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MANAGEMENT REPORT

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CONTEXT

GENERAL CONTEXT

2017 was marked by sustained activity in the provision of expertise and support to the public authorities on issues of significant scientific and social importance, such as the anomalies in the carbon content of the Flamanville EPR reactor vessel closure head domes and the review of the safety options report for the CIGEO project. This expertise would not be available without the ongoing research and development which gives IRSN the knowledge and tools it needs to successfully carry out its assessments.

The detection of traces of ruthenium in the atmosphere over France and elsewhere in Europe, another key event of 2017, illustrates this approach: IRSN has measurement systems and simulation tools available to alert the public authorities as early as possible and to keep the public informed about the characteristics of the release (size, nature, geographic location, etc.) and any potential impact on health.

EXPERT ASSISTANCE IN SUPPORT OF THE SAFETY AUTHORITIES AND OTHER PUBLIC AUTHORITIES

IRSN's expert assistance role in respect of nuclear and radiological risks is multi-faceted. It is primarily aimed at the civil nuclear safety and security authorities and any other public authorities that require IRSN's technical support. In a broader national context this role means that IRSN is involved, among other things, in the definition and implementation of public policy and carries out continuous monitoring in the field of radiation protection. Lastly, it contributes to preparing and disseminating corpora of regulatory and para-regulatory texts at national, European and international level.

IRSN's activities in support of ASN, the French Nuclear Safety Authority, are essential at a time of increasingly challenging safety and radiation protection issues: inspection of ageing reactors and extension of their operating life beyond 40 years, preparation for the decommissioning of certain reactors, inspection of safety upgrades based on experience feedback from the Fukushima accident, oversight of the commissioning of the Flamanville European Pressurized water Reactor (EPR), and strict supervision of safety at research, fuel cycle and waste disposal facilities through periodic safety reviews.

The highlights of 2017 include:

- + examination of the safety reviews associated with the second ten-yearly outage inspections of the N4 series and the fourth ten-yearly outage inspections of the 900 MWe reactors;
- + the continuation of post-Fukushima stress testing, with the examination of measures proposed by EDF to prevent and control accidents at reactors in operation;
- + analysis of the consequences of the anomaly detected in the Flamanville EPR pressure vessel head domes for their serviceability;

- + examination of the EPR new model (EPR NM) safety options report;
- + examination of safety options report for the CIGEO project;
- + identification of problems with the earthquake resistance of pumping station pipework at 29 nuclear reactors in France and the behavior of the dikes at the Tricastin nuclear power plant in the event of an earthquake.

In defense-related nuclear facility safety, one of IRSN's expert assistance priorities was the continued oversight of the commissioning (scheduled by the French Navy for 2019 at the latest) of the Suffren, the first Barracuda class nuclear attack submarine, and its support infrastructure. IRSN also assessed the procedures and measures proposed by licensees for the shutdown and decommissioning of their facilities and the management of the associated waste and effluent, especially at defense-related facilities on the Areva site at Pierrelatte and the CEA site at Marcoule

In nuclear security, IRSN fulfilled all the technical support requests it received concerning the national register of nuclear materials and the management and operational tracking of nuclear material shipments. In the context of its technical support to the Senior Defense and Security Official at the Ministry of Energy, priority was given to examining the reports submitted by licensees as part of their work to bring their facilities into compliance with requirements for protection against malicious attacks and terrorism, and to continuing IRSN's examination of the security data package for the Flamanville EPR.

For France's implementation of international treaties on nuclear non-proliferation (Euratom Treaty, IAEA Safeguards Agreement and its additional protocol, bilateral agreements) and the prohibition of chemical weapons (Chemical Weapons Convention), IRSN provided support and technical assistance by centralizing the receipt of licensees' declarations and forwarding them to the inspection agencies and by accompanying international inspections led by the IAEA and Euratom (47 inspections in 2017) in the nuclear field and by the OPCW (12 inspections in 2017) in the chemical field.

As regards support for the public authorities, the multiannual priority objectives were maintained in 2017, in particular monitoring the doses received by workers, actions to support the national measures in the roadmap for France's national emergency response plan for major nuclear or radiological accidents, management of the inventory of disused uranium mines, and monitoring of foodstuffs in France.

In conjunction with the relevant authorities, IRSN continued to be heavily involved in the transposition into French law of European Directive 2013/59/Euratom of 5 December 2013, laying down basic safety standards for protection against the dangers arising from exposure to ionizing radiation.

RESEARCH TO ENHANCE NUCLEAR SAFETY AND RADIATION PROTECTION

Due to its position in the field of governance of nuclear and radiological risks, IRSN identifies R&D requirements in relation to nuclear safety and radiation protection issues. This R&D may take the form of studies, applied research or more basic research. IRSN's position enables it to set its research priorities, which are then discussed with stakeholders and the public authorities, particularly ASN, through its Research Policy Committee, but also within European research structures as part of the definition of strategic research agendas. The research programs developed by IRSN or in which it is involved are designed to meet the need to acquire and develop new knowledge in relation to current and future nuclear and radiological risk assessment issues. These programs also aim for scientific excellence in terms of both results and methodology, and 2017 was a key year for this because IRSN's research was subject to peer review as part of the evaluation performed in October 2017 by the High Council for Evaluation of Research and Higher Education (HCERES).

Much of IRSN's work on nuclear reactor safety is related to the aftermath of the Fukushima accident, most notably the management of major programs and national and international research projects such as:

- + IMVR (part of H2020), which aims to study the potential for and technical limits of corium stabilization and in-vessel retention as a safety measure to manage severe accidents involving core melt;
- + PERFROI and DENOPI (programs being run as part of the Investment in the Future Program), which are studying the consequences of loss of coolant of the fuel in the reactor and the fuel in the spent fuel pool.

2017 also saw the finalization and publication of the main results of the European "Passive and Active Systems on Severe Accident source term Mitigation" (PASSAM) project, begun in 2013 to improve the venting and filtration systems for fission products liable to be released into the environment in the event of a core melt accident. In four years PASSAM has established an experimental database for each filtration system studied, which should help to improve the reliability of existing systems in nuclear power plants and contribute to the design of new systems.

IRSN's research in the geosciences and waste disposal largely focused on the challenges associated with assessing disposal facilities. In this context IRSN continued to contribute to the European MODERN 2020 project, which aims to develop the most appropriate strategies for monitoring the key parameters of a disposal facility (evolution of the excavation damaged zone after excavation, hydrogen production, geochemical parameters, etc.). IRSN's other activities in 2017 include the preparation of a proposal for a joint European programming tool for planning and carrying out research into radioactive waste management and disposal, as part of the work for and the conclusions of the European JOPRAD project.

As part of its research into radiation protection in 2017, IRSN finalized the ANR ANTHOS program on optimizing therapeutic treatment with the use of stem cells, and continued the AMORAD and PRIODAC programs, as part of the "Tomorrow's Nuclear Technology" Investment in the Future Program. AMORAD aims to improve models for predicting and assessing the environmental impact of radionuclides and PRIODAC aims to identify procedures for the repeated administration of stable iodine in the event of a nuclear accident.

OPENING UP TO SOCIETY AND TRANSPARENCY

As regards transparency and openness to society, IRSN remains heavily involved in efforts to promote wider dissemination of knowledge and to improve recognition of the contribution made by members of the public to research and/or risk assessment processes.

On the basis of experiences in the field of long-lived high level and intermediate level waste (HL-ILW/LL), and working in particular with the Bure Local Information and Oversight Committee (CLIS) and the French National Association of Local Information Commissions and Committees (ANCCLI), IRSN rolled out a new method of interacting with civil society during its examination of the CIGEO safety options report, organizing discussions with a group of around fifteen people from the Bure CLIS, ANCCLI, the citizens' panel from the 2013 public debate, and non-institutional experts.

The main objective is to take account of the concerns of civil society in the examination of the CIGEO safety options report and to find new ways of interacting with civil society when dealing with future projects with major implications for society.

FISCAL YEAR BUDGET EXECUTION

The budget execution is presented below in terms of commitment authorizations (CA) and payment appropriations (PA) with reference to the initial budget (IB), unless stated otherwise.

BUDGETARY CONTEXT

In fiscal year 2017:

- + there was a reduction in the net grant from the Ministry for Ecological and Inclusive Transition (MTES) linked to Budget Program 190, which was set at €166.2 million in the initial budget and executed at €157.9 million, i.e. a reduction of €8.3 million due to a first cut of €1.7 million in the Initial Finance Act, a second cut of €9.8 million during the year, then the release in December of €3.2 million from the contingency reserves;
- + IRSN implemented significant mid-year spending cuts to absorb the €9.8 million grant reduction. Suspension of new spending commitments for 2017 as well as a hiring freeze (see below) reduced expenditure from the €285.3 million planned in the initial budget to €274.6 million, a reduction of €10.7 million;
- + personnel expenses fell by €4.6 million, with an average of 1,680 full time equivalent (FTE) employees during the year (excluding government-subsidized contracts and intern and apprenticeship contracts), compared to 1,704 FTE employees in the initial budget. To make the necessary savings to absorb the €9.8 million budget cut, IRSN decided to freeze hiring for a certain number of posts. The number of FTE employees at the end of December 2017 rose slightly to 1,699;
- + execution of self-generated revenue (excluding grants and contributions) exceeded the forecast of €3.4 million, due partly to improved debtor management and partly to receipt of advance payments on grants to co-finance research (ANR/H2020);
- + the new building 01 at the Fontenay-aux-Roses site was commissioned, which had a significant impact on the balance sheet (€42.4 million in fixed assets and debt).

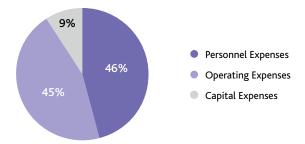
BUDGET VERSUS ACTUAL REPORT

+ Budget Balance

	Actual 2017		Initial budget 2017	
in €thousands	CA	PA	CA	PA
EXPENDITURE				
Personnel Expenses*	145,553	145,922	150,526	150,526
Operating Expenses	115,748	114,812	159,238	118,283
Capital Expenses	12,783	13,901	17,480	16,520
TOTAL	274,085	274,634	327,244	285,328
REVENUE				
Aggregated revenues		272,530		275,432
Public service grant		161,622		169,609
Other government finance		878		2,494
Tax allocation		64,598		62,519
Other public finance		2,800		1,388
Self-generated revenue		42,632		39,423
Earmarked revenue		-		-
TOTAL		272,530		275,432
BUDGET BALANCE		(2,104)		(9,896)

^{*} Personnel expenses are personnel costs and the cost of taxes on remuneration

+ Breakdown of 2017 expenditure by payment appropriations



The budget deficit, executed at - \in 2.1 million in 2017, improved by \in 7.8 million compared to the projection in the initial budget (IB).

Revenue collected was &2.9 million below the projected figure in IB 2017 at &272.5 million, mainly due to the combined effect of the following:

- + a reduction in the MTES grant for Budget Program 190 of $\in 8.3$ million in total, due to two cuts made during fiscal year 2017: a $\in 1.7$ million cut by the 2017 Initial Finance Act and a $\in 6.6$ million cut by the 2017 Amending Finance Act (a $\in 9.8$ million cut followed by a $\in 3.2$ million contribution);
- + a \in 62.5 million cap on the contribution paid by INB licensees. The \in 2.1 million excess amount received in 2017 was paid back to the Government and recorded as expenditure;
- + other public sources of finance fell slightly by €0.2 million compared to IB 2017;

+ self-generated revenue grew by €3.4 million, of which €3.1 million was from services for safety and radiation protection of facilities and activities.

There were three areas of expenditure – personnel expenses, operating expenses and capital expenses – amounting to a total of \in 274.6 million in 2017, which was \in 10.7 million below the projected figure in IB 2017, giving an expenditure execution rate of 96% (for information, compared to the second budget amendment, the expenditure execution rate is 99%). The change is related to:

- + an overall reduction in operating expenses and capital expenses of €6.1 million to absorb the cut in the MTES grant;
- + an execution level of €145.9 million for personnel expenses compared to a budget of €150.5 million, i.e. a difference of -€4.6 million, mainly due to a freeze on hiring during the year.

+ Resources by origin

The following table gives resources by field, showing actual figures against the figures in IB 2017:

in €thousands	Actual 2017	IB 2017
AREAS	Total Revenue	Total Revenue
001 Facility radiation protection	14.9	13.5
002 Security, non-proliferation	0.1	0.3
003 Radiation protection - Environment and human	20.1	19.1
004 Emergency and post-accident situations	0.8	0.8
005 Transparency, openness to society, safety	1.5	1.9
006 Strategy, scientific and technical excellence	6.7	6.7
Programs subtotal	44.1	42.2
Interdisciplinary	228.4	233.2
GRAND TOTAL	272.5	275.4

Notably, interdisciplinary resources include the grants for Budget Programs 190 and 212 and the contribution paid by INB licensees.

+ Expenditure by destination

The following table shows expenditure by destination expressed in terms of production costs, showing actual figures against the figures in IB 2017:

in €thousands	Actual 2017				IB 2017
AREAS	Operation	Personnel	Investment	Total Expenditure	Total Expenditure
001 Facility radiation protection	35.3	59.2	4.4	99.0	102.7
002 Security, non-proliferation	2.1	7.7	0.2	10.0	10.4
003 Radiation protection - Environment and human health	19.3	34.5	4.6	58.4	60.4
004 Emergency and post-accident situations	2.7	4.8	0.3	7.8	7.8
005 Transparency, openness to society, safety culture	3.1	4.6	-	7.8	8.5
006 Strategy, scientific and technical excellence	2.2	9.6	=	11.8	11.7
Functional and support	14.1	21.4	0.2	35.6	36.9
Property master plan	2.2	0.2	2.5	4.8	6.9
Other property	18.3	2.2	0.5	21.0	23.0
IT	14.5	1.6	1.1	17.3	15.0
Feursmétal	1.1	0.1	-	1.2	2.1
GRAND TOTAL	114.8	145.9	13.9	274.6	285.3

The difference between revenue and expenditure in the above tables corresponds to the budget balance.

ACCRUAL ACCOUNTING

■ INCOME STATEMENT

in €thousands	Actual 2017	IB 2017
REVENUE		
Grants and similar revenue	228,240	236,010
Grants	163,642	173,491
Revenue from tax allocation	64,598	62,519
Direct revenue from activities	35,693	41,423
Including gains on sale of assets	41	-
Investment income	31	-
Including write-backs on depreciation, impairments and provisions	10	-
Internal operations	17,695	14,939
TOTAL REVENUE	281,659	292,371
EXPENDITURE		
Personnel Expenses*	149,866	150,526
Operating Expenses	116,809	116,587
Internal operations	32,012	27,314
TOTAL EXPENDITURE	298,687	294,427
FISCAL YEAR RESULT	(17,028)	(2,056)
TOTAL INCOME STATEMENT BALANCE	298,687	294,427

^{*} Personnel expenses are personnel costs and the cost of taxes on remuneration

Fiscal year 2017 ended with a \in 17.0 million loss, compared with a projected loss of \in 2.1 million in the IB, a difference of \in 615.0 million, of which \in 4.3 million was due to an increase in expenses and \in 10.7 million was due to a reduction in income.

REVENUE

The main differences between the initial projection (IB) and the execution of fiscal year 2017 are summarized below:

- + grants and similar revenue fell by €7.8 million due to an €8.0 million reduction in grants from the government (allocations for Budget Programs 190 and 212), a €1.9 million reduction in grants from other public bodies, and a €2.1 million increase in the contribution paid by INB licensees. Because the INB licensees' contribution is capped in accordance with Article 46 of the Budget Act of December 28, 2011 in its form expressed in Article 41 of the Budget Act of December 29, 2015, the excess amount was paid back to the government and recorded as expenditure in the fiscal year 2017;
- + direct revenue from activities was executed at a rate of 86%. The low execution rate of direct revenue was mainly due to a change in the rate of recognizing income related to the CABRI contract. This long-term contract is treated from an accounting point of view on a percentage of completion basis, with revenue recognized on the basis of project progress, determined by the ratio of expenditure disbursed to total cost at project completion.

The percentage of completion at the end of fiscal year 2017 was 67% for non-capital expenditure and 98% for capital expenditure. During the year, the operating and experimentation costs were revised to $\[\in \]$ 15.1 million, and the experimentation period was extended by two and a half years to 2024 at a cost of $\[\in \]$ 27.6 million. This revision will add $\[\in \]$ 42.7 million to the project completion cost, which means that, compared to the previous year, there was a reduction in revenue recognized on a percentage of completion basis ($\[\in \]$ 4.2 million);

+ non-budgeted revenue was also €2.8 million higher, mainly due to write-backs on provisions, which were smaller in scope when the initial budget was set.

EXPENDITURE

Total operating expenditure, budgeted at \in 116.6 million, was in fact \in 116.8 million, a slight increase of \in 0.2 million.

Personnel expenses (account 64 + accounts 631 and 633), projected at €150.5 million, totaled €149.9 million, a difference of -€0.7 million.

Internal operations, restated in the calculation of cash provided by operations, rose by 64.7 million compared to the initial budget. This was due primarily to:

+ a €5.0 million increase in provisions for depreciation compared to a projected figure of €25 million in the initial budget, related to the commissioning of fixed assets under construction;

+ a €0.3 million decrease in other internal operations compared to a projected figure of €2.3 million, caused by a change in accounting presentation (profit-sharing and provision for impairment of customer accounts treated henceforth as expenses payable).

Consequently, the change in the result is due mainly to the revision of the CABRI project, which led to a &4.2 million reduction in revenue, and an adjustment to internal operations, where provisions for depreciation caused a &5 million increase in operating expenses for the CABRI and PPP Prisme projects.

CASH FLOW STATEMENTS

in€thousands	Actual 2017	IB 2017			
TRANSFER OF RESULT TO CASH PROVIDED BY OPERATIONS					
FISCAL YEAR RESULT	(17,028)	(2,056)			
+ Loss on sale of assets	498	-			
+ Depreciation and provisions	31,514	27,314			
- Gains on sale of assets	(41)	-			
- Portion of grants recorded in result	(6,240)	(10,000)			
- Write-backs on depreciation and provisions	(11,308)	(4,939)			
- Expense transfers	(157)	-			
CASH PROVIDED BY OPERATIONS (+) / (-)	(2,762)	10,319			

in €thousands	Actual 2017	IB 2017
SUMMARY CASH FLOW STATEMENTS		
CASH PROVIDED BY OPERATIONS (+) / (-)	(2,762)	10,319
SOURCES OF CASH		
Equity	1,584	-
Disposal of fixed assets	41	-
Other sources (excl. internal operations)	248	100
Increase in long-term debt	42,493	-
TOTAL SOURCES OF CASH (INCL. CASH PROVIDED BY OPERATIONS)	44,367	10,419
USES OF CASH		
Acquisition of tangible and intangible assets	53,821	16,520
Financial assets	5	-
Long-term debt paid	1,891	619
TOTAL USES OF CASH (incl. cash flow shortfall)	58,479	17,139
CONTRIBUTION TO (+) OR DEDUCTION FROM (-) WORKING CAPITAL	(14,113)	(6,720)

The projected figure for cash provided by operations in the initial budget was $\[\in \]$ million. Execution revealed a cash flow shortfall of $\[\in \]$ 2.7 million, a variation of $\[\in \]$ million.

This reduction is due to the combined effect of the fall in income (- \in 15.0 million), and the \in 2.1 million increase in internal operations resulting from a change in accounting presentation, with provisions for profit sharing and customer risks now being treated respectively as expenses payable and asset impairments, which are not part of cash provided by operations.

SOURCES OF CASH

Cash, totaling €44.4 million, consisted of:

- + a \in 1.6 million increase in equity, corresponding to allowances from the ANR associated with fixed assets (+ \in 1.2 million) and the share of income from CABRI recognized on a percentage of completion basis (+ \in 0.4 million);
- + a €42.4 million increase in long-term debt for the public-private partnership (PPP) set up with the company Prisme to build and operate building 01 on the Fontenay-aux-Roses site;
- + interest of €0.1 million accruing on loans;
- + other sources of cash (including the repayment of loans to staff) of 0.3 million.

USES OF CASH

The total amount of €55.7 million was used for:

- + the acquisition of tangible and intangible assets and investments, in the amount of €53.8 million, including building w01 at Fontenay-aux-Roses (€42.4 million);
- + the reimbursement of financial debts, in the amount of \in 1.9 million, including depreciation of the loan taken out to acquire the Triangle building (\in 0.5 million), the depreciation of financial lease payments under the PPP contract for financing building 01 (\in 1.5 million), and lastly the loans to staff (\in 0.1 million).

This resulted in a \in 14.1 million reduction in working capital, compared with a projected withdrawal of \in 6.7 million in the budget.

WORKING CAPITAL AND WORKING CAPITAL REQUIREMENT

in€millions	Actual 2017	IB 2017	Actual / Budget difference	Actual 2016	Actual difference 2017/2016
Result	(17.0)	(2.1)	(15.0)	(6.4)	(10.7)
Cash provided by operations	(2.8)	+10.3	(13.1)	+14.1	(16.9)
Variation in working capital	(14.1)	(6.7)	(7.4)	(9.3)	(4.8)

Overall, the difference between the working capital withdrawals projected in the budget and the actual figure for 2017 was -€7.4 million.

The budget execution gap was due to:

- + the completion of work related to the construction of building 01 at Fontenay-aux-Roses, amounting to -€0.5 million;
- + the impact of the revaluation of expenses on recognition of CABRI income on a percentage of completion basis, the cost at completion of the project having been extended by two years, amounting to -€4.2 million;
- + an increase of $\epsilon 0.8$ million in earmarked decommissioning and cleanup operations;

- + delays in operations, amounting to -€0.3 million;
- + a decrease in provisions of €1.8 million, mainly due to reclassification of the profit-sharing provision as personnel expenses (-€2.2 million) to comply with good accounting practice;
- + lastly, the residual balance at the end of 2017 can be used to add \in 0.6 million to the working capital, producing a difference of - \in 1.4 million between the two fiscal years. At year-end 2017, the amount of working capital not earmarked was therefore \in 3.0 million.

in∈millions	Actual 2017	Budget 2017	Actual / Budget difference
Working capital	+1.2	+5.0	(3.8)
Working capital requirement	(32.8)	(19.1)	(13.6)
Cash	+34.0	+24.1	+9.8

As at December 31, 2016, cash stood at \in 34.0 million, \in 9.8 million above the IB 2017 projection of \in 24.1 million, mainly because of an increase in revenue collected at the end of the fiscal year.

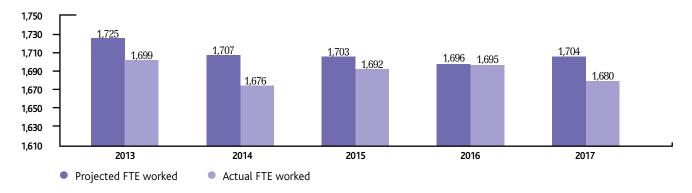
This results in a decrease in the working capital requirement of \in 32.8 million compared to the projected decrease of \in 19.1 million in the initial budget.

WORKFORCE

The average number of employees (excluding interns, apprenticeships and government-subsidized contracts) in 2017 was 1,680 FTE worked, which was 24 FTE below the figure of 1704 FTE set in the Initial Finance Act, but which is close to the figure of 1,684 FTE set in the most recent budget revision (BR2).

	Actual 2017	LFI 2017
Posts	1,680	1,704
Below ceiling	1,627	1,645
Above ceiling	53	59

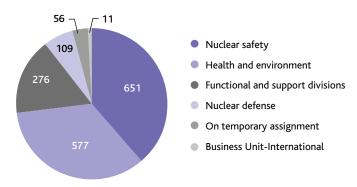
The average number of permanent employees represented 94.5% of the total workforce in 2017, compared with 94% in 2016.

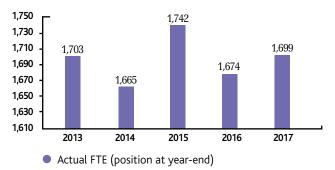


The number of employees connected to IRSN's program development effort represented 80.2% of the 2017 total average workforce.

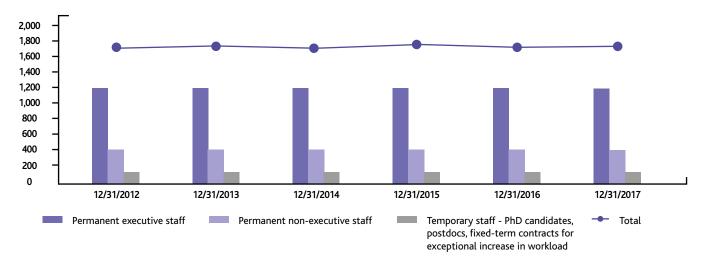
The level of FTEs as at December 31, 2017 was 1,699 (excluding interns, apprenticeships and government-subsidized contracts) compared to 1,674 as of December 31, 2016.

+ Breakdown of average annual workforce in 2017 (in average annual FTE)





As at December 31, 2017 IRSN had 1600.5 permanent FTEs (compared with 1574.5 FTEs on December 31, 2016), of which 1222.6 FTEs were executive staff and 377.9 FTEs were non-executive staff.



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INCOME STATEMENT

in €thousands	Notes	Fiscal year 2017	Fiscal year 2016				
EXPENDITURE							
OPERATING EXPENSES	OPERATING EXPENSES						
Purchases		5	6				
Outside expenses for the fiscal year	Note 6	106,740	108,991				
Personnel expenses	Note 7	143,609	139,864				
Wages, salaries and other remuneration		96,486	95,490				
Social security contributions		39,545	39,167				
Profit-sharing		3,966	1,662				
Other personnel expenses		3,612	3,545				
Other operating expenses (including losses due to bad debts)	Note 8	14,672	12,437				
Depreciation, impairments, provisions and net accounting value	Note 9	32,012	42,091				
TOTAL OPERATING EXPENSES		297,038	303,389				
FINANCIAL CHARGES							
Interest charges		1,634	566				
Foreign exchange losses		15	30				
Depreciation, impairments and provisions	Note 9	-	10				
TOTAL FINANCIAL CHARGES	Note 10	1,649	606				
TOTAL EXPENSES		298,687	303,995				

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in €thousands	Notes	Fiscal year 2017	Fiscal year 2016
REVENUE			
OPERATING REVENUE			
Grants and similar revenue	Note 2	228,240	233,568
Public service grants		161,622	167,587
Operating grants from the government and other public bodies		2,020	3,217
Revenue from tax allocation		64,598	62,764
Direct revenue from activities		35,693	42,407
Sales of goods or services	Note 3	32,323	38,881
Revenue from assets sold		41	33
Other operating revenue	Note 4	3,329	3,494
Other revenue	Note 9	17,695	21,614
Write-backs on depreciation, impairments and provisions		11,455	11,461
Write-backs of asset-related finance		6,240	10,153
TOTAL OPERATING REVENUE		281,628	297,589
INVESTMENT INCOME			
Revenue from controlled entities and loans		6	8
Interest on short-term receivables		1	1
Foreign exchange gains		14	39
Write-backs on depreciation, impairments and provisions	Note 9	10	-
TOTAL INVESTMENT INCOME	Note 5	31	47
TOTAL REVENUE		281,659	297,637

in €thousands	Fiscal year 2017	Fiscal year 2016
FISCAL YEAR RESULT	(17,028)	(6,359)

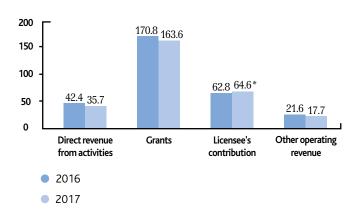
REVENUE

in€millions	2017	2016	Evolution
Grants and similar revenue	228.2	233.6	(5.3)
Direct revenue from activities	35.7	42.4	(6.7)
Other revenue	17.7	21.6	(3.9)
Operating revenue	281.6	297.6	(16.0)
Investment income	-	-	-
TOTAL REVENUE	281.7	297.6	(16.0)

IRSN's income fell overall by €16.0 million between 2016 and 2017.

Operating revenue stood at $\$ 281.6 million, down $\$ 16.0 million or -5.4% compared to the previous fiscal year.

+ Change in operating income (in €M)

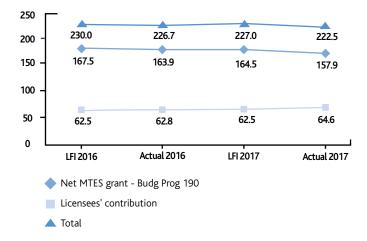


^{*}A repayment of €2.1 million was allocated to expenses, giving a net cash figure of €62.5 million, which complies with the cap

It includes:

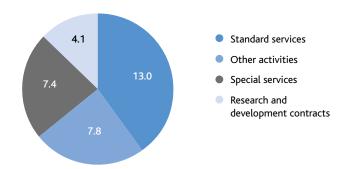
- + €163.6 million in grants, down €7.2 million between the two fiscal years, composed of:
 - a €157.9 million public service grant received from the MTES under Budget Program 190, compared with €163.9 million in 2016;

+ SCSP Budget Program 190 and Licensees' Contribution (in €M)

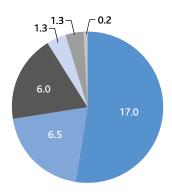


- a €3.7 million grant under the Ministry of Defense agreement in connection with Budget Program 212;
- €2.0 million (-€1.2 million) in other grants from other public bodies;
- + the contribution paid by the INB licensees is capped at $\$ 62.5 million, so the excess amount of +62.1 million collected in 2017 was paid back to the government;
- + direct revenue of €35.7 million from activities, including revenue from standard services, R&D contracts, specific services and other activities, which was down €6.6 million or 17% to €32.3 million. CABRI revenue booked on a percentage of completion basis fell in fiscal year 2017 (down €4.9 million compared to 2016), mainly due to the extension of the contract to 2024 and the consequent increase in the project cost at completion, causing a change in the rate of revenue recognition.

+ Breakdown of 2017 sales by type (in €M)



+ Breakdown of 2017 sales by field (in €M)



- Radiation protection Environment and human health
- Facility radiation protection
- Strategy, scientific and technical excellence
- Transparency, openness to society, safety culture
- Interdisciplinary
- Security, non-proliferation

The cancellation of expenses payable on prior fiscal years (ϵ 2.0 million) and revenue from fees (ϵ 0.8 million) account for most of the balance of direct revenue from activities.

+ other revenue of €17.7 million, down €3.9 million compared to the previous year, corresponds to €11.5 million in write-backs on depreciation, impairments and provisions, and the portion of the capital grant recorded in the income statement (€6.2 million).

Investment income, composed primarily of foreign exchange gains, was stable and negligible. For the record, IRSN is not permitted to invest its cash.

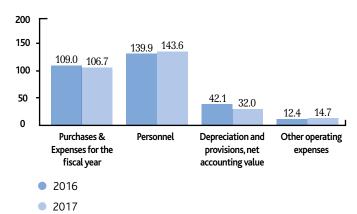
EXPENDITURE

in€millions	2017	2016	Evolution
Purchases	106.7	109.0	(2.3)
Personnel	143.6	139.9	+3.7
Depreciation & provisions, net accounting value	32.0	42.1	(10.1)
Other operating expenses	14.7	12.4	+2.2
Operating expenses	297.0	303.4	+8.9
Financial charges	1.6	0.6	+1.0
TOTAL EXPENSES	298.7	304.0	(5.3)

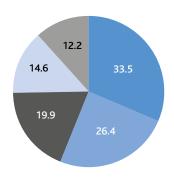
IRSN's expenditure fell overall by $\ensuremath{\mathfrak{c}}5.3$ million between 2016 and 2017.

Operating expenses totaled $\ensuremath{\mathfrak{C}}297.0$ million, up $\ensuremath{\mathfrak{E}}8.9$ million or 3% on the previous fiscal year, broken down as follows:

+ Change in operating expenses (in €M)



+ Breakdown of 2017 purchases and expenses (in €M)



- Other purchases
- External subcontracting
- Research purchases (other)
- Research purchases (CEA)
- Purchases of supplies not stocked

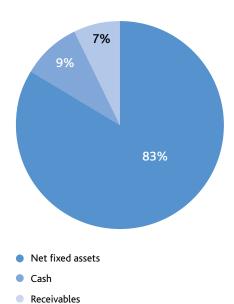
Financial charges increased by ϵ 0.6 million in 2017 to ϵ 1.6 million. They consisted primarily of interest paid on the loan to finance the Triangle building at Fontenay-aux Roses (ϵ 0.5 million) and interest on lease payments under the PPP contract for building 01 (ϵ 1.1 million).

BALANCE SHEET - ASSETS

			12/31/2017		12/31/2016
in €thousands	Notes	GROSS	DEPRECIATION & PROVISIONS	NET	NET
FIXED ASSETS					
Intangible assets	Note 11	31,289	(28,808)	2,481	6,881
Tangible assets	Note 11	548,010	(232,314)	315,696	284,315
Land		31,781	(350)	31,431	30,811
Constructions		159,113	(49,622)	109,491	50,316
Technical facilities, equipment and tools		283,271	(153,823)	129,448	135,336
Other tangible assets		38,603	(28,518)	10,084	11,317
Tangible assets in progress		35,238	-	35,238	56,535
Prepayments and advances on orders		3	-	3	-
Financial assets	Note 12	574	-	574	659
TOTAL FIXED ASSETS		579,873	(261,122)	318,751	291,855
CURRENT ASSETS					
Receivables	Note 13	28,448	(349)	28,099	44,091
Receivables from public bodies	Note 14	7,387	-	7,387	13,220
Customer receivables and related accounts	Note 15	20,522	(349)	20,173	30,108
Prepayments and advances on orders		177	-	177	327
Other receivables	Note 16	362	-	362	436
Prepaid expenses	Note 17	1,081	-	1,081	878
TOTAL CURRENT ASSETS (EXCLUDING CASH)		29,529	(349)	29,180	44,970
Cash	Note 18	33,959	-		29,106
TOTAL CURRENT ASSETS		63,488	(349)	63,139	74,076
Foreign currency gains or losses		-	-	-	10
GRANDTOTAL		643,361	(261,471)	381,890	365,941

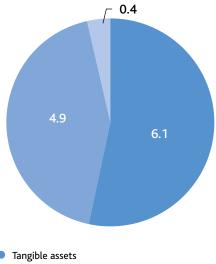
The balance sheet total for the fiscal year ending December 31, 2017 stood at \leqslant 381.9 million. Gross assets were \leqslant 643.4 million.

+ Composition of the balance sheet



Net fixed assets grew by €26.9 million to €318.8 million, mainly due to the commissioning of building 01, which is financed through a public-private partnership. Acquisitions of fixed assets amounted to €11.4 million during 2017.

+ Acquisitions of fixed assets (in €M)



- Fixed assets in progress
- Intangible assets

Net current assets stood at €63.1 million, down €11.0 million compared to the previous year, primarily as a result of the following changes:

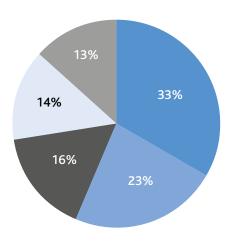
- + receivables from public bodies were down by €5.8 million;
- + customer receivables were down by €9.9 million;
- + cash was affected by an increase in collections (release of the contingency reserves at the end of the year and increase in the level of advances on grants), leading to a reduction in receivables, the effect of which was a €4.9 million increase in cash, to €34.0 million, at December 31, 2017.

BALANCE SHEET – LIABILITIES

in €thousands	Notes	12/31/2017	12/31/2016
CAPITAL			
Finance received			
Government-financed assets	Note 19	64,572	67,215
Assets financed by third parties	Note 20	25,170	27,183
Reserves		90,783	90,783
Retained earnings	Note 21	48,869	55,227
Fiscal year profit or loss		(17,028)	(6,359)
Special depreciation allowances for tax purposes	Note 22	3,525	3,884
TOTAL CAPITAL		215,891	237,933
CONTINGENCY AND LOSS PROVISION			
Contingency provision		332	628
Loss provision		48,999	54,673
TOTAL CONTINGENCY AND LOSS PROVISION	Note 23	49,331	55,301
LIABILITIES			
Debts	Note 25	54,359	13,757
Bank borrowings		13,172	13,691
Debts and other borrowings		41,187	66
Non-financial liabilities		62,310	58,951
Trade notes and accounts payable	Note 26	20,597	22,743
Tax and social liabilities	Note 27	25,542	21,344
Prepayments and advances on orders		6,851	7,303
Other non-financial liabilities	Note 28	405	809
Prepaid expenses		8,915	6,752
Cash		-	-
TOTAL LIABILITIES	Note 24	116,668	72,707
GRAND TOTAL		381,890	365,941

Assets balance with liabilities as follows:

+ Composition of the liabilities



- Other capital
- Asset finance received
- Non-financial liabilities
- Debts
- Contingency and loss provision

With a loss of €17.0 million, combined with a €4.7 million reduction in financing received and a slight drop of €0.4 million in special depreciation allowances for tax purposes, IRSN's capital fell by €22.0 million to €215.9 million as at December 31, 2017, compared to €237.9 million at the end of the previous fiscal year. Contingency and loss provisions stood at €49.3 million, down €0.6 million on the December 31, 2016 balance. This reduction was largely due to the change in the provision for cleanup and dismantling of facilities, and to accounting treatment of the provision for profit-sharing, which is now treated as personnel expenses.

IRSN cleanup and dismantling operations involve four specific areas: the PHEBUS and CABRI research reactors operated by the CEA; the facilities classified on environmental protection grounds (ICPE) that belong to IRSN; various surplus equipment that is considered radioactive waste; and the cleanup of the Feurs site, which was accidentally polluted.

As at December 31, 2017, the position of operations concerning the first three areas stood at \in 42.4 million, broken down as follows:

- + the rod clusters from experiments in PHEBUS: €5.3 million;
- + CABRI (INB 24) and related waste (sodium): €31.0 million;
- + waste from the Valduc regulated nuclear defense facility: €2.7 million:
- + ICPEs: €3.3 million.

The cost of cleanup at the Feurs site is estimated to be €3.8 million.

The technical and financial assessments for INB 24 are based on the costs incurred for INB 92.

The Board of Directors decided on June 13, 2017 to cancel the special fund for the cleanup and dismantling of INBs. IRSN followed the Board's recommendation to earmark funds from working capital to cover cleanup and dismantling operations. Working capital withdrawals for operations required in 2017 stood at $\$ 5.2 million, of which $\$ 1.3 million was for cleanup at the Feurs site and $\$ 3.9 million for other cleanup and dismantling operations. The earmarked working capital balance was affected by these movements and therefore stood at $\$ 4.9 million as at December 31, 2017.

Debt rose by €44.0 million from €72.7 million in 2016 to €116.7 million as at December 31, 2017. Financial debts rose by €40.6 million, mainly for the financing of building 01 (PPP Prisme): total debt taken on in 2017 stood at €42.4 million, reduced by repayments during the year of €1.3 million. Non-financial liabilities increased by €3.4 million. Prepaid income rose by €2.1 million to €8.9 million. This was mainly due to the change in method for recording revenue for the CABRI program. The new method, in place since fiscal year 2014, is based on percentage of completion.

CASH FLOW STATEMENTS

in €thousands	Fiscal year 2017	Fiscal year 2016
CASH PROVIDED BY OPERATIONS (+) / (-)		
Fiscal year net profit or loss	(17,028)	(6,359)
Increase/(decrease) in depreciation	31,514	40,422
Increase/(decrease) in impairments and provisions	(11,308)	(11,399)
Portion of capital grant recorded in income statement	(6,240)	(10,153)
Gains/(losses) on disposal of assets	457	1,647
Expense transfers	(157)	(63)
CASH PROVIDED BY OPERATIONS (+) / (-)	(2,762)	14,096

in €thousands	Fiscal year 2017	Fiscal year 2016
SOURCES OF CASH		
Disposal of assets	41	33
Other sources	248	274
Increase in equity	1,584	(286)
Increase in long-term debt	42,493	66
(A) TOTAL SOURCES OF CASH + CASH PROVIDED BY OPERATIONS	44,367	14,183

in €thousands	Fiscal year 2017	Fiscal year 2016
USES OF CASH		
Acquisition of tangible and intangible assets	53,821	22,817
Acquisition of financial assets	5	67
Acquisitions of fixed assets	53,826	22,884
Long-term debt paid	1,891	567
(B) TOTAL USES OF CASH + CASH FLOW SHORTFALL	58,479	23,451

in €thousands	Fiscal year 2017	Fiscal year 2016
VARIATION IN WORKING CAPITAL (C=A-B)	(14,113)	(9,268)
+ Variation in current operating assets	(15,532)	(6,183)
- Variation in operating liabilities	3,762	(36,111)
Variation in working capital requirements from operations	(19,295)	29,928
+ Variation in other debit balances	(74)	-
- Variation in other credit balances	(403)	(8,121)
Variation in working capital requirements not from operations	329	8,121
Variation in working capital requirements (D)	(18,966)	38,049
VARIATION IN CASH (E=C-D)	4,853	(47,318)
Cash at the start of the period	29,106	-
Cash at the end of the period	33,959	-
Cash variation	4,853	-

■ WORKING CAPITAL, CASH AND WORKING CAPITAL REQUIREMENT

+ Change in operations financed by working capital

in € millions	Actual position 12/31/2016	Actual movements 2017	Actual position 12/31/2017
EARMARKED OPERATIONS			
Property project - Building 01 (FAR)	1.19	(1.19)	-
Property project - Building A	0.30	(0.30)	-
CABRI	1.79	(1.79)	-
Change of method for recording income from CABRI	(6.75)	(2.16)	(8.92)
RECURRING OPERATIONS			
Earmarked dismantling operations	10.09	(5.15)	4.94
Delays in operations	0.32	(0.32)	-
Provision	3.91	(1.81)	2.10
Available	4.44	(1.39)	3.05
TOTAL	15.29	(14.11)	1.18
TOTAL excluding income from CABRI	22.04	(11.95)	10.09

Operating capital stood at \in 1.2 million as at December 31, 2017, compared with \in 15.3 million on December 31, 2016, down \in 14.1 million. This is due to:

- + the end of the financing of certain earmarked operations:
 - the property project concerning two buildings at Vésinet and Fontenay-aux-Roses, causing a withdrawal of working capital of &1.49 million;
 - the CABRI project (€1.8 million);
 - delays in operations, amounting to €0.3 million.
- + other operations in progress impacted working capital in 2017:
 - the principle of recognizing CABRI income on a percentage of completion basis generated an increase in income yet to be received of $\[\in \]$ 2.2 million for working capital (prepaid income is shown as negative working capital), mainly due to the extension of the contract by two years;
 - dismantling and cleanup operations used $\ensuremath{\mathfrak{C}}$ 5.2 million of working capital;
 - provisions subject to rapid disbursement fell by €1.8 million.

The level of available working capital left as at December 31, 2016 had an impact on fiscal year 2017:

- + due to the withdrawal of €2.0 million from the available working capital, projected in BR1 2017 mainly to finance the reduction in the MTES grant which occurred between the finance bill (PLF) for 2017 and the 2017 Initial Finance Act;
- + and to the unused funds of €0.6 million as at December 31, 2017.

in€millions	2017 level	2016 level	Difference
Working capital	+1.2	+15.3	(14.1)
Working capital requirement	(32.8)	(13.8)	(19.0)
Cash	+34.0	+29.1	+4.9

Cash at December 31, 2017 stood at ϵ 34.0 million, up ϵ 4.9 million on the previous fiscal year. This ϵ 4.9 million increase in cash was mainly due to an increase in collections.

Working capital requirements were executed at -&32.8 million at year-end 2017. The &19.0 million drop in working capital requirements was due to a &19.3 million drop in trade working capital requirements (operating liabilities increased whereas current asset receivables decreased) and to a &0.3 million rise in nontrade working capital requirements. It should be pointed out that the IRSN's working capital requirement is structurally negative because of the way SCSP public service grant is paid (each quarter) and the licensees' contributions are received (during the second quarter).

NOTES TO THE ANNUAL ACCOUNTS

■ NOTE 1 – ACCOUNTING PRINCIPLES AND VALUATION METHODS

IRSN's financial statements for fiscal year 2017 were prepared in accordance with the following standards, principles and methods:

- + regulation No. 2014-03 of June 5, 2014 of France's national accounting standards body (Autorité des Normes Comptables) on the general accounting plan, approved by the Order of September 8, 2014 and published in the French Official Journal on October 15, 2014;
- + accounting standards applicable to organizations mentioned under paragraphs 4 to 6 of Article 1 of Decree No. 2012-1246 of November 7, 2012 on budget management and public accounting, approved by the Order of July 1, 2015, and published in the French Official Journal on July 9, 2015, with advance application as amended by the Order of November 28, 2016;
- + the Instruction of December 11, 2017 on the implementation of the accounting standards for publicly-funded bodies (BOFIP-GCP-17-0021 of December 29, 2017).

Given the short timeframe between the passing of the amendment and the IRSN Board of Directors' convening on March 6, and considering that the impact of the amendment on the Institute's financial statements was insignificant, the version of the accounting standards for public bodies amended by the Order of February 22, 2018 was not taken into account for the 2017 year-end closing.

Valuation principles and methods (options, derogations, exceptions)

1. Intangible and tangible assets

Valuation of the entry cost

Intangible and tangible assets are valued at the historic purchase or production cost excluding financial charges and administration costs. In accordance with standards 5 and 6 of the accounting standards applicable by public bodies relating to fixed assets, on October 15, 2015 the Board of Directors decided on a &1,500 unit simplification threshold for the recognition of assets to be capitalized.

Intangible assets include patents, licenses and purchased software as well as created or developed software. Nuclear facilities controlled jointly with the CEA (the CABRI experimental reactor) are included in IRSN's fixed assets in proportion to the control of the asset, in application of DGFIP Instruction No. 14-0003 of January 31, 2014.

Some equipment (nuclear facilities operated by CEA and facilities classified on environmental protection grounds (ICPEs) used by IRSN are entered as tangible assets under "Dismantling Assets" as a double entry counterpart of the provision for the estimated total cost of end-of-cycle operations, once the facility comes into active service. This asset forms an integral part of the cost price of the corresponding facilities and is depreciated in accordance with the depreciation schedules drawn up for each facility. These assets are valued, symmetrically with the corresponding provisions, based on technical information that is regularly revised.

The assets provided by the government under usage agreements have been valued in the accounts on the basis of valuation at fair value determined in 2013 by France Domaine.

External financing of assets is managed in application of the Instruction of December 18, 2012 (BOFIP-GCP 13 005 of January 31, 2013), which requires capital to be presented so as to differentiate between government finance and finance from other third parties (local and regional authorities, the European Union, etc.). This presentation, which is different from the presentation required by the general accounting plan, is justified by the special legal status of public bodies, which do not have their own equity capital and depend on the government for finance. In addition, asset-related finance now changes symmetrically with the asset that it finances so that there is a link between the income (the finance received) and the expenditure (consumption of the economic benefits or loss of value of the asset).

Research and development costs, regardless of outcome, are treated as expenditure for the fiscal year.

On July 7, 2014 the IRSN entered into a public-private partnership with the company PPP Prisme to design, build, finance and commission the new "Prisme" building (building 01) on publicly-owned land, for use by IRSN's services, at its headquarters in Fontenay-aux-Roses. The building was accepted and commissioned on July 20, 2017.

In accordance with the public accounting rules applicable to public-private partnerships (BOFIP-GCP-140011 of July 21, 2014), the building is entered on the balance sheet as a tangible asset whereas the sums paid to finance it are entered as liabilities. The building's value, ϵ 48 million, was financed from two sources: ϵ 6 million direct from IRSN's capital and ϵ 42 million to be treated as a long-term debt for which the last repayment will be made on December 31, 2039.

The annual lease payment consists of repayment of capital, interest and various costs associated with the operation. Each component of the lease payment is therefore accounted for separately:

- + capital repayments as debts on the liabilities side of the balance sheet;
- + interest as financial charges and ancillary costs as other operating expenses on the income statement.

The total debt stands at 61.7 million, and the annual lease payment will be 62.75 million from 2018; because 2017 was a partial year, the lease payment was 62.4 million.

Depreciation

Intangible assets, composed solely of software, are depreciated over 3 years.

Tangible assets are depreciated in accordance with depreciation schedules drawn up on the basis of the economic life or according to the probable conditions of use of the asset, on a straight-line basis and at the rates usually applied to these asset categories. Depreciation in the "Land" row corresponds to the depreciation of the development of these investments.

The main depreciation times used for new equipment are as follows:

- + infrastructure 10 years;
- + heavy-duty buildings 20 to 30 years;
- + light buildings 10 to 20 years;
- + general installations 10 years;
- + fixtures 5 to 10 years;
- + equipment 5 to 7 years;
- + tools 3 to 5 years;
- + furniture, small equipment items and computer equipment 3 to 5 years.

For second-hand assets, the depreciation times are reduced by half.

The special depreciation allowance for tax purposes is used as necessary and corresponds to the difference between depreciation on replacement value and legally accepted depreciation.

Impairment

Intangible and tangible assets are subject to impairment where events or circumstances make their value in use less than the net accounting value over the long term.

2. Financial assets

Financial assets are valued at their historic cost.

3. Inventory and work in progress

Given the fact that this item is not significant, IRSN does not estimate the value of inventories of materials or supplies of consumables. These purchases are treated entirely as expenditure for the fiscal year.

Work in progress and finished products related to research contracts or to uninvoiced service orders are treated as income accrued as and when the services are provided.

4. Investment securities

IRSN does not hold any transferable securities.

5. Contingency and loss provision

A provision is set up in cases where there is an obligation towards a third party on the account-closing date. This obligation may be legal, contractual or implicit and must be subject to a probable outflow of resources to the third party which IRSN can estimate with an adequate degree of reliability. No provision is made for contingent liabilities that correspond to an obligation that is neither certain nor likely on the account-closing date. Information is provided in the Notes if they are significant.

IRSN acts as its own insurer with respect to compensation for employees who have lost their job. A provision has thus been made based on the residual compensation period for beneficiaries registered as at December 31 of that year.

No provision is made for IRSN's commitments towards its staff regarding severance pay on retirement; instead these are listed as off-balance sheet commitments.

The provision for the cleanup and dismantling of facilities used by IRSN corresponds to the total cost of the operation where IRSN is the facility licensee (ICPEs) or to the portion attributable to it in connection with its participation in a program in which CEA is the nuclear licensee (on an INB). In view of the immediacy of the degradation, these provisions are made as soon as the facility commences active operation (CRC Regulation No. 2004-06 and CNC Notice No. 2005-H). Provisions are offset on the assets side of the balance sheet as "Dismantling assets".

The assessment of the cost to clean up and dismantle the facilities is based on methodologies that can provide the best estimate, at any moment, of the operations' costs and time frame. These estimates are based on agreements signed with the service providers, internal assessments based on an inventory of equipment items and their projected radiological situation, and successive studies used to assess cleanup and dismantling costs with an increasingly small margin of uncertainty.

These estimates incorporate the following main assumptions:

- + an inventory of the costs of bringing the facility to decommissioning level, generally and without specific constraints, based on cleanup of standing civil engineering infrastructure, with all nuclear waste areas reclassified as conventional waste areas. The final state of the facilities to be dismantled (buildings and soils) is a baseline assumption for developing the dismantling scenario and estimating the cost;
- + the assessment of the expenses based on projected costs, which take into account subcontracting, staff costs, radiation protection costs, consumables, equipment, processing of associated waste, transportation and final disposal at Andra. The assessment also takes into account a portion of the technical support costs of the entities responsible for the dismantling operations;
- + some waste from former experiments could not be processed as it was generated because conditioning facilities were not available at that time. It will be retrieved and conditioned in accordance with methods and technologies approved by the French safety authorities;
- + some of these projected costs are based on firm, non-adjustable quotes signed with the licensee of the facilities. Consequently, no assumption has been made for inflation in determining these quotes;
- + these provisions are not discounted as the IRSN is not authorized to have interest-bearing securities.

The assessments used for end-of-cycle provisions are, at the closing date of the accounts for the fiscal year, the best assessment of the resources needed to carry out its current obligations to dismantle and clean up its facilities. These estimates nevertheless present external risks, such as CEA's performance of operations under contractually defined conditions, and changes in the regulatory framework defined by the Nuclear Safety Authority (ASN) or in the final destination of the waste.

6. Debts

IRSN's commitments towards its staff for expired paid leave not taken, paid leave accrued but not yet taken within the period, and leave entitlement recorded by the staff in an accumulated leave time savings account are recorded as debts at their gross value plus any social security contributions and tax charges payable by the employer. This year employee profit-sharing, previously recorded as a provision, has been reclassified as a liability.

7. Receivables

In previous fiscal years a contingency and loss provision was made to cover impairment of customer accounts. From fiscal year 2017 this provision has been reclassified in current assets, as impairment of customer receivables.

This impairment of customer accounts has been calculated as follows:

- 0% of the receivable amount for a delay of less than 6 months;
- 10% for a delay between 6 and 12 months;
- \bullet 15% for a delay between 12 and 18 months;
- 75% for a delay of more than 18 months.

This statistical rule was revised during fiscal year 2017 to take account of execution rates in previous years.

NOTES ON THE INCOME STATEMENT

■ NOTE 2 – GRANTS AND SIMILAR REVENUE

This item includes the public service grants received from the government and the income from the contribution paid by INB licensees (see Article 96 of the 2010 Revised Budget Act), the grants received from the French National Research Agency (ANR), the European Union and other public bodies, allocated to the financing of operating expenses for the fiscal year.

in €thousands	Notes	Fiscal year 2017	Fiscal year 2016
Public service grants		161,622	167,587
Budget Program 190	(a)	157,947	163,912
Budget Programs 212		3,675	3,675
Operating grants from the government and other public bodies	(b)	2,020	3,217
ANR (IA and non IA)		293	1,993
European Union		1,097	710
Others		631	514
Licensees' contribution	(c)	64,598	62,764
TOTAL		228,240	233,568

- (a) The grant paid under Budget Program 190 by the Ministry of Ecology was reduced by €6.0 million between 2016 and 2017.
- (b) Other grants from public bodies decreased by €1.2 million to €2 million, which corresponds to the entry in the accounts as capital of the portion of the equipment grant included in the financing of ANR contracts.
- (c) The contribution paid by INB licensees, a list of which is drawn up by the Nuclear Safety Authority, was €64.5 million in 2017. The main contributors were EDF (€48.4 million), CEA (€8.1 million) and Areva (€5.1 million).

Because of the cap on the taxes payable by licensees, imposed by Article 46 of the Budget Act for 2012 (No. 2011-1977 of December 28, 2011) amended by Decision 2016-743 DC of December 29, 2016, IRSN paid the €2.1 million excess collected back to the Government. This adjustment of the contribution to the capped amount is booked as "special expenses" under "other operating expenses" in the income statement.

in €thousands

LICENSEES' CONTRIBUTION	
Cap (Art. 46 of Act No. 2011-1977)	62,500
Excess amount paid back to the government and booked as expenses in 2017	2,098
TOTAL	64,598

■ NOTE 3 – SALES

Sales correspond to the research and services invoiced by IRSN to third parties within the context of its programs or service provision. They are based on percentage of completion.

in €thousands	Fiscal year 2017	Fiscal year 2016
Research and development contracts	4,123	11,501
Standard services	12,986	12,548
Special services	7,383	6,221
Other activities	7,832	8,612
TOTAL	32,323	38,881

Sales fall into four main categories:

- + co-funded R&D contracts of €4.1 million, down €7.3 million on the previous fiscal year. In particular, it should be noted that an additional item of prepaid income was included in the year for the CABRI project, generating a €5.6 million decrease between 2016 and 2017. This was due to a change to the project's cost and duration, leading to an increase in the cost at completion. This increase changes the rate at which revenue related to the program is recognized;
- + standard services grew from €12.5 million to €13.0 million, especially from passive dosimetry (€10.8 million), radiotoxicology analyses (€0.8 million) and CAMARI examinations (€0.4 million);
- + special services and research that is not co-funded (€7.4 million). The €1.2 million increase compared to 2016 was mainly generated by RISKAUDIT contracts (€0.4 million), and the provision of trainers for ENSTTI (€0.5 million);
- + other activities stood at €7.8 million, down €0.8 million on the previous year, due to exceptional items in 2016, where personnel provided to ENSTTI in 2015 were invoiced in 2016 and the site agreement with the CEA for 2014/2015 was invoiced in 2016.

■ NOTE 4 – OTHER INCOME

in €thousands	Fiscal year 2017	Fiscal year 2016
Fees for concessions, patents, licenses, trade marks, processes, software	822	1,005
Operating revenue from the cancellation of payment requests from previous fiscal years	2,020	2,208
Premiums and penalties received on purchases and sales	102	109
Collection of receivables written off	4	3
Other revenue	380	168
TOTAL	3,329	3,494

Intellectual property fees stood at €822 K, mainly due to the sale of the following licenses:

- C3X: €512,000;
- SYLVIA: €185,000;
- BADIMIS: €105,000.

Income from cancellations of expenses for earlier years stood at €2 million:

- €1.6 million from the cancellation of expenses payable, mainly for operations with the CEA (€570,000 for CABRI operation in 2016, €463,000 for adjustment of the balance for the support agreement with CEA Saclay);
- €0.3 million of deferred payment on previous financial years of which €137,000 is for controlling ENSTTI expenditure in 2013.

Other income of €380,000:

- €197,000 repayment of advances for the RISKAUDIT office in Kiev, which has been closed;
- €46,000 adjustment for non-recoverable VAT for building 01 (Prisme).

Writing off receivables does not extinguish a creditor's rights over its debtors. This account records the recovery of debts from debtors whose financial situation has improved.

Collection of receivables written off totals €4,500 for 19 invoices. The largest movement on that account was €595.

■ NOTE 5 – INVESTMENT INCOME

Investment income consists of the following:

in €thousands	Fiscal year 2017	Fiscal year 2016
Revenue from controlled entities and loans	6	8
Interest on short-term receivables	1	1
Foreign exchange gains	14	39
Write-backs on depreciation, impairments and provisions	10	-
TOTAL	31	47

In application of the regulation applicable to publicly-owned bodies, IRSN does not invest its cash. This account fell by \leq 16,000 due to a reduction in exchange rate gains.

■ NOTE 6 – EXPENSES FOR THE FISCAL YEAR

Expenses for the fiscal year are broken down as follows:

in€thousands	Fiscal year 2017	Fiscal year 2016
Subcontracting purchases	34,586	37,373
Research purchases (CEA)	14,648	16,611
Research purchases	10,348	11,073
Service purchases	9,590	9,689
Purchases of materials and supplies not stocked	12,184	10,114
Purchases of equipment and works	2,930	994
Other purchases of materials and supplies not stocked	9,255	9,120
Outside services	59,969	61,505
External subcontracting	26,441	25,223
Rental and hire costs	1,943	2,024
Maintenance and repairs	14,202	15,695
Insurance	785	746
Documentation	2,108	1,664
Temporary workers	2,702	3,417
Fees	386	322
Advertising and publications	189	172
Transport	495	454
Travel and entertainment expenses	6,331	6,923
Postage and telecommunication costs	2,290	2,554
Bank charges	36	13
Other	2,061	2,299
TOTAL	106,740	108,991

Goods and services purchased totaled €106.7 million, down €2.2 million on 2016 due to a reduction in the resources allocated to Budget Program 190 during the fiscal year. This reduction related mainly to purchases of subcontracted research.

■ NOTE 7 – PERSONNEL EXPENSES

Personnel expenses can be analyzed as follows:

in €thousands	Fiscal year 2017	Fiscal year 2016
Wages and salaries	96,486	95,490
Emoluments, paid leave and leave time saving accounts	92,032	91,533
Family allowance	1,107	1,066
Other	3,347	2,891
Social security contributions	39,545	39,167
Medical insurance	25,978	26,169
Mutual insurance	1,618	1,510
Pension	10,467	10,425
Other social security contributions	1,483	1,063
Profit-sharing (excluding associated social security contrib.)	3,966	1,662
Other personnel expenses	3,612	3,545
TOTAL	143,609	139,864

The entitlements accrued by employees in respect of paid leave and accumulated leave time saving accounts (CET) have been recorded in full under expenses payable at their gross value plus estimated costs.

€2.2 million for employee profit-sharing, previously included in contingency and loss provisions, is now treated as personnel expenses.

■ NOTE 8 – OTHER OPERATING COSTS

in €thousands	Fiscal year 2017	Fiscal year 2016
Taxes and duties on remuneration	6,257	6,258
Employmenttax	1,662	1,735
Apprenticeship tax	802	799
Employers' contribution to continuing vocational training	941	947
Travel payments	2,432	2,357
Other taxes and duties on remuneration	421	421
Other taxes, duties, and similar payments	1,471	1,353
Corporate real estate tax (CFE)	204	219
Corporate value added tax (CVAE)	99	172
Real estate taxes	549	560
Office taxes	75	84
Company vehicle taxes	79	80
Non-recoverable taxes over a combined perimeter	381	68
Other	85	170
Fees	3,116	3,470
Losses due to bad debts	269	173
Special expenses	2,543	130
Other operating expenses	1,016	1,052
TOTAL	14,672	12,437

The $\ensuremath{\in} 2.5$ million increase between 2016 and 2017 is explained by:

- +€2 million for repayment to the government of the portion of the INB licensees' contribution exceeding the cap set by Act No 2011-1977 of December 28, 2011;
- $+\,\!\!\in\!\!0.4$ million corresponding to the IRSN share of ENSTTI EEIG losses for 2015.

NOTE 9 – DEPRECIATION AND PROVISIONS AND WRITE-BACKS ON DEPRECIATION AND PROVISIONS, IMPAIRMENTS

Depreciation and provisions and write-backs on depreciation and provisions can be broken down as follows:

	Depreciation & Provisions		Write-backs	
in €thousands	Fiscal year 2017	Fiscal year 2016	Fiscal year 2017	Fiscal year 2016
Net accounting value of assets disposed of	498	1,679		
On fixed assets				
Depreciation allowances	29,574	30,092	-	-
Special depreciation allowances	11	4,703	-	-
On current assets				
Impairments of customer receivables	349	80	156	22
Provisions				
Contingency and loss provision	1,176	5,127	10,379	9,649
Investment contingency and loss provision	-	10	10	-
Special depreciation allowances for tax purposes	404	411	762	1,727
Expense transfer	-	-	157	63
Write-back of asset-related finance	-	-	6,240	10,153
TOTAL	32,012	42,101	17,705	21,614

The net accounting value of assets disposed of records disposals of assets with a non-zero accounting value.

The main disposals related to the following events:

- + equipment assigned to Vésinet building A, abandoned during 2016 (€169,000);
- + disposals as a result of internal controls:
 - IT equipment: €112,000;
 - fixed assets with a gross value less than €1,500 (€170,000).
- + other one-off disposals (€47,000).

The reduction in allowances by €9 million is explained by:

- + intangible assets:
 - -€4.7 million for an exceptional depreciation (a) in 2016 of intangible assets not reconciled as a result of the inventories carried out from 2012 to 2014.
- + current assets:
 - the impairment of customer receivables is the result of the calculation rule described in Note 1. The impairment stands at 60.329 million, down 60.6 million on the previous fiscal year.
- + provisions:
 - -64 million mainly corresponding to the reclassification of the profit-sharing provision in personnel expenses (Note 7) and of the customer accounts provision as an impairment under current assets (see above).

■ NOTE 10 – FINANCIAL CHARGES

The financial charges are shown below:

in €thousands	Notes	Fiscal year 2017	Fiscal year 2016
Interest charges	(a)	1,634	566
Foreign exchange losses		15	30
Depreciation, impairments and provisions		-	10
TOTAL		1,649	606

38.603

5.280

NOTES ON THE BALANCE SHEET

ASSETS

■ NOTE 11 – TANGIBLE AND INTANGIBLE ASSETS

. 64				
in €thousands	12/31/2016	Increases	Decreases	12/31/2017
INTANGIBLE ASSETS				
Gross value	33,642	3,387	5,740	31,289
Concessions, patents, licenses and software	30,441	2,837	2,271	31,006
Intangible assets in progress	3,201	551	3,469	283
Depreciation	26,761	4,198	2,151	28,808
Concessions, patents, licenses and software	26,761	4,198	2,151	28,808
SUBTOTAL	6,881	(810)	3,590	2,481
TANCIDLE ACCETS				
TANGIBLE ASSETS				
Gross value	504,754	94,107	50,852	548,010
Land	31,087	872	177	31,781
Constructions	96,700	66,500	4,086	159,113
Technical facilities, equipment and tools	279,965	18,264	14,958	283,271

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Tangible assets in progress	56,535	5,001	26,298	35,238
Advances paid on orders for tangible assets	-	56	53	3
Depreciation	220,439	32,401	20,526	232,314
Land	276	74	-	350
Constructions	46,383	6,345	3,106	49,622
Technical facilities, equipment and tools	144,629	21,905	12,711	153,823
Other tangible assets	29,151	4,076	4,709	28,518
SUBTOTAL	284,315	61,707	30,326	315,696
TOTAL	291,196	61,707	30,326	318,177

40.468

3.415

+ Intangible assets

Other tangible assets

The &cupe 0.6 million increase on 2016 corresponds to the value of new software acquisitions less the value of disposals, in particular assets discarded as a result of internal controls, including a grant-funded portion (£1 million) that was restated on an ad hoc basis (see Note 19).

+ Tangible assets

These increased by €43 million, corresponding to +€48 million for the commissioning of building 01 (Prisme) in accordance with accounting instruction BOFIP-GCP-140011 of July 21, 2014, a +€3 million increase of the dismantling assets for rod clusters and ICPEs, and -€8 million for the definitive disposal of equipment related to the experimental PHEBUS reactor (INB 92).

+ Transfer of assets in progress to assets in service

These fell by €26 million in the case of tangible assets, of which €8 million was for the commissioning of building 01 (Prisme), €5 million was for the commissioning of facilities in building Z at Vésinet, and €4.9 million was for the commissioning of facilities in building 05 (PARISII). Intangible assets fell by €3.4 million, of which €3.1 million was for applying rights to use the Fontenay-aux-Roses canteen.

+ Dismantling assets

These are recorded as the double entry counterpart of provisions not entered in the accounts; their net accounting value was $\in 24.3$ million, less than the balance of the provision of $\in 42.34$ calculated in the same way, and corresponding to the actual amount of dismantling to be carried out.

■ NOTE 12 – FINANCIAL ASSETS

The financial assets of $\[\in \]$ 0.57 million include deposits and guarantees paid and loans to staff. Loans to staff fell by $\[\in \]$ 0.087 million.

in €thousands	12/31/2017	12/31/2016
Loans	413	500
Other financial assets	161	160
TOTAL	574	659

■ NOTE 13 – MATURITY OF RECEIVABLES

At the end of the fiscal year the situation is as follows:

in €thousands	12/31/2017 Gross	Maturing in less than 1	Maturing in more than 1
FIXED ASSET RECEIVABLES			
Loans	413	18	395
Other financial assets	161	-	161
CURRENT ASSET RECEIVABLES			
Doubtful and disputed trade	24	24	-
Other customer receivables	27,885	27,885	-
Prepayments and advances received	177	177	-
Other receivables	362	362	-
TOTAL	29,022	28,466	556

■ NOTE 14 – RECEIVABLES FROM PUBLIC BODIES

in €thousands	Notes	12/31/2017	12/31/2016
Government and other public authorities - Grants to be received	(a)	656	1,487
Government - VAT	(c)	4,900	8,794
Government and other public authorities - Expenses to pay and revenue to be	(b)	1,831	2,939
TOTAL		7,387	13,220

⁽a) The €0.8 million reduction is due to progress in 2017 with projects financed by ANR (DISCOM, MIRE, TANDEM).

⁽b) The €1.1 million reduction is due to a delay in receiving payments for projects financed by ANR.

⁽c) The \in 3.8 million reduction is due to a difference in position on the VAT balance to be repaid in suspense.

■ NOTE 15 – CUSTOMER RECEIVABLES

in €thousands	Notes	12/31/2017	12/31/2016
Gross value		20,522	30,264
Customers - sales of goods or services	(a)	15,775	23,971
Doubtful and disputed trade receivables		24	187
Customers - invoices to be prepared		4,724	6,107
Impairment provision		(349)	(156)
Provision for impairment of customer accounts	(b)	(349)	(156)
TOTAL		20,173	30,108

⁽a) A €10 million reduction in customer receivables in 2017, of which €8.2 million is for outstanding customer balances and €1.4 million for invoices to be prepared (for the record, see the analysis of income from research contracts, Note 3).

■ NOTE 16 – OTHER RECEIVABLES

At the end of the fiscal year the situation is as follows:

in €thousands	12/31/2017	12/31/2016
Prepayments and advances to personnel	-	4
Other debtors	362	432
TOTAL	362	436

■ NOTE 17 – PREPAID EXPENSES

in€thousands	12/31/2017	12/31/2016
Prepaid expenses	1,081	878

Prepaid expenses totaled $\[mathcal{\in}$ 1.1 million. Expenditure subject to this adjustment is mainly maintenance of licenses ($\[mathcal{\in}$ 866,000), IT maintenance contracts and site maintenance ($\[mathcal{\in}$ 121,000).

⁽b) The provision consists mainly of a statistical depreciation of €0.329 million (see Notes 1 and 9).

■ NOTE 18 – CASH

This item shows the cash position with the Recette Générale des Finances at the closing of the year:

in €thousands	12/31/2017	12/31/2016
Cash	33,959	29,106

LIABILITIES

■ NOTE 19 – GOVERNMENT-FINANCED ASSETS

in €thousands						
n e a lousantes	Notes	12/31/2016	Allowances	Write-backs	12/31/2017	
ALLOWANCES						
Funds not associated with specific assets - Government	(a)	15,024	1,213	481	15,756	
Asset funds made available - Government		30,923	-	-	30,923	
Original value of asset-related funds - Government	(b)	102,482	1,424	2,527	101,378	
Original value of asset-related funds - ANR/IA	(c)	247	493	12	728	
SUBTOTAL		148,676	3,130	3,020	148,786	
ADDITIONAL ALLOWANCES						
Write-back of asset funds made available - Government	(d)	(1,662)	(416)	-	(2,078)	
Write-back of other asset funds	(d)	(79,762)	(3,556)	(1,308)	(82,011)	
Write-back of other asset funds - ANR/IA	(d)	(37)	(89)	(2)	(125)	
SUBTOTAL		(81,462)	(4,061)	(1,309)	(84,214)	
TOTAL		67,215	(932)	1,711	64,572	

- (a) The €0.7 million increase in 2017 is mainly due to payments of ANR capital grants not associated with specific assets, of €0.8 million.
- (b) The change between the two fiscal years is due to the retirement of grant-funded assets in the amount of -€1 million (assets discarded as a result of internal controls).
- (c) This item concerns ANR grants related to fixed assets for the PRIODAC, MIRE, MEDEA and DENOPI programs, in the amount of €0.5 million.
- (d) These write-backs correspond to the portion of depreciation for grant-funded assets of €4 million, minus the write backs for discarded fixed assets of €1.3 million, giving a difference of €2.7 million.

NOTE 20 – ASSETS FINANCED BY THIRD PARTIES

This is essentially an issue of how the external financing of assets is treated in the accounts. Grants received from sources other than the government and allocated to the financing of assets are written back as the corresponding assets are depreciated.

in €thousands	Notes	12/31/2017	12/31/2016
Funds not associated with specific assets - Other third parties		-	-
Government capital grants	(a)	7,069	6,697
Other capital grants		-	-
Original value of asset-related funds - Local authorities and national public bodies		35,292	35,292
Original value of asset-related funds - Other organizations		22,320	22,320
Write-backs on asset-related funds - Local authorities and national public bodies	(b)	(34,600)	(34,448)
Write-backs on asset-related funds - Other organizations	(b)	(4,910)	(2,678)
Capital grants recorded in income statement		-	-
TOTAL		25,170	27,183

⁽a) The increase of €0.3 million in external financing as at December 31, 2017 is linked to the share of the grant related to income from CABRI in 2017.

■ NOTE 21 – RETAINED EARNINGS CARRIED FORWARD

in €thousands	12/31/2017	12/31/2016
Retained earnings	48,869	55,227

The variation in "retained earnings" corresponds to the allocation of the loss of €6.3 million from the previous year.

It should be noted that the "reserves" item amounts to €90.8 million and consists exclusively of optional reserves. As a state owned industrial and commercial enterprise, IRSN does not have a legal reserve nor a statutory reserve.

NOTE 22 – SPECIAL DEPRECIATION ALLOWANCES FOR TAX PURPOSES

in €thousands	12/31/2017	12/31/2016
Special depreciation allowances for tax purposes	3,525	3,884
TOTAL	3,525	3,884

In 2013, IRSN changed the depreciation term of certain assets in relation to the fiscal reference period, which was reflected by the entry in the accounts of special depreciation allowances for tax purposes. The impact of this on the 2017 fiscal year was as follows:

- + an additional allowance of €0.4 million;
- + a depreciation write-back of €0.7 million.

⁽b) External financing allocated to the capitalization of CABRI is written back as the corresponding asset is depreciated.

■ NOTE 23 – CONTINGENCY AND LOSS PROVISION

			Write-backs fo	r the fiscal year		
in€thousands	Notes	12/31/2016	Allocations in the fiscal year	(provision used)	(provision not used)	12/31/2017
Provision for disputes		618	62	348	-	332
Employment disputes		618	62	348	-	332
Other disputes		-	-	-	-	-
Provision for foreign exchange losses		10	-	10	-	-
Loss provision		54,673	4,357	9,491	541	48,999
Dismantling	(a)	42,804	3,243	3,615	91	42,341
Cleanup	(b)	6,768	-	1,431	450	4,888
Customer risks	(c)	901	-	901		-
European Commission reimbursement		101	-	-	-	101
Contribution - Strasbourg INB		319	-	-	-	319
PSE/DGGN expenditure - Teleray		190	-	-	-	190
ENSTTI - Share/losses		400	167	400	-	167
AGEFIPH		46	25	-	-	71
Employee profit-sharing	(d)	2,255	-	2,255	-	-
Miscellaneous human resources (incl. unemployement compensation provision)		888	922	888	-	922
TOTAL		55,301	4,419	9,848	541	49,331

⁽a) As the PHEBUS reactor is now entirely dismantled, the dedicated provision for this was completely written back (-€2.2 million) correlated to the retirement of the associated dismantling asset. The dismantling provision was €3.2 million, mainly for the FPTO rod assembly with an additional allowance of +€3.0 million.

■ NOTE 24 – DEBT MATURITIES

At the end of the fiscal year the situation is as follows:

in €thousands	12/31/2017 Brut	Maturing in less than 1 year	Maturing in 1 - 5 years	Maturing in more than 5 years
Debts	54,359	1,842	6,350	46,167
Prepayments and advances received	6,851	6,851	-	-
Trade notes and accounts payable	20,597	20,597	-	-
Tax and social liabilities	25,542	25,542	-	-
Other non-financial liabilities	405	405	-	-
Prepaid expenses	8,915	8,915	-	-
TOTAL	116,668	64,151	6,350	46,167

The variation is due to entry of the IRSN's debt to PPP Prisme as a counterpart to the asset entered on the balance sheet for commissioning of building 01 at Fontenay-aux-Roses (see Note 25).

⁽b) Cleanup at the FEURSMETAL site and the cost revision to come are reflected in the write-back and reduction of the provision, giving an overall reduction of €1.8 million.

⁽c) Write back of -€0.9 million: the cover for risks on customer receivables previously entered as a contingency and loss provision was reclassified in 2017 as an impairment of customer receivables (see Note 9).

⁽d) Write back of -€2.2 million: employee profit-sharing, previously entered as a contingency and loss provision is recorded in 2017 as a personnel expense (see Note 7).

■ NOTE 25 – BANK BORROWING

As at December 31, 2017, the bank borrowing situation is as follows:

in €thousands	Notes	12/31/2016	Reimbursement	Increase	12/31/2017
Bank borrowing		13,691	(519)	-	13,172
Other financial liabilities	(a)	-	-	41,123	41,123
Accrued interest not yet due		66	-	-	64
TOTAL		13,757	-	-	54,359

⁽a) In accordance with the accounting treatment required by Instruction BOFIP-GCP-140011 of July 21, 2017 the €41 million increase in other financial liabilities corresponds to the finance for building 01 (PPP Prisme). The total amount of borrowing recorded in 2017 is €42.4 million, less repayments of €1.3 million made during the year.

■ NOTE 26 – TRADE NOTES AND ACCOUNTS PAYABLE

Trade payables at the end of the fiscal year can be broken down as follows:

in €thousands	12/31/2017	12/31/2016
Suppliers - Purchases of goods and services	5,594	4,307
Travel expenses	3	29
Suppliers - Holdbacks	398	375
Suppliers - Expenses payable	13,415	16,537
Trade notes and accounts payable	1,186	1,496
TOTAL	20,597	22,743

■ NOTE 27 – TAX AND SOCIAL WELFARE LIABILITIES

At the end of the fiscal year, the accounting situation is as follows:

in €thousands	12/31/2017	12/31/2016
Employee-related liabilities	16,565	13,385
Provision for paid leave	9,487	9,200
Provision for leave time saving accounts	3,173	2,884
Provision for reduced working hours	1,665	1,267
Other personnel liabilities	2,240	33
Social security and other social organizations	9,897	9,204
Social security contributions/PL	4,649	4,508
Social security contributions/leave time saving accounts	1,555	1,413
Social security contributions/reduced working hours	816	621
Other liabilities/social organizations	2,878	2,661
Government and other public authorities	(921)	(1,245)
TOTAL	25,542	21,344

Tax and social welfare liabilities were up by €4.2 million, broken down as follows:

- +€2 million for employee leave not yet taken;
- +€2.2 million from reclassification of employee profit-sharing, previously treated as a contingency and loss provision, to personnel expenses.

■ NOTE 28 – OTHER NON-FINANCIAL LIABILITIES

The significant elements of this item are as follows:

in €thousands	12/31/2017	12/31/2016
Excess amount to be paid back	113	33
Other expenses payable	-	256
Revenue received before issue of securities	251	346
Other liabilities	42	174
TOTAL	405	809

■ NOTE 29 – OTHER INFORMATION

Post-closing events

None.

CABRI reactor and water loop

The CABRI reactor is subject to Article L.593-18 of the French Environment Code, which means it must be inspected every ten years. IRSN does not yet have sufficient information to determine the cost of this and no provision has been made for it in the accounts as at December 31, 2017.

Situation with regard to corporate tax

IRSN has made a tax loss. The following are excluded: taxable activities and all funding of public service, research and teaching missions, whether or not they are carried out in partnership with public- or private-sector organizations. Conversely, all activities subject to corporate tax correspond to "lucrative" operations, carried out under similar conditions to commercial companies. The loss to carry over in 2017 is ϵ 70 million.

Retirement commitments

- + Commitments calculated in accordance with IAS 19: €18.1 million gross, or €28.0 million including an estimate of social security costs. The following assumptions were made:
 - discount rate: 1.45%
 - age at retirement: 62 years for non-executive staff and 65 years for executive staff;
 - turnover rate: 4.2%;
 - salary increase rate: 1.7%.

Workforce

IRSN employed a paid workforce of 1757 as at December 31, 2017 (excluding work-study program contracts and interns). This figure can be broken down as follows:

- + permanent managerial contracts: 1,249;
- + permanent non-managerial contracts: 390;
- + tixed term contracts: 118.

These contracts can be broken down into:

- + full time contracts: 1,587;
- + part time contracts: 170.

AUDITOR'S REPORT ON THE FINANCIAL STATEMENTS



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Institut de Radioprotection et de Sûreté Nucléaire (IRSN)

Siège social : 31, avenue de la Division Leclerc - 92260 Fontenay-aux-Roses

Rapport du commissaire aux comptes sur les comptes annuels

Exercice clos le 31 décembre 2017

A l'attention du Ministère de l'Economie et des Finances.

Opinion

En exécution de la mission qui nous a été confiée par le Ministère de l'Économie, de l'Industrie et du Numérique, nous avons effectué l'audit des comptes annuels de l'Institut de Radioprotection et de Sûreté Nucléaire (IRSN) relatifs à l'exercice clos le 31 décembre 2017, tels qu'ils sont joints au présent rapport.

Nous certifions que les comptes annuels sont, au regard des règles et principes comptables français, réguliers et sincères et donnent une image fidèle du résultat des opérations de l'exercice écoulé ainsi que de la situation financière et du patrimoine de l'Institut à la fin de cet exercice.

Fondement de l'opinion

Référentiel d'audit

Nous avons effectué notre audit selon les normes d'exercice professionnel applicables en France. Nous estimons que les éléments que nous avons collectés sont suffisants et appropriés pour fonder notre opinion.

Les responsabilités qui nous incombent en vertu de ces normes sont indiquées dans la partie « Responsabilités du commissaire aux comptes relatives à l'audit des comptes annuels » du présent rapport.

Indépendance

Nous avons réalisé notre mission d'audit dans le respect des règles d'indépendance qui nous sont applicables, sur la période du 1er janvier 2017 à la date d'émission de notre rapport, et notamment nous n'avons pas fourni de services interdits par le code de déontologie de la profession de commissaire aux comptes.

KPMG S.A., société française membre du réseau KPMG constitué de cabinets indépendants adhérents de KPMG International Cooperative, une entité de droit suisse.

Société anonyme d'expertise comptable et de commissariat aux comptes à directoire et conseil de surveillance. Inscrite au Tableau de l'Ordre à Paris sous le n° 14-3030/101 et à la Compagnie Régionale des Commissaires aux Comptes de Versailles. Siège social : KPMG S.A. Tour Eqho 2 avenue Gambetta 92066 Paris la Défense Cedex Capital : 5 497 100 €. Code APE 65202 775 726 417 R.C.S. Nanterre TVA Union Européenne FR 77 775 726 417



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Justification des appréciations

En application des dispositions des articles L. 823-9 et R.823-7 du code de commerce relatives à la justification de nos appréciations nous portons à votre connaissance les appréciations suivantes qui, selon notre jugement professionnel, ont été les plus importantes pour l'audit des comptes annuels de l'exercice.

Immobilisations corporelles et incorporelles

Le paragraphe « 1 – Immobilisations incorporelles et corporelles » de la note 1 relative aux principes comptables et méthodes d'évaluation de l'annexe expose les règles et méthodes comptables relatives à la comptabilisation des immobilisations corporelles et incorporelles.

Dans le cadre de notre appréciation des principes comptables suivis par votre société, nous avons examiné les modalités de l'inscription à l'actif des immobilisations corporelles et incorporelles ainsi que celles retenues pour leur amortissement et nous nous sommes assurés que les notes « 9 — Dotations et reprises sur amortissements et provisions, dépréciations » et « 11 — Immobilisations incorporelles et corporelles » de l'annexe fournissent une information appropriée.

Provisions pour risques et charges

Votre établissement constitue des provisions pour couvrir ses passifs de démantèlement et d'assainissement, tels que décrits dans le paragraphe «5 – Provisions pour risques et charges » de la note 1 relative aux principes comptables et méthodes d'évaluation de l'annexe.

Dans le cadre de nos travaux, nous avons apprécié le caractère approprié et raisonnable des hypothèses retenues concernant les estimations de ces passifs et nous nous sommes assurés que l'information communiquée dans la note « 23 – Provisions pour risques et charges » est appropriée. Nous rappelons toutefois que, ces estimations étant fondées sur des prévisions présentant par nature, un caractère incertain, les réalisations pourraient différer, parfois de manière significative, des prévisions.

Les appréciations ainsi portées s'inscrivent dans le contexte de l'audit des comptes annuels pris dans leur ensemble et de la formation de notre opinion exprimée ci-avant. Nous n'exprimons pas d'opinion sur des éléments de ces comptes annuels pris isolément.

Vérification du rapport de gestion et des autres documents adressés aux autorités de tutelle

Nous avons également procédé, conformément aux normes d'exercice professionnel applicables en France, aux vérifications spécifiques prévues par la loi. La mission des commissaires aux comptes ne comprend pas d'interventions spécifiques sur la comptabilité budgétaire, en conséquence, nos vérifications sur le rapport de gestion et documents adressés aux autorités de tutelle ne portent pas sur les données de la comptabilité budgétaire.

Nous n'avons pas d'observation à formuler sur la sincérité et la concordance avec les comptes annuels des informations données dans le rapport de gestion de l'ordonnateur et dans les autres documents adressés aux autorités de tutelle sur la situation financière et les comptes annuels.

DM 181-26 - Exercice clos le 31 décembre 2017



Institut de Radioprotection et de Sûreté Nucléaire (IRSN) Rapport du commissaire aux comptes sur les comptes annuels 6 mars 2018

Responsabilités de l'ordonnateur et de l'agent comptable relatives aux comptes annuels

Il appartient à l'agent comptable, en relation avec l'ordonnateur, d'établir des comptes annuels présentant une image fidèle conformément aux règles et principes comptables français applicables aux établissements publics nationaux, et à l'ordonnateur, en liaison avec l'agent comptable, de mettre en place le contrôle interne qu'ils estiment nécessaire à l'établissement de comptes annuels ne comportant pas d'anomalies significatives, que celles-ci proviennent de fraudes ou résultent d'erreurs.

Lors de l'établissement des comptes annuels, il incombe à l'ordonnateur d'évaluer la capacité de l'établissement à poursuivre son exploitation, et à l'agent comptable de présenter dans ces comptes, le cas échéant, les informations nécessaires relatives à la continuité d'exploitation et d'appliquer la convention comptable de continuité d'exploitation, sauf s'il est prévu de cesser son activité.

Les comptes annuels ont été arrêtés par le conseil d'administration.

Responsabilités du commissaire aux comptes relatives à l'audit des comptes annuels

Il nous appartient d'établir un rapport sur les comptes annuels. Notre objectif est d'obtenir l'assurance raisonnable que les comptes annuels pris dans leur ensemble ne comportent pas d'anomalies significatives. L'assurance raisonnable correspond à un niveau élevé d'assurance, sans toutefois garantir qu'un audit réalisé conformément aux normes d'exercice professionnel permet de systématiquement détecter toute anomalie significative. Les anomalies peuvent provenir de fraudes ou résulter d'erreurs et sont considérées comme significatives lorsque l'on peut raisonnablement s'attendre à ce qu'elles puissent, prises individuellement ou en cumulé, influencer les décisions économiques que les utilisateurs des comptes prennent en se fondant sur ceux-ci.

Comme précisé par l'article L.823-10-1 du code de commerce, notre mission de certification des comptes ne consiste pas à garantir la viabilité ou la qualité de la gestion de votre Institut.

Dans le cadre d'un audit réalisé conformément aux normes d'exercice professionnel applicables en France, le commissaire aux comptes exerce son jugement professionnel tout au long de cet audit. En outre :

- il identifie et évalue les risques que les comptes annuels comportent des anomalies significatives, que celles-ci proviennent de fraudes ou résultent d'erreurs, définit et met en œuvre des procédures d'audit face à ces risques, et recueille des éléments qu'il estime suffisants et appropriés pour fonder son opinion. Le risque de non-détection d'une anomalie significative provenant d'une fraude est plus élevé que celui d'une anomalie significative résultant d'une erreur, car la fraude peut impliquer la collusion, la falsification, les omissions volontaires, les fausses déclarations ou le contournement du contrôle interne :
- il prend connaissance du contrôle interne pertinent pour l'audit afin de définir des procédures d'audit appropriées en la circonstance, et non dans le but d'exprimer une opinion sur l'efficacité du contrôle interne;

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- il apprécie le caractère approprié des méthodes comptables retenues et le caractère raisonnable des estimations comptables faites par l'ordonnateur et l'agent comptable, ainsi que les informations les concernant fournies dans les comptes annuels;
- il apprécie le caractère approprié de l'application par l'agent comptable de la convention comptable de continuité d'exploitation et, selon les éléments collectés, l'existence ou non d'une incertitude significative liée à des événements ou à des circonstances susceptibles de mettre en cause la capacité de l'établissement à poursuivre son exploitation. Cette appréciation s'appuie sur les éléments collectés jusqu'à la date de son rapport, étant toutefois rappelé que des circonstances ou événements ultérieurs pourraient mettre en cause la continuité d'exploitation. S'il conclut à l'existence d'une incertitude significative, il attire l'attention des lecteurs de son rapport sur les informations fournies dans les comptes annuels au sujet de cette incertitude ou, si ces informations ne sont pas fournies ou ne sont pas pertinentes, il formule une certification avec réserve ou un refus de certifier;
- il apprécie la présentation d'ensemble des comptes annuels et évalue si les comptes annuels reflètent les opérations et événements sous-jacents de manière à en donner une image fidèle.

Paris La Défense, le 6 mars 2018

KPMG Audit

Département de KPMG S.A.

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