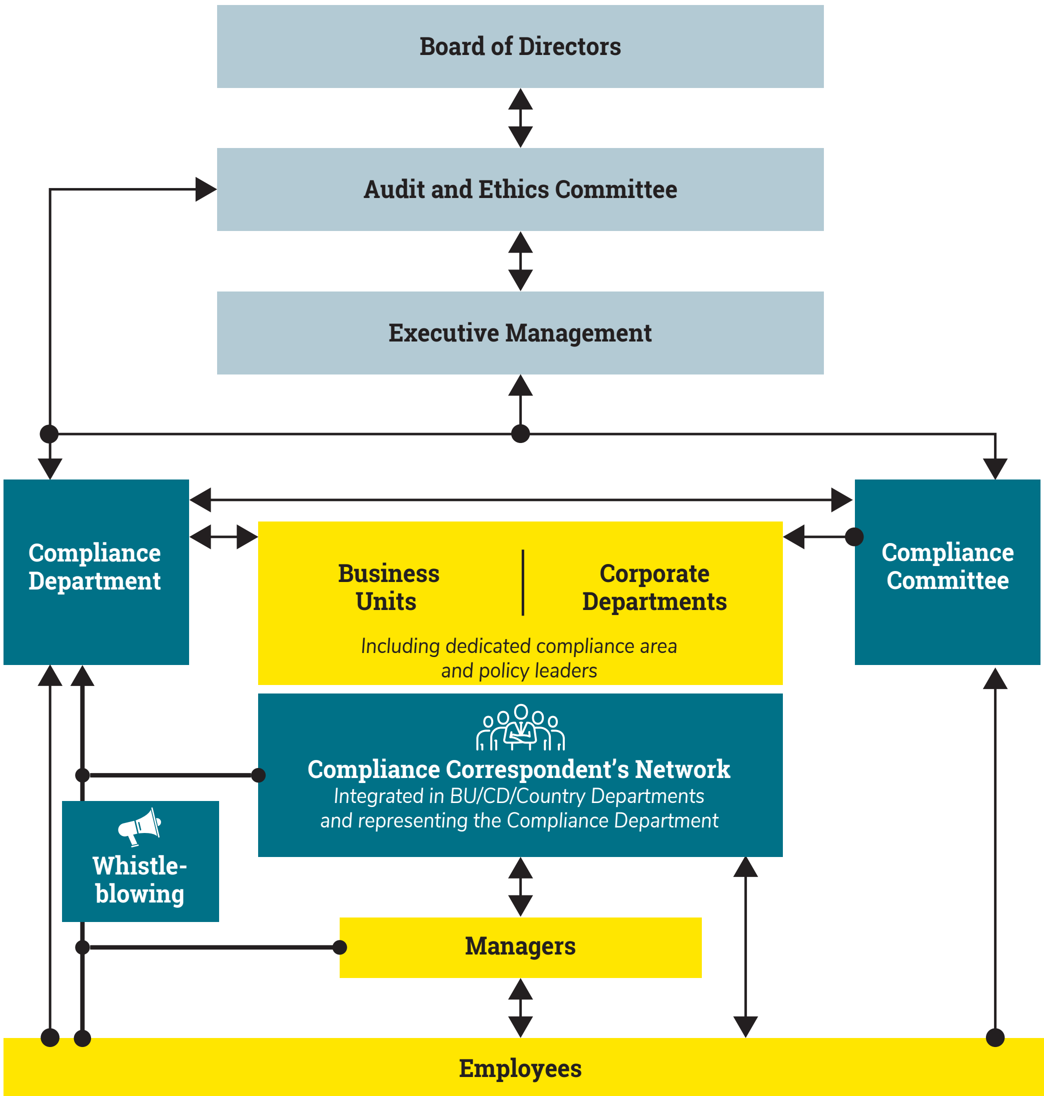
- improving and steering the compliance processes, publishing the associated procedures, setting up necessary tools when appropriate, and monitoring their understanding and application;
- leading a network of Business Units' (BU), countries' and Corporate Departments' (CD) Compliance Correspondents , and ensuring regular communication with operational managers and staff;
- developing employees' ethics and compliance culture through awareness and training campaigns; and
- improving the internal whistleblowing system.

The Compliance Committee, chaired by the Chief Compliance Officer, issues opinions and recommendations on third-party compliance assessments (under the Sapin II law) and oversees the implementation of the compliance procedures. It is composed of permanent members from the Corporate Departments. Depending on the topics, the concerned Compliance Correspondent and operationals are invited to Compliance Committee meetings.

The Compliance Correspondents, appointed by their department, relay the internal rules on ethics and compliance through their organization, and provide information and training to exposed populations. They also take part in the development of the procedures for managing identified risks, and in the operational implementation of action plans.

Finally, the group's managers play a key role in the teams' commitment to implementing the program and to its day-to-day integration.

GOVERNANCE OF ORANO COMPLIANCE



Source: Orano

4.2.1.2 Risk mapping and action plan

The risks associated with corruption and influence peddling are included in a specific risks mapping as part of the group's overall risk analysis according to three criteria: severity, occurrence, and level of control. The action plans and their prioritization are defined on the basis of this mapping.

This risk mapping update is steered by the Compliance Department in coordination with the Risk and Internal Audit Department and carried out by the BU/Country/CD using a shared method. Its results are reported to the Executive Committee and the Audit and Risk Committee and are systematically integrated into any new major project, investment or contract risk analysis.

4.2.1.3 Reference Document

The group endeavors to provide accurate and relevant information enabling objective assessment of its performance in terms of environmental, economic, social and societal responsibility. Its compliance program is aimed at developing this culture and its practice of ethics based on:

- the Code of Ethics and the Anticorruption code of conduct updated in July 2018. It is available on the intranet and on the group's website, handed to every new employee, reminded to the group's employees during their annual appraisal interview, and it is shared with all Orano's third-parties when contracting. It is the foundation of the group's compliance policy and includes Executive Management's commitment in leading an initiative to prevent and detect corruption and influence peddling. It defines and illustrates the prohibited conducts that may characterize corruption and influence peddling, based on the risks identified in the dedicated risks mapping, and distinctly reminds the disciplinary consequences and measures applicable in the event that these rules are not followed;
- a set of internal policies and procedures dedicated to preventing corruption and influence peddling (*i.e.* gifts and invitations, third-party assessments, conflicts of interest, *etc.*), disclosed and accessible to all employees *via* the group's documentation system and intranet from 2019.

4.2.1.4 Third-party relations

Business relationships with third parties (clients, intermediaries, suppliers, service providers, consultants, etc.) may incur risks of corruption and influence peddling. In order to prevent these, and in keeping with the evolution in the French Sapin II (prevention of corruption and influence peddling) and *Devoir de Vigilance* (Duty of Care) laws, the group reinforced its third-party compliance assessment policy in 2018, to proceed with their rigorous selection using appropriate verifications of their integrity, with a view to establishing ethical and long-lasting partnerships.

This process is based on the identification of corruption risk and influence peddling within the risk mapping, and the categorization of third parties and environments at risk. It applies to every new or renewed business relationship with a third party. It is steered by the Compliance Department, with support from the Compliance Network, the Business Intelligence Division, the Compliance Committee, and the relevant Business Unit, country and corporate departments, countries.

The Compliance Committee ensures that, for all business relationships with potentially at-risk third parties, the risks of non-compliance with the group's standards, particularly with the regulations on corruption, or with international rules and sanctions, are identified and managed as much as possible, in order to ensure informed operational decision-making.

4.2.1.5 Training and awareness

The Compliance Department defines and steers the deployment of an annual awareness and training plan regarding the prevention of corruption and influence peddling, in coordination with the Compliance Network.

This program includes:

- awareness sessions for the Executive Committee (about three or four times a year) and the group's Executive Management Committees (at least one annual session per Management Committee);
- in-person training sessions for the most exposed populations to the identified risks (273 people trained in 2018);
- e-learning modules dedicated to ethics and corruption prevention, for all employees of the group.

4.2.1.6 Whistleblowing system

The internal whistleblowing system is dedicated to all group employees and guarantees the confidentiality and protection of whistleblowers. Its description and operating procedure are accessible on the group intranet.

The system stipulates that if in case of any suspicion or observation of a blatant incident or breach of a statutory or regulatory obligation or a violation of the Code of Ethics or the compliance policies, employees can report it to their immediate supervisor, contact their entity's Compliance Correspondent, or the group's Compliance Department directly.

Lastly, with regard to regulatory evolutions (the French Sapin II and *Devoir de Vigilance* laws), the group launched a project in 2018 to strengthen its internal whistleblowing system by setting up a dedicated secured whistleblowing platform, which will be deployed in 2019.

4.2.2 Supplier relations and responsible purchasing

4.2.2.1 A rigorous purchasing and supplier assessment process

The group's purchasing activities are governed by the group's Purchasing and Supply Chain Process.

Suppliers are assessed and monitored as regards their reliability, quality, compliance, financial strength, competitiveness, health, safety, security, environmental performance, and ability to provide products/services that are compliant with the specified needs and requirements.

The Corporate Supply Chain Department works closely with the group's Quality; Safety, Health, Security and Environment; Legal; and Compliance Departments to ensure that suppliers meet the benchmarks such as ISO 9001, ISO 14001, OHSAS 18001, and the regulations on regulated nuclear facilities (INB Decree).

To adapt the responses to the risk levels, Orano has divided the markets into three categories using a "hazard analysis."

The level of the activity's risk determines the list of suppliers invited to bid and the measures to be taken for contract follow-up and operational supervision to ensure the control of subcontractor health, safety, environment and sustainable development requirements.

Moreover, the Purchasing Manager and the specifier must factor in the economic and ethical aspects, as well as fair competition practices, specifically by:

- promoting competition, plurality of responses, and the emergence of alternative offers;
- allowing all companies matching the bid requirements to respond without discrimination;
- applying the reciprocity principle, *i.e.* requiring of suppliers what the organization requires of itself; and
- valuing those suppliers and bids that are the best offer for what the organization is doing. When identifying needs, they must factor in the local situation, the impact on jobs and the local economy.

4.2.2.2 Commitment to sustainable development

Orano wishes to engage its suppliers in its efforts toward sustainable development.

For several years, Orano has included provisions concerning suppliers' observance of this commitment in 100% of its contracts and general conditions of purchase.

Under the terms of this commitment, suppliers agree to promote respect for human rights, labor rights (work standards, child labor, discrimination, length of workday and minimum wage) and the environment, along with a nuclear safety and security system.

Each supplier also agrees to make ongoing efforts toward progress in these areas, including corruption prevention, efforts which are taken into account when being listed as an Orano supplier.

4.2.2.3 General Terms and Conditions of Purchase (GTCP)

An integral part of all contracts signed with suppliers, the GTCP set forth the obligations on suppliers as to hygiene, safety and health protection, as well as respect of the environment. They include provisions concerning the obligations the provider must respect in terms of:

- hygiene, safety and protection of health;
- regulated substances (the REACH regulations);
- sustainable development relating to human rights, health, safety, labor law and the environment.

Non-compliance with these provisions may result in the termination of the contract or order.

The GTCP include provisions such that Orano where applicable, its customer, any third party commissioned by Orano or any duly empowered authority shall have access to the premises of the supplier, its subcontractors and suppliers for the purpose of inspections or audits of all the requirements specified in the order.

4.2.2.4 Annual outsourcing report

The Supply Chain Unit helps the group's Safety, Health, Security and Environment Department (D3SE) issue a report on the state of outsourcing in France, which is sent to the French Ministry with oversight. This report is also transmitted to the French Nuclear Safety Authority (ASN) and the French Institute of Radiation Protection and Nuclear Safety (IRSN). It reports on the inclusion of safety-security-environment requirements in the procurement process, as well as on the monitoring of authorizations, training and awareness programs for outside companies operating on Orano sites.

4.2.2.5 Specific measures of the Mines BU for hygiene, health and safety

For operations in remote areas, the Mines BU surveys the outsourcer's health care arrangements (such as occupational medicine, vaccine requirements, training in first aid, medical care, infirmary, equipment, medical evacuation plans) on the isolated sites (Kazakhstan, Mongolia).

On the production sites in Niger, dosimetric monitoring of the relevant outsourcers is provided by the Orano subsidiaries themselves, to ensure monitoring quality identical to that of its employees.

4.2.2.6 Measures in place and action plans planned in 2019

The Orano group's Supply Chain Management System integrates the duty of care prevention plan into these processes (RFI/RFQ and Supplier evaluation and tracking). The various documents and processes making up the Supply Chain Management System (Code of Ethics, GTCP, Sustainable Development Commitment, *etc.*) take into account:

- risk analyses by Purchasing market ("Hazard Table") and by country (see Orano internal "Country Compliance Classification" procedure). These analyses will be reinforced by the deployment of a compliance questionnaire;
- the plan for mitigating the associated risks before awarding the contracts (through supplier selection criteria and qualification audits, and monitoring programs during contract fulfillment);
- supplier performance metrics and the required improvement plans;
- the Ethics and Sustainable Development Commitment aspects in contract clauses, in compliance with the French Sapin II and Duty of Care laws; and
- studies performed by the group's Economic Intelligence Division, specifically for all SOC suppliers, systematically.

In 2019, a systematic supplier assessment process, adjusted to risk level (compliance, corruption, duty of care) will be deployed in coordination with the Compliance Department.

Concerning the French suppliers subject to the Duty of Care law, Orano may arrange for a study of their annual reports to verify the measures taken by them. Depending on the results of this analysis, Orano will reserve the possibility of carrying out more in-depth analyses of the companies concerned.

As regards suppliers not subject to the act, Orano will vet them further by sending questionnaires and conducting audits, if necessary.

4.2.3 Local economic and labor impacts of operations

Contributing to local economic development

Orano continues to be committed to local involvement through programs aimed at contributing to the attractiveness and economic development of the communities in which its sites are based.

Since 2016, as part of its competitiveness plan and commitments to revitalization under its voluntary departure plan in France, the Orano group has been committed to helping communities through an economic revitalization plan and programs designed to promote the emergence of new businesses and the creation of new jobs.

The framework agreement for the implementation of the revitalization, signed with the French State in October 2016, has been adopted in the form of local agreements in the following regions and departments: Ile-de-France, Manche, Aude, and the Tricastin-Marcoule platform (Drôme, Gard, and Vaucluse). The goal of the revitalization action plan is to create a thousand jobs in the areas near affected Orano sites over the 2017-2019 period.

In accordance with the company's social and environmental values, Orano draws on its knowledge of the communities and local economic development agents to carry out actions suited to the specific features of each employment area. As part of its revitalization plan, the group supports labor sectors experiencing shortages and projects led by small and medium sized businesses in the manufacturing and industrial services sector, particularly in the nuclear industry, and attaches particular importance to the sustainability of the activities generated by those projects. Local economic development actions also concern the funding of projects in the fields of training, employment support and the social and solidarity-based economy.

In all its countries of operation, Orano Mining systematically creates and coordinates organizations for dialogue and consensus-building near its sites in the form of local information commissions (CLI), site-monitoring commissions (CSS), visits, or websites. They are integral to an approach aimed at long-term dialogue with local and internal stakeholders and ensure a constructive relationship for better understanding their expectations.

Dialogue frequency depends on the results of the stakeholders' regular mapping: in 2018, in Mongolia and France on certain post-mining issues; in 2019, two stakeholders' mapping, one in Kazakhstan and one in Niger, will be led near the mining sites. To meet the expectations of the stakeholders and respond to the operational issues of Orano Mining, 3 million euros were invested in 2018 by the different entities on community investment projects.

4.3 Environmental issues

4.3.1 Environmental policy and organization

Policy

The 2017-2020 group Environmental Safety Policy defines and formalizes priorities in terms of nuclear safety, industrial security, and environmental protection. For INB – ICPE facilities and transport and service activities, its goal is compliance with regulatory requirements, mining operation controls in the broad sense, and the management performance of Orano's activities.

It has been adopted by all entities in the form of action plans at various organizational levels in these entities (BU, sites, facilities, and entities).

Cross-business actions for improvement began a few years ago:

- roll-out of intervention reliability practices (PFI);
- self-assessments of the SE culture of those involved, which are used to create training initiatives;
- increase of the field presence of managers with their teams (Managers in the Field approach);
- assessments of the compliance control on the sites at la Hague, Melox, and Tricastin;
- formalization of operating standards as close to the workstation as possible, supported by greater management involvement in the control and guidance of operating procedures; and
- intensified monitoring of service providers.

Organization

The corporate Health, Safety and Environment Department (HSE Department) spearheads a number of areas on behalf of Executive Management:

- the safety of the group's nuclear facilities (INB, ICPE, Mines) and of related activities (design, operation, dismantling, transportation, services) carried out for the group or for its customers;
- the radiation protection in the group's facilities and for all the group's service operations;
- the occupational health and safety of all of the employees of the group and of its subcontractors;
- industrial and environmental risk prevention in the group's facilities (INB, ICPE, Mines), and more generally the management of sustainable development actions;
- the management of critical events, emergencies and crisis situations.

The HSE Department draws on specific organizations within the Business Units, the operating entities and the regions to carry out its duties. The role of this network of experts is to participate actively in lobbying activities and regulatory monitoring, and to provide assistance to line managers for the implementation of their HSE performance plans.

On behalf of the Executive Management, a body of inspectors, which is independent of the chain of command, is tasked with verifying that responsibilities are correctly assumed, detecting any early signs of potential deterioration, and recommending the necessary improvements. It issues an annual report on the status of safety in the group's nuclear facilities and operations.

Through its specialists and their networks, the department disseminates information related to accomplishments, best practices and events in order to prevent risk and promote performance improvement.

4.3.2 Environmental risk prevention and control

Orano actively contributes to the circular economy by recycling spent nuclear fuel in its la Hague and Melox plants. This solution reduces waste volume and radioactivity. Recycling also saves raw materials. In France, nearly one out of ten lightbulbs works because of recycled nuclear materials. Recycling uranium and spent MOX fuel can mean 20-30% savings on raw materials. Within this same recycling process, the group places special importance on the responsible use of materials and consumables used in operations. Through the processes of extracting and separating recyclable materials (Uranium and Plutonium) in la Hague, chemicals that are used during operations (in particular nitric acid and solvents) are recovered and reused.

The uranium chemistry and enrichment phases on the Tricastin platform contribute to the principles of the circular economy, thereby economizing on raw materials, because every year, approximately:

- 5,000 metric tons of 70% hydrofluoric acid are produced by the defluorination of UF_6, then sold in the chemicals industry; and
- 1,000 metric tons of nitric acid are produced from uranyl nitrate, then shipped to the la Hague plant for reuse.

As regards biodiversity, Orano pays great attention to ensuring its preservation and includes it as a crucial issue for the compatibility of its activities with their environment. Overall, the protection of plant and animal life begins in the new project design phase, continuing throughout the facility operating period, and later into the site rehabilitation phase.

Most often located in natural areas, mining sites are most especially concerned with biodiversity protection and conservation, whether during the exploration, operation, or "post-mining" phases. The particular nature requires specific management measures. For example, for mining activities in Mongolia, the road network is reduced to the bare minimum in order to minimize the damage to biodiversity. Likewise, drilling has been improved to reduce its environmental footprint, by installing optimized platforms to avoid, or at least reduce, the number of trees cut down, and by reducing water use. When it is impossible to avoid cutting down trees when building facilities, measures are taken to reduce the impacts (selecting locations in low-vegetation areas), and even to offset them (planting Saxaul trees in partnership with local stakeholders). On a former uranium mine site located in the Cantal region, the preparations for securing an old tunnel revealed the presence of chiroptera (bats) overwintering inside. The decision was made to secure the access by installing a special grating, allowing the bats access and thereby preserving the tunnel as their shelter.

As for industrial facilities (plants), a nuclear facility's environmental impact study is updated at each stage of its lifecycle, *i.e.* upon its creation, significant modification, shutdown and dismantling. It is also reexamined (and updated as needed) at every ten-year review of the facilities. Such studies seek to characterize the potential health effects and environmental impacts of stresses and releases from the facility in question, by accounting for the particularities of the local environment (geology, hydrology, meteorology, natural and human environment, *etc.*) as well as the presence of any protected species or habitats. Accordingly, the impact study considers the presence of these remarkable zones.

To minimize its environmental footprint, including monitoring of its industrial platforms, the group acts to reduce withdrawals from the natural environment and its consumption of materials and energy, and continually searches for opportunities to recycle waste. Thus for the renovation and commissioning of its new facilities on the front end of the cycle, the best available technology is adopted, considerably reducing the withdrawals, consumption, and emissions of these activities. Compared to the Comurhex plant, the innovations of the Philippe Coste plant reduce the consumption of chemical reagents (-75% ammonia, -50% nitric acid, -60% potassium), cut water consumption by a factor of 10, and reduce greenhouse gas emissions. These investments in new technology have helped Orano achieve the targets of its environmental policy two years ahead of schedule. Since 2004, in fact, the group has reduced its greenhouse gas emissions by 80% and its energy consumption by 50%. The new plants on the Orano Tricastin site have made a particular contribution in this regard, with 96% lower electricity use and 80% lower greenhouse gas emissions.

As for chemical and radioactive releases, Orano devotes considerable resources to reducing and monitoring these releases and at the same time ensures ongoing monitoring of the environment.

The resources deployed take into account regulatory reporting requirements, including in particular declarations for the European Pollutant Emission Register (EPER), reduction of greenhouse gas emissions under the National Quota Allocation Plan, and renewal of release permits for the nuclear facilities. The amended "INB Order" of February 7, 2012 and ASN's "Environmental Decision" no. 2013-DC-360 lay down general rules related to the reporting of releases from regulated nuclear facilities and for environmental monitoring.

Regarding radioactive releases, Orano is strongly committed to the standardization program for measurements of effluent radioactivity established in 2007 by the M60 3 Committee of the Bureau de normalisation des équipements nucléaires (BNEN, the French nuclear equipment standards organization) and has designated a representative from each major nuclear site to participate in this effort.

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As regards radioactive waste: it is produced mainly during operations, dismantling and cleanup of nuclear facilities. It is characterized based on its radiological activity (very low-level, low-level, medium-level or high-level) and by the half-life of the radioelements that it contains (very short-lived, short-lived or long-lived waste). Each type of waste requires a specific management method, as shown in the table below:

<table>
<tr><th></th><th>Very short-lived
(< 100-day period)</th><th>Short-lived
(≤ 31-year period)</th><th>Long-lived
(> 31-year period)</th></tr>
<tr><td>Very low-level (VLLW)</td><td rowspan="2">Management by radioactive decay on the production site</td><td colspan="2">Near-surface storage of VLLW (Aube)</td></tr>
<tr><td>Low-level (LLW)</td><td rowspan="2">Near-surface storage of LLW (Aube)</td><td>Research carried out under French law of June 28, 2006 (near-surface disposal at 15-200 meters)</td></tr>
<tr><td>Medium-level (IL)</td><td rowspan="2">then elimination by conventional methods</td><td>Research carried out under French law of June 28, 2006 (deep disposal, 500 meters)</td></tr>
<tr><td>High-Level (HL)</td><td colspan="2">Research carried out under French law of June 28, 2006 (disposal in a deep geological repository, 500 meters)</td></tr>
</table>

Orano establishes radioactive waste management methods in compliance with the principles of the French Environmental Code and directive no. 2011/70/Euratom of July 19, 2011:

- protect public health, safety and the environment;
- prevent and limit the burden to be borne by future generations;
- reduce the quantity and toxicity of radioactive waste, in particular by using appropriate processing and packaging methods;
- organize waste shipments and limit them in distance and volume;
- provide information to the public on the effects on the environment and public health of waste production and management operations, subject to confidentiality rules provided in the law, and on the measures taken to prevent or offset harmful effects.

Each waste management method is thus defined as part of a graduated approach to the risks and impacts as regards the costs (human, financial, environmental, *etc.*) and the benefits expected from the use of a management solution.

For implementation of waste management methods, Orano draws on:

- the operating entities of the different production sites likely to generate radioactive waste;
- the Dismantling and Waste Contracting Department (DM2D), which is tasked with steering Orano's overall performance plan and defining strategies to be deployed by the operating entities.

The principles guiding the use of management methods at Orano's different sites, in compliance with safety, cost, schedule and quality objectives and commitments, are:

- waste reduction at source, with the goal of "zero waste" in design and operation; waste likely to be radioactive is separated from conventional waste based in particular on a facility "zoning" policy. This policy is continually optimized to minimize quantities of radioactive waste;
- radiological characterization and assessment of activity to define optimum packaging;
- volume reduction using cuttings, assembling and compaction processes;
- with packaging, waste is immobilized in a container suited to its radioactivity level and half-life, in some cases using material to hold it in place (such as cement) or after processing. When processing is necessary, the goal is to convert the initial waste into a waste form with characteristics more appropriate for final disposal, in particular by maximizing containment performance. Drying, incineration, vitrification and melting are examples of processing. Furthermore, processing reduces waste volumes.

A quality program including quality control is carried out throughout processing operations. Best available technologies (BAT) are used for processing and are chosen based on multicriteria analyses that factor in the industrial, environmental, health and radiological impacts.

The sustainable radioactive waste management solutions used by Orano follow the guidelines of the National Radioactive Waste and Materials Management Plan (PNGMDR). Orano is heavily involved in developing the PNGMDR resulting from the implementation of the Program law of June 28, 2006 on the sustainable management of radioactive materials and waste. The principal purpose of this triennial plan developed under the aegis of the Ministry for Ecological and Solidarity Transition, together with the nuclear safety authority ASN, is to regularly assess the radioactive substances management policy in France, to evaluate new requirements and to determine the objectives to be achieved. Orano is represented through its Dismantling and Waste Contracting Department, which steers and coordinates cross-business programs and studies related to the development, implementation and follow-up of the plan.

Dissemination and communication of information

Information on the flows and volumes of waste stored at Orano's nuclear facilities (especially volumes) is communicated to the competent authorities in the form of annual reports. In addition, Orano is a major participant in updates to the National Inventory published every year by ANDRA.

The inventory also presents storage capacities, in particular for long-lived medium- and high-level waste, along with their fill status.

This information is available on the website of ANDRA's national inventory of radioactive waste and materials: http://www.inventaire.andra.fr/inventaire?field_stocks_year_target_id=51773&region=All&departement=51068&exploitant=50275&categorie=All&famille=All&=Appliquer

Concerning the monitoring of environmental radioactivity, it has been possible since February 2010 for any member of the public to go to the website managed by IRSN (www.mesure-radioactivite.fr) to see all of the environmental radioactivity measurements carried out by the operators in the vicinity of their sites as part of the prescribed environmental monitoring. Each site has acquired the tools needed to manage and submit the data. The group's laboratories have been licensed by the French nuclear safety authority (ASN) to carry out the necessary analyses. These licenses are periodically renewed as laboratory comparison tests organized by IRSN are carried out, based on a table of analyses defined by the national environmental radioactivity measurement network RNM in the Order of June 3, 2015 implementing ASN's Decision no. 2015-DC-0500 of February 26, 2015, which itself modifies ASN's Decision no. 2008-DC-0099 of April 29, 2008 on the organization of the national environmental radioactivity measurement network and sets the terms for laboratory licensing.

As regards soil management, the objectives of Orano's environmental safety policy are to reduce and manage all of its negative environmental impacts with an approach that is in proportion to the challenges. On February 6, 2014, AREVA NC (now Orano Cycle) filed a license application with the French ministry in charge of nuclear safety for the dismantling of INB 105 at the Tricastin site. At the same time, a similar application was filed for INB 93 (EURODIF gaseous diffusion uranium enrichment plant), also to proceed with its dismantling. ASN and its technical expert IRSN are reviewing both applications, and the decrees are expected for 2019.

At former French mining sites, 90% of the campaign to combine mine tailings that are in the public domain had been completed at the end of 2018. The work is scheduled for completion in 2019.

Following the completion of cleanup and dismantling work at the SICN site in Annecy, prefectural permits for monitoring and public service were issued to the site. Currently, the site hosts a mechanical machining company which conducts its operations in the remaining rooms, a warehousing and maintenance workshop where the former uranium foundry was located, and the biomass boiler built by IDEX in the southwestern part of the site, which has provided heating for a number of individual houses and municipalities since the beginning of the year. On the Veurey site, decommissioning of the two INB was approved by the ASN and is now under review by the local governments. Decommissioning is slated for the end of June 2019.

Completion reports on operations to clean up the Miramas site were sent to the prefecture for review and approval. The site is now working with local partners to examine its sale and reindustrialization: the western zone was sold at the end of 2018 with a view to installing a solar farm, and discussions are under way on the sale of the center/east zone.

Orano performs some 100,000 measurements and analyses annually on samples taken at some 1,000 locations to monitor environmental radioactivity around its sites.

4.3.3 Measuring environmental performance

Reports are presented regularly to the Orano Executive Committee (COMEX) and the Board of Directors.

The main environmental safety indicators used are:

- the number of significant safety events (SSE) of Level 2 or higher;
- the prevention rate of the events (where EPR = SSE N1/SSE N0).

NUMBER OF EVENTS IN 2018 RANKED ON THE INES [1] SCALE IN THE GROUP'S NUCLEAR ENTITIES (OWNER-OPERATORS, CONTRACT OPERATORS, AND SERVICE PROVIDERS) OR DURING THE SHIPMENT OF RADIOACTIVE MATERIALS

	Level 0	Level 1	Level 2 or higher
2017	105	12	0
2018	121	8	0

Concerning environmental performance, each site in the group has defined its areas of improvement in its action plans, especially as concerns the consumption of energy and production of conventional waste. The improvements in terms of energy consumption are mainly the result of the major investments made by the group, in particular on the Tricastin site with the commissioning of the new Georges Besse II enrichment facility and the Philippe Coste conversion plant.

ENVIRONMENTAL DATA

	2018	12 months 2017
CONSUMPTION		
Quantity of energy consumed *(MWh)*	1,869,557	2,080,917
Quantity of water tapped *(m^3)*	10,856,726	12,026,198
CONVENTIONAL WASTE		
Total tonnage of conventional waste (normal and exceptional operations)	19,909	26,686
Quantity of hazardous waste *(MT)* related to normal operations	6,690	9,490
Quantity of non-hazardous waste *(MT)* related to normal operations	6,760	6,796
RELEASES		
Direct Scope 1 greenhouse gas emissions *(teq CO_2)* √ [1]	260,687	294,832
Indirect Scope 2 greenhouse gas emissions *(teq CO_2)*	163,893	157,424
Volatile organic compounds *(MT VOC)*	931	846

(1) Indicator subject to reasonable assurance.

Based on the last carbon footprint study done in 2009 on AREVA's historical scope of consolidation, emissions of Scope 3 greenhouse gases do not appear to be significant.

(1) International Nuclear Event Scale.

BOARD OF DIRECTORS' CORPORATE GOVERNANCE REPORT

5

In accordance with the provisions of Article L. 225-37 of the French Commercial Code, this report covers the composition of the Board of Directors of Orano SA (the "Company") and the conditions for the preparation and organization of its work.

It was approved by the Board of Directors at its meeting of February 28, 2019.

The work and reviews related to the preparation of this report were also submitted to the Statutory Auditors.

Please note that view of its status as an issuer of debt instruments admitted for trading on a regulated market, on July 27, 2017 the Board of Directors decided, pursuant to Article L. 225-37-2 of the French Commercial Code, to refer voluntarily to the Afep-Medef Code of Corporate Governance. In accordance with the "apply or explain" principle set out in Article L. 225-37 of the French Commercial Code, the Company will explain hereunder the reasons for which it currently derogates from certain recommendations of the Afep-Medef Code.

5.1 Preparation and organization of the Board of Directors' work

5.1.1 Composition and functioning of the Board of Directors

5.1.1.1 General rules relating to the composition of the Board of Directors

The Company operates under a "Monist" or unitary organization, with a Board of Directors.

The General Meeting of July 27, 2017 decided to revise the Company's Articles of Association to take account of the acquisition of equity stakes by new strategic investors as part of the capital increase approved by the General Meeting of February 3, 2017 and to bring these into compliance with the provisions of Order No. 2014-948 of August 20, 2014 relating to the governance and share capital transactions of publicly owned companies (the "Order").

In accordance with Article 14 of the Articles of Association:

- the Company is run by a Board of Directors composed of at least three and at most eighteen members including, where applicable, one representative of the French State and Directors appointed by the General Meeting of Shareholders following a proposal by the French State, pursuant to the Order and Decree No. 2014-949 of August 20, 2014, subject to statutory dispensations; and
- the Board of Directors is also composed of two directors representing the employees, appointed by the two trade unions with the highest number of votes in the first round of the elections preceding the date of appointment of the members of the Works Council or Works Committee or the sole Employee Delegation for the Company and its (direct and indirect) subsidiaries with their registered offices in France. These are not taken into account when determining the minimum and maximum number of directors.

As of the date of this report, the Board of Directors has 13 members:

- 11 members appointed by the General Meeting (including the representative of the French State and five directors who are individuals nominated by the French State); and
- two members representing the employees appointed by the trade unions.

The members of the Board of Directors, with the exception of those representing the employees, hold a term of office of four years, bearing in mind that the terms of office of the current members of the Board of Directors will end after the General Meeting called to approve the financial statements for the fiscal year ended December 31, 2021.

Pursuant to Article 14 of the Company's Articles of Association, the terms of office of the members of the Board of Directors representing the employees will end either (i) upon expiry of their four-year terms of office, due at the close of the Ordinary General Meeting convened to rule upon the financial statements for the fiscal year ended and held during the year of expiry of said terms of office, or (ii) in the event of a breach in the employment contract, or (iii) on the date of their revocation in accordance with the conditions set out in the Articles of Association and with the statutory and regulatory provisions in force on the date of revocation, or (iv) in the event of a conflict as described in Article L. 225-30 of the French Commercial Code. Furthermore, if the Company is no longer subject to the obligation set out in Article L. 225-27-1 of the French Commercial Code, the terms of office of Directors representing the employees will end at the close of the meeting during which the Board of Directors notes the removal of this obligation.

Pursuant to Decree No. 83-1116 of December 21, 1983, as amended, and Decree No. 55–733 of May 26, 1955, the following persons also attend meetings of the Board of Directors in an advisory capacity: the Director, the representative of the General Economic and Financial Control's mission to the French Alternative Energies and Atomic Energy Commission, EDF, and other structures in the energy sector (Control mission for Atomic Energy). They may also attend meetings of Board Committees (see Section 5.1.1.5 below).

In accordance with Article 14 of the Articles of Association, the Board of Directors is also assisted in its duties by one or more observers who attend meetings in an advisory capacity (see Section 5.1.1.5 below).

The Statutory Auditors are invited to attend meetings of the Board of Directors held to review the annual and half-year financial statements, and any other meetings at which their presence is deemed appropriate.

5.1.1.2 Composition of the Board of Directors

As of the date of this report, the members of the Board of Directors are:

- Philippe VARIN (Chairman);
- Philippe KNOCHE (Chief Executive Officer, Director);
- Catherine DEIANA (Director representing the employees);
- Alexia DRAVET (Director representing the employees);
- Maurice GOURDAULT-MONTAGNE (Director appointed upon a proposal by the French State);
- Claude IMAUVEN (Independent Director);
- François JACQ (Director appointed upon a proposal by the French State);
- François MESTRE (Director appointed upon a proposal by the French State);
- Patrick PELATA (Independent Director);
- Marie-Hélène SARTORIUS (Independent Director);
- Philippe SOULIÉ (Director appointed upon a proposal by the French State);
- Marie-Solange TISSIER (Director appointed upon a proposal by the French State);
- The French State, represented by Bruno VINCENT (Director appointed by decree of the French State).

Overview of the Board of Directors at December 31, 2018

	Personal information				Position on the Board				
	Date of birth	Gender	Nationality	Number of shares	Independence	Initial appointment	Expiration of term of office	Length of service on the Board	Board committees
Philippe VARIN Chairman of the Board	1952	M	FR	n/a	Yes	2017	2022	1.5 years	SIC
Philippe KNOCHE Chief Executive Officer and Director	1969	M	FR	n/a	No	2017	2022	1.5 years	n/a
Catherine DEIANA Director representing employees	1968	F	FR	n/a	No	2017	2022	1.5 years	CNC/SIC
Alexia DRAVET Director representing employees	1987	F	FR	n/a	No	2017	2022	1.5 years	AEC/ EoLOMC
Maurice GOURDAULT-MONTAGNE Director appointed upon a proposal by the French State	1953	M	FR	n/a	No	2017	2022	1.5 years	SIC
Claude IMAUVEN Director	1957	M	FR	n/a	Yes	2017	2022	1.5 years	AEC/SIC/ EoLOMC
François JACQ Director appointed upon a proposal by the French State	1965	M	FR	n/a	No	2018	2022	8 months	SIC/ EoLOMC
François MESTRE Director appointed upon a proposal by the French State	1965	M	FR	n/a	No	2018	2022	3 months	n/a
Patrick PELATA Director	1955	M	FR	n/a	Yes	2018	2022	6 months	n/a
Marie-Hélène SARTORIUS Director	1957	F	FR	n/a	Yes	2017	2022	1.5 years	AEC/CNC
Philippe SOULIÉ Director appointed upon a proposal by the French State	1956	M	FR	n/a	No	2018	2022	1 month	n/a
Marie-Solange TISSIER Director appointed upon a proposal by the French State	1955	F	FR	n/a	No	2017	2022	1.5 years	AEC/CNC
French State (Bruno VINCENT) Director	1982	M	FR	n/a	No	2017	2022	1.5 years	AEC/SIC/ CNC/ EoLOMC

(Key – n/a: not applicable; AEC: Audit and Ethics Committee; SIC: Strategy and Investments Committee; CNC: Compensation and Nominating Committee; EoLOMC: End-of-Lifecycle Obligations Monitoring Committee)

Nota Bene: Mr. Daniel VERWAERDE resigned from the Board of Directors on April 20, 2018; Mr. Reynold PRÉVOST DE LA BOUTETIÈRE resigned from the Board of Directors on October 1, 2018; Mrs. Marie-Astrid RAVON-BERENGUER resigned from the Board of Directors on December 6, 2018.

Biographies and terms of office of the members of the Board of Directors

The number of offices held by directors is compliant with the law, applicable regulations, and the Afep-Medef Corporate Governance Code limiting the number of offices any individual may hold.

Philippe VARIN – Chairman of the Board of Directors

Born on August 8, 1952 in Reims (France), a French national, Philippe VARIN is an alumnus of the École polytechnique and École des mines de Paris.

He joined the Péchiney group in 1978 as a researcher and subsequently held a number of management positions within the group (management control, strategy, project direction) before being appointed in 1995 as Director of the Rhenalu Division then Chief Executive Officer of the aluminum segment and member of the group's Executive Committee in 1999.

In 2003, he joined the Anglo-Dutch steel group Corus as Chief Executive Officer. He was Chairman of the European Confederation of Iron and Steel Industries (Eurofer) from 2006 to 2008.

Appointed Chairman of the Management Board of PSA Peugeot Citroën in June 2009, he left the group in 2014.

In 2015, he joined the AREVA group as Chairman of the Board of Directors.

Philippe VARIN is a Knight of the National Order of Merit, Officer of the National Order of the Legion of Honor and Commander of the British Empire.

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He has chaired the Board of Directors of the Company since July 27, 2017. As such, he is responsible for relations between the Board and the Company's shareholders.

Other offices held

- Director and Chairman of the Board of Directors of AREVA SA;
- Director of Saint-Gobain and Chairman of the Audit Committee;
- Director of Positive Planet;
- Chairman of France Industrie;
- Vice-Chairman of Conseil National de l'Industrie;
- Chairman of SASU PRM3C;
- Chairman of Fondation Georges Besse;
- Chairman of the French Committee of the International Chamber of Commerce.

Other offices held during the past five years

- Director of EDF;
- Chairman of the Management Board of Peugeot SA;
- Chairman of the Board of Directors of Peugeot Citroën Automobiles SA;
- Director of Banque PSA Finance SA;
- Director of Faurecia SA;
- Director de PCMA Holding BV;
- Director of BG Group Plc.

Philippe KNOCHE – Chief Executive Officer, Director

Born on February 14, 1969 in Strasbourg (France), with dual French and German nationality, Philippe KNOCHE is a graduate of École polytechnique and École des mines de Paris.

In 1995, he began his career in Brussels as a Case Handler for the European Commission's anti-dumping department.

In 1998, he joined the Consortium de Réalisation as Assistant to the Chairman of the Supervisory Board.

He joined AREVA in 2000 as Director of Strategy. In 2004, he was appointed Executive Vice President of the Treatment Business Unit and in 2006, Director of the Olkiluoto 3 project. In 2010, he took over the Reactors and Services Business group and became a member of the group's Executive Committee.

In July 2011, Philippe KNOCHE was appointed member of the Management Board and Deputy CEO in charge of nuclear business operations.

In January 2015, he became a member of the Board of Directors and Chief Executive Officer of AREVA.

He has been the Company's Chief Executive Officer since July 27, 2017.

Other offices held

- Chairman & CEO of Orano Cycle;
- Chairman of the Board of Directors of Orano Mining;
- Permanent Member of the Strategy Committee of SET Holding.

Other offices held during the past five years

- Chief Executive Officer and Director of AREVA SA (expired July 26, 2017);
- Member of the Executive Board and Chief Executive Officer of AREVA (expired January 7, 2015);
- Chief Operating Officer of AREVA (expired October 21, 2014);
- Chairman of the Supervisory Board of AREVA GmbH (expired November 8, 2016);
- Chairman of the Board of Canberra Industries Inc (expired July 1, 2016);
- Chairman of AREVA NP SAS (expired June 30, 2016);
- Permanent representative of AREVA SA on the Board of Directors of AREVA TA (expired February 10, 2016).

Catherine DEIANA – Director representing the employees

Born on December 10, 1968 in Dieulefit (France), a French national, Catherine DEIANA has a degree in Documentation Studies.

She joined the AREVA group in 2001.

Currently in charge of reprography at the Tricastin site, Catherine DEIANA was appointed by her trade union as Director representing the employees.

She has been a member of the Board of Directors of the Company since July 27, 2017.

Other offices held

- None.

Other offices held during the past five years

- Member of the Orano Cycle Tricastin Social and Economic Committee (CSE), elected during the professional elections held on October 15-19, 2018, expired (due to resignation to remain as employee director) on October 23, 2018;
- Trade union representative on the AREVA NC Tricastin Health, Safety and Working Conditions Committee (CHSCT) (expired July 26, 2017).

Alexia DRAVET – Director representing the employees

Born on April 13, 1987 in Amiens (France), a French national, Alexia DRAVET has a degree in Safety, Environment and Quality Studies.

She joined the AREVA group in 2008.

Currently "Chemical Products Environment" engineer in the Safety/Environment Department within the Safety, Health, Security and Environment Department at the Tricastin site, Alexia DRAVET was appointed by her trade union as Director representing employees.

She has been a member of the Board of Directors of the Company since July 27, 2017.

Other offices held

- None.

Other offices held during the past five years

- Director representing the employees of AREVA NC (expired May 24, 2017).

Maurice GOURDAULT-MONTAGNE – Director

Born on November 16, 1953 in Paris (France), a French national, Maurice GOURDAULT-MONTAGNE is a graduate of Institut d'études politiques (IEP) in Paris and Institut national des langues et civilisations orientales. He also holds a Masters in law.

He has held various diplomatic positions in India (1981-1983), Germany (1988-1991) and at the headquarters of the Office of the Minister of Foreign Affairs (1986-1988), after which he became Deputy Spokesperson at Quai d'Orsay (1991-1993).

In 1993, he was appointed Deputy Director of the Office of the Minister of Foreign Affairs (Alain Juppé) and he later became Director of the Office of the Prime Minister from 1995 to 1997.

He was French Ambassador to Tokyo in 1998, before being appointed Diplomatic Adviser and Sherpa to the President of the French Republic in 2002.

Between 2007 and 2017, he was successively the French Ambassador to the United Kingdom, Germany and China.

He is currently the Secretary General of the Ministry of Europe and Foreign Affairs.

He has been a member of the Board of Directors of the Company since October 31, 2017.

Other offices held

- Director of EDF (since August 1, 2017);
- Director of the École nationale d'administration;
- Director of the Institut français;
- Director of the Agence nationale des titres sécurisés;
- Director of the Commission de récolement des dépôts d'œuvres d'art;
- Director of France Médias Monde;
- Director of the Fondation d'entreprise Renault;
- Member of the Atomic Energy Committee.

Other offices held during the past five years

- None.

Claude IMAUVEN – Independent Director

Born on September 6, 1957 in Marseille (France), a French national, Claude IMAUVEN is a graduate of École polytechnique and Corps des Mines.

He began his career in 1983 at the French Ministry for Industry, where he held various positions of responsibility in public administration, notably in ministerial offices (Foreign Trade and Industry).

His career at Saint-Gobain began in 1993 with the Flat Glass Division, where he was Vice President of Industrial Policy and subsequently Vice President of Industry and Finance. In 1996, he was appointed Delegate General for Spain, Portugal and Morocco. Returning to France in 1999, he joined the Pipe branch as Deputy CEO of Pont-à-Mousson SA, and then in 2001 he took over the reins of this company as CEO and Director of the Pipe branch.

Between April 2004 and the end of 2015, Claude IMAUVEN was Deputy CEO of Saint-Gobain, leading the Construction Products Division.

From January 2016 until the end of 2018, Claude IMAUVEN was Chief Executive Officer of Saint-Gobain.

Claude IMAUVEN is a Knight of the Legion of Honor and Officer of the National Order of Merit.

He has been a member of the Board of Directors of the Company since July 27, 2017.

Other offices held

- Director of Artelia HOLDING SAS;
- Chairman of the Board of Directors of the Institut Mines-Télécom (EPSCT).

Other offices held during the past five years

- Director of AREVA SA (expired July 27, 2017);
- Director of Banque CIC Est;
- Chairman of Saint-Gobain Matériaux de Construction SAS (Saint-Gobain);
- Chairman of Saint-Gobain Matériaux Produits pour la Construction SAS (Saint Gobain);
- Chairman of the Board of Directors of Saint-Gobain PAM (Saint-Gobain);
- Chairman of the Board of Directors of Saint-Gobain ISOVER (Saint-Gobain);
- Chairman of the Supervisory Board of Saint-Gobain WEBER (Saint-Gobain);
- Chief Executive Officer of Saint-Gobain.

François JACQ – Director

Born on October 28, 1965 in Harfleur (France), a French national, François JACQ is a graduate of École polytechnique and Corps des Mines. He holds a PhD from École des mines de Paris.

After starting out in research, he went on to hold various posts within the French Ministry of Education. From 2000 to 2005, he was Director General of the French National Agency for Radioactive Waste Management (Andra).

From 2005 to 2007, he was Head of Energy Markets and Demand at the French Ministry of Industry, before becoming an adviser to the French Prime Minister. From 2009 to 2013, he was Chairman and Chief Executive Officer of Météo France, before serving as Chairman and Chief Executive Officer of IFREMER from 2013 to 2018. He then became Chief Executive of the French Alternative Energies and Atomic Energy Commission (CEA).

He has been a member of the Board of Directors of the Company since May 3, 2018.

Other offices held

- Chairman of the Board of Directors of the CEA;
- Member of the Supervisory Board of Framatome.

Other offices held during the past five years

- Director of CNES;
- Director of STORENGY.

François MESTRE – Director

Born on September 14, 1965 in Clermont Ferrand (France), a French national, François MESTRE is a graduate of École polytechnique (1985) and Ecole nationale supérieure des techniques avancées (1990).

An engineer-general in the French Corps de l'armement, François MESTRE was appointed as Head of the Industrial Affairs and Economic Intelligence Unit by decree of June 18, 2018. With a background in the chemicals industry, he has several years of experience in the management of arms programs. He has also held various posts in the office of the French defense minister.

Since 2018, François MESTRE has overseen the monitoring of defense companies and their expertise. He led a joint review of the government's shareholding strategy with the French State Shareholding Agency (Agence des participations de l'État – APE). He has also examined proposals for foreign investment in France for the Armed Forces Ministry, and security and economic intelligence initiatives for armaments and defense. He formulates guidelines for the Ministry's industrial policy.

From 2013 to 2018, he worked on preparations for the future of arms programs at the French Defense Procurement Agency (DGA), where he developed guidance on technology maturity for the Chief Executive. He thus contributed within the Ministry of Defense to the overall capacity coherence of defense in association with the joint chiefs of staff.

He has been a member of the Board of Directors of the Company since October 25, 2018 (co-opted as director to replace Reynold PRÉVOST DE LA BOUTETIÈRE, who resigned). This appointment will be subject to ratification at the next Annual General Meeting on May 23, 2019.

Other offices held

- Member of the Supervisory Board of KNDS;
- Director of Ariane Group.

Other offices held during the past five years

- None.

Patrick PELATA – Independent Director

Born on August 24, 1955 in Pujols (France), a French national, Patrick PELATA is a graduate of École polytechnique and École des ponts ParisTech. He also has a PhD in socioeconomics from École des hautes études en sciences sociales.

He joined Groupe Renault in 1984, holding various positions in manufacturing and engineering, before being appointed Head of Vehicle Engineering in 1998. In 1999, he transferred to Nissan in Japan, where he served as Executive Vice President. In 2005, he returned to Renault as EVP Product Planning and Programs, before becoming Renault's Chief Operating Officer in 2008.

In 2012, he was appointed Executive Vice-Chairman and Chief Automotive Officer of Salesforce.

In 2015, Patrick PELATA founded the company Meta Consulting LLC, of which he is Chairman. It was renamed Meta Strategy Consulting in early 2018.

He is a Knight of the Legion of Honor.

Patrick PELATA served as censor of the Company from July 27, 2017, before being appointed to the Board of Directors on February 26, 2018, when Japan Nuclear Fuel Ltd and Mitsubishi Heavy Industries Ltd became shareholders of the Company.

Other offices held

- Chairman of Meta Strategy Consulting (France);
- Director of Safran;
- Director of VULOG.

Other offices held during the past five years

- None.

Reynold PREVOST DE LA BOUTETIÈRE – Director (until October 1, 2018)

Born on March 22, 1971 in Paris (France), a French national, Reynold PREVOST DE LA BOUTETIÈRE is a graduate of the École polytechnique and École nationale supérieure de techniques avancées. He also obtained a Diploma of Advanced Studies in Economics from the University of Nanterre.

After starting his career as a Telecommunications Engineer at Direction des Constructions Navales (French Naval Shipbuilding Directorate), Reynold PREVOST DE LA BOUTETIÈRE held a number of positions at the French Treasury before moving onto ministerial office.

In 2009, he was in charge of bilateral cooperation for the Strategy Department of the Direction générale de l'armement (French Government Defense procurement and technology agency) before moving in summer 2014 to the "Electronic, mechanical and naval" sub-division of the industrial business and economic intelligence service of the same agency.

He has been a member of the tender review committee for the Société du Grand Paris since 2012 and was a Director of AREVA Mines and AREVA NC from 2015 to 2017.

Reynold PRÉVOST DE LA BOUTETIÈRE is a Knight of the Legion of Honor and of the National Order of Merit.

He has been a member of the Board of Directors of the Company since July 27, 2017. He resigned on October 1, 2018.

Other offices held

- Director of SNPE;
- Director of TechnicAtome.

Other offices held during the past five years

- Director of TSA (expired January 29, 2018);
- Director of AREVA Mines (expired May 30, 2017);
- Director of AREVA NC (expired May 24, 2017);
- Director of GIAT Industries (expired March 10, 2017).

Marie-Astrid RAVON-BERENGUER – Director (until December 6, 2018)

Born on April 25, 1977 in Paris (France), a French national, Marie-Astrid RAVON-BERENGUER is a graduate of École polytechnique, ENSAE ParisTech and Institut d'études politiques de Paris (IEP).

She began her career at the French Budget Ministry as Assistant to the Head of the Employment and Vocational Training Bureau, after which she became Assistant to the Head of Budgetary Policy. Marie-Astrid RAVON-BERENGUER then went on to become Head of the Health Expenditure and Social Security Accounts Bureau, and Assistant Director of the sub-division in charge of the Ministries of Culture and Communication, Youth and Sports, Justice, Overseas Territories and the Finance Ministers.

In 2012, she joined the Economic Department of the French Embassy in Spain as a Project Manager for the Head of Department.

In 2014, she became a Public Inspector of Finance.

Since 2016, Marie-Astrid RAVON-BERENGUER has been the Chief Financial Officer and Director of Programs for the Commissariat à l'Énergie Atomique (CEA – French Alternative Energies and Atomic Energy Commission).

She has been a member of the Board of Directors of the Company since July 27, 2017. She resigned on December 6, 2018.

Other offices held

- Director of CEA Investissement.

Other offices held during the past five years

- Director of AREVA Mines (expired May 30, 2017);
- Director of AREVA NC (expired May 24, 2017).

Marie-Hélène SARTORIUS – Independent Director

Born on January 23, 1957 in Lyon (France), a French national, Marie-Hélène SARTORIUS is a graduate of École polytechnique and École nationale des ponts et chaussées.

She began her career at Banque Paribas, now BNP Paribas, where she held a number of positions in management control and corporate banking before being appointed Head of Specialized Financing for Europe (LBOs, project finance).

In 1995, she joined the Market Activities Department of the Paribas group in London as Head of Risk and in 1999, she launched a new credit derivatives trading business for the group.

In 2001, Marie-Hélène SARTORIUS joined PricewaterhouseCoopers (PwC) as a Partner in charge of consulting services in France and provided advice to some of the largest international groups until 2016. She works primarily with large listed investment banks, and energy companies, where she specializes in risk management, performance optimization and major transformation programs.

On an international level, Marie-Hélène SARTORIUS has been a member of PwC's EMEA Financial Services Leadership Team (EMEA FSLT) and Global Financial Services Advisory Leadership Team (GFSALT).

Marie-Hélène SARTORIUS joined the AREVA group in 2016 as a director.

She has been a member of the Board of Directors of the Company since July 27, 2017.

Other offices held

- Director of BNP Paribas Cardif SA;
- Director of Milleis Banque SA.

Other offices held during the past five years

- Member of the Supervisory Board of ANF Immobilier (expired October 23, 2017);
- Director of AREVA SA (expired July 27, 2017).

Philippe SOULIÉ – Director

Born on July 1, 1956 in Paris (France), a French national, Philippe SOULIÉ is a graduate of École polytechnique and holds an MBA from Insead.

He joined the AREVA group in 2016 as Chief Operating Officer during the restructuring of AREVA SA. On July 27, 2017 he was appointed Chief Executive Officer of AREVA SA. He was co-opted on the same day by the Board of Directors as director of AREVA SA to replace Philippe KNOCHE, who had resigned. His term as director of AREVA SA will expire at the end of the Annual General Meeting convened in 2019 to approve the financial statements for the year ended December 31, 2018.

He was co-opted as director of Orano on December 18, 2018 to replace Marie-Astrid RAVON-BERENGUER, who had resigned. This appointment will be subject to ratification at the next Annual General Meeting on May 23, 2019.

Other offices held

- Chief Executive Officer of AREVA SA;
- Chairman of AREVA NP;
- Chairman of AREVA Énergies Renouvelables;
- Member of the Supervisory Board of AREVA H2Gen;
- Chairman of AREVA Project 2;
- Chairman of AVELEOS SA.

Other offices held during the past five years

- None.

Marie-Solange TISSIER – Director

Born on April 6, 1955 in Paris (France), a French national, Marie-Solange TISSIER is a graduate of École polytechnique and Mines ParisTech.

She was Head of the Environment Division within the Interdepartmental Directorate for Lorraine Industry from 1979 to 1982. In 1982, she moved to the General Council of Mines as Deputy Head of Service, and in 1984 she joined the office of the Secretary of State for Energy as a Technical Adviser. In 1986, Marie-Solange TISSIER was appointed Head of Nuclear Service at the General Directorate for Energy and Raw Materials. In 1988, she joined the Ministry for Industry and Regional Development as a Technical Adviser.

From 1989 to 2017, Marie-Solange TISSIER was Head of Department at the General Council of Mines, which in 2009 became the General Council of Economy, Industry, Energy and Technology within the French Ministry for the Economy and Finance. During this period she has also held the position of Deputy Director of Mines ParisTech.

In May 2017, she became Chairperson of the Regulation and Resources Department of the General Council of Economy, Industry, Energy and Technology within the French Ministry for the Economy and Finance.

She has been a member of the Board of Directors of the Company since July 27, 2017.

Other offices held

- Director of AREVA SA;
- Director of IFP Énergies Nouvelles.

Other offices held during the past five years

- Member of the Supervisory Board of RTE (expired April 1, 2017).

Daniel VERWAERDE – Director (until April 20, 2018)

Born on August 17, 1954 in Sedan (France), a French national, Daniel VERWAERDE is an engineer graduated from École centrale de Paris and an auditor of the 32nd session of the Centre des hautes études de l'armement (CHEAr).

After joining the Commissariat à l'Énergie Atomique (CEA) in 1977 as an Engineer Mathematician, he worked until 1996 on the development of digital methods and important weapon simulation software. From 1991 to 1996, he was Head of the Department of Applied Mathematics at the CEA.

In 1996, following France's signature of the Comprehensive Nuclear-Test-Ban Treaty, Daniel VERWAERDE became responsible for establishing the CEA's Simulation Program.

In July 2000, he was appointed Director of the CEA DAM/Île-de-France Center in Bruyères-le-Châtel, home to the weapons design, digital simulation, treaty monitoring and anti-proliferation teams. In 2002 he launched Project Ter@tec which seeks to promote digital simulation in France and to develop the European IT industry.

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In January 2004, he became Director of Nuclear Weapons for the CEA's Military Applications Division. He is in charge of the French Nuclear Weapons Projects as part of the Simulation Program.

On April 3, 2007, he was appointed Director of Military Applications. His responsibilities included weapons and simulation programs, nuclear propulsion programs, the sourcing of strategic materials and the CEA's work to combat nuclear proliferation.

Daniel VERWAERDE has been teaching at the École centrale de Paris since 1981, and in 1991 he was appointed a Professor of Mathematics. He teaches digital analysis at this institution.

Daniel VERWAERDE is an Officer of the Legion of Honor and a Knight of the National Order of Merit.

He was appointed Chairman of the French Atomic Energy and Alternative Energy Commission (CEA) by decree dated January 29, 2015 and Chairman of the Board of Directors on April 3, 2015.

Daniel VERWAERDE joined the AREVA group in 2008.

He has been a member of the Board of Directors of the Company since July 27, 2017. He resigned on April 20, 2018.

Other offices held

- Director of Framatome;

Other offices held during the past five years

- Director of AREVA SA (expired July 27, 2017);
- Director of AREVA NC (expired May 24, 2017);
- Director of SODERN.

The French State, represented by Bruno VINCENT – Director

Born on March 6, 1982, a French national, Bruno VINCENT is a graduate of École polytechnique and École nationale des ponts et chaussées.

Between 2005 and 2008, he worked at the French Embassy in the United States and later at the World Bank in Washington DC, where he was initially a Research Assistant before becoming Consultant for the Economic Policy and Debt Department.

After heading the administrative supervision of the French Development Agency at the French Treasury from 2008 to 2010, Bruno VINCENT joined the French State Shareholding Agency (Agence des participations de l'État – APE) in 2010 as a Chargé d'Affaires overseeing RATP and the ports sector.

In 2012, he worked at the Treasury Department where he was involved in negotiating the arrangements for an instrument to recapitalize Eurozone banks.

In 2013, he was tasked with managing the Services & Finance sector at the French State Shareholding Agency (APE).

In 2014, he was appointed Assistant Head of Equity Investments for the transport sector at APE. In this role, he was responsible for managing a portfolio of companies in the transport sector (SNCF, RATP, Air France KLM, ADP, regional airports, ports, SNCM). He was also project manager for the privatization of the Nice and Lyon airport companies.

Since 2017, he has been Head of Equity Investments for the energy sector at APE.

He has represented the French State on the Board of Directors of the Company since July 27, 2017.

Other offices held

- Director of AREVA SA (representing the French State);
- Director of ERAMET SA (representing the French State).

Other offices held during the past five years

- Director of the Port of Marseille;
- Director of SNCF Réseau;
- Director of Aéroports de la Côte d'Azur;
- Director of Aéroports de Lyon;
- Director of Imprimerie Nationale;
- Director of the Monnaie de Paris;
- Director of the Port of La Rochelle.

5.1.1.3 Changes in the composition of the Board and its committees in 2018

	Departure	Appointment	Renewal
Board of Directors	Daniel VERWAERDE (resigned April 20, 2018 [1]) Reynold PRÉVOST DE LA BOUTETIÈRE (resigned October 1, 2018) Marie-Astrid RAVON-BERENGUER (resigned December 18, 2018 [2])	Patrick PELATA (February 26, 2018) François JACQ (co-opted May 3, 2018; ratified May 24, 2018) François MESTRE (co-opted October 25, 2018) Philippe SOULIÉ (co-opted December 18, 2018)	n/a
Audit and Ethics Committee	n/a	n/a	n/a
Compensation and Nominating Committee	n/a	n/a	n/a
Strategy and Investments Committee	Daniel VERWAERDE (resigned April 20, 2018)	François JACQ (May 3, 2018)	n/a
End-of-Lifecycle Obligations Monitoring Committee	Daniel VERWAERDE (resigned April 20, 2018)	François JACQ (May 3, 2018)	n/a

(Key – n/a: not applicable)

(1) Resigned at the end of his/her term at the CEA.

(2) Resigned after taking a new position in the French Secretariat-General for National Defense and Security.

5.1.1.4 Independence of the members of the Board of Directors

As of the date of this report, the Board of Directors has four independent (or deemed independent) directors. The proportion of at least one-third independent members recommended by the Afep-Medef Code is thus met, it being noted that the directors representing the employees are not counted in establishing this proportion.

In accordance with these criteria, and based on a recommendation from the Compensation and Nominating Committee, the Board of Directors, at its meeting of February 28, 2019, considered the following Board members to be independent in the light of the Afep-Medef Code criteria, or otherwise deemed them to be independent:

- Marie-Hélène SARTORIUS;
- Claude IMAUVEN;
- Patrick PELATA; and
- Philippe VARIN.

The Board of Directors examined the business relationships that may exist between the Company and the companies in which these directors hold terms of office. The Board of Directors noted that none of the independent members (or members deemed to be independent) have a significant business relationship with the Company. The primary basis for this assessment was the insignificant share of revenue generated by existing business relationships, if any, compared to the respective revenue of the Company and the companies in which the members concerned hold a position.

The table below outlines the situation for each director in the light of the independence criteria contained in Paragraph 8 of the Afep-Medef Code.

Independence criteria

Criterion 1	Not to be and not to have been within the previous five years: • an employee or executive officer of the corporation; • an employee, executive officer or director of a company consolidated within the corporation; or • an employee, executive officer or director of the company's parent company or a company consolidated within this parent company.
Criterion 2	Not to be an executive officer of a company in which the corporation holds a directorship, directly or indirectly, or in which an employee appointed as such or an executive officer of the corporation (currently in office or having held such office within the last five years) holds a directorship.
Criterion 3	Not to be a customer, supplier, commercial banker, investment banker or consultant: • that is significant to the corporation or its group; or • for which the corporation or its group represents a significant portion of its activities.
Criterion 4	Not to be related by close family ties to a company officer.
Criterion 5	Not to have been an auditor of the corporation within the previous five years.
Criterion 6	Not to have been a director of the corporation for more than twelve years. Loss of the status of independent director occurs on the date when this twelve years is reached.
Criterion 7	A non-executive officer cannot be considered independent if he or she receives variable compensation in cash or in the form of shares or any compensation linked to the performance of the corporation or the group.
Criterion 8 (1)	Directors representing major shareholders of the corporation or its parent company may be considered independent, provided these shareholders do not take part in the control of the corporation. Nevertheless, beyond a 10% threshold in capital or voting rights, the Board, upon a report from the Nominations Committee, should systematically review the qualification of a director as independent in the light of the make-up of the corporation's capital and the existence of a potential conflict of interest.

(1) For this analysis and regarding the structure of the company's shareholding, Directors representing the State or appointed on a proposal by the State shall not be deemed to meet this criteria.

OVERVIEW TABLE (1)

	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Criterion 7	Criterion 8	Independent/ Not independent
Philippe VARIN	*	√	√	√	√	√	√	√	**Deemed Independent**
Philippe KNOCHE	x	x	√	√	√	√	√	√	**Not independent**
French State (Bruno VINCENT)	√	√	√	√	√	√	√	x	**Not independent**
Catherine DEIANA	x	√	√	√	√	√	√	√	**Not independent**
Alexia DRAVET	x	√	√	√	√	√	√	√	**Not independent**
Maurice GOURDAULT-MONTAGNE	√	√	√	√	√	√	√	x	**Not independent**
Claude IMAUVEN	√	√	√	√	√	√	√	√	**Independent**
François JACQ	√	√	x	√	√	√	√	x	**Not independent**
François MESTRE	√	√	√	√	√	√	√	x	**Not independent**
Patrick PELATA	√	√	√	√	√	√	√	√	**Independent**
Marie-Hélène SARTORIUS	√	√	√	√	√	√	√	√	**Independent**
Philippe SOULIÉ	x	√	√	√	√	√	√	x	**Not independent**
Marie-Solange TISSIER	√	√	√	√	√	√	√	x	**Not independent**

(1) In this table √ means that an independence criterion has been met and X means that an independence criterion has not been met.

* *The Board of Directors of February 28, 2019, on the recommendation of the Compensation and Nominating Committee of February 21, 2019, concluded that Philippe VARIN should be deemed independent since (i) his appointment was made based on a proposal from the Board of Directors to the General Meeting of Shareholders of July 27, 2017, on account of his knowledge, expertise and impartiality, (ii) he was deemed independent by decision of the shareholders in the Shareholders' Agreement dated February 21, 2018, reiterated on July 13, 2018, (iii) he does not hold, directly or indirectly, any significant business relationship with the company or its subsidiaries (iv) in the event that any conflict of interest should arise on the Board of Directors, he would abstain from voting and participating in debates.*

Economic and Financial Controller General

VINCENT Berjot, appointed Head of the Atomic Energy Control Mission of the General Economic and Financial Control Department by a decision dated October 30, 2018 of the Ministry for the Economy, Industry and Employment, is a member of the Company's general economic and financial control body, in accordance with Decree No. 83-1116 of December 21, 1983, as amended.

Government Commissioner

Laurent Michel, appointed Director General for Energy and Climate by a decree dated December 19, 2012, holds the position of Government Commissioner for the Company, in application of Decree No. 83-1116 of December 21, 1983 as amended by a decree dated July 25, 2017. To this end, he attends the meetings of the Board of Directors and of its specialized committees.

Pursuant to Article 3 of Decree No. 83-1116 of December 21, 1983 as amended and relative to the Company, the deliberations of the Board of Directors shall become fully enforceable unless the Government Commissioner or other authority responsible for economic and financial control opposes these within five days of either the meeting of the Board of Directors if they were present thereat, or following receipt of the minutes of the meeting.

This opposition, of which the Minister of the Economy and the Minister of Energy shall be immediately informed by the party presenting the opposition, shall cease to have effect if, within fifteen days, it has not been upheld by one of these Ministers.

Censors

In addition, pursuant to Article 14 of the Articles of Association, on October 25 the Board of Directors appointed Thomas Courbe as censor to replace Pascal Faure, who had resigned, for the remainder of the latter's term of office (*i.e.* until the end of the General Meeting convened to approve the financial statements for the financial year ended December 31, 2018).

The role of censor notably involves monitoring the strict application of the Articles of Association and the provision of advice and information to the Board of Directors. The censor may be a natural person or legal entity. The censor is invited to attend all meetings of the Board of Directors and participate in deliberations in an advisory capacity. The censor is provided with the same documents and information as the members of the Board of Directors and has the same right of access to information as the Directors.

Secretary of the Board

Anne-Sophie Bodin serves as Secretary of the Board of Directors.

5.1.2 Responsibilities and functioning of the Board of Directors

5.1.2.1 Missions

The responsibilities of the Board of Directors and the planning and organization of its work are defined within the framework of legislative and regulatory provisions governing limited liability companies, in the Company's Articles of Association and in the rules of procedure of the Board of Directors.

The Board of Directors determines the direction of the Company's activities and oversees its implementation. Except for the powers expressly assigned to the General Meetings of Shareholders, and within the limits of the Company's purpose, it may take up any matter concerning the Company's operations and, through its resolutions, rules on matters concerning it. It may perform inspections and checks at any time of the year, as it sees fit, and demand to obtain any documents it considers useful for accomplishing its mission; It is to be kept updated by the Audit and Ethics Committee on the Company's financial position, cash-flow situation and commitments. It must also be kept informed in good time of the Company's liquidity position and take, where appropriate, decisions relating to its financing and borrowing.

As part of its responsibilities, and without this list being exhaustive, the Board of Directors in 2018:

- changed the Company's name from New AREVA Holding to Orano;
- authorized and recorded the completion of the capital increases for the benefit of Japan Nuclear Fuel Ltd and Mitsubishi Heavy Industries Ltd;
- proposed amendments to the Articles of Association;
- kept itself informed of all significant events concerning the Company and any significant transactions outside the Company's announced strategy, including the digitization process;
- determined the strategic direction of the Company and the group, after taking advice from the Strategy and Investments Committee;
- examined and authorized the commercial proposals made by the Proposals Committee; and
- organized a seminar to provide directors with an insight into the group's strategic issues.

The Board of Directors meets as often as the interests of the Company require and at least four times per year. In 2018, the Board of Directors met nine times with a 70.77% attendance rate. Directors may choose to be represented by another director at meetings of the Board of Directors. Each Director may only represent one of his or her colleagues at any one meeting of the Board of Directors.

The following table shows the attendance rate of directors and committee members as at December 31, 2018:

	Board of Directors	Audit and Ethics Committee	Compensation and Nominating Committee	Strategy and Investments Committee	End-of-Lifecycle Obligations Monitoring Committee
Philippe VARIN	100%	n/a	n/a	100%	n/a
Philippe KNOCHE	100%	n/a	n/a	n/a	n/a
French State (Bruno VINCENT)	100%	90%	100%	100%	80%
Catherine DEIANA	100%	n/a	100%	100%	n/a
Alexia DRAVET	100%	80%	n/a	n/a	80%
Maurice GOURDAULT-MONTAGNE	56%	n/a	n/a	71.43%	n/a
Claude IMAUVEN	100%	100%	n/a	85.71%	100%
François JACQ (2)	60%	n/a	n/a	100%	100%
François MESTRE (3)	100%	n/a	n/a	n/a	n/a
Patrick PELATA (1)	89%	n/a	n/a	n/a	n/a
Reynold PRÉVOST DE LA BOUTETIÈRE (6)	75%	n/a	n/a	71.43%	n/a
Marie-Hélène SARTORIUS	100%	100%	100%	n/a	n/a
Philippe SOULIÉ (4)	100%	n/a	n/a	n/a	n/a
Marie-Solange TISSIER	100%	90%	100%	n/a	n/a
Marie-Astrid RAVON-BERENGUER (7)	88%	n/a	n/a	n/a	n/a
Daniel VERWAERDE (5)	100%	n/a	n/a	100%	50%

n/a: not applicable
(1) Director since February 26, 2018.
(2) Director since May 3, 2018.
(3) Director since October 25, 2018.
(4) Director since December 18, 2018.
(5) Resigned on April 20, 2018.
(6) Resigned on October 1, 2018.
(7) Resigned on December 6, 2018.

Meetings of the Board of Directors are chaired by the Chairman, who leads the discussions or, in the event of his absence, by the Vice-Chairman or, in the absence of the latter, by a member of the Board of Directors designated at the beginning of the meeting by a simple majority of the members present.

Directors who participate in a meeting of the Board of Directors *via* videoconferencing or other methods of telecommunication that allow their identity to be known and assure the effective participation thereof, shall be deemed present for the calculation of quorum and majority. The Secretary of the Board of Directors shall sign the register in lieu and on behalf of these Directors.

This process may only be used for the preparation of the annual financial statements, the consolidated financial statements and related reports.

Furthermore, the use of videoconferencing or other methods of telecommunication may be excluded by the Chairman of the Board of Directors if the topics being discussed are of a sensitive nature or on the agenda of the meeting.

The group's employees may also be invited based on their contribution to the items on the meeting's agenda. The presence of external third parties must be authorized by the Chairman of the Board of Directors.

5.1.2.2 Information and training of directors

Directors shall receive, at least five calendar days prior to the meeting, the agenda of the meeting of the Board of Directors and any information to be discussed, except in cases of emergency or exceptional circumstance. They shall be kept informed at all times between meetings of the Board of Directors and, where necessary, must be able, if they so wish, to meet with the key executives of the Company after giving prior notice thereof to the Chairman of the Board of Directors and the Chief Executive Officer.

Each Director may benefit, if he/she deems it necessary, from training on specific details of the Company, its businesses and sectors of activity, as well as on the role of Director.

5.1.2.3 Business ethics of directors

The Director shall perform his or her duties with independence, integrity, uprightness and professionalism.

The rules of procedure of the Board of Directors of the Company sets out the duties of the directors and in particular:

- compliance with the law, Articles of Association and corporate interest;
- professionalism and duty of expression;
- the strict confidentiality of the work of the Board of Directors and of its committees;
- the application of rules relating to the plurality of offices;
- preventing conflicts of interest;
- compliance with obligations related to the holding of financial instruments issued by the Company and the holding of inside information.

The Company refers and adheres to the principles of the Orano Code of Ethics, which are applied.

5.1.2.4 Rules applicable to conflicts of interest

The rules applicable to the members of the Board of Directors with regard to preventing conflicts of interest appear in Article 4.6 of the rules of procedure of the Board of Directors, which notably states that:

- the Director shall at all times preserve his/her independence of judgment, decision-making and action;
- the Director shall strive to avoid any conflict that may exist between his/her moral and material interests and those of the Company;
- the Director shall inform the Board of any conflict of interest in which he/she may be directly or indirectly involved;
- in the event that a situation or risk of conflict of interest should arise, the Director concerned must, upon receipt of the agenda, inform the Chairman of the Board of Directors and, where applicable, the chairperson of the Committee concerned and shall abstain from taking part in any discussions or voting on the corresponding deliberation;
- the Director, or a permanent representative if the Director is a legal entity, may not participate personally in companies or activities in competition with the group without first informing the Board of Directors and receiving its approval;
- a Director that considers him/herself no longer in a position to fulfill their role on the Board of Directors, or any Committees of which he/she is a member, shall resign.

5.1.3 Rules applicable to evaluations

Article 1.2 of the rules of procedure of the Board of Directors provides that, at least once a year, the Board of Directors shall dedicate one item on its agenda to discussing the assessment of its composition, its functioning and its organization, as well as those of its committees, to ensure that important issues are properly addressed and discussed. Furthermore, at least once every three years, it shall carry out or have carried out a formal assessment of its work. It shall inform the shareholders annually of the assessments performed and, where applicable, the action taken as a result of these.

Once a year, the Board of Directors meets to evaluate the performance of its Chairman and of the Chief Executive Officer, neither of whom attend the meeting.

At its meeting of December 18, 2018, the Board of Directors, on the recommendation of the Compensation and Nominating Committee, decided to conduct a formal evaluation with the help of an external consultant.

The Board examined the results of this formal evaluation on February 28, 2019.

The Board, on recommendation of the Compensation and Nominating Committee based on a study of the Board's functioning carried out by the independent firm of Spencer Stuart, concludes that the Board is organized satisfactorily, that it is in a constant improvement and that its Directors are engaged and involved in its functioning. Therefore, there are no grounds to substantially alter its functioning. In addition, the points raised the previous year have been addressed (a better communication of company news and the organization of a strategic seminary). The Board does, however, recognize the need to eventually enhance the diversity of the Board's composition, and to review whether director appointments could be staggered over time, should this prove relevant. Based on the Compensation and Nominating Committee's recommendation, it is assigned to the Secretary of the Board to review, in coordination with the Compensation and Nominating Committee, the extent to which these points could be implemented. The Chairman of the Board will provide individual feedback of such evaluation to each Board member, before the next General Meeting.

5.2 Committees of the Board of Directors

The Board of Directors may establish Board committees, for which it shall define the composition and powers.

The role of these committees is to gather and present to the Board of Directors additional relevant information and to facilitate decision-making by, where appropriate, making proposals. They do not have any powers of their own and carry out their duties under the responsibility of the Board of Directors.

The composition and functioning of the committees form part of the framework defined by the statutory and regulatory provisions applicable to limited liability companies, the Company's Articles of Association and the rules of procedure of the Board of Directors.

On July 27, 2017, the Board of Directors created four permanent committees:

- an Audit and Ethics Committee;
- a Strategy and Investments Committee;
- an Compensation and Nominating Committee; and
- an End-of-Lifecycle Obligations Monitoring Committee

Committee members may not claim compensation in this capacity, with the exception of attendance fees that may be allocated to them by the Board of Directors.

The chairperson of each committee may ask the Chief Executive Officer and, where applicable, any Deputy Chief Executive Officer(s) to attend committee meetings. This also applies to the Chairman of the Board of Directors, where he or she is not a member of the committee in question.

Group employees may also be invited, subject to the approval of the chairperson of the committee, to attend committee meetings based on their contribution to the items on the agenda of the meeting.

The committees may seek external technical advice on topics that fall within their remit, subject to approval from the Chairman of the Board of Directors and with the understanding that it will share this information with the Board of Directors. The committee must verify the skills and independence of the external experts that it calls upon.

The duration of the terms of office of committee members shall coincide with their terms of office as members of the Board of Directors. These may be renewed at the same time as the latter. By way of exception, the Board of Directors may at any time dismiss a member of a committee or its chairperson.

The chairperson of each committee is appointed by the Board of Directors upon a proposal from the Appointments and Compensation Committee. In the absence of the chairperson, the other members of the committee shall appoint a chairperson for the meeting.

The chairperson of each committee shall appoint a secretary. Minutes of the committee meetings are the responsibility of the chairperson of each committee, who shall send a copy thereof to the Board of Directors.

The members of the committee may be convened by any means (mail, fax, email, *etc.*), or even verbally. Other than in the case of an emergency or exceptional circumstances, the relevant documentation shall be sent to the members of the committee at least five calendar days prior to the date of the meeting.

Committee members cannot appoint their own representatives.

5.2.1 Audit and Ethics Committee

As at the date hereof, the Audit and Ethics Committee has five members:

- Marie-Hélène SARTORIUS (Chairperson and Independent Director);
- Alexia DRAVET (Director representing the employees);
- Claude IMAUVEN (Independent Director);
- Marie-Solange TISSIER; and
- Bruno VINCENT (representing the French State, Director).

The Audit and Ethics Committee is responsible for issues relating to the preparation and control of accounting and financial information, in particular the process for the preparation of financial information, the effectiveness of the internal control and risk management systems, the statutory audit of annual and consolidated financial statements by the Statutory Auditors and the consistency of accounting methods, the procedure for the selection of the Statutory Auditors and their independence, the approval of additional services provided by the Statutory Auditors, the independence of the Statutory Auditor, the proper assessment of mining resources and reserves, the monitoring of the execution of major projects and business risk mapping.

To perform its duties, the committee must work together with the Head of Internal Control and give its opinion on the organization of this unit. The committee shall be sent internal audit reports or a periodic summary of these reports. The committee shall also work together with the Statutory Auditors and the Financial, Accounting and Treasury Directors.

The committee examines the list of consolidated companies and, if appropriate, the reasons for which companies are or are not included on it.

The Audit and Ethics Committee shall prepare an annual work agenda to ensure the proper planning of its work. Financial statements must be provided to the committee for review sufficiently in advance (at least three calendar days before their review by the committee). The review of the financial statements by the Audit and Ethics Committee must be accompanied by a presentation from the Statutory Auditors highlighting the key points of the findings of the statutory audit (in particular any audit adjustments and any significant internal control weaknesses identified), and of the accounting options selected. It must also be accompanied by a presentation from the Chief Financial Officer describing the Company's exposure to risk and any significant off-balance sheet commitments.

The Audit and Ethics Committee must, at least twice per year, address the ethical aspects that concern the Company and, in accordance with the following recommendations:

- ensure that the Company and its relations with third parties are compliant with ethical standards and that the group complies with international best practices in relation to ethics;
- examine the standards and procedures put in place by the group both for the Company and its (directly or indirectly controlled) subsidiaries in France and abroad, and in particular those governing the use of economic intelligence studies and the group's Charter of Values and any updates thereto, ensuring the correct distribution and application thereof.

With regard to foreign subsidiaries, the committee shall take into consideration the legal and regulatory framework of the countries in which they operate.

In 2018, the Audit and Ethics Committee met five times with an average attendance rate of 94%.

It examined matters that specifically fall within its remit, including the half-year and annual financial statements, press releases, the risk mapping, the review of the conclusions of the Internal Audit Department and Statutory Auditors on internal controls, the review of major customer investment projects, the summary of internal audits, and cybersecurity.

In addition, the committee examined the following topics in 2018, without this list being exhaustive:

- update on the transition between Statutory Auditors and their fees;
- update on the Orano group's tax management;
- review of Orano's compliance plan and its obligations under the Sapin II law;
- 2019 audit plan and internal audit charter;
- Code of Ethics and ethics report;
- 2019-2028 financial trajectory;
- presentation of mining resources and reserves; update of the currency hedging policy; and
- update on current legal proceedings.

5.2.2 Strategy and Investments Committee

As of the date of this report, the Strategy and Investments Committee has six members:

- Philippe VARIN (Chairman);
- Alexia DEIANA (Director representing the employees);
- Maurice GOURDAULT-MONTAGNE (Director);
- Claude IMAUVEN (Independent Director);
- François JACQ; and
- Bruno VINCENT (representing the French State, Director).

The Strategy and Investments Committee is responsible for analyzing the main strategic directions in terms of the group's development and for making any major strategic decisions proposed by the Chief Executive Officer. It examines the implementation of the Company's strategy both at company level and within its subsidiaries.

The committee is tasked with examining proposed transactions subject to the prior approval of the Board of Directors. [1]

In 2018, the Strategy and Investments Committee met seven times with an average attendance rate of 68.2%.

In 2018, the committee examined in the following topics, without this list being exhaustive:

- progress and monitoring of the negotiations for the treatment and recycling plant in China;
- progress report on the 2018 strategic action plan and its worldwide implementation;
- implications for Orano of energy transition scenarios;
- examination of various commercial proposals, especially in Japan, Russia and the United States;
- communication plan on the closed fuel cycle; and
- themes and organization of the strategic seminar.

The Strategy and Investments Committee may meet as a restricted committee if so decided by its chairperson. The role of this restricted committee, known as the Business Proposals Committee, is to research the main business proposals to be submitted to the Board of Directors for approval.

5.2.3 Compensation and Nominating Committee

As of the date of this report, the Compensation and Nominating Committee has four members:

- Marie-Solange TISSIER (Chairperson);
- Catherine DEIANA (Director representing the employees);
- Marie-Hélène SARTORIUS (Independent Director); and
- Bruno VINCENT (representing the French State, Director).

The main role of the Compensation and Nominating Committee is to recommend to the Board of Directors potential persons to be appointed as corporate officers, to discuss the independent status of each Director, to put forward to the Board of Directors recommendations and proposals concerning compensation, pension and insurance schemes, supplemental pensions, benefits in kind, the various pecuniary rights of the Company's executive officers and in particular, where applicable, severance payments and retirement benefits, to review the allocation procedure for attendance fees payable to the members of the Board of Directors, to review the compensation policy for key executives who are not corporate officers, to review the objectives, conditions and results of its policy on gender representation, nationalities and diversity of skills with regard to its members and to prepare and monitor the implementation of the corporate governance rules applicable to the Company.

Where possible, the executive directors shall attend the Committee meeting at which the compensation policy for key executives who are not corporate officers is reviewed.

In 2018, the Compensation and Nominating Committee met five times with an attendance rate of 100%.

It examined the following topics in particular:

- setting of the targets for the Chief Executive Officer;
- the Company's policy in terms of equal opportunity, equal pay and gender equality;
- succession plans for officers;
- examination of candidates to replace the directors and censor who have resigned;
- preparation for the assessment of the Board's work and selection of the independent expert; and
- examination of the diversity policy applied within governance bodies with regard to criteria such as age, gender, qualifications and experience, how the Company is striving for a more balanced representation of women within the Executive Committee (COMEx), and the gender balance achieved in the top 10% most senior positions.

(1) See Section 5.4.2.2 below.

Succession plan for officers

As part of its succession plan review, the committee examined the Chief Executive Officer succession plan at its meeting on December 6, 2018. The committee gave careful consideration to the plan, which was prepared in consultation with the Human Resources Department. The Compensation and Nominating Committee has ensured that the mechanisms in place within the Company cover the following two situations:

- the need for an immediate acting Chief Executive Officer in the event of sudden and unforeseen incapacity or "impediment"; and
- a more conventional and orderly process to replace the Chief Executive Officer during or at the end of his term of office.

The committee emphasized that any acting Chief Executive Officer would have to be recruited internally, be immediately available, have a thorough knowledge of the business, be well-respected within the Company and if possible outside it, and have an in-depth understanding of the group's various industrial, financial and social dimensions.

The Compensation and Nominating Committee will review these criteria and their application each year. The Chairman of Orano's Board of Directors approves and announces their implementation.

In the event of the announced or planned departure of the Chief Executive Officer (during or at the end of his term of office), the replacement process will be carried out according to the following principles:

- internal selection of candidates for the position of Chief Executive Officer. Some of the group's executives have already been identified on that basis. Over the next few years, the group will focus on preparing a suitable development plan for them (training, coaching or mentoring);
- in due course, and prior to (or in parallel with) the launch of an external search, a thorough assessment process will be offered to the Board of Directors' shortlisted candidates. This assessment will validate the internal application(s) and, where necessary, enable them to be compared against external candidates;
- external search: in parallel with the assessment of the "internal pool," an external search may be launched and approved by the Board of Directors. The search will be conducted on the basis of criteria approved in advance by the Compensation and Nominating Committee.

This process was presented to and approved by the Board of Directors of the Company at its meeting of December 18, 2018.

Diversity policy of the Board of Directors

Due to its limited number of employees, the Company is not subject to the provisions of law No. 2011-103 of July 27, 2011 on balanced gender representation on boards of directors and supervisory boards. The Company does not currently have a diversity policy. However, at its meeting of December 18, 2018, the Board of Directors, following the recommendation of the Compensation and Nominating Committee of December 6, 2018, confirmed its plan to increase the number of women on the Board in the future.

Diversity measures on the Executive Committee and in the top 10% most senior positions

At its meeting of December 18, 2018, following the recommendation of the Compensation and Nominating Committee of December 6, 2018, the Board of Directors also examined how the Company seeks a balanced representation of women and men within the Executive Committee, and the gender balance achieved in the top 10% most senior positions within the group.

The Orano group is structured around Business Units and Corporate Departments. The group's Executive Committee (COMEX) operates under the authority of the Chief Executive Officer. It is composed of the heads of the Business Units and senior management from the Group's corporate departments, who represent the most senior positions at Orano.

On February 1, 2019, the Orano group appointed Corinne Spilios to its Executive Committee, as group Head of Performance in charge of the Operational Excellence, Supply Chain and Quality Departments. Reporting to Chief Executive Officer Philippe KNOCHE, she is the first female member of Orano's Executive Committee. As a result of her appointment, women now make up 9% of the Orano group's top 10% most senior positions. This appointment marks a decisive step towards greater diversity within the Company's Executive Committee.

Group diversity policy

Implementing the group's diversity policy requires all human resources processes to undergo scrutiny to ensure equal treatment between men and women throughout their careers, and thus empower more women to hold senior positions within the group. The policy's implementation involves a three-pronged approach:

1/ More female candidates in recruitment pools

The Human Resources Department gets involved early on in the process to encourage more female students to enter technical disciplines. It arranges talks by women in technical and scientific roles at various levels of state education, from secondary schools to universities. These actions have gradually resumed since the start of 2018, following the group's restructuring.

Similarly, the group agreement targets a one percentage point increase per year in the number of female interns, particularly in technical disciplines. At the end of 2017, women accounted for 38% of all group interns. This figure was unchanged at the end of the last recruitment campaign in September 2018.

The group's communication, through its various communication channels (brochures, videos, social media), routinely portrays women in technical and industrial roles.

2/ Recruitment

Since recruitment resumed in 2017, the number of female new hires has increased dramatically. In 2018, 27% of all new hires were women; for manager positions the figure was 34.5%.

3/ Career development

In addition to its general goal of recruiting women, the group pays particular attention to their development throughout their careers. At the end of 2017, 26% of the group's managers and 27.5% of its identified talent were women. By the end of 2018, 27.3% of the group's managers and 31% of its identified talent were women. The percentage of women on the group's Management Committees totaled 32% in Corporate functions and 25% in subsidiaries. In addition, a specific mentoring program based on individual and collective coaching ("Female Talent") was set up in the first quarter of 2017 for women who are "potential executives" and "confirmed talent": a total of six modules were completed and 56 women received training. A further three sessions are planned in 2019. The group also plans to launch shorter modules for young women identified as "upcoming talent".

Lastly, the number of experts who are women is steadily increasing: experts are reappointed every two years, and in the 2017 campaign 16% of the total number were women. This represents an increase of 4 percentage points compared with the previous campaign.

For more details on the diversity policy, see Section 4.1.5.3

5.2.4 End-of-Lifecycle Obligations Monitoring Committee

As of the date of this report, the End-of-Lifecycle Obligations Monitoring Committee has four members:

- Claude IMAUVEN (Chairman and Independent Director);
- Alexia DRAVET (Director representing the employees);
- François JACQ; and
- Bruno VINCENT (representing the French State, Director).

The role of this Committee is to assist the monitoring of the portfolio of earmarked assets created by Company subsidiaries to cover their future cleanup and dismantling expenses.

To this end, the committee, upon presentation by the Company of relevant documents including a Management Charter, shall assess, in accordance with a multi-year schedule, the future cleanup and dismantling expenses of the group companies concerned, review the terms and conditions for the constitution, functioning and control of funds earmarked to cover said expenses within these companies and the management policy applicable to the corresponding financial assets. These points form the basis of opinions and recommendations made by the Committee to the Board of Directors, summarized in an annual document provided thereto with a view to preparing its report to the General Meeting.

The Committee may work together with the financial advice institutions chosen by the companies responsible for the management of the funds, subject to committee approval.

In 2018, the End-of-Lifecycle Obligations Monitoring Committee met five times with an average attendance rate of 82%.

It examined the following topics in particular:

- changes in estimates and end-of-lifecycle liabilities at the end of 2018;
- the performance and investment strategy of earmarked assets and the coverage ratio at the end of 2018;
- changes in the regulations governing end-of-lifecycle obligations;
- a methodological update on risk and contingency management in end-of-lifecycle projects; and
- a detailed review of dismantling cost estimates selected at random by the Committee.

5.2.5 Composition of the committees

The table below summarizes the existing committees of the Company and the composition thereof.

First and last name	Audit & Ethics Committee	Compensation and Nominating Committee	Strategy and Investments Committee	Commercial Proposals Committee (restricted SIC)	End-of-Lifecycle Obligations Monitoring Committee
Philippe VARIN	PG	n/a	X Chairman	X Chairman	n/a
Philippe KNOCHE	PG	n/a	n/a	n/a	n/a
Maurice GOURDAULT-MONTAGNE	n/a	n/a	X	n/a	n/a
Claude IMAUVEN	X	n/a	X	X	X Chairman
Patrick PELATA	n/a	n/a	n/a	n/a	n/a
François MESTRE	n/a	n/a	n/a	n/a	n/a
Philippe SOULIÉ	n/a	n/a	n/a	n/a	n/a
Marie-Hélène SARTORIUS	X Chairman	X	n/a	n/a	n/a
Marie-Solange TISSIER	X	X Chairperson	n/a	n/a	n/a
François JACQ	n/a	n/a	X	X	X
Bruno VINCENT	X	X	X	X	X
Alexia DRAVET	X	n/a	n/a	n/a	X
Catherine DEIANA	n/a	X	X	n/a	n/a

n/a: not applicable; PG: permanent guest

5.3 Other committee

In accordance with the provisions of the Shareholders' Agreement, an Advisory Committee was created on July 27, 2017. This committee, which plays an advisory and consultative role, may submit proposals concerning the group's strategy, particularly in relation to its international development policy.

In 2018, the Advisory Committee met four times.

5.4 Officers

5.4.1 Executive Management arrangements

The Board of Directors opted on July 12, 2017 to separate the roles of Chairman of the Board of Directors and Chief Executive Officer.

On July 27, 2017, following the General Meeting that approved the change in governance, the Board of Directors decided to appoint Philippe VARIN as Chairman of the Board of Directors and noted the appointment by decree of Philippe KNOCHE as Chief Executive Officer.

The aim of this separation of functions was to create a clear distinction between the strategic, decision-making and control duties of the Chairman of the Board of Directors and the operational and executive duties of the Chief Executive Officer. It was also designed to improve the functioning of the Board of Directors through the presence of one person dedicated to chairing the Board and the balanced distribution of powers to limit the isolation of the group leader and to encourage dialogue between peers.

Furthermore, as a member of the Board of Directors, the Chief Executive Officer participates in the determination of the Company's and the group's strategic directions.

The powers of the Chairman of the Board of Directors and of the Chief Executive Officer are described in Section 5.4.2 below.

5.4.2 Powers of the officers

5.4.2.1 Chairman of the Board of Directors

The Chairman represents the Board of Directors and, other than in exceptional circumstances, is the sole person authorized to act and speak on behalf of the Board of Directors.

In coordination with the Company's Executive Management, the Chairman may take part in defining the group's strategic directions and may represent the group in France and abroad in its relations with public officials and the group's partners.

The Chairman organizes and manages the work of the Board of Directors and ensures the smooth functioning of the Company's bodies in compliance with the principles of good governance. He coordinates the work of the Board of Directors with that of the Board's committees.

He ensures that the Directors and censors, the Head of the Control Mission and the Government Commissioner have, in good time and in a clear and appropriate format, the information they require to carry out their responsibilities.

The Chairman provides liaison between the Board of Directors and the Company's Shareholders, in concert with Management.

The meetings of the Board of Directors are chaired by the Chairman, who leads the discussions, or in his absence by the Vice-Chairman, or in the absence of the latter by a member of the Board of Directors designated at the beginning of the meeting by a simple majority of the members present.

5.4.2.2 Chief Executive Officer

The Chief Executive Officer is responsible for the Company's Executive Management and represents the Company in its relations with third parties.

The broadest powers are vested in him to act in all circumstances on behalf of the Company, subject to the powers which the law assigns to the Board of Directors and to the General Meeting of Shareholders, as well as the corporate governance rules applicable to the Company.

Under the terms of Article 16-2 of the Company's Articles of Association, the following transactions of the Company and its subsidiaries are subject to the prior approval of the Board of Directors:

a) transactions likely to impact the group's strategy and modify its financial structure or scope of activity;

b) insofar as they relate to an amount of more than 80 million euros:
- **(i)** issues of securities by direct subsidiaries, of any nature,
- **(ii)** exchanges, with or without monetary consideration, of assets, shares or securities, loans, borrowings, credits and advances; acquisitions or disposals, by any means, of receivables, excluding day-to-day cash transactions,
- **(iii)** settlements, agreements or transactions relating to disputes;

c) insofar as they relate to an amount of more than 20 million euros:
- **(i)** investment projects relating to the creation of a site or the extension of an existing site,
- **(ii)** acquisitions, extensions or disposals of equity interests in any existing or future companies,
- **(iii)** decisions to set up new or close down existing locations in France or abroad,
- **(iv)** acquisitions of buildings.

Exceptionally, and unless the Chairman of the Board of Directors requests otherwise, the transactions referred to under (a), (b) and (c) above are not subject to the prior approval of the Board of Directors when they are carried out between companies of the group.

On December 18, 2018, the Board of Directors delegated its authority to the Chief Executive Officer to issue sureties, endorsements and guarantees.

5.5 Compensation of corporate officers

5.5.1 Report of the Board of Directors on the principles and criteria for determining, distributing and allocating the components that make up the compensation of its officers

Under Article L. 225-37-2 of the French Commercial Code, the General Meeting of Shareholders of May 24, 2018, after having taken note of the Board of Directors' report on the elements of the compensation policy, approved for 2018 the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional components that make up the total compensation and benefits of any kind attributable to the Chairman of the Board of Directors and to the Chief Executive Officer, as detailed in said report (report on the compensation policy).

The General Meeting of Shareholders of May 24, 2018 thus approved, according to the "ex ante" and "ex post" voting principles, the compensation policy for the Chairman and for the Chief Executive Officer for 2018 and the variable compensation to be paid in respect of 2017. The resolutions concerning these votes were adopted unanimously.

On December 18, 2018, the Board extended for 2019 the compensation policy for the Chairman of the Board of Directors and for the Chief Executive Officer. According to the aforementioned article L. 225-37-2 which provides that the principles of compensation of officers, on account of their positions, are the subject of a resolution submitted at least annually to the General Meeting of Shareholders for approval. This policy shall be subject to the shareholders' approval at the General Meeting scheduled on May 23, 2019. The Board of Directors' report can be found in Appendix 8.8 of the group's Annual Activity Report.

5.5.2 Compensation of officers and members of the Board of Directors

The arrangements for the setting of the compensation of Company corporate officers comply with the provisions of the French Commercial Code and with the Afep-Medef Code to which the Company has referred since July 27, 2017.

In the absence of a Compensation and Nominating Committee within the Company until its governance was restructured, the Compensation and Nominating Committee of AREVA SA voted on July 26, 2017 on the compensation policy for the Company's officers for their entire term of office.

Following its meeting of March 23, 2018, the Company's Board of Directors, in its report to the General Meeting of Shareholders of May 24, 2018, confirmed that this compensation policy would apply to the Company's corporate officers for 2018.

The compensation of the Chairman of the Board of Directors and the Chief Executive Officer is submitted to the Minister for the Economy each year pursuant to Decree No. 53-707 of August 9, 1953, as amended, on government control of national public sector companies and certain organizations serving an economic or social purpose.

In accordance with current regulations, the following tables present the compensation and benefits of any kind received by each of the corporate officers over the course of the fiscal year from controlled companies within the meaning of Article L. 233-16 or from the company that controls, within the meaning of the same article, the company in which the term of office is held.

Compensation policy for corporate officers and overview of its implementation

The compensation policy for the financial year and the compensation for the previous financial year are governed by the constraints imposed by Article 3 of Decree No. 53-707 of August 9, 1953 on government control of public sector companies, as amended by Decree No. 2012-915 of July 26, 2012, capping executive compensation at 450,000 euros [(1)] and making it subject to ministerial approval. The overview of its implementation over several years is contingent on and limited to strict compliance with these measures.

5.5.2.1 Directors' fees

In respect of their terms of office, the members of the Board of Directors may receive attendance fees.

In accordance with their preferences expressed to the Board:

- Philippe VARIN, Philippe KNOCHE, Daniel VERWAERDE, François JACQ, Marie-Astrid RAVON-BERENGUER and Philippe SOULIÉ will not receive attendance fees for 2018;
- the attendance fees received by Alexia DRAVET and Catherine DEIANA in their capacity as Directors representing the employees shall be paid to their trade unions; and

(1) Not including benefits in kind and severance payments.

- the attendance fees paid to the representative of the French State and/or members of the Board nominated by the French State and having the status of public official, shall be paid directly to the French State pursuant to the provisions of Articles 5 and 6 of Order No. 2014-948 of August 20, 2014.

The General Meeting of July 27, 2017 set the total amount of attendance fees allocated to the members of the Board of Directors for the calendar year at 600,000 euros, including amounts paid to the independent directors for their attendance at meetings of the Advisory Committee [(1)].

The distribution of the attendance fees has been designed so that the majority of the compensation received by each Board member is linked to a variable component.

The members of the Board of Directors are entitled to a fixed component in consideration of their duties as Director and a variable component according to their effective attendance at Board meetings and, where applicable, meetings of committees (or meetings of the Restricted Committee) of which they are a member. Moreover, the Board may allocate an additional sum of attendance fees to those Directors residing outside of France to take account of the travel constraints involved.

Amounts for meetings of the Board:

a) a flat annual fee in view of the responsibility attached to the appointment, which fee may be withheld in the event of repeated absences. This amount was set at 10,000 euros for the 2018 financial year (the same amount will be valid for subsequent years); and

b) an amount of 1,500 euros per meeting.

Amounts for meetings of the Committees of the Board (including the Restricted Committee and non-permanent committees):

a) an amount of 3,000 euros per meeting for the chair of the Audit and Ethics Committee;

b) an amount of 2,500 euros per meeting for each committee chair (including the Restricted Committee and non-permanent committees); and

c) an amount of 1,500 euros per meeting for each committee member, other than the committee chair (including the Restricted Committee and non-permanent committees).

With regard to members residing outside of France, the amounts indicated in points 1 b) and 2 are doubled for their physical presence at meetings.

Payment will be made within 45 days of the end of the fiscal year.

Directors attending a meeting of the Board of Directors or of a committee *via* teleconferencing or videoconferencing shall receive a fee equivalent to half of the fee paid to a Director resident in France and physically attending the meeting.

Exceptionally, if the Board of Directors meets on the same date as the General Meeting of Shareholders, either before or after said Meeting, a single attendance fee will be paid in respect of the two sessions.

Moreover, each Director is entitled to reimbursement, on presentation of receipts, of reasonable travel expenses incurred in carrying out his or her duties.

In accordance with Article 3 of Decree No. 52-707 of August 9, 1953, these compensation components have been approved by a ministerial decision dated September 7, 2017.

SUMMARY OF THE ATTENDANCE FEES ALLOCATED TO THE DIRECTORS DURING THE 2018 FINANCIAL YEAR

Members of the Board of Directors (1)	Total 2018
Claude IMAUVEN	68,250
Maurice GOURDAULT-MONTAGNE	23,500
François MESTRE (since October 28, 2018)	3,000 (2)
Patrick PELATA (since February 26, 2018)	18,500
Reynold PRÉVOST DE LA BOUTETIÈRE (until October 28, 2018)	17,500 (2)
Marie-Hélène SARTORIUS	59,500
Marie-Solange TISSIER	47,000 (3)
French State represented by Bruno VINCENT	64,750 (3)
Catherine DEIANA	39,250 (4)
Alexia DRAVET	40,000 (4)
TOTAL	**381,250**

(1) List of the members of the Board of Directors who received attendance fees during the 2018 financial year. Philippe VARIN, Philippe KNOCHE, Daniel VERWAERDE, François JACQ, Marie-Astrid RAVON-ERENGUER (director until December 18, 2018) and Philippe SOULIÉ (director since December 18, 2018) did not receive attendance fees in respect of their directorships in 2018.

(2) François MESTRE was appointed by the Board of Directors on October 25, 2018 to replace Reynold PRÉVOST DE LA BOUTETIÈRE, who had resigned.

(3) For Reynold RÉVOST DE LA BOUTETIÈRE, Maurice GOURDAULT-MONTAGNE, Bruno VINCENT and Marie-Solange TISSIER, as directors representing the French State, representatives of the French State and/or members of the Board of Directors nominated by the French State and as public officials, Orano pays their attendance fees directly to the French State's general budget.

(4) For Catherine DEIANA and Alexia DRAVET, as directors representing employees, Orano pays their attendance fees directly to the trade union to which they belong.

(1) Based on a recommendation from the Compensation and Nominating Committee of AREVA SA, the Board of Directors of the Company, at its meeting of July 27, 2017, decided to grant each Independent Director sitting on the Advisory Committee individual compensation in the amount of 1,500 euros per committee meeting attended.

In addition, the directors representing the employees are employed by Orano Cycle and as such receive compensation unrelated to their board duties. Accordingly, this compensation is not published.

5.5.2.2 Censors' fees

Thomas COURBE does not receive a fee for his role as censor.

5.5.3 Compensation of executive corporate officers

5.5.3.1 Compensation of the CEO

On July 27, 2017, the Board of Directors decided, based on a recommendation from the Compensation and Nominating Committee, that Philippe KNOCHE would receive the following compensation in respect of his position as Chief Executive Officer, and this for his entire term of office:

- gross annual fixed compensation of 420,000 euros;
- an annual variable component calculated in accordance with the achievement of qualitative criteria (40%: group performance plan, management and staffing, change management, compliance, risks control with foreign authorities) and quantitative criteria (60%: health-safety-security goals, net cash flow, operational result, production results and commercial results goals) validated for each fiscal year by the Board of Directors. This variable compensation may not exceed the gross amount of 30,000 euros; and
- an annual benefit in kind in the form of a company car, with a value as at July 27, 2017 of 4,416 euros [1].

For 2018, this compensation was approved by a ministerial decision dated April 24, 2018.

This recommendation was renewed for 2019 by the Compensation and Nominating Committee on December 6, 2018 and confirmed by the Board of Directors of the Company on December 18. At the same Board meeting, the Board of Directors set the targets for 2019 to determine the variable component of Philippe KNOCHE's compensation and any severance payment.

These components of compensation are subject to the approval of the Minister of the Economy, in accordance with the provisions of Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the control of the French State over domestic public sector companies and certain organizations with an economic or social purpose.

It should also be noted that within the Company there are no performance share plans, stock option plans or share option plans in place for either the directors or the employees.

Philippe KNOCHE does not have an employment contract.

The table below presents the compensation owed to or received by Philippe KNOCHE in his respect of his duties as Chief Executive Officer of the Company for the financial year ended and financial year N-1:

(in euros) Summary of compensation and benefits to Philippe KNOCHE

	Period ended December 31, 2017 [1]		Period ended December 31, 2018	
Orano corporate officer	Amounts due	Amounts paid	Amounts due	Amounts paid
Fixed compensation	140,000	140,000	420,000	420,000
Variable compensation	n/a	n/a	12,500 [2]	9,625 [2]
Exceptional compensation	n/a	n/a	n/a	n/a
Attendance fees	n/a	n/a	n/a	n/a
Benefits in kind	1,472	1,472	4,416	4,416
TOTAL	**141,472**	**141,472**	**436,916**	**434,041**

(1) Four-month financial year from September 1 to December 31, 2017. As a reminder, 2017 was split into two financial years, the first from January 1, 2017 to August 31, 2017, and the second from September 1, 2017 to December 31, 2017.
(2) Variable compensation due/paid by Orano for the 2017 financial year.

(1) The value of this company car is adjusted annually. It was 4,416 euros in 2017 and 2018 and is estimated at 4,488 euros for 2019.

SEVERANCE AND NON-COMPETITION PAYMENTS

	Employment contract		Supplemental retirement benefits		Compensation or benefits due or likely to be owed due to the cessation of or change in duties, including payments relative to a non-competition clause	
Executive corporate officer	Yes	No	Yes	No	Yes	No
Name: Philippe KNOCHE Position: Chief Executive Officer Date of start of term: July 26, 2017 Date of end of term: 2022 GM		X		X	X (1)	

(1) Except as noted below.

Severance payments

Under Article L. 225-42-1 of the French Commercial Code, the Board of Directors, at its meeting on July 27, 2017, following a proposal from the Compensation and Nominating Committee, decided to terminate the commitments made by the Company regarding payments or benefits due or liable to be due to Philippe KNOCHE, Chief Executive Officer, as a result of his duties being terminated or changed during his term of office, under the following conditions:

KNOCHE may be granted a severance payment capped at twice the total amount of his annual compensation on the date of cessation of his duties.

If Philippe KNOCHE (i) wishes to exercise his right to retire shortly after the end of his term, regardless of the reason, even if constrained to do so, or (ii) occupies another function within the group, he shall not be entitled to a severance payment.

The aforementioned severance payment shall only be paid in the event of the dismissal of Philippe KNOCHE due to a change in control or strategy, it being understood that this shall not be paid in the event of dismissal for just cause.

This payment shall also be subject to performance conditions, in accordance with the following criteria:

- if the rate of fulfillment of the quantitative and qualitative objectives set for the last two full fiscal years averages out to at least 60%, the severance payment shall automatically be paid;
- if the rate of fulfillment of the quantitative and qualitative objectives set for the last two full fiscal years averages out to less than 60%, the Board of Directors shall appraise the performance of the person in question in view of the circumstances that affected the operation of the Company during the fiscal year ended.

The rates of fulfillment of the quantitative and qualitative objectives taken into account will be those approved by the Board of Directors of AREVA SA in 2017 and those approved by the Board of Directors of the Company in 2018.

The performance objectives shall be approved every year by the Board of Directors of the Company, with effect from 2018.

Non-competition payments

The Board of Directors may decide to grant Philippe KNOCHE an indemnity in return for a non-competition clause. The amount of this indemnity shall be deducted from the amount of severance payment granted, where applicable, to Philippe KNOCHE in accordance with the above conditions. In the absence of any severance payment, the amount of the non-competition indemnity shall be set by the Board of Directors in accordance with usual practices.

Any severance payment and/or non-competition indemnity must be approved in advance by the Board of Directors in accordance with Article L. 225-42-1, paragraph 5, of the French Commercial Code and be approved by the Minister for the Economy pursuant to the aforementioned Article 3 of Decree No. 52-707 of August 9, 1953.

Pensions and retirement benefits

No defined-benefit supplemental retirement plans have been subscribed by the Company on behalf of Philippe KNOCHE. He is eligible for the supplemental retirement plans applicable to the Company's management personnel.

Unemployment insurance

A MEDEF unemployment insurance policy has been taken out with the GSC (Garantie Sociale des Chefs et Dirigeants d'Entreprise), in favor of Philippe KNOCHE. 70% of the contributions to this policy are paid by the Company and 30% by the beneficiary.

5.5.3.2 Compensation of the Chairman of the Board of Directors

Philippe VARIN was also appointed Chairman of the Board of Directors of the Company by a decision of the Board of Directors dated July 27, 2017.

Based on a recommendation from the Compensation and Nominating Committee, the Board of Directors, at its meeting of July 27, 2017, decided to set Philippe VARIN's gross fixed compensation at 120,000 euros for the duration of his term of office. This decision was authorized for 2018 by a ministerial decision dated April 24, 2018.

This recommendation was renewed for 2019 by the Compensation and Nominating Committee on December 6, 2018 and confirmed by the Board of Directors of the Company on December 18.

Philippe VARIN does not receive any variable compensation.

The table below presents the compensation owed to or received by Philippe VARIN in respect of his duties as Chairman of the Board of Directors of the Company for the financial year ended and financial year N-1:

(in euros) Summary of compensation and benefits of Philippe VARIN

	Period ended December 31, 2017 (1)		Period ended December 31, 2018	
Orano corporate officer	Amounts due	Amounts paid (2)	Amounts due	Amounts paid (2)
Fixed compensation	40,000	40,000	120,000	120,000
Variable compensation	n/a	n/a	n/a	n/a
Exceptional compensation	n/a	n/a	n/a	n/a
Attendance fees	n/a	n/a	n/a	n/a
Benefits in kind	n/a	n/a	n/a	n/a
TOTAL	**40,000**	**40,000**	**120,000**	**120,000**

(1) Four-month financial year from September 1 to December 31, 2017. As a reminder, 2017 was split into two financial years, the first from January 1, 2017 to August 31, 2017, and the second from September 1, 2017 to December 31, 2017.
(2) Sum total of the compensation paid during the year.

SEVERANCE AND NON-COMPETITION PAYMENTS

Philippe VARIN is not entitled to any severance or non-competition payment.

	Employment contract		Supplemental retirement benefits		Compensation or benefits due or likely to be owed due to the cessation of or change in duties, including payments relative to a non-competition clause	
Executive corporate officer	Yes	No	Yes	No	Yes	No
Name: Philippe VARIN Position: Chairman of the Board of Directors Date of start of term: July 27, 2017 Date of end of term: 2022 GM		X		X		X

5.5.4 Shareholder consultation on the compensation of executive corporate officers

In accordance with the provisions of Article L. 225-37-2 of the French Commercial Code, at the next Orano General Meeting the shareholders will be asked to approve the compensation of Orano SA's executive corporate officers, as follows:

Approval of the components of the compensation policy applicable respectively to the Chairman of the Board of Directors and the Chief Executive Officer

The General Meeting, deliberating under the conditions of quorum and majority required for Ordinary General Meetings and after having taken note of the Board of Directors' report prepared pursuant to Article L. 225-37-2 of the French Commercial Code, approves the principles and criteria used for determining, distributing and allocating the fixed, variable and exceptional components of the total compensation and the benefits of any kind payable to the Chairman of the Board of Directors and the Chief Executive Officer of the Company, by reason of their respective offices, as presented in the report contained in the Corporate Governance Report included in Section 5.5.3.

In accordance with this principle, on May 23, 2018, Orano's General Meeting approved the group's compensation policy for 2018, as well as the components of variable compensation paid to Philippe KNOCHE for 2017.

5.6 Reference Corporate Governance Code

Following a decision of the Board of Directors on July 27, 2017, the Company voluntarily refers to the "Code of Corporate Governance for Publicly Traded Companies" developed jointly by Afep and Medef in December 2008 and last revised in June 2018 (Afep-Medef Code).

In accordance with the "apply or explain" principle described in Article L. 225-37-4 of the French Commercial Code, the Company explains below the reasons for which it has derogated from the following recommendations of the Afep-Medef Code.

Afep-Medef recommendation	Departure	Explanation or corrective action taken
The Afep-Medef Code recommends that a description of the diversity policy applied to members of the Board of Directors should be made public (Article 6 of the Code).	Orano SA does not have a diversity policy for its Board at present.	The structure of the Board of Directors is a result of the group's restructuring as approved by the meeting of July 27, 2017. With the restructuring complete, the Board of Directors is reviewing how well it could meet the Afep-Medef Code recommendation with a view to eventually diversifying its composition.
The Afep-Medef Code recommends that the terms of office of the members of the Board of Directors should be staggered to avoid replacing the entire Board *en masse* and to facilitate the smooth replacement of directors (Article 14 of the Code).	The terms of office of the first members of the Board of Directors appointed on July 27, 2017 and February 26, 2018 will all expire on the same date, *i.e.* after the General Meeting convened to approve the financial statements for the year ended December 31, 2021.	The agreements signed between the French State, AREVA SA, MHI and JNFL provide for specific governance to be put in place from the completion of the capital increase reserved for the State. This means that it is impossible at this stage to stagger terms of office.
The Afep-Medef Code recommends that: • the proportion of independent directors on the audit committee should be at least equal to two-thirds; • the committees in charge of nominations and compensation must not include any executive officer and must mostly consist of independent directors; • the chairman of the committee should be independent and one of its members should be an employee director (Articles 15, 16 and 17 of the Code).	• The Audit and Ethics Committee is not two-thirds composed of independent directors. • The Compensation and Nominating Committee is composed of a majority of directors nominated by the French State and includes one employee director. It is not chaired by an independent director.	These recommendations are not suited to the Company, considering the structure of its share ownership and the resulting composition of the Board of Directors.
The Afep-Medef Code recommends that members of the Board of Directors should hold a relatively significant number of shares and that officers should hold a "minimum number of shares" (Articles 19 and 22 of the Code).	The Company's Articles of Association and the rules of procedure of the Board of Directors do not require Board members to hold a relatively significant number of shares. In addition, the Board of Directors has not set the number of shares that must be held by officers until the end of their term of office.	These recommendations are not suited to the Company, considering the structure of its share ownership and the resulting composition of the Board of Directors. Moreover, because the Company's shares are not listed, the need for alignment of interests in terms of share performance (which is the reason for this recommendation) does not apply. Likewise, since no stock options or free shares are allocated to officers, the recommendation to retain some of the shares thus obtained is not relevant.

5.7 General Meetings

5.7.1 Shareholder attendance at General Meetings

In accordance with Chapter V of the Company's Articles of Association, General Meetings of Shareholders are convened and deliberated in accordance with the conditions provided by law.

A duly convened General Meeting shall be deemed to represent all of the shareholders.

Resolutions of the General Meeting made in compliance with the law and with the Articles of Association are binding on all of the shareholders, even those who are absent, dissenting or incapable.

Any shareholder may attend General Meetings in person or by proxy under the conditions prescribed by law upon presenting proof of his or her identity and evidence of the registration of his or her shares on the day of the General Meeting in the registered share account maintained by the Company.

In the event of the subdivision of share ownership, only the voting right holder may attend or be represented at the General Meeting.

Joint owners of undivided shares are represented at the General Meeting by one of the joint owners or by a single proxy who shall be designated, in the event of disagreement, by order of the President of the Commercial Court in an urgent ruling at the request of any of the joint owners.

Any shareholder may be represented by another shareholder, by his or her spouse, or by the partner with which he or she has signed a civil solidarity pact.

The General Meeting is chaired by the Chairman of the Board of Directors. In the absence of the latter, it elects its own chairman.

In the event that it is convened by the Statutory Auditor(s), by a court-appointed receiver or by the liquidators, the General Meeting is chaired by the person or by one of the persons who convened it.

The two members of the General Meeting attending and accepting which have the largest number of votes fulfill the duties of vote teller.

The committee thus constituted appoints a Committee Secretary, who may come from outside the members of the General Meeting.

An attendance sheet maintained in accordance with the regulatory conditions is signed by the shareholders present or their representatives and certified to be accurate by the members of the committee.

The committee ensures the functioning of the General Meeting, but its decisions may, at the request of any member of the General Meeting, be subject to the sovereign vote of the General Meeting itself.

Resolutions of General Meetings are recorded in minutes signed by the members of the committee and drawn up on a special register kept at the registered office, with a serial mark and initialed per the conditions stipulated in the applicable regulations.

5.7.2 Summary of delegations granted to the Board of Directors by the General Meeting of Shareholders pursuant to Article L. 225-37-4 of the French Commercial Code

5

The table below presents a summary of the valid delegations granted to the Board of Directors by the General Meeting of Shareholders in relation to capital increases, pursuant to Article L. 225-37-4 of the French Commercial Code.

Type of authorization	Date of authorization	Term/Expiration	Maximum amount (in euros)
Authorization of a capital increase in the total amount of 250,020,606.27 euros, including share premium, by issuing 13,207,639 new ordinary shares with a par value of 0.50 euros each, accompanied by a share premium of 18.43 euros per share, reserved for JNFL and/or any associate of JNFL, defined as any entity controlled by JNFL under the meaning of Article L. 233-3 of the French Commercial Code.	EGM July 11, 2017 (amendment of the 4th resolution adopted by the EGM of February 3, 2017)	18 months used on February 26, 2018	250,020,606.27
Authorization of a capital increase in the total amount of 250,020,606.27 euros, including share premium, by issuing 13,207,639 new ordinary shares with a par value of 0.50 euros each, accompanied by a share premium of 18.43 euros per share, reserved for MHI and/or any associate of MHI, defined as any entity controlled by MHI under the meaning of Article L. 233-3 of the French Commercial Code.	EGM July 11, 2017 (amendment of the 6th resolution adopted by the EGM of February 3, 2017)	18 months used on February 26, 2018	250,020,606.27

5.8 Agreements referred to in article L. 225-37-4 of the French Commercial Code

No agreement was signed in 2018, directly or through a third party, between the Chairman and Chief Executive Officer, one of the directors or one of the shareholders holding a share of more than 10% of the Company's voting rights, and another company of which the Company owns, directly or indirectly, more than half of the share capital.

5.9 Elements likely to have an impact in the event of a public offering

Due to the fact that Company shares are not admitted for trading on a regulated market, they may not be the subject of a public tender offer or public exchange offer and consequently, the provisions of Article L. 225-37-5 of the French Commercial Code requiring the description of elements likely to have an impact in the event of a public offering are not applicable.

INFORMATION ON THE SHARE CAPITAL

6

6.1 Structure and evolution of the Company's share capital

6.1.1 Amount of subscribed capital

At December 31, 2018, the share capital of the company amounted to 132,076,389 euros divided into 264,152,778 shares with a par value of 0.50 euros per share, accompanied by a single voting right.

6.1.2 Treasury shares and interlocking investments

None.

6.1.3 Share buyback programs

None.

6.1.4 Liens

None.

6.1.5 Transactions during the period referred to in article L. 621-18-2 of the French Monetary and Financial Code

None.

6.2 Allocation of capital and voting rights

6.2.1 Shareholding structure

At December 31, 2018, the distribution of the Company's share capital and voting rights was as follows:

Shareholder	Number of shares	% of share capital and voting rights
AREVA SA	52,830,555	19.9999998%
French State	132,076,390	50.0000004%
CEA	1	0.0000004%
Japan Nuclear Fuel Limited	13,207,639	5.0000000%
Mitsubishi Heavy Industries, Ltd	13,207,639	5.0000000%
Natixis	26,415,277	9.9999997%
Caisse des Dépôts	26,415,277	9.9999997%
TOTAL	**264,152,778**	**100%**

6.2.2 Employee share ownership

In accordance with Article L. 225-102 of the French Commercial Code, we hereby inform you that neither the personnel of the Company nor that of the companies which are related to it under the meaning of Article L. 225-180 of the French Commercial Code held an interest in the share capital of the Company on the last day of the period.

At December 31, 2018, the Company had 5 employees.

MISCELLANEOUS INFORMATION

7

7.1 Statutory Auditors

The Statutory Auditors of the Company are as follows:

PricewaterhouseCoopers Audit

(term expiring at the conclusion of the General Meeting convened to approve the financial statements for the period ending December 31, 2023)

KPMG Audit

(term expiring at the conclusion of the General Meeting convened to approve the financial statements for the period ending December 31, 2023)

7.2 Review of regulated agreements and commitments

7.2.1 Review of regulated agreements and commitments authorized during the financial year ended December 31, 2018

During the year ended December 31, 2018, pursuant to Articles L. 225-38 and L. 225-42-1 of the French Commercial Code, the Board of Directors, at its meeting of February 21, 2018, authorized the signing of amendments to the memorandum of investment, trust agreement and Shareholders' Agreement concluded in 2017, as described below. The amendments made are described in Section 7.2.2 below.

7.2.2 Review of regulated agreements and commitments authorized during previous financial years with continuing effect in the last financial year

The following regulated agreements and commitments, authorized by the Board of Directors in accordance with Articles L. 225-38 and L. 225-42-1 of the French Commercial Code, continued during the financial period ended December 31, 2018.

Memorandum of investment and Shareholders' Agreement

On January 26, 2017, the Board of Directors authorized the signing of a memorandum of investment and of a Shareholders' Agreement between AREVA SA, the French State, Japan Nuclear Fuel Limited (JNFL), Mitsubishi Heavy Industries Ltd (MHI) and the Company, pertaining to the acquisition by JNFL and MHI of an equity stake in the Company, each acquiring 5% of the share capital and voting rights.

The aforementioned agreements were signed on March 13, 2017.

On June 29, 2017, the Board of Directors authorized the signing of an amendment to memorandum of investment and Shareholders' Agreement entered into on March 13, 2017 by AREVA SA, the French State, Mitsubishi Heavy Industries Ltd (MHI), Japan Nuclear Fuel Ltd (JNFL) and the Company.

Signed on July 26, 2017, the main purpose of this amendment was to:

- add to the draft statutes of the Company and rules of procedure of the Board appended to the memorandum of investment and Shareholders' Agreement to reflect the additional changes agreed between the parties;
- formalize the agreement of MHI and JNFL to proceed, where applicable, with the two closures of the Company's fiscal year and that of some of its subsidiaries;
- amend certain provisions of the aforementioned memorandum of investment to bring it in line with the schedule agreed for the completion of the capital increase reserved for the French State.

On February 21, 2018, the Board of Directors authorized the signing of two new amendments to the memorandum of investment and Shareholders' Agreement, signed on the same day, intended to:

- officially acknowledge that several conditions precedent necessary to undertake Orano's capital increases reserved for MHI and JNFL had been satisfied;
- set the Orano capital increases reserved for JNFL and MHI for February 26, 2018; and
- adapt certain provisions of the Shareholders' Agreement to recognize, and organize, the acquisition of a stake in the Company by Natixis and Caisse des Dépôts, acting as trustees of Orano securities on behalf of various lenders of AREVA SA.

These amendments are in the Company's interest insofar as their conclusion was an essential and indivisible part of the implementation of the group restructuring project, and in particular of the Company's capital increases reserved for MHI and JNFL.

On March 27, 2018, Natixis and Caisse des Dépôts joined the Shareholders' Agreement. A French and English version of this agreement was signed on July 13, 2018, reiterating the terms of the Shareholders' Agreement of February 21, 2018.

Trust agreement

On January 26, 2017, the Board of Directors authorized the signing of a trust agreement between AREVA SA, the French State, Mitsubishi Heavy Industries Ltd (MHI), Japan Nuclear Fuel Ltd (JNFL), the Company and Crédit Agricole Corporate and Investment Bank.

In accordance with the provisions of the aforementioned memorandum of investment, the signing of the trust agreement took place on the day of completion of the capital increase of the Company reserved for the French State, namely July 26, 2017.

Under the terms of this trust agreement, MHI and JNFL placed in trust the sum of their subscriptions to the capital increase reserved therefor (*i.e.* 500,041,212.54 euros in total) until the completion of said capital increase.

Also under the terms of this agreement, the Company undertakes to pay all trust expenses and, where applicable, to pay compensation for any decrease in value of the trust estate.

On February 21, 2018, the Board of Directors authorized the signature of an amendment to the trust agreement, signed on the same day, to incorporate the changes made by the parties to the memorandum of investment. This amendment is in the Company's interest insofar as its conclusion was an essential and indivisible part of the implementation of the group restructuring project, and

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in particular of the Company's capital increases reserved for MHI and JNFL.

The funds placed in trust were released on February 26, 2018 upon completion of the capital increases reserved for MHI and JNFL, thereby terminating the trust agreement.

Service agreement

On July 26, 2017, the Board of Directors authorized the signing of a service agreement between AREVA SA and the Company. The aim of this agreement is to ensure the transfer of knowledge and to enable AREVA SA to have immediate access to the resources and means required to carry out certain tasks. It is justified by the Company's loss of control following the completion of the capital increase reserved for the French State.

The Company undertakes to provide to AREVA SA, directly or *via* one of its affiliates or a third-party provider of its choice, certain services within a specific list of fields.

This service agreement, entered into in accordance with the rules applicable to regulated professions, notably concerns certain financial services, the administrative management of human resources, the management of work environment services and access to information systems.

Services are billed in accordance with the conditions set out in the appendices to the agreement, it being specified that the prices thereof, approved annually as part of the parties' budgetary review, include a 2% margin (IT services) or 5% margin (non-IT services) on top of their cost price.

The agreement is renewable on a yearly basis, with effect from the completion of the Company's capital increase reserved for the French State.

The agreement was signed on July 27, 2017. It was tacitly renewed on July 27, 2018 for a renewable one-year term.

Compensation of independent directors members of the Advisory Committee

On July 27, 2017, the Board of Directors took note of the establishment of an "Advisory Committee" in accordance with the provisions of the Shareholders' Agreement entered into on March 13, 2017 between AREVA SA, the French State, Mitsubishi Heavy Industries Ltd (MHI), Japan Nuclear Fuel Ltd (JNFL) and the Company.

This Advisory Committee, which plays an advisory and consultative role, may make proposals relating to the group's strategy, particularly in relation to its international development policy.

On the same day, the Board of Directors, upon a recommendation from AREVA SA's Compensation and Nominating Committee, authorized the assignment of compensation to those independent directors agreeing to sit on the Advisory Committee of 1,500 euros per meeting attended.

Company commitments in favor of Philippe Knoche

On July 27, 2017, the Board of Directors noted the appointment, by a decree of the Minister of the Economy dated July 26, 2017, of Philippe KNOCHE as Chief Executive Officer of the Company.

This same Board of Directors, upon a proposal from the Compensation and Nominating Committee, established the Company's commitments concerning compensation and benefits due or likely to be due to Philippe KNOCHE, Chief Executive Officer, due to the cessation of or change to his duties in accordance with the following terms.

The Board of Directors authorized the payment to Philippe KNOCHE of a severance payment of a maximum amount equal to twice the sum of his annual compensation on the day of cessation of his duties.

It should be noted that if Philippe KNOCHE (i) intends to claim his pension rights shortly after the end of his term of office, for any reason whatsoever, including forced departure, or (ii) comes to hold another position within the group; he shall not be entitled to a severance payment.

This severance payment shall only be paid in the event of the dismissal of Philippe Knoche due to a change in control or strategy, and not in the event of dismissal for just cause. In all cases, the payment shall be subject to performance conditions, based on the following criteria:

- if the rate of fulfillment of the quantitative and qualitative objectives set for the last two full fiscal years averages out to at least 60%, the severance payment shall automatically be paid;
- if the rate of fulfillment of the quantitative and qualitative objectives set for the last two full fiscal years averages out to less than 60%, the Board of Directors shall appraise the performance of the person in question in view of the circumstances that affected the operation of the Company during the fiscal year ended.

The appraisal of the rate of fulfillment of the quantitative and qualitative objectives shall be as follows: if the calculation is performed in 2019: those approved by the Board of Directors of AREVA SA in 2017 and those approved by the Board of Directors of Orano in 2018.

Consequently, as from 2018, the performance objectives shall be approved each year by the Company's Board of Directors.

Moreover, the Board of Directors may decide to grant to the Chief Executive Officer an indemnity in return for a non-competition clause. The amount of this indemnity shall be deducted from the amount of any severance payment that may be granted to the CEO under the above terms and conditions. In the absence of any severance payment, the amount of the non-competition indemnity shall be set by the Board of Directors in accordance with usual practices.

Such indemnities are not part of the capped compensation of the Chief Executive Officer.

Philippe KNOCHE shall also be eligible for:

- MEDEF unemployment insurance from the GSC *(Garantie Sociale des Chefs et Dirigeants d'Entreprise)*, to which 70% of the contributions shall be made by the Company and 30% by Philippe KNOCHE; and
- the supplemental retirement scheme applicable to the management personnel of the Company.

7.3 Injunctions and fines for anti-competitive practices

As of the date of this report, the Company was not aware of any injunctions or monetary sanctions for anti-competitive practices against the Company.

7.4 Observations of the Works Council

In accordance with the dispositions of the Article L. 2332-1 of the French Labour Code on July 4, 2018, the group's Works Council was informed about the financial activity of the group. In addition, on December 12, 2018 it was consulted about Orano's strategic orientations in application of the dispositions of the Article L. 2312-20 of the French Labour Code.

The Board of Directors did not receive any observations from the from the single representative authority of the SEU Orano SA - Orano Support pursuant to the provisions of Article L. 2312-25 of the French Labor Code.

7.5 Payment terms

The invoices received and issued and not settled as at the closing date of the financial year and for which the payment deadline has passed are presented in the table below (in accordance with paragraph I of Article D. 441-4).

(in thousands of euros)	Article D. 441-1-1: Invoices received and not settled as at the closing date of the financial year and for which the payment deadline has passed						Article D. 441-1-2: Invoices issued and not settled as at the closing date of the financial year and for which the payment deadline has passed					
	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)
(A) LATE PAYMENT BANDS												
Number of invoices concerned	112	-	-	-	-	25	11	-	-	-	-	22
Total amount of invoices concerned (excl. tax)	25,753	1	0	0	143	144	2,161	146	78	0	145	368
Percentage of total amount of purchases for the year (excl. tax)	17.38%	0.00%	0.00%	0.00%	0.10%	0.10%	-	-	-	-	-	-
Percentage of revenue for the year (excl. tax)	-	-	-	-	-	-	1.78%	0.12%	0.06%	0.00%	0.12%	0.30%
(B) INVOICES EXCLUDED FROM (A) RELATING TO DISPUTED OR UNRECORDED DEBTS AND RECEIVABLES												
Number of invoices excluded	11						0					
Total amount of excluded invoices (incl. tax)	22						0					
(C) REFERENCE PAYMENT TERMS USED (CONTRACTUAL OR STATUTORY PAYMENT TERMS – ARTICLES L. 441-6 OR L. 443-1 OF THE FRENCH COMMERCIAL CODE)												
Payment terms used for calculating late payment	• Contractual terms + LME law						• Contractual terms + LME law					
	PURCHASES (EXCL. TAX): 148,141						**REVENUE (EXCL. TAX): 121,086**					

7.6 Information on loans granted to other companies covered by articles L. 511-6 and R. 511-2-1-1-II of the French Monetary and Financial Code

None.

APPENDICES TO THE ANNUAL ACTIVITY REPORT

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8.1 Consolidated financial statements – Year ended December 31, 2018

Consolidated statement of income

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

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

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

Comprehensive income

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

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

Consolidated statement of financial position

ASSETS

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

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

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

SHAREHOLDERS' EQUITY AND LIABILITIES

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

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

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

Consolidated statement of cash flows

(in millions of euros)	Note	December 31, 2018 (**)	December 31, 2017 (*) (12 months)
Net income for the period		**(542)**	**(360)**
Less: income from operations sold, discontinued or held for sale		-	2
Net income from continuing operations		**(542)**	**(358)**
Net amortization, depreciation and impairment of PP&E and intangible assets and marketable securities maturing in more than 3 months		424	1,046
Net increase in (reversal of) provisions	(Notes 12, 21, 22)	(293)	(253)
Net effect of accretion of assets and provisions		498	334
Income tax expense (current and deferred)		70	56
Net accrued interest included in financial debt		165	206
Loss (gain) on disposals of fixed assets and marketable securities maturing in more than 3 months; change in fair value		404	(277)
Share in net income of joint ventures and associates	(Note 13)	10	4
Dividends received from joint ventures and associates and share of income from consortiums		(5)	0
Other non-cash items		(15)	14
Cash flow from operations before interest and taxes		**716**	**771**
Net interest received (paid)		(205)	(210)
Income tax paid		3	(309)
Cash flow from operations after interest and tax		**514**	**252**
Change in working capital requirement	(Note 26)	147	56
NET CASH FROM OPERATING ACTIVITIES		**661**	**309**
Investment in PP&E and intangible assets		(460)	(486)
Disposals of PP&E and intangible assets		7	55
Acquisitions of shares of consolidated companies, net of acquired cash		(1)	(62)
Disposals of shares of consolidated companies, net of disposed cash		0	4
Acquisitions of financial assets earmarked for end-of-lifecycle operations		(1,349)	(3,269)
Disposals of financial assets earmarked for end-of-lifecycle operations		1,396	2,515
Loans granted to joint ventures and associates		(32)	0
Repayment of loans from joint ventures and associates		1	2
Acquisitions of other financial assets		(6)	(61)
Disposals of other financial assets		59	1
NET CASH FLOW FROM INVESTING ACTIVITIES		**(384)**	**(1,301)**
Share issues of the parent company and shares issues subscribed by non-controlling interests	(Note 19)	499	2,500
Transactions with non-controlling interests		-	(110)
Dividends paid to non-controlling interests		(62)	(23)
Increase in borrowings	(Note 23)	7	7
Decrease in borrowings	(Note 23)	(565)	(866)
Change in other borrowings	(Note 23)	(77)	(4)
NET CASH FLOW FROM FINANCING ACTIVITIES		**(199)**	**1,506**
Impact of foreign exchange movements		(2)	(21)
Net cash generated by operations sold, discontinued or held for sale		-	2
CHANGE IN NET CASH		**77**	**494**
NET CASH AT THE BEGINNING OF THE PERIOD		**1,877**	**1,382**
Net cash at the end of the period	(Note 18)	2,027	1,950
Less: short-term bank facilities and non-trade current accounts in credit	(Note 23)	(74)	(73)
NET CASH AT THE END OF THE PERIOD		**1,953**	**1,877**

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

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

Consolidated statement of changes in equity

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

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

(**) *Application of IFRS 9 as of January 1, 2018 (see Note 35).*

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

Summary of notes

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

INTRODUCTION

Orano is a business corporation with a Board of Directors (*Société anonyme à Conseil d'administration*) under French law. It is governed by the French Commercial Code. Orano SA has issued debt securities admitted to trading on the Euronext Paris regulated market; in accordance with Article L. 233-16 of the French Commercial Code, it is therefore required to publish consolidated financial statements. The consolidated financial statements of the Orano group as of December 31, 2018 have been prepared in accordance with IFRS. They were approved by the Board of Directors of Orano SA on February 28, 2019.

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

1.1 Highlights

Constitution and recapitalization of the Orano group

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

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

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

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

Capital increases reserved for JNFL and MHI

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

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

Change in share capital

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

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

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

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

Multi-Year Energy Program

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

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

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

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

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

Termination of the MFFF contract

MOX Services, 30% owned by Orano, was notified on October 10, 2018 by the National Nuclear Safety Administration (NNSA) of a request for termination for convenience of the contract for the construction of the Savannah River recycling plant (South Carolina). The plant, known as the MOX Fuel Fabrication Facility (MFFF), was to contribute to the nuclear disarmament program by recycling 34 metric tons of military plutonium into fuel to produce electricity for the 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 actions planned for the termination of the contract are underway, and should be finalized in 2019, at the same time as the conclusions of the audit carried out by the DoE (Department of Energy). On February 14, 2019, the DoJ (Department of Justice) also announced that it had begun a legal action against MOX Services, alleging excess payments amounting to 7 million US dollars. At this stage, and pending the conclusion of the ongoing discussions on the termination of the contract, the group does not expect a material impact on its financial statements.

Abandonment of the EREF project

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

Philippe Coste plant

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

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

Move of the Tricastin platform under a single nuclear operator

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

Liquidity position

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

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

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

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

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

1.2 Estimates and judgments

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

- operating margins on contracts recognized according to the percentage of completion method (see Notes 1.3.6 and 22), which are estimated by the project teams and reviewed by management following the group's procedures;
- cash flow forecasts and the discount and growth rates used for impairment tests for goodwill and other plant, property and equipment and intangible assets (see Notes 1.3.7.5, 9, 10 and 11);
- all assumptions used to assess the value of pension commitments and other employee benefits, including future payroll escalation and discount rates, retirement age and employee turnover (see Notes 1.3.10 and 21);
- all assumptions used to measure provisions for end-of-lifecycle operations (see Notes 1.3.12 and 12) and, where appropriate, the assets corresponding to the third-party share, in particular:
  - the estimated costs of those operations;
  - the inflation and discount rates;
  - the schedule of future disbursements;
  - the operating life of the facilities;
  - the scenario chosen with regard to knowledge of the initial condition of the facilities, the target final condition, and waste treatment and removal methods and their availability;
  - the procedures for final shut-down;
  - safety requirements and regulatory developments;

- assumptions used to measure provisions for contract completion, in particular for waste treatment channels not yet existing: the prospective cost estimates of the related operations, the provisional payment schedule, the inflation rate and the discount rate (see Notes 1.3.11 and 22);
- estimates and judgments regarding the outcome of disputes in progress and, more generally, estimates regarding all of the provisions and contingent liabilities of Orano (see Notes 1.3.11 and 22);
- estimates and judgments relative to the recoverability of accounts receivable from the group's customers and other financial assets (see Notes 1.3.6 and 1.3.9.5);
- estimates of future taxable income allowing the recognition of deferred tax assets (see Notes 1.3.13 and 8).

1.3 Accounting principles

1.3.1 Basis of preparation

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

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

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

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

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

Standards applicable from January 1, 2018

IFRS 9 "Financial Instruments"

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

In addition, IFRS 9 ushers in various amendments to IFRS 7, adding new requirements for disclosures in respect of financial instruments to accompany financial statements.

Classification and measurement

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

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

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

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

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

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

ASSETS

BREAKDOWN BY CATEGORY

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

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

This table should be read together with Note 29.

Impairment

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

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

Hedge accounting

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

IFRS 15 “Revenue from Contracts with Customers” and clarifying amendments to IFRS 15

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

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

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

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

principles changed the method used to recognize the financial components attached to several of the group's Back End contracts.

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

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

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

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

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

Standards applicable after 2018 and not early adopted by the group

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

IFRS 16 "Leases"

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

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

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

Other standards and interpretations

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

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

1.3.2 Rules governing the presentation of the financial statements

Current and non-current assets and liabilities

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

Other operating income and expenses

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

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

1.3.3 Consolidation method

Subsidiaries

Entities over which the group exercises exclusive control are fully consolidated. Control by the group over its subsidiaries is based on its exposure or entitlements to variable income resulting from its investment in these entities, as well as its ability to exercise power over the entity in such a way as to influence the amount of the returns it receives.

In the event of a change in the percentage of the group's interest in a subsidiary without loss of control, the change is recognized as a transaction between shareholders.

Intra-group balances and transactions are eliminated.

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

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

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

Joint ventures and associates

An associate is an entity over which the group exercises significant influence. Significant influence is the power to influence the making of key financial and operational decisions within the entity, without this demonstrating control or joint control of the group.

A joint venture is a joint arrangement in which the parties, who exercise joint control, are entitled to a share of the net assets of the joint venture. Joint control is demonstrated when, on the basis of the rights granted by the agreement, decisions on the relevant activities of the entity require the unanimous agreement of the parties.

The factors taken into account to demonstrate significant influence or joint control are similar to those used for analyzing the group's control over its subsidiaries. Joint ventures and associates are accounted for using the equity method.

Interests in joint operations

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

1.3.4 Consideration of the effect of foreign currencies

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

Transactions denominated in foreign currencies

Foreign currency-denominated transactions are translated by group companies into their functional currency at the exchange rate prevailing at the transaction date.

Monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rate prevailing on the last day of the period. Foreign exchange gains and losses are then recognized:

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

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

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

1.3.5 Operating segments

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

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

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

Mining activities cover exploration (search for new deposits), mining projects (studies and construction of mines), operation (extraction of natural uranium, then chemical concentration into U_3O_8) and the redevelopment of sites after their operation.

Front End activities primarily include the conversion of uranium concentrate (U_3O_8) to uranium hexafluoride (UF_6), followed by the enrichment of UF_6 by centrifugation.

Lastly, Back End activities include spent fuel recycling, nuclear logistics (cask design and manufacturing, and transportation of nuclear materials and waste), dismantling and services (dismantling of nuclear facilities, waste management and services to nuclear operators), as well as engineering activities (design and implementation of complex projects).

The methods used to measure the key indicators of each segment when preparing the internal reporting are identical to those used for the preparation of the consolidated financial statements. As a result, the segment information provided in the tables is presented in accordance with the same accounting principles as those used for the group's consolidated financial statements.

In addition, transactions between operating segments are carried out on an arm's length basis.

Segment assets include non-current assets, with the exception of “deferred tax assets” and “Securities of joint ventures and associates,” as well as “Inventories and work in progress” and receivables (excluding taxes). Orano has adopted centralized management of financial assets and liabilities and tax matters. Therefore, the corresponding balance sheet and statement of income items are not assigned to business operations.

Moreover, information on segment assets and liabilities is not regularly provided to the chief operating decision-maker; the group has nevertheless elected to present the assets allocatable by operating segment on a voluntary basis.

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

1.3.6 Revenue

The group operates in the various stages of the fuel cycle, offering the following products and services:

- supply of uranium concentrates (U_3O_8);
- supply of conversion and enrichment services or UF_6 and enriched UF_6;
- treatment-recycling services;
- engineering support to the operator and dismantling of nuclear facilities;
- transportation and warehousing logistics services and solutions, including cask design and manufacturing.

Customer contracts and performance obligations

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

Contract price

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

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

Allocation of the contract price to performance obligations

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

Recognition of revenue associated with each performance obligation

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

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

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

Contract assets and liabilities

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

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

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

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

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

Costs of obtaining contracts

Costs incurred to obtain a contract are only capitalized if:

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

1.3.7 Valuation of property, plant and equipment and intangible assets

1.3.7.1 Intangible assets

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

Intangible assets are recorded at their acquisition or production cost.

Goodwill

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

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

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

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

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

Goodwill from the acquisition of subsidiaries is presented separately in the balance sheet. Goodwill is not amortized, but is subject to impairment testing whenever indications of loss of value are identified, and at least once a year, as described in 1.3.7.5.

After initial recognition, goodwill is recorded at cost less any impairment recognized. In the income statement, impairment losses related to goodwill are presented under "Other operating expenses."

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

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

Research and Development expenses

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

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

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

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

Mineral exploration and pre-mining development

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

- exploration expenses whose purpose is to identify new mineral resources, and expenses related to assessments and pre-development of identified deposits are incurred before project profitability is determined and are recognized as "Research and Development" expenses for the period;
- pre-mining development expenses concern a project which, as of the date of the financial statements, has a strong chance of technical success and commercial profitability, and are capitalized. Indirect costs, excluding overhead expenses, are included in the valuation of these costs. Capitalized pre-mining expenses are amortized in proportion to the number of 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 depreciation of the assets (straight-line depreciation or as a function of the production units); each component is depreciated over its specific useful life.

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

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

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

1.3.7.3 Leases

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

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

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

Operating leases are expensed over the term of the lease.

1.3.7.4 Inclusion of borrowing costs

In accordance with IAS 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

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

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

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

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

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

- its fair value less costs to sell, corresponding to the net realizable value based on observable data when available (recent transactions, offers received from potential acquirers, reported ratios for comparable publicly traded companies, multiples of uranium resources in the ground obtained by comparing the market capitalizations of comparable companies with the stated deposit reserves or resources);
- and its value in use, which is equal to the present value of its projected future cash flows, as it results from the strategic plan validated by the governance bodies and its underlying assumptions, plus its "terminal value," corresponding to the present value, discounted to infinity, of cash flows for the "normative" year estimated at the end of the period covered by future cash flow projections. However, some CGUs or groups of CGUs have finite lives (depending on the volume of ore resources in Mining or the duration of operating permits in the nuclear businesses); in such cases, the cash flows taken into account to assess their value in use are not discounted to infinity but within the limit of their expected useful lives.

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

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

1.3.8 Inventories and work-in-process

Inventories are carried at the lesser of their historical cost and their net realizable value, which is the estimated selling price in the ordinary course of business, less anticipated completion costs or costs to sell.

Inventory consumption is generally measured using the weighted average unit cost method.

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

In the case of material loans with transfer of ownership, the group recognizes in inventory the borrowed material at the weighted average unit cost, which corresponds to the estimated fair value of the consideration transferred on the transaction date. A liability corresponding to the obligation to return the material is recognized in the same amount in "other operating liabilities."

A provision for onerous contracts is made when the expected weighted average unit cost of the return comes to be greater than that of the liability initially recorded.

1.3.9 Financial assets and liabilities

Financial assets

Financial assets consist of:

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

Financial liabilities

Financial liabilities include:

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

1.3.9.1 Classification and measurement of financial assets and liabilities

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

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

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

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

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

1.3.9.2 Methods used to measure financial assets and liabilities

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

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

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

1.3.9.3 Financial assets earmarked for end-of-lifecycle operations

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

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

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

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

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

1.3.9.4 Loans, advances and deposits

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

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

1.3.9.5 Trade accounts receivable

Trade receivables are recognized using the amortized cost method.

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

1.3.9.6 Cash and cash equivalents

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

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

1.3.9.7 Borrowings

Borrowings include:

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

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

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

1.3.9.8 Derivatives and hedge accounting

1.3.9.8.1 Risks hedged and financial instruments

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

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

1.3.9.8.2 Recognition of derivatives

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

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

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.

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

Presentation in the statement of financial position

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

Presentation in the statement of income

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

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

1.3.9.9 Derecognition of financial assets and liabilities

The group derecognizes a financial asset when:

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

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

1.3.10 Employee benefits

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

The benefits provided under post-employment benefits can be distinguished according to whether the level of benefits depends on (i) contributions made by the employee ("defined contribution" plans) or (ii) a level of benefit defined by the company ("defined benefit" plans").

In the case of defined contribution plans, the group's payments are recognized as expenses for the period to which they relate.

For defined benefit plans, benefit costs are estimated using the projected credit unit method: under this method, accrued pension benefits are allocated among service periods based on the plan vesting formula.

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

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

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

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

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

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

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

1.3.11 Provisions relating to operating activities

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

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

Provisions for contract completion

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

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

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

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

Onerous contracts

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

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

Provisions for restructuring

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

Provisions for mining site reclamation

These provisions correspond to the share of the expected expenses related to the costs of rehabilitating mining sites. The provision is constituted as and when the site is operated, in accordance with the principle of progressive deterioration.

The provision for mining site reclamation is equal to the proportion of tonnages processed since the commissioning of the site compared to the total tonnage of the site (quantities already processed and yet to be processed).

1.3.12 Provisions for end-of-lifecycle operations

Provisions for end-of-lifecycle operations cover:

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

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

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

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

Treatment of amortization

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

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

Treatment of expenses from discounting reversals

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

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

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

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

The discount rate is set:

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

The rate thus results from implementation of the following approach:

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

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

Treatment of changes in assumptions

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

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

- if the facility is in operation, end-of-lifecycle assets are adjusted in the same amount as the provision; end-of-lifecycle assets are amortized over the remaining life of the facilities;

- if the facility is no longer in operation, or if the operations cover waste retrieval and packaging (WRP), the impact is expensed in the year of the change for the remaining share of the cost to the group. The impact of changes in cost estimates is recognized under operating income; the impact of changes in discount rates related to changes in market conditions and changes in the payment schedules is reflected in financial income.

End-of-lifecycle assets (third party share)

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

End-of-lifecycle assets (third party share) are not amortized.

They are discounted symmetrically with the corresponding provisions. Accretion effects increasing the value of the asset are recorded in a financial income account.

They decline as the contracted work is carried out in return for the recognition of a claim on the same third parties and/or payments received from them.

1.3.13 Income tax

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

Current tax

Current tax assets and liabilities are measured based on the expected amount that will be received or paid to the tax authorities.

Current tax relating to items recognized in equity is also recognized in equity, and not in the income statement. When the positions it has taken in its tax returns are subject to interpretation, Management periodically reviews them, and records provisions accordingly when it deems necessary.

Deferred taxes

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

Temporary taxable differences generate a deferred tax liability.

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

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

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

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

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).

Netting 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

2.1 Consolidated companies (French / foreign)

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

2.2 2018 Transactions

Creation of the Interim Storage Partners LLC joint venture

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

2.3 2017 transactions (12 months)

Sale of MAINCO

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

Acquisition of Orano Projets (formerly AREVA Projets)

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

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

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

Buyout of non-controlling interests in EURODIF SA

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

Creation of Si-nerGiE

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

2.4 Consolidated companies and associates

		December 31, 2018		December 31, 2017	
Name of unit or controlling entity: Company name, legal form	Country	Method	Percentage of interest	Method	Percentage of interest
FRANCE					
Orano		FC	100	FC	100
Orano Cycle		FC	100	FC	100
Orano Support		FC	100	FC	100
Orano Mining		FC	100	FC	100
CFMM		FC	100	FC	100
CFM		FC	100	FC	100
Orano Expansion		FC	86.51	FC	86.51
EURODIF SA (see Note 20)		FC	90	FC	90
EURODIF PRODUCTION (see Note 20)		FC	90	FC	90
SOCATRI (**) (see Note 20)				FC	90
SOFIDIF		FC	60	FC	60
SET HOLDING		FC	95	FC	95
SET		FC	95	FC	95
Orano Temis		FC	100	FC	100
Orano DS – Démantèlement et Services		FC	73.86	FC	73.86
CNS		FC	51	FC	51
TRIHOM (1)		FC	48.75	FC	48.75
SICN		FC	100	FC	100
LEMARECHAL		FC	100	FC	100
TN International		FC	100	FC	100
Orano Med		FC	100	FC	100
Orano Projets		FC	100	FC	100
Orano Assurance et Réassurance		FC	100	FC	100
Laboratoire d'étalons d'activité		FC	100	FC	100
Si-nerGiE		EM	50	EM	50
EUROPE (Excluding France)					
Orano GmbH	Germany	FC	100	FC	100
Urangesellschaft - Frankfurt	Germany	FC	100	FC	100
Dekontaminierung Sanierung Rekultivierung	Germany	FC	100	FC	100
Enrichment Technology Company Ltd (ETC)	United Kingdom	EM	50	EM	50
Orano Projects Ltd	United Kingdom	FC	100	FC	100
AMA Nuclear Ltd	United Kingdom	EM	33	EM	33
Orano UK Ltd	United Kingdom	FC	100	FC	100
AMERICAS					
Orano USA LLC	United States	FC	100	FC	100
UG USA	United States	FC	100	FC	100
Columbiana High Tech	United States	FC	100	FC	100
TN Americas LLC	United States	FC	100	FC	100
Orano Med LLC	United States	FC	100	FC	100
PIC	United States	FC	100	FC	100
Orano Federal Services LLC	United States	FC	100	FC	100
Orano Decommissioning Services LLC	United States	FC	100		
Orano CIS LLC	United States	FC	100		
Interim Storage Partners LLC	United States	EM	51		
Orano Canada Inc. (*)	Canada	FC	100	FC	100
Cigar Lake	Canada	JO	37.10	JO	37.10

		December 31, 2018		December 31, 2017	
Name of unit or controlling entity: Company name, legal form	Country	Method	Percentage of interest	Method	Percentage of interest
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 Ltd	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 Ltd	China	FC	100	FC	100
Areva Mongol LLC	Mongolia	FC	66	FC	66
COGEGOBI	Mongolia	FC	66	FC	66
Badrakh Energy LLC [(1)]	Mongolia	FC	43.56	FC	43.56
Orano Korea	Rep. of Korea	FC	100	FC	100
AREVA India Private Ltd	India	FC	100	FC	100
Katco	Kazakhstan	FC	51	FC	51
Orano Holdings Australia Pty Ltd	Australia	FC	100	FC	100
Orano Australia Pty Ltd	Australia	FC	100	FC	100
AFRICA/MIDDLE EAST					
SOMAïR	Niger	FC	63.40	FC	63.40
IMOURAREN SA	Niger	FC	57.66	FC	57.66
COMINAK	Niger	EM	34	EM	34
Orano Mining (Namibia) Pty Ltd	Namibia	FC	100	FC	100
Orano Processing Namibia	Namibia	FC	100	FC	100
Erongo Desalination Company (PTY) Ltd	Namibia	FC	100	FC	100
URAMIN Centrafrique	Central African Rep.	FC	100	FC	100
AREVEXPLO RCA SA	Central African Rep.	FC	70	FC	70
Orano Gabon	Gabon	FC	100	FC	100
COMUF	Gabon	FC	68.42	FC	68.42
JORDAN AREVA RESSOURCES	Jordan	FC	50	FC	50

(FC: Full consolidation; EM: equity method; JO: Joint operation)
(**) Mergers between consolidated entities.
(1) The percentage of control over these entities is greater than 50%.

2.5 Unconsolidated companies

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

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

NOTE 3 SEGMENT INFORMATION

By business segment

2018 RESULT

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

(*) See Note 6.

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

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

2018 STATEMENT OF FINANCIAL POSITION

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

2017 RESULTS (12 MONTHS)

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

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

(**) See Note 6 and adjustments pursuant to IFRS 15 in Note 35.

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

2017 STATEMENT OF FINANCIAL POSITION

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

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

By region

2018

CONTRIBUTION TO CONSOLIDATED REVENUE BY BUSINESS SEGMENT AND CUSTOMER LOCATION

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

ACQUISITIONS OF PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS (EXCLUDING GOODWILL) AT DECEMBER 31, 2018 BY BUSINESS SEGMENT AND REGION OF ORIGIN OF THE UNITS

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

DECEMBER 31, 2017 (12 MONTHS)

CONTRIBUTION TO CONSOLIDATED REVENUE BY BUSINESS SEGMENT AND CUSTOMER LOCATION

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

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

ACQUISITIONS OF PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS (EXCLUDING GOODWILL) FOR THE 12 MONTHS ENDED DECEMBER 31, 2017 BY BUSINESS SEGMENT AND BY ORIGINAL REGION OF THE UNITS

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

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

NOTE 4 ADDITIONAL INFORMATION BY TYPE OF EXPENSE

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

(*) Excluding pension obligations.

NOTE 5 OTHER OPERATING INCOME AND EXPENSES

OTHER OPERATING INCOME

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

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

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

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

OTHER OPERATING EXPENSES

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

Impairment losses on other assets are described in Note 11.

In 2018, other operating expenses include:

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

NOTE 6 RECONCILIATION BETWEEN OPERATING INCOME AND EBITDA

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

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

NOTE 7 NET FINANCIAL INCOME

Gross borrowings costs

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

OTHER FINANCIAL INCOME AND EXPENSES

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

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

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

NOTE 8 INCOME TAX

ANALYSIS OF TAX EXPENSE

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

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

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

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

It should also be noted that at December 31, 2018, relationships between the subsidiaries and AREVA SA for the period in which they were part of the scope of the tax consolidation formed around AREVA SA, *i.e.* until December 31, 2016 inclusive, are still governed by an exit agreement, based on a principle of fiscal neutrality.

The tax credits that the tax-consolidated companies transmitted to the parent company during the tax consolidation period and that were not used within the consolidation will be refunded by AREVA SA in the first half of the fourth year following that in which the expenses giving rise to the tax credit were incurred, *i.e.*, from 2018 (the 2014 tax credits) to 2020 (the 2016 tax credits).

RECONCILIATION OF TAX EXPENSE AND INCOME BEFORE TAXES

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

BREAKDOWN OF OTHER CHANGE IN PERMANENT DIFFERENCES

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

DEFERRED TAX ASSETS AND LIABILITIES

(in millions of euros)	December 31, 2018	December 31, 2017
Deferred tax assets	104	101
Deferred tax liabilities	13	33
NET DEFERRED TAX ASSETS AND LIABILITIES	**91**	**68**

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

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

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

MAIN CATEGORIES OF DEFERRED TAX ASSETS AND LIABILITIES

(in millions of euros)	December 31, 2018	December 31, 2017
TAX IMPACT OF TEMPORARY DIFFERENCES RELATED TO:		
Property, plant and equipment, intangible assets and non-current assets	56	18
Working capital assets	16	(29)
Employee benefits	11	124
Provisions for restructuring	0	0
Tax-driven provisions	(146)	(134)
Provisions for end-of-lifecycle operations	30	30
Impact of loss carry-forwards and deferred taxes	93	34
Other temporary differences	31	25
NET DEFERRED TAX ASSETS AND LIABILITIES	**91**	**68**

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

AREVA Nuclear Material (renamed Orano USA LLC since January 22, 2018) had a tax asset of more than 300 million US dollars serving as the tax base at December 31, 2017 (*i.e.* 75 million US dollars taxed at 25%), representing the cost of studies for the Eagle Rock Enrichment Facility (EREF) project.

This expenditure, recognized since its origin as annual expenses for accounting purposes, has now been capitalized for tax reasons, and could be depreciated once the facility has been commissioned. Since the US Department of Energy (DOE) has informed the company of its decision not to renew in 2018 its original commitment to guarantee the loan necessary to build the plant, the decision was made to abandon the project, put the land that had been acquired in Idaho up for sale, and to make this known to the public. As a result, this asset, now devoid of any future utility, is totally written off for tax purposes starting in 2018, with a 20-year carryforward. Deferred tax assets have been maintained accordingly.

CHANGE IN CONSOLIDATED DEFERRED TAX ASSETS AND LIABILITIES

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

CONSOLIDATED DEFERRED TAX INCOME AND EXPENSES BY CATEGORY OF TEMPORARY DIFFERENCE

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

BREAKDOWN OF DEFERRED TAXES RECOGNIZED IN OTHER COMPREHENSIVE INCOME (IN EQUITY)

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

DEFERRED TAX ASSETS NOT RECOGNIZED

(in millions of euros)	December 31, 2018	December 31, 2017
Tax credits	-	-
Tax losses	589	434
Other temporary differences	1,177	1,069
TOTAL DEFERRED TAX ASSETS NOT RECOGNIZED	**1,766**	**1,503**

NOTE 9 GOODWILL

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

Goodwill impairment tests

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

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

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

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

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

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

Mining

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

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

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

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

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

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

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

Front End

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

Future cash flows are determined using the contractually set prices for the fixed component of the backlog and, for the variable component, the market prices based on the forecast price curve prepared and updated by Orano. The forecast price curve is also used for the portion of sales not yet covered by a contract.

The price curve is based among other things on Orano's vision of changes in supply (enrichment capacities, secondary stocks and resources) and demand for enriched uranium (reflecting the consumption of the global fleet of nuclear power plants over the length of the curve and the purchasing policy of the relevant utilities).

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

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

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

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

Back End

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

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

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

NOTE 10 INTANGIBLE ASSETS

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

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

NOTE 11 PROPERTY, PLANT AND EQUIPMENT

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

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

Mining assets

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

Mining assets in Namibia - Trekkopje

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

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

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

Industrial assets: conversion

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

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

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

Industrial assets: enrichment

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

NOTE 12 END-OF-LIFECYCLE OPERATIONS

Provisions for end-of-lifecycle operations

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

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

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

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

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

Nature of the commitments

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

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

For all the facilities 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.

Measurement of provisions for dismantling and WRP operations

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

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

Main opportunities and uncertainties

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

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

Consideration of identified risks and unforeseen events

The technical cost of end-of-lifecycle operations is backed up by consideration of:

- a baseline scenario that takes operating experience into account;
- a margin for risks identified through risk analyses conducted in accordance with the Orano standard and updated regularly as the projects advance;
- a margin for unforeseen events designed to cover unidentified risks.

Long-term waste management

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

These expenses include:

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

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

This cost at completion, after adjustment to the economic conditions prevailing at December 31, 2018 and discounting, have been covered by a provision for the amount of the estimated share of financing that will ultimately be borne by the group and the proportion of waste existing at the closure. The breakdown of funding between nuclear operators depends on many factors, including the volume and nature of the waste sent by each operator, the timing of the shipment of waste and the design of the underground facility.

For sensitivity analysis purposes, an increase of 1 billion euros in the amount of the CIGEO project estimate before discounting would result in an additional expense in a present value of approximately 32 million euros for Orano, based on the methodology used to establish the existing provision.

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

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

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

Tentative schedule of provision disbursements

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

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

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

End-of-lifecycle assets

End-of-lifecycle assets include two items:

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

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

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

Financial assets earmarked for end-of-lifecycle operations

This heading consists of the following:

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

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

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

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

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

Portfolio of earmarked assets

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

The Equity segment is primarily managed by external service providers *via*:

- an equity management agreement; and
- earmarked investment funds.

The Rate segment (bonds and money market) is invested *via*:

- open-ended mutual funds;
- earmarked investment funds; and
- directly held bonds.

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

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

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

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

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

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

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

Receivables related to end-of-lifecycle operations

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

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

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

Risk description and assessment

Equity investments in the portfolio of earmarked securities include mainly:

- a mandate of publicly-traded shares, which includes about thirty companies based in the European Union. The securities are held in order to generate gains over the long term. Although it is not a management guideline, the mandate will be assessed over the long term by reference to the MSCI EMU index, net dividends reinvested. The nature of the long-term mandate is not compatible with an evaluation against a benchmark;
- dedicated equity funds with diversified management strategies centered on European securities. The managers must follow strict exposure rules, depending on the objectives of the fund involved: including limits on the amounts invested in certain stocks or as a percentage of the net value of the portfolio, limits on exposures in currencies other than the euro, tracking error (relative risk compared with the benchmark), and limits on exposures to certain types of instruments. Together, these limits are designed to comply with investment rules established in the implementing decree of the law of June 28, 2006.

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

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

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

Risk assessment and management of the earmarked portfolio

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

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

(in millions of euros)	December 31, 2018
ASSUMPTION: DECLINING EQUITY MARKETS AND RISING INTEREST RATES	
- 10% on equities	(262)
+100 basis points on rates	(65)
TOTAL	**(327)**
ASSUMPTION: RISING EQUITY MARKETS AND DECLINING INTEREST RATES	
+10% on equities	+262
- 100 basis points on rates	+65
TOTAL	**+327**

NOTE 13 INFORMATION ON JOINT VENTURES AND ASSOCIATES

2018

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

2017

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

Significant joint ventures

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

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

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

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

	December 31, 2018	December 31, 2018	December 31, 2017	December 31, 2017
(in millions of euros)	ETC	Siner-GiE	ETC	Si-nerGiE
	Front End	*Corporate*	*Front End*	*Corporate*
Country	*UK*	*France*	*UK*	*France*
% held	*50%*	*50%*	*50%*	*50%*
Share of net equity before eliminations at the beginning of the year	**22**	**(5)**	**10**	**22**
Share of comprehensive income	21	-	-	-
Share of dividend distributions	-	-	-	-
Share of income paid by consortiums	-	5	-	-
Other changes	-	-	-	-
Share of net equity before eliminations at the end of the year	**43**	**0**	**22**	**(5)**
Consolidation adjustments	(75)	-	(74)	-
INVESTMENTS IN JOINT VENTURES AT YEAR-END CLOSING SHARE OF NEGATIVE NET EQUITY	**(32)**	**-**	**(52)**	**(5)**

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

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

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

Non-significant joint ventures

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

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

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

NOTE 14 OTHER CURRENT AND NON-CURRENT ASSETS

(in millions of euros)	December 31, 2018	December 31, 2017
Derivatives on financing activities	37	52
Other	81	62
TOTAL OTHER NON-CURRENT ASSETS	**118**	**114**
Derivatives on financing activities	46	9
Pledged bank accounts	-	58
Other	20	-
TOTAL OTHER CURRENT FINANCIAL ASSETS	**66**	**67**

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

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

NOTE 15 INVENTORIES AND WORK IN PROCESS

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

NOTE 16 TRADE ACCOUNTS RECEIVABLE AND RELATED ACCOUNTS

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

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

TRADE ACCOUNTS RECEIVABLE AND RELATED ACCOUNTS (GROSS)

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

NOTE 17 OTHER OPERATING RECEIVABLES

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

Government receivables mainly include VAT receivables and tax credits.

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

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

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

NOTE 18 CASH AND CASH EQUIVALENTS

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

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

NOTE 19 EQUITY

Capital

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

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

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

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

Stock option plan

There is no stock option plan.

Transactions with shareholders

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

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

Transactions with companies under joint control

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

NOTE 20 NON-CONTROLLING INTERESTS

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

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

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

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

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

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

DECEMBER 31, 2018

(in millions of euros)	IMOURAREN	SOMAÏR	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)**
of which attributable to non-controlling interests	*(7)*	*0*	*34*	*0*	*(1)*
Current assets	5	124	136	654	139
Non-current assets	114	158	143	5,122	31
Current liabilities	(24)	(59)	(13)	(881)	(112)
Non-current liabilities	(2,114)	(71)	(22)	(3,076)	(20)
Net assets	**(2,018)**	**152**	**244**	**1,819**	**38**
of which attributable to non-controlling interests	*(554)*	*56*	*119*	*91*	*10*
Cash flow from operating activities	(51)	17	116	154	1
Cash flow from investing activities	6	(15)	(33)	39	(4)
Cash flow from financing activities	44	-	(1)	(200)	(6)
Increase (decrease) in net cash	**(1)**	**2**	**76**	**(6)**	**(9)**
Dividends paid to non-controlling interests	-	-	(9)	(1)	(1)

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

DECEMBER 31, 2017

(in millions of euros)	IMOURAREN	SOMAÏR	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 (*)	**-**	**154**	**178**	**642**	**260**
EBITDA (*)	**(1)**	**31**	**104**	**446**	**26**
Net income (*)	**(1,127)**	**(41)**	**52**	**66**	**21**
of which attributable to non-controlling interests	*(234)*	*(15)*	*25*	*3*	*6*
Current assets	10	141	98	664	156
Non-current assets	114	154	157	5,213	25
Current liabilities	(25)	(88)	(36)	(919)	(116)
Non-current liabilities	(2,070)	(57)	(21)	(3,121)	(19)
Net assets	**(1,971)**	**151**	**198**	**1,836**	**46**
of which attributable to non-controlling interests	*(547)*	*55*	*97*	*92*	*12*
Cash flow from operating activities (*)	(47)	19	60	291	7
Cash flow from investing activities (*)	6	(24)	(31)	(75)	(2)
Cash flow from financing activities (*)	47	-	(59)	(206)	(7)
Increase (decrease) in net cash (*)	**6**	**(5)**	**(33)**	**10**	**13**
Dividends paid to non-controlling interests (*)	-	-	(20)	(1)	(2)

(*) *For the 12-month period.*
(**) *Imouraren is held directly by Orano Expansion, whose purpose is to finance its subsidiary. The data presented for Imouraren and Orano Expansion are aggregated. The share attributable to non-controlling interests in Imouraren is 42.34%, to those in Orano Expansion, it is 13.49%.*

NOTE 21 EMPLOYEE BENEFITS

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

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

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

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

The group's key benefits

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

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

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

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

PROVISIONS RECOGNIZED ON THE BALANCE SHEET

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

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

ACTUARIAL ASSUMPTIONS

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

Mortality tables

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

Retirement age in France

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

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

The rates in brackets indicate estimated maximum and minimum values in the group.

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

Assumed rate of salary increase for the calculation of provisions include inflation.

The rates in square brackets show average revaluations at the beginning of the career, which are assumed to be higher, and those at the end of the career.

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

FINANCIAL ASSETS

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

Effective return on plan assets

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

NET AMOUNT RECOGNIZED

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

Sensitivity of the actuarial value to changes in discount rate

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

EXPENSE FOR THE YEAR

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

CHANGE IN THE DEFINED BENEFIT OBLIGATION

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

CHANGES IN PLAN ASSETS

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

CHANGE IN PROVISION MEASURED

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

PROVISIONAL SCHEDULE OF USE OF THE PROVISION

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

NOTE 22 OTHER PROVISIONS

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

(*) Including 98 million euros of accretion.

Provisions for onerous contracts

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

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

In addition:

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

Provisions for contract completion

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

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

Main uncertainties

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

Discount rate

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

Other current provisions

As of December 31, 2018 other current provisions include:

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

NOTE 23 BORROWINGS

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

(*) *After hedging of the interest rate risk.*

At December 31, 2018, borrowings included in particular:

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

CHANGE IN BORROWINGS

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

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

(in millions of euros)	
Cash flows of borrowings	**(713)**
Interest paid	106
Financial instruments – Assets	(22)
Short-term bank facilities and current accounts in credit	(6)
CASH FLOWS OF BORROWINGS INCLUDED IN NET CASH FLOWS FROM FINANCING ACTIVITIES	**(635)**

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

BORROWINGS BY MATURITY

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

BORROWINGS BY CURRENCY

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

BORROWINGS BY TYPE OF INTEREST RATE

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

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

BOND DEBT

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

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

SCHEDULES OF CONTRACTUAL FLOWS AT DECEMBER 31, 2018

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

SCHEDULES OF CONTRACTUAL FLOWS AT DECEMBER 31, 2017

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

NOTE 24 ASSETS AND LIABILITIES ON CONTRACTS

Contract assets and liabilities are defined in Note 1.3.6.

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

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

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

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

NOTE 25 OTHER OPERATING LIABILITIES

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

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

NOTE 26 CASH FROM OPERATING ACTIVITIES

CHANGE IN WORKING CAPITAL REQUIREMENT

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

NOTE 27 TRANSACTIONS WITH RELATED PARTIES

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

Related party transactions include:

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

DECEMBER 31, 2018

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

DECEMBER 31, 2017 (12 MONTHS)

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

Relations with the French State and state-owned companies

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

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

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

Associates and joint ventures

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

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

Joint operations

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

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

Cigar Lake

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

McClean Lake

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

McArthur River

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

Key Lake

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

Compensation paid to key executives

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

Key executives are:

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

NOTE 28 FINANCIAL INSTRUMENTS

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

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

Foreign exchange risk

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

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

Currency translation risk

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

Financing risk

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

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

Trade exposure

The principal foreign exchange exposure concerns fluctuations in the euro/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 tender proposals in foreign currencies, Orano purchases derivative financial instruments (mainly currency futures) or specific insurance contracts issued by Coface. Hedging transactions are accordingly backed by underlying transactions in identical amounts and maturities, and are generally documented and eligible for hedge accounting (excluding possible hedges of tenders submitted in foreign currencies).

FINANCIAL DERIVATIVE INSTRUMENTS SET UP TO HEDGE FOREIGN EXCHANGE RISK AT DECEMBER 31, 2018

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

FINANCIAL DERIVATIVE INSTRUMENTS SET UP TO HEDGE FOREIGN EXCHANGE RISK AT DECEMBER 31, 2017

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

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

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

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

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

Liquidity risk

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

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

The next significant maturity is November 6, 2019. It relates to a bond issued in a nominal amount of 750 million euros.

Orano had a gross cash position of 2,027 million euros as of December 31, 2018 to meet these commitments and ensure the continuity of its operations over the longer term. This cash position has been strengthened since July 11, 2018 by a confirmed and undrawn syndicated credit facility of 840 million euros. This new facility, signed with a pool of 10 international banks, has a term of three years, with two optional one-year extensions.

Counterparty risk

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

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

Interest rate risk

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

FINANCIAL DERIVATIVE INSTRUMENTS SET UP TO HEDGE INTEREST RATE RISK AT DECEMBER 31, 2018

		Notional amounts by maturity date						
(in millions of euros)	Total	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	Market value (1)
INTEREST RATE SWAPS – EUR VARIABLE LENDER								
EUR fixed borrower	200	-	-	-	200	-	-	(4)
EUR variable borrower	100	-	-	-	100	-	-	-
CAD variable borrower	346	346	-	-	-	-	-	(1)
INTEREST RATE SWAPS – EUR FIXED LENDER								
EUR variable borrower	550	50	150	150	-	200	-	25
INFLATION RATE SWAPS								
variable lender – USD fixed borrower	153	-	153	-	-	-	-	(25)
TOTAL	**1,349**	**396**	**303**	**150**	**300**	**200**	**-**	**(5)**

(1) Foreign exchange portion.

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

		Market value of contracts (1)			
(in millions of euros)	Nominal amount of contract	Cash flow hedges (CFH)	Fair value hedges (FVH)	Not formally documented (Trading)	Total
INTEREST RATE SWAPS – EUR VARIABLE LENDER					
EUR fixed borrower	200	-	-	(4)	(4)
EUR variable borrower	100	-	-	(0)	(0)
CAD variable borrower	346	-	-	(1)	(1)
INTEREST RATE SWAPS – EUR FIXED LENDER					
EUR variable borrower	550	-	25	-	25
INFLATION RATE SWAPS – USD VARIABLE LENDER					
USD fixed borrower	153	-	-	(25)	(25)
TOTAL	**1,349**	**-**	**25**	**(30)**	**(5)**

(1) Interest rate portion.

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

MATURITIES OF THE GROUP'S FINANCIAL ASSETS AND BORROWINGS AT DECEMBER 31, 2018

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

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

MATURITIES OF THE GROUP'S FINANCIAL ASSETS AND BORROWINGS AT DECEMBER 31, 2017

(in millions of euros)	Less than 1 year	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 5 years	More than 5 years	Total
Financial assets	**2,070**	**-**	**-**	**-**	**-**	**-**	**2,070**
including fixed rate assets	-	-	-	-	-	-	-
including floating rate assets	2,061	-	-	-	-	-	2,061
including non-interest-bearing assets	9	-	-	-	-	-	9
Borrowings	**(429)**	**(821)**	**(603)**	**(852)**	**(288)**	**(2,112)**	**(5,105)**
including fixed rate borrowings	(212)	(758)	(522)	(763)	-	(1,938)	(4,194)
including floating rate borrowings	(118)	(63)	(81)	(89)	(288)	(169)	(807)
including non-interest-bearing borrowings	(100)	-	-	-	-	(5)	(105)
Net exposure before hedging	**1,641**	**(821)**	**(603)**	**(852)**	**(288)**	**(2,112)**	**(3,035)**
share exposed to fixed rates	(212)	(758)	(522)	(763)	-	(1,938)	(4,194)
share exposed to floating rates	1,943	(63)	(81)	(89)	(288)	(169)	1,254
non-interest-bearing share	(91)	-	-	-	-	(5)	(96)
Off-balance sheet hedging							
on borrowings: fixed rate swaps	59	50	150	150	(200)	200	409
on borrowings: floating rate swaps	(59)	(50)	(150)	(150)	200	(200)	(409)
Net exposure after hedging	**1,641**	**(821)**	**(603)**	**(852)**	**(288)**	**(2,112)**	**(3,035)**
share exposed to fixed rates	(153)	(708)	(372)	(613)	(200)	(1,738)	(3,785)
share exposed to floating rates	1,884	(113)	(231)	(239)	(88)	(369)	845
non-interest-bearing share	(91)	-	-	-	-	(5)	(96)

Equity risk

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

NOTE 29 ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

Financial assets and liabilities by category

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

DECEMBER 31, 2018

ASSETS

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

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

BREAKDOWN OF ASSETS RECOGNIZED AT FAIR VALUE BY VALUATION TECHNIQUE

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

LIABILITIES AND EQUITY

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

(*) Level 2.

DECEMBER 31, 2017

ASSETS

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

BREAKDOWN OF ASSETS RECOGNIZED AT FAIR VALUE BY VALUATION TECHNIQUE

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

LIABILITIES AND EQUITY

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

(*) *Level 2.*

Net gains and losses on financial instruments

SECURITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

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

(*) *Excluding tax impact.*

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

LOANS AND RECEIVABLES

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

FINANCIAL ASSETS AND LIABILITIES AT AMORTIZED COST

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

CASH FLOW HEDGES

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

NOTE 30 OFF-BALANCE-SHEET COMMITMENTS

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

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

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

NOTE 31 DISPUTES AND CONTINGENT LIABILITIES

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

GADOULLET

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

URAMIN case

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

COMUF

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

Investigations

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

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

NOTE 32 AUDITORS' FEES

DECEMBER 31, 2018

	PwC Audit	KPMG Audit
(in thousands of euros)	Amount excl. tax	Amount excl. tax
INDEPENDENT AUDIT, CERTIFICATION & EXAMINATION OF THE SEPARATE AND CONSOLIDATED FINANCIAL STATEMENTS		
Orano SA	385	320
Consolidated French subsidiaries	726	730
SUB-TOTAL	**1,111**	**1,050**
SERVICES OTHER THAN AUDITING THE FINANCIAL STATEMENTS		
Orano SA	-	9
Consolidated French subsidiaries	178	54
SUB-TOTAL	**178**	**63**
TOTAL	**1,289**	**1,113**

Services other than auditing the financial statements mainly concern:

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

DECEMBER 31, 2017

	Ernst & Young	Mazars
(in thousands of euros)	Amount excl. tax	Amount excl. tax
INDEPENDENT AUDIT, CERTIFICATION & EXAMINATION OF THE SEPARATE AND CONSOLIDATED FINANCIAL STATEMENTS		
Orano SA	788	874
Consolidated French subsidiaries	488	1,231
SUB-TOTAL	**1,276**	**2,105**
SERVICES OTHER THAN AUDITING THE FINANCIAL STATEMENTS		
Orano SA	28	28
Consolidated French subsidiaries	422	95
SUB-TOTAL	**450**	**122**
TOTAL	**1,725**	**2,227**

NOTE 33 BACKLOG

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

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

NOTE 34 SUBSEQUENT EVENTS

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

NOTE 35 TRANSITION FROM THE PUBLISHED 2017 FINANCIAL STATEMENTS TO THE ADJUSTED 2017 FINANCIAL STATEMENTS

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

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

RESTATEMENT OF EQUITY

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

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

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

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

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

Restatement of EBITDA

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

Transition from reported statement of income to restated statement of income

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

Transition from Statement of comprehensive income as reported to restated Statement of comprehensive income

(in millions of euros)	December 2017 (12 months) Reported	IFRS 15 adjustments	December 2017 (12 months) Restated
NET INCOME	**(360)**	**-**	**(360)**
Items not recyclable to the statement of income	**(8)**	**-**	**(8)**
Items recyclable to the statement of income	**(34)**	**-**	**(34)**
TOTAL OTHER ITEMS OF COMPREHENSIVE INCOME (NET OF INCOME TAX)	**(42)**	**-**	**(42)**
COMPREHENSIVE INCOME	**(401)**	**-**	**(401)**
• Attributable to owners of the parent	(281)	-	(281)
• Attributable to non-controlling interests	(121)	-	(121)

Transition from the statement of financial position as reported at December 31, 2016 to the restated statement of financial position at January 1, 2017

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

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

Transition from the statement of financial position as reported to the restated statement of financial position at December 31, 2017

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

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

Transition from reported CF statement to restated CF statement

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

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

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

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

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

Statement of income

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

Comprehensive income

(in millions of euros)	August 31, 2017 (8 months)	December 31, 2017 (4 months)	Foreign exchange impact	December 31, 2017 (12 months)
NET INCOME	**(380)**	**20**	**0**	**(360)**
Items not recyclable to the statement of income	**35**	**(43)**	**0**	**(8)**
Items recyclable to the statement of income	**(63)**	**31**	**(1)**	**(34)**
TOTAL OTHER ITEMS OF COMPREHENSIVE INCOME (NET OF INCOME TAX)	**(29)**	**(12)**	**(1)**	**(42)**
OTHER COMPREHENSIVE INCOME	**(409)**	**8**	**0**	**(401)**

8.2 Company financial statements – Year ended December 31, 2018

Note: Tables are generally expressed in thousands of euros. Rounding may in some cases lead to differences in totals or in changes.

Contents

STATEMENT OF FINANCIAL POSITION

Assets *(in thousands of euros)*	Note Appendix	2018 Gross	2018 Amortization Write-downs	2018 Net	2017 Net
Uncalled share capital					
NON-CURRENT ASSETS					
Research and development expenses					
Concessions, patents, licenses, software and similar rights					
Leasehold					
Other intangible assets					
Intangible assets in progress					
Advances and prepayments					
Total intangible assets					
Land					
Buildings					
Plant, equipment and tooling					
Other property, plant and equipment (PPE)					
Plant, property and equipment in progress		37		37	
Advances and prepayments on PPE					
Total property, plant and equipment		**37**		**37**	
Associates		5,564,406	216,236	5,348,169	4,880,614
Loans to associates		3,254,074	107,276	3,146,797	3,081,237
Long-term shareholdings in trading portfolio					
Other long-term securities					
Loans					
Other long-term investments		7,061		7,061	7,061
Total long-term investments	5.1/5.2	**8,825,541**	**323,513**	**8,502,028**	**7,968,912**
TOTAL NON-CURRENT ASSETS		**8,825,578**	**323,513**	**8,502,065**	**7,968,912**
CURRENT ASSETS					
Raw materials and supplies					
Goods in process					
Intermediate and finished products					
Goods					
Total inventories and work-in-process					
Advances and prepayments on orders					*816*
Accounts receivable and related accounts		5,482		5,482	11,152
Other accounts receivable		163,423		163,423	258,323
Subscribed capital called for, unpaid					
Total receivables	5.3	**168,905**		**168,905**	**269,475**
Marketable securities		1,011,905	412	1,011,493	1,156,081
Cash instruments		33,547		33,547	19,104
Cash and cash equivalents and non-trade current accounts		986,682	6,010	980,672	729,898
Total cash and marketable securities	5.5	**2,032,133**	**6,422**	**2,025,712**	**1,905,082**
Prepaid expenses					*765*
TOTAL CURRENT ASSETS		**2,201,039**	**6,422**	**2,194,617**	**2,176,138**
Deferred charges		7,715		7,715	5,891
Bond redemption premiums		8,247		8,247	10,564
Unrealized foreign exchange gains					
TOTAL ASSETS		**11,042,578**	**329,935**	**10,712,644**	**10,161,505**

SHAREHOLDERS' EQUITY AND LIABILITIES

(in thousands of euros)	Note Appendix	2018	2017
SHARE CAPITAL	5.6	**132,076**	**118,869**
Additional paid-in capital, merger premiums, share premiums		3,550,601	3,065,056
Legal reserve		10,886	10,886
Reserves in accordance with the articles of association			
Other reserves		4,041	4,041
Retained earnings		-225,436	-788,904
Net income for the year		**560,964**	**563,468**
Investment subsidies			
Tax-driven provisions			
TOTAL SHAREHOLDERS' EQUITY	5.7	**4,033,133**	**2,973,415**
OTHER SHAREHOLDERS' EQUITY			
Proceeds from issues of equity securities			
Advances subject to covenants			
TOTAL OTHER SHAREHOLDERS' EQUITY			
PROVISIONS FOR CONTINGENCIES AND CHARGES			
Provisions for contingencies		4,554	13,614
Provisions for charges		3,243	35
TOTAL PROVISIONS FOR CONTINGENCIES AND CHARGES	5.8	**7,797**	**13,649**
LIABILITIES			
Convertible bond issues			
Other bond issues		4,012,787	4,072,224
Bank borrowings		27	
Miscellaneous loans and borrowings		2,400,879	2,752,988
Advances and prepayments on orders			
Trade accounts payable and related accounts		33,445	64,154
Taxes and employee-related liabilities		1,322	1,446
Accounts payable on non-current assets and related accounts			
Other liabilities		155,224	191,357
Financial instruments		2,691	4,315
Unearned income		65,342	87,958
TOTAL LIABILITIES	5.9	**6,671,714**	**7,174,441**
Unrealized foreign exchange losses			
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**10,712,644**	**10,161,505**

STATEMENT OF INCOME

(in thousands of euros)	Note Appendix	December 2018 (12 months)	December 2017 (4 months)
OPERATING INCOME			
Sales of goods			
Sales of products			
Services performed		121,086	10,531
Revenue (1)		**121,086**	**10,531**
Production in inventory			
Self-constructed assets			
Operating subsidies			
Reversals of provisions, amortization and depreciation			80
Transferred expenses		3,880	
Other income			
TOTAL OPERATING INCOME		**124,966**	**10,611**
OPERATING EXPENSES			
Purchase of goods			
Change in inventory (goods)			
Purchases of raw materials and other supplies			
Change in inventory (raw materials and supplies)			
Other purchases and expenses		148,141	56,663
Taxes and related expenses		545	46
Salaries and other compensation		1,028	325
Social security taxes		691	113
Amortization, depreciation and provisions		5,263	575
Other expenses		531	188
TOTAL OPERATING EXPENSES		**156,200**	**57,910**
CURRENT OPERATING INCOME	6.1	**-31,233**	**-47,298**
SHARE OF NET INCOME FROM JOINT OPERATIONS			
Profit allocated or loss transferred			
Loss allocated or profit transferred		4,839	
FINANCIAL INCOME			
From equity interests		116,880	41,919
From other marketable securities and capitalized receivables			
Other interest and related income		122,773	26,348
Reversals of provisions, amortization and depreciation		436,686	563,595
Transferred expenses			
Foreign exchange gains		253,355	55,031
Net income from disposals of marketable securities			
TOTAL FINANCIAL INCOME		**929,695**	**686,893**
FINANCIAL EXPENSES			
Amortization, depreciation and provisions		13,230	11,010
Interest and related expenses		260,331	76,973
Foreign exchange losses		246,146	55,936
Net loss on disposals of marketable securities		1,916	847
TOTAL FINANCIAL EXPENSES		**521,623**	**144,765**
NET FINANCIAL INCOME	6.2	**408,072**	**542,127**
INCOME BEFORE TAX AND EXCEPTIONAL ITEMS		**372,000**	**494,829**
(1) Including direct exports		*7,691*	*281*

STATEMENT OF INCOME (continued)

(in thousands of euros)	Note Appendix	December 2018 (12 months)	December 2017 (4 months)
EXCEPTIONAL INCOME			
On financial management transactions			
On capital or non-current asset transactions		5	
Reversals of provisions, amortization and depreciation			
Transferred expenses			
TOTAL EXCEPTIONAL INCOME		**5**	
EXCEPTIONAL EXPENSES			
On financial management transactions		2	
On capital or non-current asset transactions		18	
Amortization, depreciation and provisions			
TOTAL EXCEPTIONAL EXPENSES		**20**	
EXCEPTIONAL ITEMS		**-15**	**-**
Employee profit-sharing		30	2
Income tax	6.3	-189,010	-68,641
NET INCOME		**560,964**	**563,468**

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NOTES TO THE ANNUAL FINANCIAL STATEMENTS

The notes hereunder supplement the statement of financial position for the period ended December 31, 2018 showing total assets of 10,712,644 thousand euros, and the statement of income, showing net income of 560,964 thousand euros. These statements are for the 12-month period beginning January 1 and ending December 31, 2018 and are therefore not comparable with the preceding four-month period.

These notes to the financial statements include:

- highlights of the year;
- accounting principles and methods;
- changes in accounting methods;
- notes to the statement of financial position;
- notes to the statement of income;
- additional information.

These notes and tables form an integral part of the annual financial statements to December 31, 2018 approved by the Board of Directors on February 28, 2019.

NOTE 1 CONTEXT OF THE STATEMENTS AND HIGHLIGHTS OF THE PERIOD

1.1 Constitution and recapitalization of the Orano group

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

In this connection, on July 26, 2017 the Company carried out a capital increase of 2.5 billion euros reserved for the French State and authorized in principle by the European Commission on January 10, 2017. From July 26, 2018, the French State became the majority shareholder in New AREVA Holding (parent of the New AREVA group), which ceased to be consolidated within AREVA.

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

Thus, in this document the terms "Orano SA", "New AREVA Holding" and the "Company" refer to the public limited company Orano. The terms "group" or "Orano" refer to the group of companies formed by Orano SA and its subsidiaries and interests, both direct and indirect. Subsidiaries are also referred to by their new legal names.

1.2 Capital increases reserved for JNFL and MHI

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

These capital increases were carried out on February 26, 2018. Following these transaction, Orano SA's shareholding structure is now as follows: 45.2% for the French State, 4.8% for the CEA, 40% for AREVA SA, 5% for JNFL and 5% for MHI.

1.3 Changes in share capital

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

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

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

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

1.4 Liquidity position and continuity of operations

Continuity of operations is assessed for the entire Orano group insofar as Orano SA, as the group's centralizing cash-pooling company, must ensure the financing of its subsidiaries' requirements.

On November 9, 2018, Orano, through its subsidiary Société d'enrichissement du Tricastin, prepaid the 444 million euros of current outstanding principal on the syndicated loan originally maturing in June 2024 and secured by certain future revenue streams from the Georges Besse II enrichment plant.

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

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

Beyond 12 months, the first significant loan maturity consists of the repayment of a bond issue of 500 million euros, maturing September 4, 2020.

Orano had a gross cash position of 2,027 million euros as of December 31, 2018 to meet these commitments and ensure the continuity of its operations over the longer term. This cash position has been strengthened since the second half of 2018 by a confirmed and undrawn syndicated credit facility of 840 million euros. This new facility, signed with a pool of 10 international banks, has a term of three years, with two one-year extension options.

1.5 Capital increase of Orano Med

On December 17, 2018, Orano subscribed to the full capital increase of its subsidiary Orano Med in the amount of 44,982 thousand euros.

1.6 Write-down of investments in associates and loans to associates

As described in Note 2.1, at the end of each financial year, each Group activity is valued according to its projected profitability.

The recoverable amounts are translated into the financial statements by an adjustment of the write-down of certain investments in associates, of non-trade current accounts, of loans to associates held by Orano SA (see Note 5.2), and of provisions for financial risks (see Note 5.8). The main reversal of impairment of securities recorded during the year involved Orano Mining in the amount of 422,118 thousand euros, arising from the increase in the value in use of mining assets, mainly related to the optimization of costs in mining plans.

1.7 Comparative 4-month accounting period ended December 31, 2017

Ahead of the implementation of the Orano SA tax consolidation on September 1, 2017, it was decided by the Combined General Meeting of July 27, 2017 to temporarily modify the closing date of the financial year by bringing forward the close of the accounting period begun on January 1, 2017 to August 31, 2017 (eight-month period), and to return to a closing date of December 31 starting with the financial year beginning on September 1, 2017 (four-month period). The financial elements presented by the company for the twelve-month period ended December 31, 2018 are therefore not comparable with those of the four-month period ended December 31, 2017.

NOTE 2 ACCOUNTING PRINCIPLES AND METHODS

The financial statements of Orano SA for the year ended December 31, 2018 were prepared in accordance with French accounting standards as defined in articles 121-1 and 121-5 *et seq.* of the *plan comptable général 2016*. The accounting policies were applied in compliance with the provisions of the French Commercial Code, the Accounting Decree of November 29, 1983 and ANC regulations 2014-03, 2015-06 and 2016-07 related to the redrafting of the p*lan comptable général* applicable to year-end closing.

2.1 Long-term investments

Long-term investments appear on the assets side of the balance sheet at their transfer value or acquisition cost. The acquisition cost means the purchase price plus costs directly related to the purchase, in particular commissions paid to acquire the investment.

At each year-end, investments in associates are measured at their value in use. They are written down when their original cost exceeds their value in use, determined investment by investment.

To assess the profitability of the investment, the value in use is determined on the basis of the present value of its estimated 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 have a finite life (depending on the volume of ore resources in mines or the duration of operating permits in the nuclear businesses); in this case, the cash flows taken into account to assess their value in use are not discounted to infinity but within the limit of their expected operating life.

The write-down is calculated based on the share of net assets held at year end.

Loans to associates are recorded at face value. A provision for impairment is recognized if necessary to reflect the actual value at year end.

2.2 Receivables and borrowings

Receivables and borrowings are valued at face value. Receivables may be written down by a provision to reflect potential collection difficulties based on information available at closing.

Receivables and borrowings in foreign currencies are translated and recorded in euros based on exchange rates in effect at year end. Unrealized gains and losses are recorded on the balance sheet as currency translation differences. Receivables and borrowings in foreign currencies whose exchange rates have been hedged are recorded in euros based on the hedged rate. Unrealized foreign exchange losses are recognized through a contingency provision.

2.3 Financial instruments

Orano SA uses derivatives to hedge foreign exchange risks and interest rate risks both for its own transactions and those carried out by its subsidiaries. The derivatives used predominantly consist of: forward exchange contracts, currency and interest rate swaps, inflation swaps and currency options. The company has applied ANC Regulation 2015-05 since January 1st, 2017. This change had no material impact at the time it was applied.

The risks hedged relate to receivables, borrowings and firm commitments in foreign currencies. The derivatives traded to hedge subsidiaries' exposure are systematically backed by symmetrical instruments with banking counterparties to hedge the exposure of Orano SA.

Accounting principles:

- gains and losses on derivatives traded to hedge the subsidiaries' exposure are recognized through profit and loss at maturity, thus matching the gains and losses recognized on the derivatives negotiated by Orano SA with the banks:
- the interest rate derivatives negotiated by Orano SA are qualified as hedging instruments in the company financial statements. Accrued interest not yet due is recognized in the statement of financial position with an offsetting entry to the statement of income.

2.4 Non-trade current accounts

Non-trade current accounts are reported under "Cash and cash equivalents and non-trade current accounts" on the assets side of the balance sheet. Otherwise, they appear on the liabilities side under "Borrowings".

2.5 Marketable securities

Marketable securities are valued at the lower of their acquisition cost or their net carrying amount. A provision for impairment is recorded when the valuation at the end of the period shows an overall capital loss by class of securities. The net carrying amount is equal to the average closing market price of the securities for the last month of the period.

2.6 Bond issues

Bond debt is recognized as borrowings, as provided in generally accepted accounting principles in France *(plan comptable général)*.

Redemption premiums and deferred charges related to bond issues are amortized in a straight line over the term of the issue.

2.7 Provisions for contingencies and losses

Provisions for contingencies and losses are established whenever there is a probable outflow of resources resulting from a past event, in accordance with the French accounting board rules on liabilities dated December 7, 2000 (CRC 2000-06).

AREVA SA records provisions for contingencies and losses, for instance to cover restructuring or litigation expenses.

Contingent liabilities represent obligations that are neither probable nor certain at the date of closing, or obligations that are probable but where no resource is likely to be expended. Contingent liabilities are not recognized in provisions, but rather disclosed in the notes (see paragraph 5.8).

2.8 Exceptional items

Items related to the company's ordinary operations are recognized in income before tax and extraordinary items, even if they are exceptional in terms of frequency or amount. Only items that are not related to the company's ordinary operations are recognized as exceptional items in the income statement, in addition to transactions specifically qualified as exceptional items under French GAAP (regulated provisions, reversals of investment subsidies, gains on disposals of certain assets, *etc.*).

2.9 Tax information

From September 1, 2017, Orano SA opted to be solely responsible for income tax due on the combined income of the group consisting of Orano SA and the subsidiaries in which it holds at least 95% of the share capital, as provided for in article 223A of the French Tax Code. This regime remains in effect for the year ended December 31, 2018.

Under the tax consolidation, Orano SA signed an agreement with each of its subsidiaries to manage their relationship in terms of recognizing income tax expense, paying any taxes, and identifying and transferring tax credits. This agreement observes neutrality, in that it stipulates that each consolidated company determines its tax liability as if it had been taxed separately. It lays out the rules that will apply should a subsidiary leave the tax consolidation, and that will continue to uphold neutrality, and refers to the future creation of a withdrawal agreement if that should happen.

NOTE 3 CHANGES IN ACCOUNTING METHODS

The valuation methods applied are identical to those used in the previous year.

NOTE 4 EVENTS SUBSEQUENT TO YEAR-END CLOSING

No events subsequent to year-end closing have been identified as likely to have a significant impact on the company's accounts.

NOTE 5 NOTES TO THE BALANCE SHEET

5.1 Long-term investments

GROSS AMOUNT *(in thousands of euros)*	Note Appendix	2017	Increase	Decrease	2018
Associates	5.1.1	5,519,416	45,007	18	5,564,406
Loans to associates	5.1.2	3,182,842	312,085	240,853	3,254,074
Investment portfolio					
Other long-term securities					
Loans					
Other long-term investments:					
• Receivables related to end-of-lifecycle operations					
• End-of-lifecycle assets - Third party share					
• Other long-term investments	5.1.3	7,061			7,061
TOTAL LONG-TERM INVESTMENTS		**8,709,320**	**357,092**	**240,871**	**8,825,541**

5.1.1 The "Associates" line totals 5,564,406 thousand euros and primarily comprises the following securities:

- Orano Cycle 2,518,292 thousand euros;
- Orano Mining 2,356,194 thousand euros;
- Orano USA LLC 358,391 thousand euros;
- Orano Support 122,069 thousand euros;
- Orano Med 108,782 thousand euros;
- Orano Projets 63,844 thousand euros.

The change mostly reflects the subscription to the capital increase of its subsidiary Orano Med in the amount of 44,982 thousand euros in December 2018.

5.1.2 The "Loans to associates" line in the amount of 3,254,074 thousand euros concerns medium-term loans granted to companies of the group, including accrued interest (see Note 5.4.1). The companies concerned at December 31, 2018 were mainly:

- Société Enrichissement Tricastin: 2,000,231 thousand euros;
- Orano Canada Inc: 565,214 thousand euros (882,016 KCAD);
- Cilas Mining: 400,486 thousand euros;
- EURODIF SA: 130,012 thousand euros;
- Orano Ressources Centrafrique: 107,276 thousand euros;
- Orano USA LLC: 41,373 thousand euros (47,372 KUSD).

Increases in the period primarily reflect the loans granted during 2018 to Société Enrichissement Tricastin of 301,267 thousand euros (internal financing in lieu of the repayment of the so-called Niagara external loan), as well as the conversion into euros of the loan originally granted to Orano Ressources Centrafrique in dollars, with a foreign exchange effect of 5,671 thousand euros.

The decreases over the period concern foreign exchange movements and the repayments made during the 2018 financial year for the following companies:

- Orano Mining: 100,087 thousand euros;
- Orano Canada Inc.: 97,942 thousand euros;
- Orano Med: 24,031 thousand euros.

5.1.3 The item "Other long-term investments" includes Orano SA's equity interest in mutual insurance company European Liability Insurance for Nuclear Industry (Elini), representing 6,741 thousand euros at December 31, 2018, and in the mutual insurance company BlueRE in the amount of 320 thousand euros.

5.2 Write-downs of long-term investments

WRITE-DOWNS *(in thousands of euros)*	Note Appendix	2017	Increase	Decrease	2018
Associates	5.2.1	638,802	3	422,569	216,236
Loans to associates	5.2.2	101,605	5,671		107,276
Investment portfolio					
Other long-term securities					
Loans					
Other long-term investments:					
• Receivables related to end-of-lifecycle operations					
• End-of-lifecycle assets - Third party share					
• Other long-term investments					
TOTAL LONG-TERM INVESTMENTS		**740,408**	**5,674**	**422,569**	**323,513**

5.2.1 Based on the principles set out in Note 2.1, the reversals of impairment mainly correspond to provisions on the following securities:

- Orano Mining: 422,118 thousand euros;
- Orano Support: 419 thousand euros.

This reversal of impairment of Orano Mining securities arises from the increase in the value in use of certain of mining assets, mainly related to the optimization of costs in mining plans.

5.2.2 The change in provisions for loans to associates corresponds to the charges to provisions on the loan to Orano Ressources Centrafrique for 5,671 thousand euros due to the conversion into euros of this loan, originally granted in dollars.

5.3 Statement of receivables

(in thousands of euros)	Note Appendix	Gross amount	Maturity Due within one year	Maturity Due in more than 1 year
NON-CURRENT ASSETS				
Loans to associates	5.1.2	3,254,074	244,316	3,009,758
Loans				
Other long-term investments:				
• Receivables related to end-of-lifecycle operations				
• End-of-lifecycle assets - Third party share				
• Other long-term investments		7,061		7,061
TOTAL CAPITALIZED RECEIVABLES		**3,261,135**	**244,316**	**3,016,819**
CURRENT ASSETS				
Suppliers: advances and prepayments made				
Working capital: receivables				
Doubtful accounts				
Other trade accounts receivable		5,482	5,482	
Accounts payable to employees and related accounts				
Social security administration and other social institutions				
French State and local governments:				
• Income tax	5.3.1	60,244	225	60,019
• Value added tax		5,430	5,430	
• Other taxes and related expenses				
• Miscellaneous French State				
Group and associates				
Trade accounts and other receivables		97,749	60,443	37,306
TOTAL GROSS RECEIVABLES – WORKING CAPITAL		**168,905**	**71,580**	**97,325**
Prepaid expenses				
TOTAL GROSS RECEIVABLES		**3,430,040**	**315,896**	**3,114,144**

5.3.1 Income tax receivables refer to the tax instalments paid by subsidiaries consolidated as of January 1, 2018 to the Treasury in the amount of 16 thousand euros and to tax credits of 60,228 thousand euros.

Against that, as the parent company of the tax consolidation group, Orano SA recognizes liabilities to the consolidation subsidiaries for their share of payments made and their entitlement to tax credits (see Note 5.9.3).

5.4 Accrued income

(French decree 83-1020 of November 29, 1983, article 23)

(in thousands of euros)	Note Appendix	2018	2017
LONG-TERM INVESTMENTS			
Loans to associates	5.4.1	7,039	25,177
Other long-term investments			
TOTAL LONG-TERM INVESTMENTS		**7,039**	**25,177**
WORKING CAPITAL: RECEIVABLES			
Trade accounts receivable and related accounts		2,953	660
Accounts payable to employees and related accounts			
Social security administration and other social institutions			
French State and local governments			
Trade accounts and other receivables	5.4.2	97,749	173,622
TOTAL RECEIVABLES – WORKING CAPITAL		**100,702**	**174,281**
Marketable securities		**174**	
Cash and cash equivalents			
TOTAL INCOME RECEIVABLE		**107,916**	**199,458**

5.4.1 This item concerns accrued interest on loans to associates, in particular:

- Orano Canada: 5,137 thousand euros;
- Orano USA LLC: 1,174 thousand euros.

The change in accrued interest mainly reflects end-of-year interest payments in 2018 by SET following the restructuring of the Company's financing.

5.4.2 The change in trade accounts and other receivables is essentially due to the revaluation of financial hedging instruments at the closing rate.

5.5 Cash and cash equivalents and non-trade current accounts

(in thousands of euros)	Note Appendix	2018	2017
Other marketable securities		1,011,905	1,156,584
Write-downs		-412	-504
	5.5.1	**1,011,493**	**1,156,081**
Cash instruments		33,547	19,104
Non-trade current accounts	5.5.2	139,523	114,601
Write-downs	5.5.3	-6,010	-5,738
		133,513	**108,863**
Cash and cash equivalents		847,158	621,035
TOTAL CASH AND CASH EQUIVALENTS		**2,025,712**	**1,905,082**

5.5.1 At December 31, 2018, other marketable securities consisted primarily of money market funds and treasury bonds in the amount of 1,011,905 thousand euros.

5.5.2 Non-trade current accounts amounted to 139,523 thousand euros. The companies concerned at December 31, 2018 were mainly:

- CFMM: 58,681 thousand euros;
- Orano Temis: 18,284 thousand euros;
- Orano UK Ltd: 14,520 thousand euros;
- Columbiana Hi Tech LLC: 14,046 thousand euros;
- Orano Cycle: 10,020 thousand euros;

- Orano Ressources Centrafrique 6,010 thousand euros;
- Orano Delfi: 5,698 thousand euros;
- Orano Med LLC: 3,421 thousand euros;
- Société Enrichissement Tricastin: 3,269 thousand euros.

5.5.3 The increase in the write-down of non-trade current accounts corresponds to the change in the hedging of the non-collectability risk of Orano Ressources Centrafrique in the amount of 272 thousand euros.

5.6 Share structure

(French decree 83-1020 of November 29, 1983, article 24-12)

		Number of shares			
Category of shares	Par value	At the beginning of the year	Increase	Decrease	At year-end
Ordinary shares	0.50 euros	237,737,500	26,415,278		264,152,778

The authorized share capital presented above of Orano SA at December 31, 2018 breaks down as follows:

	2018	2017
French State	50% + 1 share	50.18%
AREVA SA	20%	44.44%
Natixis (*)	10%	
Caisse des Dépôts (*)	10%	
CEA (**)	0%	5.37%
MHI	5%	
JNFL	5%	
TOTAL	**100%**	**100.00%**

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

(**) *On December 4, 2018 the French State acquired 12,774,282 Orano equity shares from the CEA, which retained one share. Since that date, the French State holds 50% + 1 share in the capital of Orano.*

5.7 Equity

(in thousands of euros)	Note Appendix	2017	Allocation of net income	Net income for the year	Increase	Decrease	2018
Subscribed capital	5.7.1	118,869			13,208		132,076
Additional paid-in capital, share premiums	5.7.1	3,065,056			485,545		3,550,601
Revaluation adjustment							
Legal reserve		10,886					10,886
Restricted reserves							
Regulated reserves							
Other reserves		4,041					4,041
Retained earnings		98,575	-324,011				-225,436
Unallocated income		-887,479	887,479				-
Net income for the year		**563,468**	**-563,468**	**560,964**			**560,964**
Net investment subsidies							
Tax-driven provisions							
TOTAL SHAREHOLDERS' EQUITY		**2,973,415**	**-**	**560,964**	**498,753**		**4,033,133**

5.7.1 The increase in the share capital on February 26, 2018 by the sum of 500,041 thousand euros consists of share capital in the amount of 13,208 thousand euros and issue premiums totaling 486,834 thousand euros. As a result of these transactions, the share capital stands at 132,076 thousand euros and the share premiums amount to 3,550,601 thousand euros after deducting the costs of the capital increase.

5.8 Provisions for contingencies and charges

(in thousands of euros)	Note Appendix	2017	Increase	Decrease	Reclassifications	2018
PROVISIONS FOR CONTINGENCIES						
Provisions for litigation						
Provisions for customer guarantees						
Provisions for taxes						
Provisions for foreign exchange losses						
Other provisions for contingencies	5.8.1	13,614	4,554	13,614		4,554
TOTAL PROVISIONS FOR CONTINGENCIES		**13,614**	**4,554**	**13,614**		**4,554**
PROVISIONS FOR CHARGES						
Provisions for retirement and similar benefits		35	10			45
Provisions for taxes						
Provisions for work completion						
Provisions for accrued expenses						
Provisions for mining site reclamation						
End-of-lifecycle provisions						
Provisions for decontamination of tooling						
Other provisions for charges	5.8.2		3,198			3,198
TOTAL PROVISIONS FOR CHARGES		**35**	3,208			**3,243**
TOTAL PROVISIONS FOR CONTINGENCIES AND CHARGES		**13,649**	**7,762**	**13,614**		**7,797**
Including charges and reversals						
• Operating			3,207			
• Financial			4,555	13,614		
• Exceptional						

5.8.1 The other provisions for risk concern unrealized losses on rate swaps in the amount of 4,544 thousand euros.

Reversals in the period consisted of:

- the provision for unrealized losses on rate swaps in the amount of 4,807 thousand euros;
- the share in the 2017 deficit of the Si-nerGiE consortium in the amount of 4,839 thousand euros;
- the provision for the negative net position of Orano Support in the amount of 3,968 thousand euros.

5.8.2 The other provisions for expenses mainly involve the impacts of the expiring sub-lease on the Courbevoie premises.

5.9 Statement of liabilities

(in thousands of euros)	Note Appendix	Gross amount	Maturity Due within 1 year	Maturity 1 to 5 years	Maturity More than 5 years
BORROWINGS					
Convertible bond issues					
Other bond issues	5.9.1	4,012,787	812,787	2,200,000	1,000,000
Bank borrowings		27	27		
Miscellaneous loans and borrowings	5.9.2	2,400,879	2,400,879		
TOTAL BORROWINGS		**6,413,692**	**3,213,692**	**2,200,000**	**1,000,000**
Advances and prepayments on orders					
OTHER LIABILITIES					
Trade accounts payable and related accounts		33,445	33,445		
Taxes and employee-related liabilities:					
• Accounts payable to employees and related accounts		229	229		
• Social security administration and other social institutions		84	84		
• French State and local governments:					
◦ Value added tax		15,895	15,895		
◦ Other taxes		236	236		
◦ Income tax					
Accounts payable on non-current assets and related accounts					
Group and associates	5.9.3	58,571	36,673	21,864	
Other liabilities		81,564	44,252	37,312	
Cash instruments		2,691	2,691		
TOTAL OTHER LIABILITIES		**192,680**	**133,504**	**59,177**	
Unearned income	5.9.4	65,342	21,844	39,937	3,561
Total unearned income		**65,342**	**21,844**	**39,937**	**3,561**
TOTAL GROSS LIABILITIES		**6,671,714**	**3,369,040**	**2,299,114**	**1,003,561**

5.9.1 Bond issues

The balance of bond debt consists of the 3,950,000 thousand euro nominal value of the bond issues plus accrued interest not yet due of 62,787 thousand euros (see Note 5.10.1). An outstanding of 850 million euros in interest rate swaps was backed by these bonds.

Issue date *(in currency thousands)*	Nominal	Currency	Nominal rate	Maturity
September 23, 2009	1,000,000	EUR	4.875%	2024
November 6, 2009	750,000	EUR	4.375%	2019
September 22, 2010	750,000	EUR	3.500%	2021
April 4, 2012	200,000	EUR	TEC 10 + 2.125%	2022
September 4, 2013	500,000	EUR	3.250%	2020
March 20, 2014	750,000	EUR	3.125%	2023
TOTAL	**3,950,000**	**EUR**		

Bond issues with a nominal value of 8,000 million yen were redeemed as planned upon maturity on September 20, 2018.

5.9.2 Miscellaneous loans and borrowings

This item stood at 2,400,879 thousand euros at December 31, 2018, mainly comprising:

- debt related to associates in the amount of 1,430 thousand euros;
- non-trade current account liabilities in the amount of 2,399,449 thousand euros. The companies concerned at December 31, 2018 were mainly:
  - Orano Cycle: 1,490,450 thousand euros,
  - TN International: 213,653 thousand euros,
  - Société Enrichissement Tricastin: 171,503 thousand euros,
  - Orano Mining: 79,744 thousand euros,
  - Orano Assurance et Réassurance: 67,753 thousand euros,
  - Orano Support: 53,453 thousand euros,
  - TN America: 47,937 thousand euros,
  - ETC: 46,213 thousand euros,
  - EURODIF: 33,687 thousand euros,
  - Orano DS: 24,411 thousand euros,
  - Orano Projets: 22,663 thousand euros,
  - Orano Federal Services: 20,107 thousand euros.

5.9.3 Group and associates

This item consists of Orano's liabilities to consolidated French subsidiaries, after calculating the tax consolidation, of 8,341 thousand euros and tax credit liabilities to those subsidiaries of 48,891 thousand euros.

5.9.4 Deferred income

	2018	2017
Unearned financial income	65,342	87,958
TOTAL	**65,342**	**87,958**

AREVA SA had unwound rate swaps that had been set up to cover bond issues (fixed rate receiver / variable rate payer). In line with market conditions, the swap terminations generated a gain recognized as unearned income, which will be spread out over the remaining period of the borrowings to reflect their effective interest rate over their term. This was transferred to Orano SA as part of the partial asset contribution.

5.10 Accrued expenses

(in thousands of euros)	Note Appendix	2018	2017
BORROWINGS			
Convertible bond issues			
Other bond issues	5.10.1.	62,787	62,969
Bank borrowings			
Miscellaneous loans and borrowings			
TOTAL BORROWINGS		**62,787**	**62,969**
OTHER LIABILITIES			
Trade accounts payable and related accounts	5.10.2.	7,669	39,902
Taxes and employee-related liabilities		499	219
Accounts payable on non-current assets and related accounts			
Other liabilities	5.10.3	81,564	154,458
TOTAL OTHER LIABILITIES		**89,733**	**194,579**
TOTAL ACCRUED EXPENSES		**152,519**	**257,548**

5.10.1 This item includes the accrued interest not yet due on bond issues.

5.10.2 The change in trade accounts payable mainly concerns the charge-back by Orano Support of central division costs.

5.10.3 The change in other liabilities is mainly due to the revaluation of financial instruments at the closing rate.

NOTE 6 NOTES TO THE INCOME STATEMENT

6.1 Current operating income

Revenue notably includes:

- charge-backs to the subsidiaries of corporate services for a total amount of 110,267 thousand euros,
- the revenue from real estate operations in the amount of 7,799 thousand euros,

Operating expenses comprise purchases from Orano Support of central division costs, leases and expenses related to the Saint-Quentin site in Yvelines, as well as other direct purchases relating to its corporate purpose. Operating losses amount to 31,233 thousand euros.

6.2 Net financial income

Net financial income in the amount of 408,072 thousand euros corresponds mainly to:

- dividends from investments in associates: 3,700 thousand euros (1);
- net income on non-trade accounts and loans to associates 112,421 thousand euros;
- net income on financial instruments: 18,240 thousand euros;
- interest expenses on loans: -155,038 thousand euros;
- foreign exchange gains/losses: 7,209 thousand euros;
- reversals of provisions for investments in associates: 422,566 thousand euros (2);
- a provision reversal for negative net position: 3,968 thousand euros (3);
- charges to provisions for loans to associates: -5,671 thousand euros (4);
- charges to provisions for current accounts: -272 thousand euros (4);
- net reversals on provisions for other financial risks: 5,102 thousand euros;
- charges for amortization of redemption premiums on bond issues: -2,318 thousand euros.

6.3 Income tax

In accordance with the provisions of article 223A of the French Tax Code, Orano SA opted to be solely responsible for income tax due on the comprehensive income of the consolidated group in France beginning September 1, 2017.

In 2018, Orano SA and its consolidated subsidiaries generated a comprehensive loss of 446,511 thousand euros.

The tax income recognized for 2018 came to 189,010 thousand euros and consisted of:

- tax savings generated by tax consolidation: 191,227 thousand euros;
- income tax on earnings from all previous financial years: -10 thousand euros;
- the loss of foreign tax credits: -2,207 thousand euros.

NOTE 7 ADDITIONAL INFORMATION

7.1 Workforce

The average workforce of the company was five people at December 31, 2018, as indicated in the following table:

	2018	2017
Management personnel	3	2
Supervisors	2	2
Employees	-	-
TOTAL	**5**	**4**

(1) Orano Projets
(2) Mainly Orano Mining and Orano Support (see Note 5.2.1)
(3) Orano Support
(4) Orano Ressources Centrafrique

7.2 Company exposure to market risk

General objectives

Orano SA 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 SA 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 volatility of exchange rates may impact Orano SA's currency translation adjustments, equity and income.

Financing risk

Loans and borrowings granted by Orano SA to its subsidiaries are systematically converted into euros through currency swaps.

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

Trade exposure

The Orano SA policy approved by the Executive Committee seeks to systematically hedge the certain foreign exchange risks generated by its operations, and those of its subsidiaries, to minimize the impact of exchange rate fluctuations on net income.

Orano SA uses financial derivatives (principally forward exchange contracts) to hedge its foreign exchange exposure from trade, including accounts receivable and payable and confirmed off-balance sheet commitments. These hedges are backed by underlying transactions for identical amounts and maturities and, as a general rule, are documented and eligible for hedge accounting.

At December 31, 2018, the derivatives used by Orano SA to manage foreign exchange risk were as follows:

	Notional amounts by maturity date at December 31, 2018							
(in millions of euros)	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	Total	Market value
Forward exchange transactions and currency swaps	2,716	1,232	731	439	17	-	5,136	7
Cross-currency swaps	346						346	34
TOTAL	**3,062**	**1,232**	**731**	**439**	**17**	**-**	**5,482**	**40**

Interest rate risk management

Orano SA is exposed to interest rate fluctuations mainly on its floating rate borrowings and on its financial investments. The Financial Operations and Treasury Management Department manages all interest rate risks.

Orano SA uses several types of derivative instruments, depending on market conditions, to allocate its borrowings and investments between fixed rates and floating rates, with the goal being mainly to reduce its borrowing costs while optimizing the management of its cash surpluses.

At December 31, 2018, interest rate swaps were the main financial instruments used in the management of external debt. Receiver inflation rate swaps in US dollars were set up with banks to cover payer inflation rate swaps in US dollars set up with Orano Mining.

The amount of the commitments and the sensitivity of the positions taken by the Orano SA trading desk in connection with rate management are subject to limits based on the type of transaction involved.

At December 31, 2018, the following financial instruments were used to hedge interest rate exposure:

INTEREST RATE INSTRUMENTS	Notional amounts by maturity date at December 31, 2018							
(in millions of euros)	TOTAL	< 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	> 5 years	Market value
INTEREST RATE SWAPS – EUR VARIABLE LENDER								
EUR fixed borrower	200				200			-4
INTEREST RATE SWAPS – EUR VARIABLE LENDER								
EUR variable borrower	100				100			0
CAD variable borrower	346	346						34
INTEREST RATE SWAPS – EUR FIXED LENDER								
EUR variable borrower	550	50	150	150		200		25
INFLATION RATE SWAPS								
Variable lender – USD fixed borrower	153		153					-25
Variable borrower - USD fixed lender	-153		-153					25
GRAND TOTAL	**1,196**	**396**	**150**	**150**	**300**	**200**		**54**

Commodity risk

Orano SA had no exposure to raw materials risk at December 31, 2018.

Equity risk

To manage its long-term investment positions, Orano SA may elect to use puts and calls backed by portfolio equities. No such transaction was pending at December 31, 2018.

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.

Market value of financial instruments

The market value of financial instruments pertaining to currency and rates is calculated based on market data at the closing date, using discounted future cash flows, or on prices provided by financial institutions. The use of different market assumptions could have a significant impact on estimated market values.

Liquidity risk

The Financial Operations and Treasury Management Department - "DOFT" - is in charge of liquidity risk management and provides appropriate long-term and short-term financing resources.

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

The next significant maturity is November 6, 2019. It relates to a bond issued in a nominal amount of 750 million euros.

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

7.3 Related parties

The company did not enter into significant transactions with related parties not entered into under normal market conditions, following the criteria noted below.

A transaction is deemed significant if a lack of disclosure or an erroneous disclosure may have an influence on economic decisions by third parties who rely on the financial statements. Whether a transaction is significant or not depends on the nature and/or the amount of the transaction.

Conditions may be considered "normal" when they are customarily employed by the company in its dealings with third parties, such that the beneficiary of the transaction does not receive a more favorable treatment than other third parties dealing with the company, taking into account the practices of other companies in the same sector.

7.4 Off-balance-sheet commitments

(in thousands of euros)	Note Appendix	Total	< 1 year	1 to 5 years	> 5 years
COMMITMENTS GIVEN					
Bid guarantees					
Performance warranties		55,895		55,895	
Down payment guarantees					
Guarantees for waivers of warranty retentions					
After-sales warranties					
Other operating commitments		1,614	1,614		
Total operating commitments given		**57,509**	**1,614**	**55,895**	
Comfort letters given					
Guarantees and surety					
Liens given					
Mortgages given					
Other funding guarantees		41,074	39,764		1,310
Total commitments and collateral given on financing		**41,074**	**39,764**		**1,310**
Guarantees of assets and liabilities					
Guarantees pertaining to rental obligations given		17		17	
Other commitments given		917	917		
Total other commitments given		**934**	**917**	**17**	
I. TOTAL COMMITMENTS GIVEN		**99,517**	**42,295**	**55,913**	**1,310**
COMMITMENTS RECEIVED					
Market guarantees received					
Vendor warranties received					
Other commitments received					
II. TOTAL COMMITMENTS RECEIVED					
RECIPROCAL COMMITMENTS					
Firm multiyear purchase commitments					
Firm multiyear sales commitments					
Unused lines of credit	7.4.1	840,000		840,000	
Future minimum payments on operating leases	7.4.2	36,005	3,726	13,743	18,536
Other reciprocal commitments					
III. TOTAL RECIPROCAL COMMITMENTS		**876,005**	**3,726**	**853,743**	**18,536**

7.4.1 Unused lines of credit

In July 2018, the group set up a 780 million euro syndicated line of credit, increased by 60 million euros in December 2018. This new facility, signed with a pool of 10 international banks, has a term of three years, with two one-year extension options.

At December 31, 2018 this line had not been drawn down.

7.4.2 Future minimum payments on operating leases

These commitments mainly include the lease for Orano's new head office, signed during the financial year.

7.5 Compensation of officers and directors

Until November 3, 2016, the company was a simplified joint stock company (*société par actions simplifiée*). As from its transformation into a business corporation with a Board of Directors (*Société anonyme à conseil d'administration*), the Board of Directors of the Company chose to separate the functions of Chairman and Chief Executive Officer.

The compensation paid to the Chairman of the Board and the Chief Executive Officer of the Group for the period from January 1, 2018 to December 31, 2018 amounts to 0.71 million euros.

7.6 Disputes and potential 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 the "acquisition" part of the judicial investigation into the Uramin case, as civil parties. 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 the civil proceedings by 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 is aware 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 an investigation into the circumstances surrounding the granting of mining licenses in Mongolia. These investigations are taking place within the framework of legal proceedings against parties unknown and no Orano group entity is currently implicated.

7.7 Subsidiaries and associates

(Article L. 233-15 of the French Commercial Code)

	Proportion of equity owned (as %)	Share capital	Equity other than share capital	Carrying amount of shares owned		Loans and advances granted and not repaid	Amount of guarantees given	Revenue excl. VAT of the last year ended	Net income of the last year ended	Dividends received
				Gross	Net					
A - DETAILED FINANCIAL INFORMATION ON SUBSIDIARIES AND ASSOCIATES (WHERE NET CARRYING AMOUNT EXCEEDS 1% OF THE COMPANY'S EQUITY)										
1- SUBSIDIARIES (MORE THAN 50% OF THE EQUITY HELD)										
Orano Cycle										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	99,229	199,694	2,518,292	2,518,292			2,237,391	-526,653	
Orano Mining										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	25,207	326,773	2,356,194	2,263,809	400,486		1,102,282	196,767	
Orano USA LLC (1)										
1155 F Street, DC 20004 Washington – United States	100.00	243,768	-152,569	358,391	358,391	41,373		15,452	1,133	
Orano Support										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	490	-4,458	122,069	419			144,821	4,387	
Orano Projets										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	12,769	49,964	63,844	63,844			218,143	981	3,700
Orano Med										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	17,055	28,505	108,782	108,782			519	12,783	
Orano Assurance et Réassurance										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	6,375	95,129	30,940	30,940			-	4,939	
OranoDelfi										
Tour AREVA - 92084 Paris La Défense Cedex – France	100.00	456	-100	2,534	356			-	-151	
ASSOCIATES (10% TO 50% OF THE EQUITY HELD)										
GIE Si-nerGiE										
Tour AREVA - 92084 Paris La Défense Cedex – France	50.00							167,059	84	
B - SUMMARY INFORMATION ON OTHER SUBSIDIARIES AND ASSOCIATES										
1 - SUBSIDIARIES NOT INCLUDED IN SECTION A 1										
French subsidiaries				38	15					
Foreign subsidiaries				3,323	3,323					
2- ASSOCIATES NOT INCLUDED IN SECTION A 2										
French companies				-	-					
Foreign companies				-	-					

(1) 1 EUR = 1.145 USD.

8.3 Statutory Auditors' report on the consolidated financial statements for the year ended December 31, 2018

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Orano

Tour AREVA
1 Place Jean Millier
92400 Courbevoie, France

To the Shareholders,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of Orano for the year ended December 31, 2018.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the group at December 31, 2018 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit and Ethics Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from January 1, 2018 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by Article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (*Code de déontologie*) for Statutory Auditors.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Note 35 "Transition from the 2017 published financial statements to the 2017 restated financial statements" to the consolidated financial statements, which describes the impacts of the first-time application of IFRS 15 and IFRS 9 in relation to revenue recognition and measurement of financial instruments, respectively.

Justification of assessments – Key audit matters

In accordance with the requirements of Articles L. 823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgment, were the most significant in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Measurement of the goodwill, property, plant and equipment and intangible assets of the group's Mining and Front End activities

Description of risk

At December 31, 2018, the carrying amount of goodwill, intangible assets and property, plant and equipment in relation the group's Mining and Front End activities amounted to 6,948 million euros. Impairment losses were recorded on certain assets in the years prior to 2018.

As stated in Note 1.3.7.5 "Impairment of property, plant and equipment, intangible assets and goodwill" to the consolidated financial statements, the group performs impairment tests on goodwill and intangible assets with indefinite useful lives at least once a year and whenever there is an indication that they may be impaired. The group also performs impairment tests on property, plant and equipment and intangible assets with a definite useful life when there are indications of a loss or increase in value.

For the group's Mining and Front End activities, these tests are implemented in the following manner, as described in notes 9 "Goodwill", 10 "Intangible assets" and 11 "Property, plant and equipment" to the consolidated financial statements:

- with respect to the Mining Business Unit:
  - the CGUs (Cash Generating Units) of the Mining BU correspond to the mining sites operated by the group, solely or in partnership. The impairment test on goodwill – which amounts to 840 million euros – is performed at the level of the Mining BU's group of CGUs,
  - the property, plant and equipment and intangible assets of the mining sites making up the CGUs of the Mining segment are tested for impairment at each year-end taking into account the continually deteriorating conditions of the uranium market;
- with respect to Front End businesses a distinction should be made between:

- the Enrichment business corresponding to a single CGU and including goodwill in the amount of 161 million euros and intangible assets and property, plant and equipment,
- the other businesses to which no goodwill is allocated. The property, plant and equipment and intangible assets related to these businesses are tested at the level of each CGU and are tested for impairment at each year-end taking into account the continually deteriorating conditions of the uranium market. The impairment test of the Conversion CGU (Comurhex I and Philippe Coste plants, whose commissioning was not yet completed at the year-end as indicated in Note 1.1 "Highlights" to the consolidated financial statements) resulted in the recognition of a reversal of provisions for impairment amounting to 45 million euros for the year.

The impairment tests are based on the estimate of the recoverable amount corresponding to the higher of:

- fair value less costs to sell; this fair value is based on observable data (recent transactions, offers received from potential buyers, reported ratios for comparable companies, multiples of uranium resources in the ground); and
- value in use, which is equal to the present value of projected future cash flows.

The future cash flow projections established for these tests are based on fundamental assumptions and estimates such as:

- assumptions as to the price of uranium, conversion and enrichment based on the prices in the order book and derived from projected curves based on the group's view of the trends in supply and demand for uranium and for conversion and enrichment services;
- forecast production and cost data;
- discount rates applied to future cash flows.

We deemed the measurement of goodwill, intangible assets and property, plant and equipment related to the Mining and Front End businesses to be a key audit issue due to:

- the potentially significant impact of impairment tests on the income statement;
- uncertainties surrounding certain assumptions, particularly those that could be impacted by exogenous factors (uranium prices, conversion and enrichment prices, exchange rates and market environments, especially multiples of uranium resources in the ground);
- the high sensitivity of measurements to operating, macro-economic, sectoral and financial assumptions;
- the high degree of judgment required by management with respect to these estimates and assessments.

How our audit addressed this risk

We assessed the methodology's compliance with the applicable accounting standards and gained an understanding of the methods used to carry out impairment tests.

In particular, we assessed the methods used to determine the groups of cash generating units (CGUs) as well as the level at which goodwill is tested.

For all impairment tests we:

- gained an understanding of indications of a loss or increase in value;
- assessed the consistency of the forecast data used in the impairment tests with the budget and the medium-term plan ("financial projections") prepared by management and approved by the Board of Directors;
- assessed, with the help of our experts, the consistency of the cash flow projections with the information sources available to us (order books, mining plans, operational life of assets, market comparisons, *etc.*) and with past outcomes;
- with regard to assumptions of uranium, conversion and enrichment prices:
  - confirmed, using sampling techniques, the consistency of current prices, used as a benchmark, with contractual data derived from the fixed component of the backlog,
  - gained an understanding of the analyses prepared by the group or external experts to construct projected price curves,
  - compared the assumptions used to construct these projected curves with the available market data,
  - analyzed the changes in the prices used compared to those of the previous year;
- studied, with the help of our experts, the impairment tests' calculation methodology and assessed the reasonableness of the measurement inputs used (discount rate and long-term growth rate);
- reconciled the carrying amount of the net economic assets tested with the underlying accounting items;
- critically examined management's sensitivity tests, particularly assumptions regarding selling prices, exchange rates (especially the euro/dollar exchange rate) and the discount rate.

In relation to the Mining BU, we assessed the consistency of the projected data used in the impairment tests with the mining plans prepared for each mine. In addition, for mineral deposits that have not yet been mined, we studied the resale value assumptions measured on the basis of observable data (recent transactions, offers received from buyers, reported ratios for comparable companies in relation to the levels of reserves and stated deposit resources).

In relation to the Conversion activity, we assessed how future cash flows of circumstantial items related to the context of industrial stabilization and the production ramp up at the Philippe Coste plant were taken into account.

Lastly, we assessed the appropriateness of the disclosures provided in Notes 1.1 "Highlights", 1.3.7.5 "Impairment of property, plant and equipment, intangible assets and goodwill", 9 "Goodwill", 10 "Intangible Assets" and 11 "Property, plant and equipment" to the consolidated financial statements.

Recognition of revenue and margin on completion on treatment-recycling contracts and assessment of the issues related to the application of IFRS 15 in relation to revenue recognition under these contracts

Description of risk

As indicated in Note 1.3.6 to the consolidated financial statements, the group operates in the different stages of the fuel cycle, by offering treatment-recycling services in respect of which revenue is recognized according to the degree of completion of the services provided.

The group is committed by a master agreement with the French utility group EDF (the "ATR Contract") which specifies the terms of industrial cooperation with regard to treatment-recycling up to 2040. As part of this agreement, Orano and EDF signed an implementation contract in February 2016 defining the technical and financial conditions for the transportation, treatment-recycling EDF's spent fuel for the period 2016-2023.

In addition, as stated in Notes 1.3.1 and 35 to the consolidated financial statements, the group applied, at January 1, 2018, with retroactive effect as from the opening balance sheet of the comparative year, the new standard "Revenues from Contracts with Customers", which modified the assessment of the conditions for recognizing group revenue.

At the end of the analysis, the group identified and restated the discrepancies compared to historical accounting rules, including in particular the pace of recognition of investments financed by customers as well as the methods for recognizing and measuring significant financial components. The entry into force of the new standard resulted in a 131 million euro reduction in equity at 1 January 2017.

The measurement of the percentage of completion of the services provided under the treatment-recycling contracts is determined by the ratio of costs incurred in relation to costs at completion. The amount of revenue and, by extension, margin to be recognized for the year from treatment-recycling service contracts therefore depends on the entity's ability to:

- measure the costs incurred under the contract and to reliably estimate the remaining future costs required to complete the contract. These future costs result from budgetary projections and the analytical structure developed by the group which is used to allocate costs from the different industrial facilities to a given contract;
- measure the selling price at the completion of the contract, which may depend on indexation or variability clauses included in the contracts or commercial negotiations with the customer.

In certain cases, the revenue recognized in relation to these contracts may include several additional components:

- the customer may participate in the financing of the construction of an asset that is necessary in order to provide the treatment-recycling services covered by the contract. The revenue relating to the financing received is then recognized according to the degree of completion of the underlying services over the useful life of the asset, except if the customer takes control of the asset upon completion;
- the payment terms of the contract price may result in significant timing differences between revenue collected and the gradual completion of the services marking the recognition of revenue. These situations may require revenue to be adjusted due to the potentially significant fair value of the financing advantage benefiting one of the two parties (the contract's "financial component").

The analysis of the contracts' terms therefore requires special attention in order to decide on the procedures for measuring and recognizing the revenue associated with each contract. Determining the financial component is a source of complexity because it requires reconstituting, at the effective date of the contract, the implied credit facility (corresponding to the difference between the collection inflows and the revenue flows) and determining the applicable interest rate while taking into account the credit risk and maturity of the credit facility, which can be very long.

We deemed the translation of the contractual provisions of the treatment-recycling contracts into the recognition of revenue (analysis and determination of the contract's different components) and the high degree of judgment required by management in implementing revenue and margin recognition (estimating the price and the costs on completion, allocating costs among contracts, percentage of completion) to be a key audit matter, particularly in the context of the adoption of IFRS 15 in relation to the recognition of revenue, requiring a review of all contracts and past practices.

How our audit addressed this risk

With regard to the issues related to applying IFRS 15 to the treatment-recycling contracts, our work consisted in particular in:

- assessing compliance with the new standard of the accounting policies and methods for recognizing revenue described in Note 1.3.6 to the consolidated financial statements;
- on the basis of a sample of contracts:
  - assessing the correct application of the new standard, particularly concerning the definition of the scope of the contracts, the identification of the performance obligations, the definition of the contract price, the identification of the financial components and the method of recognizing the revenue associated with each performance obligation,
  - confirming, where applicable, the measurement of the financial components: for the implied credit facility, based on contractual performance and payment schedules, and for the interest rate, based on available historical market data analyzed with the help of our experts;
- testing the arithmetical accuracy of the impact connected with the entry into force of the new standard;
- assessing the appropriateness of the disclosures provided in the notes to the consolidated financial statements.

With regard to the treatment-recycling contracts, and in particular the ATR contract, we performed a critical review of the correct recognition of revenue and the margin on completion through the following procedures:

- gaining an understanding of the analytical structure in place at the sites concerned for these contracts and the policies for allocating costs incurred to date and estimated future costs to the contracts;

- reconciling the analytical income statement broken down by contract with the financial accounting data;
- gaining an understanding of the procedures and performing a critical review of the key controls in relation to the measurement of the margin on completion (revenue and costs) and the measurement of the percentage of completion of contracts;
- for a selection of contracts, gaining an understanding of the contract and management's analysis describing the methods of recognizing revenue (identifying the contract's various components, defining revenue on completion and determining the model for recognizing revenue);
- recalculating the revenue on completion on the basis of the contractual items, letters of agreement and items supporting negotiations periodically carried out with the customers;
- assessing the key assumptions used by management, particularly the risks and opportunities and variable items of revenue on completion, through business reviews with project managers;
- assessing the reasonableness of the main assumptions on which the estimates of future costs are based by comparing, using sampling techniques, historical forecast data to actual data and analyzing the consequences of discrepancies on future costs and performance plans in progress;
- assessing the consistency of the contract management data (revenue and costs on completion, costs incurred) with the analytical income statement;
- assessing, where applicable, the measurement of the financial components;
- recalculating, where applicable, the gradual recognition of the financial component within revenue and in financial income (expense).

Measurement of provisions for end-of-lifecycle obligations and provisions for contract completion

Description of risk

As a nuclear operator, the group has a legal obligation to:

- following the final shut-down of its industrial facilities which are classified as regulated nuclear facilities, dismantle these facilities;
- manage the recovery and packaging of radioactive waste; and
- ensure the maintenance and monitoring of all facilities storing radioactive waste.

The group must therefore set aside provisions to cover the future costs related to the dismantling of its facilities as well as the intermediate storage, recovery, packaging, transportation and storage of waste and monitoring of the sites (called "provisions for end-of-lifecycle operations – within the scope of the law"). Under the law on securing the funding of nuclear expenses, the group is also required to allocate, exclusively for this purpose, the necessary financial assets to cover these different costs.

The group also owns other industrial facilities that are considered, according to the regulations, as facilities classified for environmental protection and therefore also subject, upon their final shutdown, to safety, rehabilitation and waste management obligations, which require provisions (called "Provisions for end-of-lifecycle operations – outside the scope of the law") to be set aside. The law on securing the funding of nuclear expenses does not apply to this category of facilities.

In addition, the future costs of intermediate storage, treatment, packaging, transportation and storage of materials or other waste derived from operating activities also result in the setting aside of provisions (called "Provisions for contract completion").

At December 31, 2018, provisions for end-of-lifecycle operations amounted to 7,881 million euros (of which 7,575 million euros in provisions for end-of-lifecycle operations – within the scope of the law and 306 million euros in provisions for end-of-lifecycle operations – outside the scope of the law). Provisions for contract completion amount to 1,381 million euros. The carrying amount of the financial assets dedicated to the coverage of the provisions for end-of-lifecycle operations – within the scope of the law is 6,693 million euros.

The accounting policies and treatments applied, the methods for measuring these provisions, the assumptions used and the related uncertainties are described in Notes 1.2, 1.3.11, 1.3.12, 12 and 22 to the consolidated financial statements.

We deemed the measurement of provisions for end-of-lifecycle operations and provisions for contract completion to be a key audit matter given:

- the material amount of these provisions in the financial statements;
- the complexity of the models for estimating costs related in particular to the long-term horizon and limited past experience of such operations as well as the complexity of the scenarios and technical solutions considered;
- the potentially material impact on the amount of the provisions of uncertainties related to changes in the regulations or requirements of safety authorities, the scenarios and technical procedures considered, waste removal and storage methods and their availability, knowledge of the initial condition of the facilities and their intended final condition, the facilities' operating life, future disbursement schedules, procedures for final shut-down and changes in inflation and discount rates; and
- the negative effects on the group's financial position in the event of an increase in provisions for end-of-lifecycle operations – within the scope of the law (mobilization of additional funds to increase the amount of assets dedicated to the coverage of these provisions in order to satisfy the regulatory coverage rate within the required deadline.

How our audit addressed this risk

We assessed the compliance of the methodology for measuring these different provisions with the accounting, legal and regulatory provisions and examined the methods for measuring them.

In particular we:

- gained an understanding of the legal and regulatory context as well as the exchanges with the administrative authority (particularly follow-up letters from the French Department of Energy and Climate) in relation to these provisions;

- took into consideration the classification of the different types of waste (provisions for end-of-lifecycle operations – within the scope of the law, provisions for end-of-lifecycle operations – outside the scope of the law, and provisions for contract completion) in relation to the group's interpretation of the current regulations;
- gained an understanding of the processes for measuring provisions, the existing controls and the associated governance principles and in particular assessed the implementation of certain key controls (such as the existence of a robust and relevant body of documentation, summary and risk analysis notes made by management, and the validation of the provisions by management through dedicated committees: the Dismantling Operations Monitoring Committee and the End-of-lifecycle Obligations Monitoring Committee);
- gained an understanding, with the help of our experts, of the general IT controls in relation to the application used by Orano to calculate the provisions in relation to facilities in operation and assessed the arithmetical functioning of the computational model developed in this application based on the certification report issued by an independent expert;
- assessed the consistency over time of the models used for estimating provisions;
- assessed the type of costs and assumptions used in determining these provisions;
- assessed, for a selection of operations and on the basis of analytical documents and interviews with the managers concerned, the validity of the assumptions used in determining costs on completion and disbursement schedules, the percentage of completion of ongoing work, modifications of estimates and the level of risk used;
- assessed the processes for measuring and validating the quantities of waste resulting from operations;
- assessed, with the help of our experts, the methodologies applied to determine the discount and inflation rates used as well as their compliance with accounting standards and the applicable regulatory provisions;
- confirmed, with the support of our experts, the methodology applied to calculate the effects of inflation, discounting and reverse discounting;
- assessed the compliance of the accounting treatment of the effects related to changes in estimates, inflation and discount rates and reverse discounting with the applicable accounting principles;
- assessed the consistency of the data provided by the systems for reporting provisions with the accounting data;
- performed a critical review of management's sensitivity tests.

Lastly, we assessed the appropriateness of the disclosures provided in the notes to the consolidated financial statements concerning the end-of-lifecycle provisions and the provisions for contract completion, particularly in terms of the uncertainties concerning certain assumptions and the sensitivity of the measurement of these provisions to certain financial inputs.

Specific verifications

As required by legal and regulatory provisions and in accordance with professional standards applicable in France, we have also verified the information pertaining to the group presented in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the management report includes the consolidated non-financial information statement required under Article L. 225-102-1 of the French Commercial Code. However, in accordance with Article L. 823-10 of the French Commercial Code, we have not verified the fair presentation and consistency with the consolidated financial statements of the information given in that statement, which will be the subject of a report by an independent third party.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of Orano SA by the Annual General Meeting of May 24, 2018.

At December 31, 2018, PricewaterhouseCoopers Audit and KPMG Audit were in the first year of engagement.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements giving a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Audit and Ethics Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

Objective and audit approach

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

As specified in Article L. 823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgment throughout the audit.

They also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

Report to the Audit and Ethics Committee

We submit a report to the Audit and Ethics Committee which includes, in particular, a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Audit and Ethics Committee includes the risks of material misstatement that, in our professional judgment, were the most significant for the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Audit and Ethics Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537-2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in Articles L. 822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Audit and Ethics Committee.

Neuilly-sur-Seine and Paris – La Défense, March 1, 2019

The Statutory Auditors

PricewaterhouseCoopers Audit		KPMG S.A.	
Partners		Partners	
Séverine Scheer	Laurent Daniel	Jean-Paul Vellutini	Laurent Genin

8.4 Statutory Auditors' report on the company financial statements for the year ended December 31, 2018

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Orano SA

Tour AREVA
1 Place Jean Millier
92400 Courbevoie, France

To the Shareholders,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of Orano SA for the year ended December 31, 2018.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at December 31, 2018 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit and Ethics Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from January 1, 2018 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by Article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

Justification of assessments – Key audit matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matter relating to the risks of material misstatement that, in our professional judgment, were the most significant in our audit of the financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the financial statements.

Measurement of equity interests and related receivables

Description of risk

At December 31, 2018, the carrying amount of the Company's equity interests and related receivables amounted to 8,495 million euros and represented 79% of total assets. Equity interests are recognized at their transfer value or their purchase price plus directly attributable costs (in particular investment acquisition expenses).

As described in Note 2.1 to the financial statements, equity interests are valued at each reporting date at their value in use. An impairment loss is recognized when their value in use, assessed individually for each interest, falls below their historical cost.

In order to assess the profitability of the interest, its value in use is determined on the basis of the present value of the projected future cash flows, based on the strategic plan approved by the governance bodies and its underlying assumptions, plus its terminal value, which corresponds to the present value, discounted to infinity, of the cash flows for the "normative year" estimated at the end of the period covered by the future cash flow projections. However, certain activities have a finite useful life (for example due to the finite mineral resources in the mines or the limited duration of the operating permits in nuclear activities); in this case, the cash flows taken into account to measure their value in use are not discounted to infinity, but rather to the end of their expected useful life.

This impairment is calculated on the basis of the share of the net asset held at the end of the year.

Estimating the value in use of equity interests requires management to exercise significant judgment in the choice of measurement methods and items to consider, which may be historical (particularly equity values) or projected (cash flow assumptions).

Given the significant amount of equity interests and related receivables in the financial statements, the judgment required by management to estimate values in use and the sensitivity of these values to changes in the data and the assumptions on which they are based, we deemed the measurement of equity interests and related receivables to be a key audit matter.

How our audit addressed this risk

Our audit procedures mainly consisted in:

- assessing, on the basis of the information provided by management, the measurement methods used by the Company;
- comparing the data used to test the equity interests for impairment with the subsidiaries' accounting data, where applicable;
- assessing the methodology and the assumptions used to determine the value in use of the equity interests when this value takes into account the subsidiaries' projected profitability;
- verifying the arithmetical accuracy of the value in use calculations used by the Company;
- assessing, with the help of our experts, the sensitivity of the estimates of value in use used to the assumptions (particularly cash flow, discount rates and the long-term growth rate);
- assessing the recoverability of the related receivables in light of the analyses made on the equity interests; and
- assessing the appropriateness of the disclosures provided in Notes 2.1 and 5.1 to the financial statements.

Specific verifications

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French legal and regulatory provisions.

Information given in the management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements.

We attest to the fair presentation and the consistency with the financial statements of the information given with respect to the payment terms referred to in Article D. 441-4 of the French Commercial Code.

Report on corporate governance

We attest that the Board of Directors' report on corporate governance sets out the information required by Articles L. 225-37-3 and L.225-37-4 of the French Commercial Code.

Concerning the information given in accordance with the requirements of Article L. 225-37-3 of the French Commercial Code relating to remuneration and benefits received by corporate officers and any other commitments made in their favor, we have verified its consistency with the financial statements or with the underlying information used to prepare these financial statements, and, where applicable, with the information obtained by your Company from companies controlling it or controlled by it. Based on this work, we attest to the accuracy and fair presentation of this information.

Other information

In accordance with French law, we have verified that the required information concerning the acquisition of investments and controlling interests has been properly disclosed in the management report.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of Orano SA by the General Meeting of May 24, 2018.

At December 31, 2018, PricewaterhouseCoopers Audit and KPMG Audit were in the first year of engagement.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for preparing financial statements giving a true and fair view in accordance with French accounting principles, and for implementing the internal control procedures it deems necessary for the preparation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Audit and Ethics Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the financial statements

Objective and audit approach

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

As specified in Article L. 823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgment throughout the audit. They also:

- identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit and Ethics Committee

We submit a report to the Audit and Ethics Committee which includes, in particular, a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Audit and Ethics Committee includes the risks of material misstatement that, in our professional judgment, were the most significant for the audit of the financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Audit and Ethics Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in Articles L. 822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Audit and Ethics Committee.

Neuilly-sur-Seine and Paris-La Défense, March 1, 2019

The Statutory Auditors

PricewaterhouseCoopers Audit		KPMG S.A.	
Partners		Partners	
Séverine Scheer	Laurent Daniel	Jean-Paul Vellutini	Laurent Genin

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8.5 Five-year financial summary

Type of indicator *(in thousands of euros)*	2015	2016	2017-08	2017-12	2018
I - SHARE CAPITAL AT YEAR-END					
a) Share capital	247,500	52,831	118,869	118,869	132,076
b) Number of ordinary shares outstanding	16,500,000	105,661,110	237,737,500	237,737,500	264,152,178
c) Number of preferred shares	-	-	-	-	-
II - OPERATIONS AND NET INCOME FOR THE YEAR					
a) Revenue before tax	-	-	28,593	10,531	121,086
b) Income before tax, employee profit-sharing and amortization, depreciation and provisions (including reversals)	-291	-28,885	-85,308	-57,261	-46,239
c) Income tax	-	-1,252	-1,737	68,641	189,010
d) Employee profit-sharing for the year	-	-	-	-2	-30
e) Income after tax, employee profit-sharing and amortization, depreciation and provisions (including reversals)	-137	101,633	-887,479	563,468	560,964
f) Net income distributed	-	-	-	-	-*
III - EARNINGS PER SHARE *(IN EUROS)*					
a) Income after tax and employee profit-sharing, before amortization, depreciation and provisions (including reversals)	-0.02	-0.29	-0.37	0.05	0.54
b) Income after tax, employee profit-sharing and amortization, depreciation and provisions (including reversals)	-0.01	0.96	-3.73	2.37	2.12
c) Dividend per share (rounded to the nearest euro cent)	0.00	0.00	0.00	0.00	0.00
IV - PERSONNEL					
a) Average number of salaried employees during the year	-	-	0.25	4.25	5.00
b) Total payroll for the year	-	-	229	325	1,028
c) Payroll taxes and other benefit expenses (social security, benefits programs, *etc.*)	-	-	82	118	481

* *Provisional data not yet approved.*

8.6 Subsidiaries and associates

Please refer to the table of subsidiaries and associates in Note 7.7 to the company financial statements (Appendix 8.2 of the Annual Activity Report – 2018).

8.7 List of French companies controlled indirectly by Orano as at December 31, 2018

Company or trading name	Legal form	Share capital *(in euros)*	Business register	Address	Majority shareholder	Orano's indirect financial interest in the Company %
CFM – Compagnie Française de Mokta	Limited liability company with a Board of Directors	6,630,830	Nanterre business register 552 112 716	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Mining	100.00
CFMM – Compagnie Française de Mines et de Métaux	Simplified joint stock company with a sole shareholder	28,594,600	Nanterre business register 300 574 894	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Mining	100.00
CNS – Compagnie Nucléaire de Services	Limited liability company with a Board of Directors	6,573,400	Nanterre business register 401 649 363	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	51.00
Eurodif	Limited liability company with a Supervisory Board	152,500,000	Nanterre business register 723 001 889	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	90.00
Eurodif Production	Limited liability company with a Board of Directors	1,525,000	Valence business register 307 146 472	Georges Besse II plant, Tricastin site 26700 Pierrelatte, France	Eurodif	90.00
GIE USLH 2 – Groupement Utilité du Site de la Hague 2	Economic interest grouping	0	Cherbourg business register 810 153 445	901 Route Départementale 50440 Herqueville, France	Orano Cycle	50.00
LEA (Laboratoire d'Etalons d'Activités)	Simplified joint stock company with a sole shareholder	250,000	Nanterre business register 538 613 613	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	100.00
Lemaréchal Célestin	Simplified joint stock company with a sole shareholder	1,361,710	Cherbourg business register 582 650 297	Rue des Entrepreneurs ZA d'Armanville 50700 Valognes, France	TN International (Orano TN)	100.00
Orano DA – Diagnostic Amiante	Simplified joint stock company with a sole shareholder	357,500	Evry business register 814 304 291	1 Route de la Noue Zac de Courcelles 91196 Gif-sur-Yvette Cedex, France	Orano DS	73.86
Orano DS – Démantèlement et Services	Limited liability company with a Board of Directors	7,259,000	Evry business register 672 008 489	1 Route de la Noue Zac de Courcelles 91196 Gif-sur-Yvette Cedex, France	CNS	73.86
Orano Expansion	Simplified joint stock company	79,861,140	Nanterre business register 501 472 492	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	CFMM	86.51
Orano Temis	Simplified joint stock company with a sole shareholder	1,300,000	Cherbourg business register 350 357 596	Z.A. d'Armanville 50700 Valognes, France	Orano Cycle	100.00

Company or trading name	Legal form	Share capital *(in euros)*	Business register	Address	Majority shareholder	Orano's indirect financial interest in the Company %
Saint Dizier Parc Energie	Limited liability company with a Board of Directors	400,000	Chaumont business register 502 699 556	Zone de Référence de Haute Marne 52100 Bettancourt-la-Ferrée, France	Orano Delfi	59.95
SC CREGU – Centre de Recherche sur la Géologie des Matières Premières Minérales et Energétiques	Professional partnership	15,244.91	Nancy business register 315 335 950	4 rue Piroux - Immeuble Thiers - 9ème étage 54000 Nancy, France	Orano Mining	50.10
SCI Du Pont de Celles – Société Civile Immobilière Du Pont de Celles	Property partnership	15,000	Montpellier business register 317 898 815	41 Avenue de Fumel 34700 Lodève, France	SEPIS	100.00
SCI Socimar – SCI du Site de Marcoule	Property partnership	2,000	Nanterre business register 443 324 306	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	SEPIS	100.00
SCI Soparim	Property partnership	1,500,000	Nanterre business register 331 981 415	1 Place Jean Millier Tour Areva 92084 Paris-La Défense Cedex, France	Orano Cycle	100.00
Sepis – Societe d'étude de Procédés Industriels Spéciaux	Private limited liability company	7,800	Nanterre business register 310 232 889	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	100.00
SET – Société d'Enrichissement du Tricastin	Simplified joint stock company with a sole shareholder	464,590,000	Nanterre business register 440 252 666	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	SET HOLDING	95.00
SET Holding – Société d'Enrichissement du Tricastin Holding	Simplified joint stock company	440,087,530	Nanterre business register 503 993 149	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	95.00
SICN – Société Industrielle de Combustible Nucléaire	Simplified joint stock company with a sole shareholder	5,000,000	Annecy business register 325 720 209	4 Rue du Radar 74000 Annecy, France	Orano Cycle	100.00
SOCATRI – Société Auxiliaire du Tricastin (1)	Private limited liability company	38,227,600	Nanterre business register 302 639 927	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	100.00
SOFIDIF – Société Franco-Iranienne pour l'Enrichissement de l'Uranium par Diffusion Gazeuse	Limited liability company with a Board of Directors	20,968,750	Nanterre business register 303 587 216	1 Place Jean Millier Tour Areva 92400 Courbevoie, France	Orano Cycle	60.00
SOVAGIC – Société pour la Valorisation et la Gestion d'Infrastructures Communes	Private limited liability company	30,500	Cherbourg business register 327 194 866	Zone Industrielle de Digulleville – Beaumont, BP 710 50440 Digulleville	Orano Cycle	100.00
TN International (Orano TN)	Limited liability company with a Board of Directors	30,291,000	Versailles business register 602 039 299	1 Rue des Hérons 78180 Montigny-le-Bretonneux France	Orano Cycle	100.00
Trihom	Simplified joint stock company	52,566.75	Tours business register 378 649 040	ZAC des Grands Clos 37420 Avoine, France	Orano DS	48.75

(1) This entity merged with Orano Cycle on January 1, 2019.

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8.8 Report of the Board of Directors on the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional components of the total compensation and benefits of any kind attributable to the officers of the Company (article L. 225-37-2 of the French Commercial Code)

Dear Shareholders,

The General Meeting of Shareholders of Orano (the **"Company"**) was convened by the Board of Directors for May 23, 2019 at the Company's head office ("the **General Meeting**").

In this report, prepared in accordance with Article L. 225-37-2 of the French Commercial Code arising from law No. 2016-1691 of December 9, 2016 concerning transparency, the fight against corruption and the modernization of economic life, known as the Sapin II law, and Decree No. 2017-340 of March 16, 2017, we present the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional components of the total compensation and benefits of all kinds to be awarded to Orano's officers.

As a reminder, in view of the fact that this company's securities are admitted for trading on a regulated market, Article L. 225-100 of the French Commercial Code provides that the amounts resulting from the implementation of these principles and criteria shall be subject to the shareholders' approval at the General Meeting convened to approve the 2018 financial statements.

The payment of amounts qualified as variable or exceptional compensation in respect of the fiscal years ended December 31, 2018 will be subject to that approval.

1. General principles of the compensation policy applicable to officers

The major principles of the compensation policy were laid down by the Board of Directors on the advice of the Compensation and Nominating Committee. In accordance with the governance structure currently in place, the Company's officers are:

- the Chairman of the Board of Directors (non-executive officers); and
- the Chief Executive Officer (executive officer).

The compensation policy defined by the Board of Directors for non-executive and executive officers is established in accordance with:

- the requirements of Article 3 of Decree No. 53-707 of August 9, 1953 concerning the French state's control over domestic public sector companies and certain organizations with an economic or social purpose, as amended by Decree No. 2012-915 of July 26, 2012 capping the compensation [1] of executives to 450,000 euros (the **Ceiling**) and subjecting it to ministerial authorization;
- the relevant recommendations of the Afep-Medef Code, as revised in June 2018, to which the Company intends to refer; and
- the provisions of Decree No. 2017-340 of March 16, 2017.

To serve these objectives effectively, the Board of Directors has comprehensively determined and carefully assesses the different components of officer compensation.

As regards the definition of the criteria and performance objectives, the Board of Directors adapts the compensation policy to the firm's strategy, situation and shareholding structure.

(1) This concerns the attendance fees or indemnities awarded notably to directors and the components of the officers' activity-related compensation. Benefits of any kind related to activities, as well as the compensation components, indemnities or benefits payable or likely to be payable to officers upon the cessation of their activities or upon a change in their positions, or thereafter, are not taken into account in the calculation of this Ceiling but are nonetheless subject to ministerial authorization.

2. Principles and criteria for determining, distributing and allocating the different components of compensation currently provided by type of duties

2.1 Chairman of the Board of Directors

A - Fixed compensation

The Chairman of the Board of Directors receives fixed annual compensation within the limit of the Ceiling, to the exclusion of any other component of compensation except for attendance fees.

The amount of this fixed component is determined on the basis of personal criteria (including work history, experience, length of service and responsibilities), industry-specific criteria, and criteria related to the general economic environment and the Company's public shareholding position.

It will be proposed that the fixed annual compensation of Mr. Philippe VARIN, Chairman of the Board of Directors, be set at 120,000 euros as from the date of the decision of the Board of Directors, meeting on July 27, 2017, and for the remainder of his term of office.

This decision was approved in principle for the entire term of office of the Chairman of the Board of Directors on September 7, 2017 by the Minister of the Economy and Finance in accordance with Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the French state's control of domestic public-sector companies and certain organizations with an economic or social purpose.

B - Attendance fees

The General Meeting on July 27, 2017 was asked to approve the setting of the annual amount of attendance fees at 600,000 euros for the overall amount of attendance fees allocated to members of the Board of Directors for each financial year until a new decision is adopted by the General Meeting.

This decision was approved on September 7, 2017 by the Minister of the Economy and Finance in accordance with Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the French state's control of domestic public-sector companies and certain organizations with an economic or social purpose. It is proposed that this amount remain unchanged for the period beginning January 1, 2019 and ending with the close of financial year 2019.

The Chairman of the Board of Directors may receive attendance fees in respect of his Director's duties, within the limit of the Ceiling.

2.2 Chief Executive Officer

A - Fixed compensation

The Chief Executive Officer receives fixed annual compensation within the limit of the Ceiling.

The amount of this fixed component is determined on the basis of personal criteria (including work history, experience, length of service and responsibilities), industry-specific criteria, and criteria related to the general economic environment and the Company's public shareholding position.

Philippe KNOCHE, Chief Executive Officer, benefits from fixed annual compensation of 420,000 euros as from the date of the decision of the Board of Directors, meeting on July 27, 2017, and for the remainder of his term of office.

This decision was approved in principle for the entire term of office of the Chief Executive Officer on September 7, 2017 by the Minister of the Economy and Finance in accordance with Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the French state's control of domestic public-sector companies and certain organizations with an economic or social purpose.

B - Variable compensation

Performance-linked variable compensation may be paid to the Chief Executive Officer in addition to his fixed compensation, within the limit of the Ceiling.

In light of the Ceiling imposed by decree, this annual variable compensation shall remain limited and capped at 30,000 euros. It is paid based on the achievement of quantitative (60%) and qualitative (40%) objectives approved for each financial year by the Board of Directors.

Each year the Board of Directors sets the qualitative and quantitative criteria for determining the variable portion of Mr. KNOCHE's compensation. Those criteria must be precise and established beforehand.

That variable portion is paid in cash, once a year.

This decision was approved in principle for the entire term of office of the Chief Executive Officer on September 7, 2017 by the Minister of the Economy and Finance in accordance with Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the French state's control of domestic public-sector companies and certain organizations with an economic or social purpose.

C - Exceptional compensation

In the interest of the group and its stakeholders, exceptional compensation may be paid to officers under specific circumstances. The payment of such compensation, within the limit of the Ceiling, must be justified and the reasons for such payment must be explained.

In all cases, such compensation must comply with the requirements of the Afep-Medef Code and the principles of reasonableness and proper balance between the various interests at stake.

Mr. Philippe KNOCHE, Chief Executive Officer, does not receive variable compensation.

D - Attendance fees

The General Meeting on July 27, 2017 was asked to approve the setting of the annual amount of attendance fees at 600,000 euros for the overall amount of attendance fees allocated to the members of the Board of Directors for each period until a new decision is adopted by the General Meeting.

This decision was approved on September 7, 2017 by the Minister of the Economy and Finance in accordance with Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the French state's control of domestic public-sector companies and certain organizations with an economic or social purpose. It is proposed that this amount remain unchanged for the period beginning January 1, 2019 and ending with the close of financial year 2019.

The Chief Executive Officer may receive attendance fees in respect of his Director's duties, within the limit of the Ceiling.

E - Non-cash benefits

The Chief Executive Officer may receive a non-cash benefit in the form of a company vehicle. This non-cash benefit is not part of the capped compensation.

Mr. Philippe KNOCHE, Chief Executive Officer, benefits from an annual non-cash benefit in the form of a company vehicle estimated at December 1, 2018 at 4,488 euros.

F - Long-term compensation: free share allocation and allocation of share options

The allocation of performance shares or share options to officers is not allowed.

G - Severance payments

The Chief Executive Officer may be granted a severance payment capped at twice the total amount of his annual compensation on the date of cessation of his duties.

The Chief Executive Officer shall not be eligible for any severance payment if he (i) intends to claim his pension rights shortly after the ending of his term of office for whatever reason, even dismissal, or (ii) comes to hold another position within the group.

The above-mentioned severance payment shall only be paid in the event of dismissal of the Chief Executive Officer, except for just cause.

The severance payment shall be subject to performance conditions, in accordance with the following criteria:

- if the rate of fulfillment of the quantitative and qualitative objectives set for the last two full fiscal years averages out to at least 60%, the severance payment shall automatically be paid;
- if the rate of fulfillment of the quantitative and qualitative objectives set for the last two full fiscal years averages out to less than 60%, the Board of Directors shall appraise the performance of the person in question in view of the circumstances that affected the operation of the company during the fiscal year ended.

The performance objectives shall be set every year by the Board of Directors.

Philippe KNOCHE, Chief Executive Officer, benefits from a severance payment meeting these criteria, it being specified that the quantitative and qualitative objectives taken into account in assessing the rate of achievement of the objectives will be:

- if the calculation is performed in 2019: the criteria approved by the Board of Directors of AREVA SA for financial year 2017 and those approved by the Board of Directors of Orano for 2018;
- if the calculation is performed in 2020: the criteria approved by the Board of Directors of Orano for financial years 2018 and 2019.

This decision was approved in principle on September 7, 2017 by the Minister of the Economy and Finance in accordance with Article 3 of Decree No. 53-707 of August 9, 1953 as amended concerning the control of the French State over domestic public sector companies and certain organizations with an economic or social purpose.

Moreover, the Board of Directors may decide during his term of office to grant the Chief Executive Officer an indemnity in return for a non-competition clause. The amount of this indemnity shall be deducted from the amount of any severance payment that may be granted to the Chief Executive Officer under the above terms and conditions. In the absence of any severance payment, the amount of the non-competition indemnity shall be set by the Board of Directors in accordance with usual practices. Signing a non-compete agreement at the time of leaving the company is ruled out.

Mr. Philippe KNOCHE, Chief Executive Officer, does not benefit from a non-competition payment.

Such indemnities are not part of the capped compensation.

H - Other

Mr. Philippe KNOCHE, Chief Executive Officer is additionally entitled to:

- unemployment insurance as provided by the Medef scheme (*Garantie sociale des chefs et dirigeants d'entreprise* – GSC) for which he pays part of the contributions;
- the supplemental retirement plan applicable to the Company's management personnel.

He receives no multi-year or deferred compensation and is awarded no stock options or performance stock.

In respect of the foregoing, we invite you to approve the compensation policy concerning the Chairman of the Board of Directors and the Chief Executive Officer as presented in this report.

The Board of Directors of Orano

8.9 Cross-reference table of the data required in the statement of non-financial performance (articles L. 225-102-1 and R. 225-104 to R. 225-105-2 of the French Commercial Code) and those required by the French Corporate Duty of Care law (article L. 225-102-4 of the French Commercial Code)

	Statement of non-financial performance Article L. 225-102-1 of the French Commercial Code	Duty of Care Article L. 225-102-4 of the French Commercial Code	Sections of the Activity Report (12/31/2018)
Business model and Situation and activities of the Company and its subsidiaries	√	-	**Company profile Section 2**
Risk mapping and risk management processes	**√**	**√**	**3.1**
System of internal controls	**√**	**√**	**3.2**
Main CSR risks linked to the Company's business	**√**	**√**	**3.3**
Labor information			**4.1**
Employment	√	√	4.1.1
Work organization	√	√	4.1.5
Labor relations	√	√	4.1.5
Health and safety	√	√	4.1.6
Training	√	√	4.1.3
Equal treatment	√	√	4.1.5
Societal information			**4.2**
Prevention of corruption and influence peddling	√	-	4.2.1
Supplier relations and responsible purchasing	-	√	4.2.2
Local, economic and labor impacts of the company	√	-	4.2.3
Environmental information			**4.3**
General environmental policy	√	√	4.3.1
Pollution	√	√	4.3.2
Circular economy: waste prevention and management, sustainable use of resources	√	√	4.3.2
Climate change	√	√	3.3.2.2
Biodiversity	√	√	4.3.2

8

8.10 Reporting methodology for the statement of non-financial performance

The indicators published in Chapter 4 of this report measure the main social, environmental, and societal impacts and issues connected with Orano's operations.

These were developed by a group of experts representing the group's various functions and business lines, according to the regulatory framework of articles R. 225-105, R. 225-105-1 and L. 225-102-1 of the French Commercial Code, and applicable international standards like the GRI (1) and the WBSCD (2).

Scope and consolidation

Reporting period: the reporting period is the calendar year (January 1 to December 31).

Scope: the reporting scope covers all of the group's operations around the world. "group" means Orano, its subsidiaries, and all its operational and functional entities present at December 31, 2018 and in which Orano's interest is 50% or greater. Certain minority-owned subsidiaries are, by exception, consolidated in the same way as majority-owned subsidiaries because of the group's operational involvement (*e.g.* Cominak in Niger, for environmental indicators). Units whose irreversible disposal was pending in 2018 were excluded from the scope. Newly-acquired entities are not consolidated the same year they are acquired, so that collection and entry structures can be set up and data made more reliable.

Tertiary establishments with less than 1,000 m² in total surface area must, at a minimum, report indicators on security, health, employment, and dosimetry (if applicable), and, if possible, on the protocol's other disciplines, if the issues are significant.

Consolidation rule: regarding "Environment, Health, and Safety" data, the consolidation method applied is full consolidation (data on majority-owned subsidiaries are fully consolidated). Human resources data are aligned, in scope as in consolidation method, with the financial consolidation rules. With regard to projects performed on the customer's premises, social data (safety, health, workforce, and dosimetry) are consolidated at group level. For Orano investment projects (*e.g.* Comurhex II and Georges Besse II), all environment, health, safety, and social data are consolidated at group level.

Change in consolidated group: for the 2018 financial year, there was no change in the consolidated group.

Methodology

Standards: the methods for calculating environmental, health and safety indicators, as well as the associated reporting procedures, are formalized in a HSE data measurement and reporting protocol. This protocol, which is updated each year, is distributed to everyone involved, at every level of data development and reporting.

Software used: the various indicators presented in Chapter 4 are reported by the use of dedicated software (dedicated SharePoint for environmental and dosimetry indicators, AHEAD for safety, and POLYPHEME for social data).

Internal control: data reported by the establishments are checked for consistency by site managers and HSE or HR managers of the Business Units.

External audit: the group had its statement of non-financial performance audited for compliance and accuracy by an independent third-party body, pursuant to Article L. 225-102-1 of the French Commercial Code. The audit encompassed the consolidated social, environmental, and societal data presented in Chapter 4 of this Annual Activity Report. The report of the independent third-party body is presented in Appendix 8.11.

Clarification of certain indicators

Dosimetry: dosimetry indicators are collected on a half-yearly basis and cover a reference period of 12 consecutive months, with a six-month delay due to the time it takes to obtain results (for example, for the annual campaign carried out in January 2019, the data cover the period from July 2017 to June 2018).

Calculation of the average dose (internal and external) includes all persons being monitored, including those whose radiation dose is zero or undetectable. For confidentiality reasons, internal dosimetry has not been reviewed by an independent third party. For this indicator, the review covers only the sum of the external individual doses resulting from the occupational exposure of the group's employees to ionizing radiation.

Occupational injuries with lost time: in the event of occupational injuries with lost time, the number of days lost is counted for the year in which the injury is sustained, regardless of which month it was sustained in or the number of days.

(1) Global Reporting Initiative (www.globalreporting.org).
(2) The GHG Protocol was developed by the WBCSD (World Business Council for Sustainable Development, www.wbcsd.org) and the WRI (World Resources Institute).

Training: due to the time it takes to produce information, the number of training hours in France is published for the 2017 financial year. The software mentioned in Section 4.1.3 will considerably reduce these times. Outside France, this indicator is not consolidated.

Direct greenhouse gas emissions: the following gases are taken into account: CO_2, CH_4, N_2O, and halogen compounds (CFC, HCFC, HFC, PFC, and SF_6). The values included in this report do not include indirect greenhouse gas emissions related to electricity, heat, or cold purchases.

The sources of the emissions factors used in calculating greenhouse gas emissions are as follows:

- Scope 1: fuel: OMINEA national emissions inventory (February 2014, CITEPA); Order of October 31, 2012 on the audit and quantification of emissions reported under the greenhouse gas emissions allowance trading system for its third period (2013-2020); GWP per gas type: IPCC Fifth Assessment Report; refrigerants: IPCC Fifth Assessment Report; waste: OMINEA national emissions inventory (February 2014, CITEPA);
- Scope 2: http://www.eea.europa.eu; http://www.ontarioenergyreport.ca/pdfs/5924_IESO_Q2OER2016_Electricity.pdf; ADEME database (France).

8.11 Report of the independent third party on the statement of non-financial performance

This is a free English translation of the Statutory Auditors' report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

For the year ended 31 December 2018

To the Shareholders,

In our capacity as Statutory Auditor, appointed as an independent third party, of Orano SA, certified by the French Accreditation Committee (*Comité français d'accréditation* or COFRAC) under number 3-1049 (1), we hereby report to you on the consolidated non-financial performance statement for the year ended 31 December 2018 (hereinafter the "Statement"), included in the group management report, in accordance with the legal and regulatory provisions of Articles L. 225 102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code (*Code de commerce*).

Responsibility of the Company

It is the Board of Directors' responsibility to prepare a Statement in accordance with legal and regulatory provisions, including a presentation of the business model, a description of the main non-financial risks, a presentation of policies applied to mitigate these risks and the outcomes of those policies, including key performance indicators.

The Statement has been prepared applying the procedures of the Company (hereinafter the "Guidelines"), the most significant aspects of which are presented in the Statement (or available on the website or upon request at the Company's headquarters).

Independence and quality control

Our independence is defined by the provisions of Article L. 822-11-3 of the French Commercial Code (*Code de commerce*) and the French Code of Ethics (*Code de déontologie*) for Statutory Auditors. Moreover, we have implemented a quality control system that includes documented policies and procedures to ensure compliance with applicable ethical rules, professional standards, laws and regulations.

Statutory Auditors' responsibility

On the basis of our work, it is our responsibility to express a limited assurance opinion about whether:

- the Statement complies with the provisions of Article R. 225-105 of the French Commercial Code (*Code de commerce*);
- the information provided (hereinafter the "Information") is fairly presented in accordance with Article R. 225-105-I(3) and II of the French Commercial Code (*Code de commerce*) concerning policy outcomes, including key performance indicators and actions relating to the main risks;

It is our responsibility to express, at the request of the Company and outside of the scope of accreditation, reasonable assurance that information selected (1) by the Company and identified with the symbol √ in Chapter 4 *Social, societal, and environmental issues* of the Statement has been prepared, in all material respects, in accordance with the Guidelines.

However, it is not our responsibility to express an opinion on:

- the Company's compliance with any other applicable legal and regulatory provisions, relating, in particular, to the duty of care requirement and the fight against corruption and tax evasion;
- the compliance of products and services with applicable regulatory provisions.

Nature and scope of our work

We performed our work described below in compliance with Article A. 225-1 *et seq.* of the French Commercial Code (*Code de commerce*), defining the conditions under which the independent third party performs its engagement, and with the professional guidance issued by the French Institute of Statutory Auditors (*Compagnie nationale des commissaires aux comptes* or CNCC) relating to this engagement , and with ISAE 3000 (International standard on assurance engagements other than audits or reviews of historical financial information).

We conducted work to form an opinion on the Statement's compliance with legal and regulatory provisions and the fair presentation of the Information therein:

- we gained an understanding of the activity of all companies in the consolidation scope, of the Entity's exposure to the main social and environmental risks relating to the business activity and, of its effects on respect for human rights and the fight against corruption and tax evasion, including any related policies and their outcomes;
- we assessed the appropriateness of the Guidelines in terms of their relevance, completeness, reliability, neutrality and clarity, by taking into consideration, where relevant, the sector's best practices;
- we verified that the Statement covers every category of information required under Article L. 225-102-1, Paragraph III concerning social and environmental matters as well as respect for human rights and the fight against corruption and tax evasion;
- we verified that the Statement presents the business model and the main risks relating to the activity of all companies in the consolidation scope, including – if relevant and proportionate – risks due to its business relationships, products or services, in

(1) Scope available at www.cofrac.fr.
(2) Direct greenhouse gas emissions (scope 1).

accordance with the disclosures required under Article R. 225-105-I, and policies, due diligence procedures and outcomes, including key performance indicators;

- we verified that the Statement presents the disclosures required under Article R. 225-105-II if they are relevant given the main risks or policies presented;
- we obtained an understanding of the process for identifying, prioritizing and validating the main risks;
- we enquired about the existence of internal control and risk management procedures implemented by the company;
- we verified that the Statement covers all companies in the consolidation scope in accordance with Article L. 233-16 within the limits specified in the Statement;
- we assessed the data collection process implemented by the entity to ensure the completeness and fair presentation of the policy outcomes and key performance indicators that must be mentioned in the Statement;
- for key performance indicators and the other quantitative outcomes [(1)] that we considered the most important, we set up:
  - analytical procedures to verify that data collected are correctly consolidated and that any changes to the data are consistent,
  - tests of details based on sampling to verify that definitions and procedures are correctly applied and to reconcile data with supporting documents. The work was carried out with a selection of entities contributing [(2)] to the reported data and represents between 14% and 100% of consolidated data of key performance indicators and outcomes selected for these tests;
- we referred to documentary sources and conducted interviews to corroborate the due diligence procedures that we deemed the most important [(3)] (organization, policies, actions, qualitative outcomes);
- we assessed the overall consistency of the Statement based on our understanding of the Company.

We believe that the sampling methods and sample sizes we have used, based on our professional judgment, are sufficient to provide a basis for our limited assurance opinion. A higher level of assurance would have required us to carry out more extensive procedures.

Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the Statement cannot be totally eliminated.

Means and resources

Our work drew on the skills of five individuals. To assist us in conducting our work, we called on our firm's sustainable development and corporate social responsibility specialists. We conducted around twenty interviews with the individuals responsible for preparing the Statement.

Opinion

Based on our work, and given the scope of our responsibilities, we have no material misstatements to report that would call into question the Statement's compliance with the applicable regulatory provisions, or the fair presentation of the information, taken as a whole, in accordance with the Guidelines.

Comments

Without qualifying our opinion, in accordance with Article A. 225-3 of the French Commercial Code (*Code de commerce*), we draw your attention to the following matters:

- the total hours of training disclosed in the Statement has been calculated for the period from 1 January to 31 December 2017 and covers the France scope only;
- information regarding radiation protection published in the Statement has been calculated for the period from July 1, 2017 to June 30, 2018 due to the time needed to obtain analysis results.

(1) Reasonable assurance: Direct greenhouse gas emissions (scope 1).
Limited assurance: Total workforce; Accident frequency rate with lost time (excluding commuting accidents); Accident severity rate (accidents reported during the year, excluding commuting accidents); Number of fatal accidents; Average employee and subcontractors exposure over 12 consecutive months to radiation; Total individual external dose over 12 consecutive months for Orano employees; Quantity of energy consumed; Quantity of water tapped; Tonnage of conventional waste (normal and exceptional operations); Indirect greenhouse gas emissions (scope 2); Volatile organic compounds.

(2) Orano SA head office (France), Orano Cycle la Hague and Orano Cycle Tricastin (France); Orano Canada Inc. (Canada); Somaïr (Niger).

(3) Policies implemented to analyze and manage employee skills; Systems implemented to measure employee satisfaction; Measures taken in favor of gender equality; Actions taken to reduce the sites' environmental impacts; Tracking of incidents and accidents in nuclear entities or during the shipment of radioactive materials; Policies implemented to prevent corruption and influence peddling; Measures taken to evaluate and reduce the suppliers' environmental and social impacts

Reasonable assurance on a selection of non-financial information

Nature and scope of our work

With regard to the information selected by the Company and identified with the symbol √ in Chapter 4. *Social, societal, and environmental issues* of the Statement, we conducted the same procedures as those described in the paragraph *Nature and scope of our work* for the most important Information. However, these procedures were more in-depth, particularly regarding the number of tests.

Consequently, the selected sample represents 51% of the information identified with the symbol √.

We believe that these procedures enable us to express reasonable assurance regarding the information selected by the Company and identified with the symbol √.

Conclusion

In our opinion, the information selected by the Company and identified with the symbol √ has been prepared, in all material respects, in accordance with the Guidelines.

Paris-La Défense, March 1 2019

KPMG S.A.

Anne Garans	Laurent Genin
Partner Sustainability Services	Partner

The CNCC considers that the translation is not signed, to the extent that it is a free translation in English of the original report prepared in French. A signature is the means by which a person identifies themselves in a deed and by which they express their approval of the document's content. Furthermore, placing a signature on a report affords it the quality of an original. In this particular case, the original is represented by the French version.

8.12 Code of Ethics

This document is a translation of the document CM ORN DIR CPL1 R0 Code Ethique d'Orano

With a presence in numerous countries, the **Orano** group is called upon to operate in complex environments. In this context, the realization of our ambitions and the long-term sustainability of our businesses are founded on a common set of shared values that guide our actions in all our areas of activity:

CUSTOMER SATISFACTION

CONTINUOUS IMPROVEMENT

RESPECT AND PEOPLE DEVELOPMENT

COHESION AND TEAM SPIRIT

LEADING BY EXAMPLE, INTEGRITY, RESPONSIBILITY

Our Code of Ethics states the principles and rules of conduct to be followed to ensure that these values are respected on a daily basis. It is a reflection of our culture and expresses our commitments with regard to all of our stakeholders, with a particular focus on fostering sustainable development and upholding respect for human rights. It serves as a point of reference for all of our employees and managers and presents our expectations and the high standards that we demand of each person who wishes to play a part in the success of our business activities.

In this Code of Ethics, which is accessible to everyone on the Intranet and Internet, the group also reaffirms its commitment to and policy of "zero tolerance" when fighting the risks that corruption and fraud pose to the quality of our products and services and the success of our business activities.

As a responsible company, our actions are governed by two basic principles considered to be a matter of priority, namely:

- **compliance with the most demanding requirements as appropriate to accomplish our goals in matters of nuclear and occupational safety in the conduct of our activities, and with those for the protection of health and the environment; and**
- **compliance with the strictest standards of integrity and an unfailing commitment in the fight against corruption, fraud and in compliance with antitrust rules.**

It is the responsibility of each and every one of us, both managers and employees, across all entities of the group, as well as those of our industrial and commercial partners, to ensure that these values are properly disseminated and that our principles are respected.

The group's Compliance Department is available to answer any questions you may have on how to apply this Code of Ethics in the course of exercising your professional duties.

We, the Executive Committee, and the Board of Directors are counting on each and every one of you to strictly apply this Code of Ethics so that together we build a sustainable and profitable growth by creating value for our customers and our partners.

Philippe KNOCHE
Chief Executive Officer

Philippe VARIN
Chairman of the
Board of Directors

1. Preamble

Orano wishes to be an exemplary group in terms of Ethics and Compliance.

This Code presents our values and describes the worldwide ethical rules applicable to all employees under all circumstances. Orano is committed to ensuring that its industrial and commercial partners, including suppliers and subcontractors comply with these same values and rules.

Orano has, within the framework of its business plan, also defined the values which must be complied with by all of its employees. Among these values, integrity, nuclear safety and occupational safety govern practices and decisions in all circumstances.

Our group conducts its activities in strict compliance with Human Rights, as defined in the *Universal Declaration of Human Rights* approved by the United Nations. It scrupulously observes the laws and regulations of the countries where it operates, as well as its own internal rules. It respects the rights of its employees. The Orano group seeks in all situations to apply the highest standards in relation to the matter at hand.

Accountability, fairness and openness to dialogue characterize Orano's conduct. The group endeavors to provide accurate and relevant information enabling objective assessment of its performance in terms of environmental, economic, social and societal responsibility.

2. Values

Nuclear safety and occupational safety are among the fundamental principles of the Orano group and must be a priority for each and every one of us.

Moreover, we all share the following set of common values:

- customer satisfaction: listening, pragmatism, anticipation, responsiveness, being proactive;
- continuous improvement: delegation of tasks, the right to make mistakes, initiative, creativity, seeking results, being oriented towards the outside world, seeking acceptable solutions to challenges;
- respect and people development: listening, high expectations, goodwill, respect of differences, personal and professional development;

- cohesion and team spirit: cooperation, transparency, problem solving, teamwork;
- leading by example, integrity, responsibility: managerial courage, presence in the field, compliance with standards, priority given to safety, compliance with the law and the rules of the company, and respect for employees' rights.

3. Orano's commitments to its stakeholders

3.1 With regard to the Countries where the group operates

Orano scrupulously observes the laws and regulations in the Countries where it operates, including the requirements of safety and regulatory authorities.

3.2 With regard to its customers

To satisfy and anticipate the requirements of its customers, the group is constantly receptive to them. We endeavor to fully honor our commitments towards them, by supplying them with products and services that fully meet their technical and quality requirements.

Orano respects its Customers' culture and protects their image and interests. Orano protects the confidentiality of the data or know-how to which its customers and partners grant access, within the legal and regulatory framework, as if it were its own.

3.3 With regard to its employees

Employees include all company officers, managers, employees, trainees and apprentices employed by all entities of the Orano group. Company officers and managers must demonstrate exemplary conduct.

Orano makes its employment decisions and actions without discrimination, be it related to age, gender, sexual orientation, ethnic or other origin, nationality, religion, political opinions, physical appearance or disability.

Orano respects the privacy of its employees and remains neutral with regard to their political opinions and philosophical or religious beliefs. Reciprocally, any indoctrination in the workplace is prohibited.

Orano is committed to dialogue between management and staff and conducts it in a fair and upright manner.

Orano offers its employees training plans aimed at maintaining their level of expertise in all areas that their job requires and contributing to their professional development.

3.4 With regard to its shareholders

Orano respects the principles of corporate governance, particularly aiming to guarantee its shareholders optimal growth and return on their investment. It is especially careful to treat them equally and provide them with accurate and relevant financial information.

3.5 With regard to its suppliers and subcontractors

Within a competitive framework, Orano sets out to forge sustainable partner relationships with its suppliers and subcontractors, with a view to providing services of the highest standards to its customers.

We thus undertake to maintain loyal, fair and objective relations marked by mutual respect with all of our suppliers, subcontractors and partners.

Orano protects the image of its suppliers and their confidential data as if they were its own.

3.6 With regard to the public

For Orano, protecting the environment as a common good encompasses all aspects of human well-being in its interactions with nature. Our environmental policy and risk control programs are underpinned by this principle and aim to reduce the environmental footprint of our activities and protect biodiversity wherever the group is engaged in industrial or mining activities. The preservation of natural resources, through recycling raw materials (in particular water), also demonstrates Orano's respect for the planet.

Orano asserts its willingness to engage with and take part in public debate. We take care to honestly explain our strategic and technological choices and to inform decision-makers and citizens of our activities. In this context, we observe ethical conduct in the use of means of information and communication.

3.7 Respect of human rights and other commitments

Orano upholds the principles of the United Nations Global Compact, complies with the Guiding Principles of the OECD for multinationals and supports the Extractive Industries Transparency Initiative (EITE). Under the terms of these commitments, Orano undertakes to promote and respect international law relating to Human Rights and not participate in any form of human trafficking, forced or compulsory labor, or to any child labor practices. Orano requires the same undertaking from its suppliers and subcontractors.

4. Orano's expectations

4.1 With regard to its employees

All group employees conduct their activities in compliance with Human Rights, as defined in the Universal Declaration of Human Rights adopted by the UN.

Employees are honest and comply with the laws and regulations in the countries where they work: the Orano Code of Ethics, the group's Compliance Policies and procedures and with rules relating to quality. They manage Orano's resources with the same rigor as if they were their own. This same attitude is expected of temporary workers.

Employees are motivated by Orano's commitment to its customers. They demonstrate professional conscientiousness, competence and rigor. The operations they carry out or outsource are the subject of complete traceability.

Employees are mindful of the excellence of Orano's products and services. They implement knowledge that is useful to the activities. Previous experience is systematically put to good use.

4.2 With regard to its suppliers and subcontractors

Orano endeavors to ensure that its regular suppliers, subcontractors, financial partners, consultants and selling intermediaries (distributors, agents, *etc.*) subscribe to the group's Code of Ethics. Their own suppliers or subcontractors, as well as the group's industrial and commercial partners are also obliged to subscribe to it.

Orano reserves the right to verify that the practices of its suppliers and subcontractors comply with Orano's Code of Ethics at all times, and throughout the goods and services supply chain.

5. Rules of conduct in force at Orano

The following rules of conduct are binding on all Orano employees and on Orano suppliers and subcontractors. Where appropriate, they are clarified by compliance policies and procedures.

5.1 Protection of life and property

Employees shall immediately notify their hierarchy of any irregularity or concerns they observe with regard to the protection of life and property.

5.1.1 People, health, quality, safety and the environment

The group conducts its activities in strict compliance with human dignity, proscribing *inter alia* any form of harassment and any violation of human rights or the rights of the child.

Orano takes care to ensure that the activities carried out on its sites comply with current rules and group policies relating to health, quality, safety and protection of the environment.

Any breach of these obligations must be reported to the relevant level – and to the Compliance Department where appropriate – which shall take immediate measures to verify the reality of the offending practices, conduct the necessary audits and promptly put an end to any such substantiated misconduct.

5.1.2 Reputation and brand image

Orano's reputation is an essential part of its heritage.

Its employees are obliged on a daily basis not to do or say anything that could harm Orano's reputation, image or credibility.

In national and international relations, due respect prohibits any denigration and ostentatious, uncivil or offhand conduct towards others.

5.1.3 Intangible heritage

Employees shall take care to protect the group's confidential data, whether or not marked "Confidential" or "Restricted", against any intrusion, theft, loss, damage, misappropriation, disclosure, reproduction, forgery, use for personal, unlawful or occult purposes, particularly on the Internet, the Intranet and on social networks.

This includes protecting technical and management data, customer, prospective customer and supplier files, software, passwords, documentation and drawings, methods and know-how, trade secrets, technical adjustments, intellectual and industrial property, forecasts, contracts and agreements, cost and selling prices not in catalogues, strategic or commercial plans, Research and Development material and information relating to innovation, financial and corporate information, the names and contact details of specialists and experts.

5.1.4 Protection of personal data

Orano takes care to ensure the protection of personal data and implements arrangements which are compliant with the provisions of the General Data Protection Regulation (GDPR).

5.2 Competition

Orano and its employees shall not directly or indirectly subvert the free play of competition within the framework of the group's activities and, in particular, in any commercial transactions in which they may participate. They shall also refrain from participating in illegal arrangements or abusing the position of strength which the group may find itself in, and, more generally, from any unfair conduct towards competitors.

Orano and its employees shall comply with applicable French, European and international competition law and the law of all countries where the group operates.

Any information relating to third parties, in particular Orano's competitors must only be collected and used in strict compliance with all applicable rules.

5.3 Export controls

With regard to nuclear activities, the group only supplies goods, services and technologies to Countries and companies within such Countries that are in compliance with current international provisions governing non-proliferation and with IAEA guarantees and export controls. It undertakes not to work under any other conditions.

The group satisfies all applicable national requirements governing export control of the countries in which it operates. This includes dual-use items, as well as the applicable laws and regulations governing international sanctions and embargoes.

5.4 Conflicts of interest

All group employees shall demonstrate loyalty, and promptly declare any conflicts of interests and in writing to their superiors, with a copy provided to the group's Compliance Department. Further instructions for reporting are provided in the "Anti-corruption code of conduct" attached as an Appendix hereto, concerning any situation in the course of an employee's duties in which his or her personal interest or that of his or her relatives could interfere with the interests of the Orano group.

Employees shall take care not to deliberately put themselves in a situation of conflict of interest and shall not participate in any analysis, meetings or decisions concerning matters subject to a conflict of interests.

5.5 Corruption, influence peddling, gifts and undue advantages

Integrity governs the relationship between group employees and governmental organizations and with group customers, suppliers and partners. Orano prohibits corruption in all its forms throughout the world, be it public or private, active or passive. Any influence peddling is also prohibited.

The "Anti-corruption code of conduct" attached as an Appendix hereto demonstrates the willingness of the Management of Orano to commit the group to a clear and unequivocal approach to the prevention and detection of acts of corruption and trafficking in influence. It describes the prohibited acts in this regard and details the internal whistleblower system for gathering reports from employees relating to the existence of acts or situations which are contrary to the group's code of conduct.

5.6 Insider dealing

All group personnel are made aware of all requirements of professional confidentiality and are informed of their duty of discretion *vis-à-vis* their relatives. They are warned about the risks of insider dealing that could occur in the course of business and must adhere to the group's policy in the governing the treatment of inside information.

Company officers undertake to acquire or sell, directly or indirectly, securities admitted to trading and issued by the group, and, in particular, shares in Orano or in debt instruments issued by Orano, or shares in listed or unlisted subsidiaries solely in accordance with group policy governing the protection of inside information, and undertake to inform the company's governing bodies thereof without delay.

5.7 Ethical alerts and primacy of the Code of Ethics

If any questionable activity or breach of a statutory or regulatory obligation or violation of this Code of Ethics or group compliance policies is observed, an immediate alert is a duty of all employees. There are neither hierarchical barriers to the internal circulation of such information, nor any requisite rank for anyone alerting their superiors forthwith.

If an employee has any questions or concerns of an ethical nature, they are to discuss them with Orano personnel who are in a position to provide answers to them. Accordingly, employees may choose to discuss concerns with their direct or indirect hierarchical manager, contact the compliance officer for their department or unit, or alternatively contact the group's Chief Compliance Officer. The Compliance network should be consulted on and is responsible for the handling of ethical issues. Contact details for the Compliance Network can be found on the group website www.orano.group and on the Intranet. In accordance with French law and the laws of many of the countries in which it operates, Orano guarantees confidentiality and immunity for whistleblowers of good faith.

It is the duty of any employee who receives an order that appears, in good faith, to be clearly contrary to Orano's Code of Ethics, or its compliance policies and procedures, to not follow such order, and seek clarification. He or she must immediately refer the matter to group Management to duly record the fact, and cannot be reprimanded for not implementing such order while seeking clarification.

5.8 Sanctions

A violation of the group's Code of Ethics or compliance policies and procedures exposes the person or persons responsible to disciplinary action (the nature of which will depend on the breach and may range from a warning to dismissal for misconduct, in accordance with internal company rules where applicable), or even a judicial sanction. Disciplinary sanctions applied locally must be compliant with the labor regulations in force.

6. Compliance Organization

The implementation of the Orano Code of Ethics is the responsibility of each and every employee. Managers are expected to adopt exemplary ethical conduct and to answer questions that their teams may have on matters of ethics and compliance, or direct them to the compliance officers for their department or unit, by using the ethical alert system described in Section 5.7 of this code.

The Compliance Department provides management with support and disseminates the group Compliance policy and the specific Compliance policies relating to different areas: prevention of corruption and of trafficking in influence, legislation and regulation of competition, regulations concerning the export of dual-use items, economic and commercial sanctions, *etc*.

The Orano group may also carry out compliance audits in order to ensure the proper implementation of the Code of Ethics or of compliance policies and procedures. These audits are conducted in compliance with the IT Charter of the Orano group.

7. Appendix to the Orano Code of Ethics

ANTI-CORRUPTION CODE OF CONDUCT

Preamble

The prevention of corruption and of influence peddling is a matter of major importance for the entire Orano group. Like our Code of Ethics, this Anti-corruption code of conduct is aimed not just at all Orano personnel and company officers worldwide, but also at its industrial and commercial partners, to ensure that we act together to eradicate practices which are contrary to our values of integrity and leading by example, and to our governing principle of transparency.

This code of conduct aims to help employees identify potential at-risk situations, and to enable them to respond in a manner which is appropriate to the context. More detailed procedures are available on the Intranet and, where necessary, the Compliance Department and Compliance Officers can provide any further clarification or assistance required.

7.1 Principles

Integrity governs the relationship between employees, corporate officers and other representatives of the Orano group and the public authorities, its customers, suppliers and established or potential business partners.

Orano prohibits corruption in all forms throughout the world, public or private, active or passive, and intends to apply the principle of "zero tolerance" where acts of corruption or of trafficking in influence are detected.

Orano also prohibits any influence peddling with a public authority or government body, whether it be French, international or foreign organization, or with their officials.

Lastly, Orano provides the assurance that conflicts of interests shall be treated in appropriate ways and not lead to a violation of the Code of Ethics.

7.2 Rules

7.2.1 Prohibited acts

Orano forbids itself and others to directly or indirectly make, offer, promise or solicit a payment or service, gift or leisure activity of more than a modest value (if allowed under applicable laws), to any politicians, state or private-sector officials, with a view to illegally winning or retaining a contract or competitive advantage; acts which are constitutive of the criminal offense of active corruption.

Likewise, Orano forbids itself and others from yielding to requests or demands, or from proffering, at any time, directly or indirectly any offer, promise, donation, gift or reward to a person, on its own behalf or the behalf of others, so that that person may unlawfully use his or her real or supposed influence with a view to obtaining distinctions, jobs, contracts or any other favorable decision from a public authority or administration; acts which are constitutive of the criminal offense of trafficking in influence punishable under French law.

Likewise, it is strictly prohibited for employees and partners of Orano to accept or request any offers, promises, donations, gifts or rewards of any kind so that they may abuse their position to unduly grant jobs, contracts, or any other favorable decision; acts which are constitutive of the criminal offense of passive corruption punishable by law.

Employees must avoid any situation in which they, even momentarily, find themselves in debt to a third party, or any merely ambiguous situations and any equivocal allusions of that nature.

A group policy describes the system of prevention of corruption and of trafficking in influence that it has put in place and with which everyone must comply.

7.2.2 Gifts, invitations and organization of events

Orano recognizes that occasional gifts of modest value accepted or given can sometimes legitimately contribute to good business relations.

Accordingly, both in the public and the private sector, modest gifts or invitations are sometimes made or received by employees. Such gifts and invitations must be in strict compliance with the applicable laws and regulations and in an entirely transparent manner, justified for a professional and unequivocal purpose. They must never influence decision-making, nor can they be perceived as having any such influence on the donor and beneficiaries. Gifts and invitations must be documented and recorded in the accounting books of the entity concerned.

In this respect, employees must demonstrate sound judgment and a keen sense of responsibility. In the case of any doubt, the employee must refuse the gift or the invitation or request authorization in advance from his or her manager or from the Compliance Department.

Under certain circumstances, should an employee find himself or herself in a situation where it is necessary to accept or make a gift or invitation of some value (beyond a modest value), for example, to abide by local customs or for reasons of protocol, he or she must inform his or her management and request prior written approval, where appropriate.

The following is strictly prohibited: payments in cash; personal services; loans; invitations and gifts which are inappropriate, or are provided in circumstances which are inappropriate for business relations.

Internally, gifts and any other intercompany selling expenses between Business Units or subsidiaries are also banned.

Events organized on an occasional basis for customers must serve a legitimate commercial purpose and all arrangements for them must be approved in advance at the appropriate level.

How should I react if...?

- *a supplier invites me to an exclusive event in the hope that I will make "the right decision" as part of an ongoing call-for-tenders process:*
  - any gift or invitation which is liable to influence or could be perceived as being liable to influence a commercial decision should be refused politely, and you should alert your hierarchical manager or your compliance officer accordingly;

- *a salesperson from my team suggests that an employee of a customer be invited to dinner with his/her spouse to obtain information on a forthcoming and as yet to be published call for tenders:*
  - you should explain to the salesperson that this type of practice is not compliant with group policy, and enroll him/her in a training course. Managers and company officers should remind teams of the principles of the Code of Ethics and the group's compliance policies on a regular basis.

7.2.3 Conflicts of interest

All employees shall demonstrate loyalty, and promptly declare in writing any conflicts of interests to their superiors, with a copy to the Compliance Department. A conflict of interest or potential conflict of interest is any situation in which an employee's personal interest or that of his or her relatives could interfere with the interests of the Orano group. This principally concerns relationships with suppliers, customers, identified competitors and any organization or person having or seeking to have dealings with Orano.

Employees shall take care not to deliberately put themselves in a conflict of interest situation and shall not participate in any analysis, meetings or decisions concerning matters subject to a conflict of interest. In particular, a friend, spouse, child or relative of a group employee may only be hired or commissioned if the employee's superior agrees, and the same rules apply to said person on objective criteria, in order to avoid any ambiguity or suspicion of favoritism. The group employee concerned cannot take part in the process of selecting his or her friend or relative. Equally, a friend, spouse, child or relative of a group employee cannot be placed under the latter's direct or indirect line of authority.

Conflicts of interest reported to management are analyzed on a case-by-case basis by the next two higher levels of management above the employee in question, which settle the conflict in accordance with current laws and regulations.

The following situations that could be a source of potential conflicts of interest must be reported (a non-exhaustive list):

- a company officer or one of his or her relatives has personal interests in a customer or supplier company – including consultants, financial partners and others – or group competitors;
- a staff member or one of his or her relatives is a director or corporate officer of an independent firm having dealings with the group;
- a staff member or one of his or her relatives is a consultant, or holds a management position or is a member of the sales or purchasing department of another company having or seeking to have dealings with the group;
- a staff member or one of his or her relatives puts premises, equipment or personal property at the disposal of the group for a consideration.

How should I react if...?

- *I notice that a member of my family represents a supplier that is submitting a bid as part of a call for tenders for which I am involved in the selection process:*
  - you should inform your L+1 and L+2 line managers of the conflict of interest and withdraw from the project.

7.2.4 Payments and relations with third parties

All group entities and managers must be able in all circumstances to substantiate the real source and use of any sum.

No payments may be made or received if their purpose has not been fully and accurately described in their supporting contractual documents and accounting records.

No payment techniques which conceal, or aim to conceal, the identity of a payer or payee are permitted.

Any facilitating payments are banned.

Depending on the level of risk identified, the third parties with which Orano interacts are subject to specific verifications with the aim of ensuring their integrity.

How should I react if...?

- *a supplier asks for a payment to be made to a bank account in another country:*
  - in principle, the supplier's bank account should be domiciled in a country which is related to the place where the business is being conducted. If this is not the case, you should request an explanation of the reasons for this request in order to assess whether it is acceptable;
- *a public official tells me that the formalities would be completed more quickly if I were to pay directly with a surcharge:*
  - this is a facilitating payment. The group's policy is to refuse to make any facilitating payment, even in countries where such practices are not illegal.

7.2.5 Selling intermediaries

The group may call upon reputable selling intermediaries and agents in order to secure commercial contracts, to perform follow-up for these contracts, or to carry out studies or any other initiatives with a view to developing the group's activities. Periodic checks should be performed to ensure that the intermediaries with which we work carry out their actions in accordance with our values, local laws and with the same principles of integrity. The selection of selling intermediaries requires particular attention, notably in terms of due diligences and contractual remuneration.

In accordance with the procedures in force, entering into relations with a selling intermediary requires prior verifications and approval, and the contracting process must be subject to specific review to ensure that provisions relating to the fight against corruption, as well as arrangements for checking execution of the contract, are incorporated into the contract.

How should I react if...?

- *I have noticed that our agent is re-invoicing higher and higher costs and expenses:*
  - the arrangements for the reimbursement of costs and expenses are in principle stipulated in the contract. They must be justified in the same way as any other service. Receipts should be requested and the agent should be asked to provide explanations;
- *I call upon the services of an intermediary which says that it will take care of the administrative formalities to ensure our activities run smoothly:*
  - in order to avoid the possibility that this intermediary may pay bribes to third parties, which could implicate the group in indirect corruption, it is necessary to ensure that its services are clearly defined and documented, and that the price invoiced by the intermediary corresponds to the fair market price. Furthermore, the contract may stipulate that an audit may be conducted.

7.2.6 Representation of interests and political party funding

The representation of interests to public authorities, commonly referred to as lobbying, is governed by laws and regulations which are specific to different countries and international organizations. In France, it is necessary to comply with the law relating to the representation of interests and the procedure in force applicable to any employee or corporate officer who contacts a person in authority in order to attempt to alter a decision.

Regarding the funding of political parties, no group company funds or provides services to a political party, a public servant or candidate to such a post.

Notwithstanding the previous paragraph, in OECD member countries where such corporate contributions are legal, contributions to election campaigns may be made in accordance with current legislation in the State concerned. Such contributions are subject to the written consent of the corporate officer of the subsidiary concerned, who shall make a point of limiting them to a minimum.

The sums and their recipients must be disclosed in the executive summary enclosed with the annual ethics report drafted by the subsidiary's designated company representative.

How should I react if…?

- *a parliamentary representative to whom I have just explained the benefits of nuclear energy ask me once the interview is over if it would be possible to finance a sports center in his constituency:*
  - you should refuse politely pointing out that sponsorship activities are governed by group policy and are subject to an approval process. Such a request could fall within the scope of trafficking in influence.

7.2.7 Corporate sponsorship, donations, humanitarian aid

The group's sponsorship policy and its action program are defined at the group level, which *inter alia* takes into consideration the involvement of employees in such programs.

Spirit: Orano's interventions reflect the values of the group. They are characterized by the lack of a *quid pro quo* of an administrative or commercial nature.

Arrangements: The group only intervenes as a supporter, with no responsibility as prime contractor or operator, and only backs projects or programs that are led by their initiators, after accomplishing all of the requisite legal and administrative formalities and obtaining the necessary permissions and guarantees.

Orano's corporate sponsorship excludes any gift to a State or regional administration or any natural persons, and any cash payments.

How should I react if…?

- *a politician asks me to fund a charity for the education of young girls. The association is managed by his wife:*
  - any support for an association must be validated in advance. Funding of this type could be considered to be a form of corruption.

7.3 Applicability

The code of conduct is applicable to all employees of the group, as well as to external and occasional contractors.

It is applicable everywhere when the Orano group conducts its activities, in all countries worldwide, and shall not serve as a substitute for the application of more demanding anti-corruption rules, where imposed by applicable laws or regulations.

7.4 Training

Orano ensures that its employees and corporate officers receive appropriate training with regard to their exposure to the risk of corruption or of influence peddling and that this training is updated on a regular basis. Each of these employees and corporate officers may receive additional information from the group's compliance teams.

7.5 Reporting

Any observed cases of active or passive corruption, trafficking in influence, or any solicitation of a third party tending towards such corruption, shall immediately be reported to direct or indirect management and/or to the Compliance Officer of the Department or of the Unit concerned and/or to the group Chief Compliance Officer, who are the persons to be consulted for the handling of ethical issues, in accordance with French law, and whose contact details can be found on the group website and on the Intranet. They shall immediately take the measures needed to ascertain the reality of such cases, *inter alia* by carrying out the appropriate audits, and promptly put an end to any such misconduct.

The law guarantees that the confidentiality of the identity of the author of an uninterested report made in good faith shall be preserved, when he or she denounces criminal acts or misdemeanors of which he or she has personal knowledge. Applicable laws may also protect the immunity of the person making the report from sanctions or discriminations or retaliation of any kind, for having reported the facts in compliance with the procedure above.

It should also be remembered that if applicable law so provides, except in the case of serious and imminent danger or risk of irreversible damages, the law prohibits the public disclosure of an alert, for a period of three months, and may only be made public once this period has elapsed, and in the event that it has not given rise to any subsequent action.

7.6 Sanctions

All the acts prohibited by this code of conduct, or any violation of the rules and principles stated in this Anti-corruption code of conduct shall expose the person responsible to disciplinary action (which may range, depending on the nature of the breach, from a warning to dismissal for misconduct, in accordance with internal company rules where applicable), or even a judicial sanction. Disciplinary sanctions applied locally must be compliant with the labor regulations in force.

Florence ASCHER
Chief Compliance Officer

Philippe KNOCHE
Chief Executive Officer

8.13 Financial glossary

Adjusted net income attributable to owners of the parent

This indicator is used to reflect Orano's industrial performance independently of the impact of financial markets and regulatory changes in respect of end-of-lifecycle commitments. It comprises net income attributable to owners of the parent, adjusted for the following items:

- return on earmarked assets;
- impact of changes in discount and inflation rates;
- unwinding expenses on end-of-lifecycle operations (regulated scope);
- significant impacts of regulatory changes on end-of-lifecycle commitment estimates (adjustment impacting operating income);
- related tax effects.

Backlog

The backlog is determined on the basis of firm orders, excluding unconfirmed options, 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. Orders in hedged foreign currencies are valued at the rate hedged. Non-hedged orders are valued at the rate in effect on the last day of the period. The backlog reported for long-term contracts recorded under the percentage of completion method and partially performed as of the reporting date is equal to the difference between (a) the projected sales revenue from the contract at completion and (b) the sales revenue already recognized for this particular contract. Accordingly, the backlog takes into account escalation and price revision assumptions used by the group to determine the projected revenue at completion.

Cash flows from end-of-lifecycle operations

This indicator encompasses all of the cash flows linked to end-of-lifecycle operations and to assets earmarked to cover those operations. It is equal to the sum of the following items:

- revenue from the portfolio of earmarked assets, cash from disposals of earmarked assets;
- full and final payments received for facility dismantling;
- minus acquisitions of earmarked assets;
- minus cash spent during the year on end-of-lifecycle operations;
- minus full and final payments paid for facility dismantling.

Earnings before interest, taxes, depreciation and amortization (EBITDA)

EBITDA is equal to operating income after depreciation, depletion, amortization and provisions, net of reversals. EBITDA is restated to exclude the cost of end-of-lifecycle operations performed in nuclear facilities during the year (facility dismantling, waste retrieval and packaging). It should be noted that the cash flows linked to end-of-lifecycle operations are presented separately.

Net cash flow from company operations

Net cash flow from company operations is equal to the sum of the following items:

- operating cash flow;
- cash flow from end-of-lifecycle operations;
- change in non-operating receivables and liabilities;
- financial income;
- tax on financial income;
- dividends paid to minority shareholders of consolidated subsidiaries;
- net cash flow from operations sold, discontinued and held for sale, and cash flow from the sale of those operations;
- acquisitions and disposals of current and non-current financial assets, with the exception of bank deposits held for margin calls on derivative instruments or collateral backed by structured financing and cash management financial assets.

Net cash flow from company operations thus corresponds to changes in net debt (i) with the exception of transactions with Orano SA shareholders, accrued interest not yet due for the financial year and currency translation adjustments, and (ii) including accrued interest not yet due for the financial year N-1.

Net debt

Net debt is defined as the sum of all short and long-term borrowings, less cash and cash equivalents, financial instruments recorded on the assets side of the balance sheet including borrowings, bank deposits constituted for margin calls on derivative instruments and collateral backed by structured financing and cash management financial assets.

Operating cash flow (OCF)

Operating cash flow (OCF) represents the amount of cash flow generated by operating activities before income tax. It is equal to the sum of the following items:

- EBITDA;
- plus losses or minus gains on disposals of property, plant and equipment and intangible assets included in operating income;
- plus the decrease or minus the increase in operating working capital requirement between the beginning and the end of the period (excluding reclassifications, currency translation adjustments and changes in consolidation scope);

- minus acquisitions of property, plant and equipment and intangible assets, net of changes in accounts payable related to fixed assets;
- plus sales of property, plant and equipment and intangible assets included in operating income, net of changes in receivables on the sale of fixed assets;
- plus prepayments received from customers during the period on non-current assets;
- plus acquisitions (or disposals) of consolidated companies (excluding equity associates), net of the cash acquired.

Operating working capital requirement (Operating WCR)

Operating WCR represents all of the current assets and liabilities related directly to operations. It includes the following items:

- inventories and work-in-process;
- trade accounts receivable and related accounts;
- advances paid;
- other accounts receivable, accrued income and prepaid expenses;
- minus: trade accounts payable and related accounts, trade advances and prepayments received (excluding interest-bearing advances), other operating liabilities, accrued expenses, and deferred income.

Note: Operating WCR does not include non-operating receivables and payables such as income tax liabilities, amounts receivable on the sale of non-current assets, and liabilities in respect of the purchase of non-current assets.

Orano
Business corporation with a Board of Directors
Capital of 132,076,389 euros

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and Investor Relations Department

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produced from sustainably managed forest.

Orano transforms nuclear materials so that they can be used to support the development of society, first and foremost in the field of energy.

The group offers products and services with high added value throughout the entire nuclear fuel cycle, from raw materials to waste treatment. Its activities, from mining to dismantling, as well as in conversion, enrichment, recycling, logistics and engineering, contribute to the production of low-carbon electricity.

Orano and its 16,000 employees bring to bear their expertise and their mastery of cuttingedge technology, as well as their permanent search for innovation and unwavering dedication to safety, to serve their customers in France and abroad.

Orano, giving nuclear energy its full value.

Join us

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Energy is our future, don’t waste il!

orano