PRINCIPLES AND PLAYERS IN THE SUPERVISION OF NUCLEAR SAFETY AND RADIATION PROTECTION

On behalf of the state, the Nuclear Safety Authority (ASN, www.asn.gouv.fr) supervises nuclear safety and radiation protection, to ensure the safety of workers, patients, the public and the environment against risks linked to nuclear activities. It also contributes towards informing the citizens.

The fundamental aim of nuclear safety as defined by the IAEA in its Safety Fundamentals (Safety Series, no. 110, 1993, available on the IAEA website, www.iaea.org), is to protect individuals, society and the environment by establishing effective defences against radiological risks and maintaining them in nuclear installations.

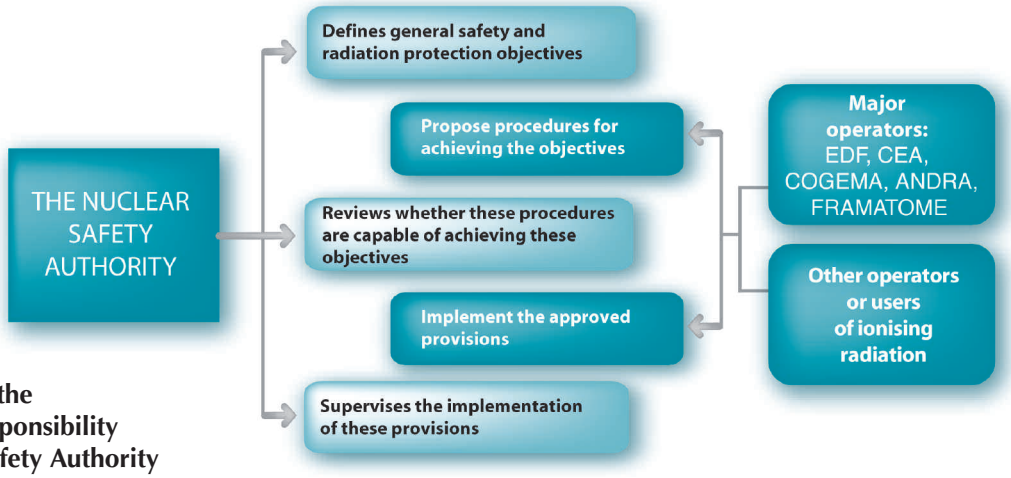
This aim takes the form of a number of operational objectives:
- in operating conditions, exposure to ionising radiation as a result of nuclear activities must be kept below the specified limits and at a level that is as low as reasonably achievable;
- accidents must be prevented in nuclear installations;
- should they occur, the consequences of any accidents must be attenuated.

1 ACTION PRINCIPLES

The performance of nuclear activities is controlled by a number of principles, some of which are enshrined in legislation and regulations.

1 | 1 Responsibility

The principle of responsibility states that the prime responsibility for activities entailing a risk lies with those who carry out these activities:
- responsibility of the licensees for the safety of basic nuclear installations (BNIs);
- responsibility of the consignors for the transport of radioactive materials;
- responsibility of the users for radiation protection of the public;
- responsibility of the suppliers for recovery of radioactive sources;
- responsibility of the employers for radiation protection of workers;
- responsibility of the prescribing doctor and the practitioner of the procedure for radiation protection of patients;
- responsibility of the polluters for harm to the environment;
- responsibility of the producers for waste disposal.



Responsibility of the operators and responsibility of the Nuclear Safety Authority

Environment Charter

Text adopted on 28 February 2005 by Parliament and enacted on 1 March 2005 by the President of the Republic

"The French people,

"Whereas,

"The emergence of mankind was dependent on natural resources and balances;

"The future and very existence of mankind are inseparable from the natural environment;

"The environment is the shared heritage of all human beings;

"Man is exercising a growing influence on the conditions governing life on the planet and his own development;

"Biological diversity, individual development and the progress of human societies are affected by certain types of consumption or production and by over-exploitation of natural resources;

"Preservation of the environment must be pursued in the same way as the other vital interests of the Nation;

"In order to ensure sustainable development, the choices designed to meet the needs of the present must not jeopardise the ability of future generations and other peoples to satisfy their own needs;

"Do proclaim:

"Art. 1 - Everyone has the right to live in a balanced and healthy environment.

"Art. 2. - Everyone has the duty to take part in preserving and improving the environment.

"Art. 3. - In the conditions laid down by law, everyone shall avoid harming the environment or, failing which, mitigate the consequences of such harm.

"Art. 4. - Everyone shall contribute to repairing the damage he or she has caused to the environment, in the conditions laid down by law.

"Art. 5. - When a particular damage, albeit uncertain in the light of current scientific knowledge, could seriously and irreversibly affect the environment, the public authorities shall employ the principle of precaution in their particular areas of competence to ensure that risk assessments are made and provisional, proportionate measures are taken to prevent the damage occurring.

"Art. 6. - Public policies shall promote sustainable development. To this effect, they shall reconcile the protection and improvement of the environment with economic development and social progress.

"Art. 7. - In the conditions and limits laid down by law, everyone shall be entitled to access environment-related information in the possession of the public authorities and to take part in public decisions having an impact on the environment.

"Art. 8. - Environmental education and training shall contribute to the exercise of the rights and duties defined in this Charter.

"Art. 9. - Research and innovation shall contribute to the preservation and improvement of the environment.

"Art. 10. - This Charter inspires France's actions at a European and international level."

The polluter-pays principle introduced into the Environment Code is an application of the principle of responsibility in that it ensures that the polluter responsible for environmental damage resulting from its activity bears the cost of pollution prevention and mitigation measures. This in particular leads to taxing of BNIs and installations classified on environmental protection grounds (ICPEs).

Constitutional law 2005-205 of 1 March 2005 concerning the Environment Charter states that "any person causing damage to the environment must contribute to reparation of said damage" (article 4).

1 | 2

Justification

The principle of justification is one of the three fundamental principles of radiation protection, enshrined in the Public Health Code. It states that a nuclear activity can only be undertaken if its health, social, economic or scientific benefits are justified, given the risks inherent in human exposure to ionising radiation which it is likely to entail.

Traditionally, this principle of justification was first of all applied to radiation protection of patients - any unjustified examination being prohibited - before being extended to all radiation protection.

It thus applies to most areas supervised by the ASN: the aim is to compare the advantages of a nuclear activity against its radiological risks, whether dealing with the risk of radiological accident or the risks induced by normal operation of the facilities, in particular through radiological exposure of the workers, effluent discharge and the production of radioactive waste.

1 | 3

Optimisation

The principle of optimisation, which is another fundamental principle of radiation protection enshrined in the Public Health Code, states that human exposure to ionising radiation as a result of nuclear activities must be kept as low as reasonably achievable in the light of current technology, economic and social factors and, as applicable, the medical purpose of the exposure.

Traditionally, this principle of optimisation was first of all applied to radiation protection of workers, before being extended to all radiation protection. It today has its counterparts in the other fields of activity supervised by the ASN: nuclear safety, environmental protection, radioactive waste management.

The Environment Code thus introduces the principle of preventive action and correction of environmental damage, primarily at source, using the best available techniques at an economically acceptable cost (article L. 110-1).

Optimisation of the safety of nuclear installations to a large extent depends on use of the concept of defence in depth, in particular characterised by the installation of successive barriers preventing the dispersal of radioactive substances into the environment. This concept is employed to compensate for any potential human or technical failures. It is based on several levels of protection, both technical and organisational, designed to maintain the effectiveness of the physical barriers placed between the radioactive substances and workers, the public and the environment, whether in normal operating conditions or incident situations and, for certain of the barriers, in the event of an accident. Operational implementation can be summarised thus: although the steps taken to prevent errors, incidents and accidents are in principle designed to prevent them happening, their occurrence is nonetheless postulated and the means of dealing with them must be examined and set up, in order to reduce their consequences to levels considered to be acceptable.

The concept of defence in depth is organised into 5 levels:

1. prevention of operating anomalies or deviations and system failures (design, definition of operating range and organisation);

2. maintaining the installation or transport package within the authorised operating range, through surveillance and detection of deviations (operation);

3. keeping accidents within the design scenarios (means of action for responding to envisaged situations);

4. prevention of deterioration of accident conditions and limitation of the consequences of serious accidents;

5. limitation of the consequences for the populations in the event of a major accident (emergency preparedness).

1 | 4

Limitation

The principle of limitation, also one of the fundamental principles of radiation protection enshrined in the Public Health Code (CSP), states that the exposure of a person to ionising radiation resulting from a nuclear activity cannot raise the total doses received above the limits set by the regulations, except when this person is exposed for medical or biomedical research purposes.

The notion of limit clearly does not apply only to radiological exposure of the general public and workers, but also to other sorts of hazards and detrimental effects: for example to the non-radiological parameters of discharges from installations subject to licensing.

1 | 5

Precaution

The Environment Charter transforms the principle of precaution into a constitutional principle (article 5). According to this principle, the absence of certainty, in the light of current scientific knowledge, should not delay the adoption of effective, proportionate measures to prevent a risk of serious and irreversible damage to the environment at an economically acceptable cost.

With regard to the biological effects of ionising radiation at low doses and low dose rates, the principle of precaution adopts a linear dose-effect relationship without threshold (see chapter 1).

1 | 6

Participation

The Environment Charter introduces the principle of participation whereby everyone has access to information about the environment, including hazardous activities and substances, and the public is involved in drafting projects with an important impact on the environment.

In the nuclear field, public inquiries - which are in particular held as part of the decision-making process for licensing or dismantling nuclear installations, or licensing water intake and effluent discharge by nuclear installations - enable local residents to participate in the decisions made by the public authorities. Articles L.121-1 and following of the Environment Code also created a National Public Debates Commission (CNDP), responsible for ensuring that the public is indeed involved in the drafting of national-interest planning and construction projects of the State, local authorities, public institutions and private individuals, in those categories of operations specified by decree, if their socio-economic stakes are high or they have significant impacts on the environment or regional planning. In 2005, two public debates organised by the CNDP concerned the ASN in particular: the public debate on radioactive waste management and that concerning the plan to build an EPR type reactor in Flamanville (Manche département).

This right to information concerns all fields of ASN activity, and in particular:
- information of the public about events occurring in BNIs or during the transport of radioactive materials, about discharges or releases from BNIs;

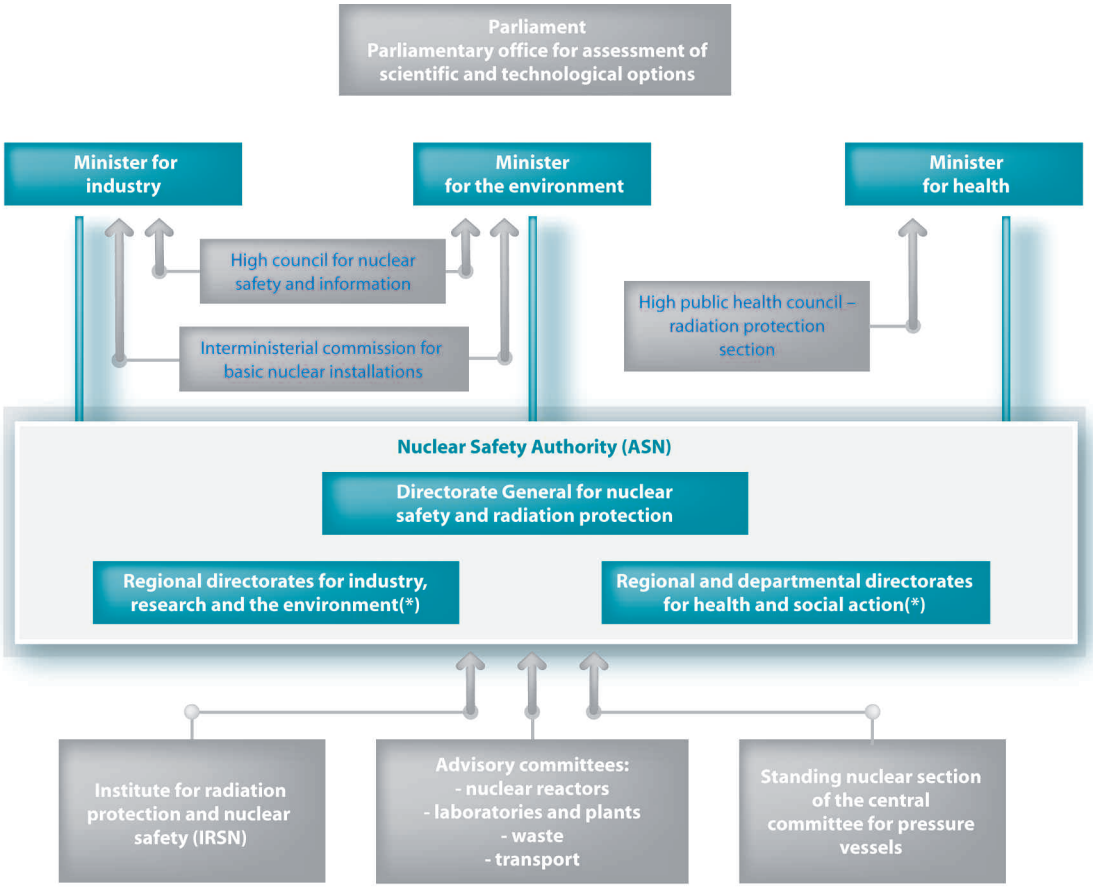
- workers information about their individual radiological exposure;
- patient information about the medical act, in particular its radiological aspect.

In accordance with the duties entrusted to it, the ASN contributes to public information about nuclear safety and radiation protection. Chapter 6 of this report details the ASN information actions.

2 SUPERVISORY INSTITUTIONS

High-risk activities are the prime responsibility of those who undertake them (see point 1.1). An industrial operator is responsible for the safety of its nuclear installations. A physician is responsible for radiation protection of his/her patient when prescribing or using ionising radiation for diagnosis or for therapeutic purposes.

The role of the public authorities is to ensure that this responsibility is assumed in full, in compliance with the principles mentioned above and the regulatory requirements implementing them.



(*) For their nuclear safety and radiation protection supervision activities.

Supervision of nuclear safety and radiation protection in France

Within the public authorities, responsibility for supervision of the safety of nuclear installations and radioactive material transports lies with the ministers in charge of nuclear safety, while responsibility for supervision of radiation protection lies with the ministers for Health and Labour.

Decree 2002-255 of 22 February 2002 amending decree 93-1272 of 1 December 1993 and creating the Directorate General for Nuclear Safety and Radiation Protection (DGSNR) gave this directorate responsibility - under the authority of the ministers for Health, the Environment and Industry - for defining and implementing nuclear safety and radiation protection policy.

In order to carry out this duty, the DGSNR calls on the services of regional offices. The DGSNR together with the regional offices for which it organises and supervises activities in its area of competence, is referred to as the "Nuclear Safety Authority" (ASN).

In carrying out their duties the ASN, and the men and women who work in it, strive to respect four key values: competence, independence, stringency and transparency.

2 | 1

ASN

The Nuclear Safety Authority comprises a directorate at central level, the Directorate General for Nuclear Safety and Radiation Protection (DGSNR), and regional offices. In the performance of its duties, the ASN calls on the expertise of external technical support organisations, in particular the Institute for Radiation Protection and Nuclear Safety, and asks various Advisory Committees for their opinions and recommendations.

2 | 1 | 1

Directorate General for Nuclear Safety and Radiation Protection

The role of the DGSNR is to propose and implement the government's nuclear safety and radiation protection policy, in civil matters.

Article 2 of the above-mentioned decree of 22 February 2002 specifies its responsibilities.

2 | 1 | 2

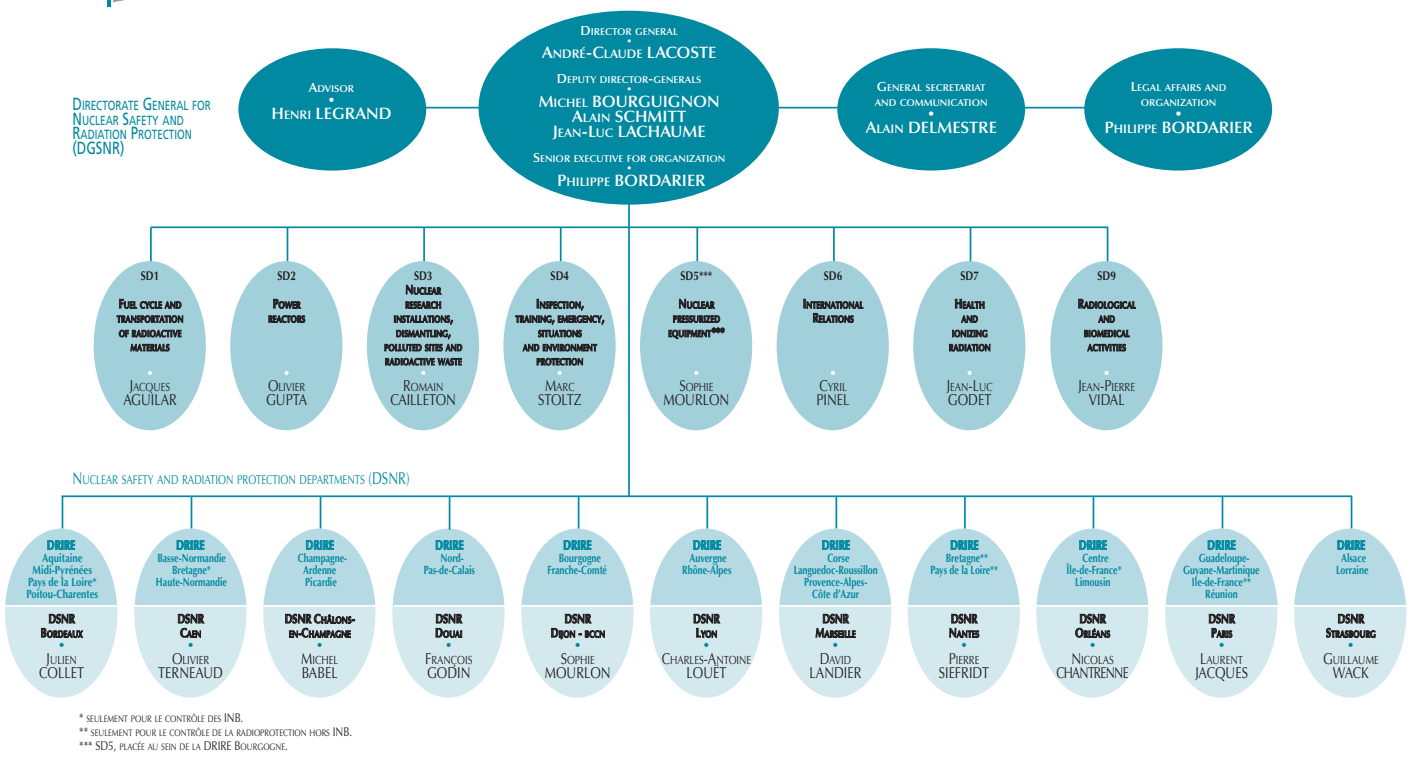
Regional offices

The DGSNR coordinates and supervises the activities of the Nuclear Safety and Radiation Protection Departments (DSNRs) of the Regional Directorates for Industry, Research and the Environment (DRIREs), and also relies on the Regional and Departmental Health and Social Action Directorates (DRASSs and DDASSs) for supervision of radiation protection.

a) The Nuclear Safety and Radiation Protection Departments of the Regional Directorates for Industry, Research and the Environment

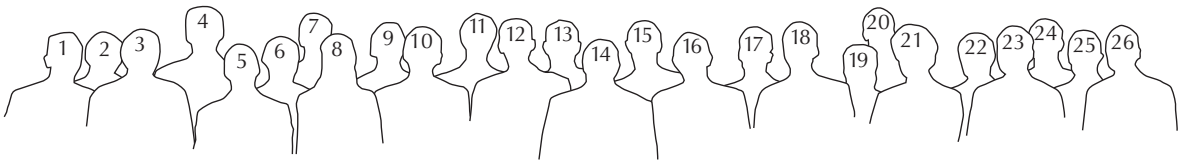
The Nuclear Safety and Radiation Protection Departments (DSNRs) operate under the authority of the directors of the DRIREs in a geographical area consisting of one or more administrative regions, as shown in the breakdown below.

The DSNRs carry out most of the direct supervision of the BNIs, radioactive material transports and local nuclear activities, through:



ASN organization chart as of January 1st, 2006

Nuclear Safety Authority management committee



1 Guillaume Wack (DSNR Strasbourg)
2 Jean-Pierre Vidal (SD9)
3 Jean-Luc Godet (SD7)
4 Bernard Doroszczuk (Director of the DRIRE of the Centre region, representing the directors of the DRIREs)
5 David Landier (DSNR Marseille)
6 Michel Babel (DSNR Châlons-en-Champagne)
7 Olivier Terneaud (DSNR Caen)
8 Sophie Mourlon (BCCN/DSNR Dijon)
9 Nicolas Chantrenne (DSNR Orléans)
10 Philippe Bordarier (Senior executive for organization)
11 Charles-Antoine Louët (DSNR Lyon)
12 Alain Schmitt (Deputy director general)
13 François Godin (DSNR Douai)
14 André-Claude Lacoste (Director general)
15 Marc Stoltz (SD4)
16 Michel Bourguignon (Deputy director general)
17 Laurent Jacques (DSNR Paris)
18 Jean-Luc Lachaume (Deputy director general)
19 Jacques Aguilar (SD1)
20 Cyril Pinel (SD6)
21 Alain Delmestre (Secretary general)
22 Romain Cailleton (SD3)
23 Henri Legrand (Advisor)
24 Pierre Siefridt (DSNR Nantes)
25 Julien Collet (DSNR Bordeaux)
26 Olivier Gupta (SD2)

Decree 2002-255 of 22 February 2002 creating the Directorate General for Nuclear Safety and Radiation Protection.
Article 2:
(…)

III - The Directorate General for Nuclear Safety and Radiation Protection is responsible, within its specified field:

1. For preparing and implementing all measures concerning the safety of basic nuclear installations, in particular by drafting the corresponding technical regulations and supervising their application;
2. For preparing and implementing all measures concerning the safe transport of radioactive and fissile materials for civil purposes, in particular by drafting the corresponding technical regulations, jointly with the Minister for Transports, and supervising their application;
3. For preparing and implementing - jointly with the other competent administrations - all measures such as to prevent or limit the health risks linked to exposure to ionising radiation, in particular by drafting technical regulations concerning radiation protection, except with respect to the protection of workers against ionising radiation, and supervising their application;
4. For organising safety inspections of basic nuclear installations and, together with the competent departments of the Minister for Transport, of transports of radioactive and fissile material for civil purposes;
5. Notwithstanding the inspections stipulated by the Labour Code and the Environment Code, for organising the radiation protection inspections laid down in the Public Health Code and in the above-mentioned law of 2 August 1961 and its implementing texts, and for coordinating all inspections involved in the supervision of industrial, medical and research radiation protection, including by monitoring sources of ionising radiation used in these fields;
6. For organising a permanent radiation protection watch, in particular through radiological monitoring of the environment nationwide;
7. For supervising gaseous and liquid effluents discharges and waste from basic nuclear installations;
8. For proposing, coordinating and implementing government policy concerning the regulation and supervision of radioactive waste management;
9. For collecting all information concerning R&D work done in the field of nuclear safety and radiation protection;
10. For participating - jointly with the other competent administrations, in particular the departments responsible for civil security - in defining and implementing a technical emergency response organisation to deal with an accident in a nuclear facility or during transport of radioactive materials, or more generally, an accident of any type likely to harm human health through exposure to ionising radiation, occurring in France or likely to affect French territory;
11. For collecting all information in the field of nuclear safety and radiation protection and about the steps taken in this field in France and abroad, and for distributing this information to the administrations concerned;
12. For contributing to informing the public about subjects concerning nuclear safety and radiation protection.

The functions mentioned in 3 and 5 above are, where necessary, carried out jointly with the labour inspectorate personnel mentioned in articles L. 611-1, L. 611-4 and L. 611-6 of the Labour Code and the other competent inspection organisations and administrations.

Together with the departments of the Minister for Foreign Affairs, the Directorate General for Nuclear Safety and Radiation Protection shall, within its areas of competence, prepare and propose France's positions with a view to international and community debates.
In the performance of its duties, it may conduct or have conducted any studies it feels useful.
(…)

V - Jointly with the other competent administrations and within its field of competence, the Directorate General for Nuclear Safety and Radiation Protection guides, organises and supervises the activities of the regional offices concerned. It oversees and coordinates their actions and provides them with the resources they need.

- field checks and inspections;
- review of incidents and accidents which occur in their regions;
- supervision of nuclear power plant unit outages in their regions.

The DSNRs take part in examining licence applications submitted by the operators of nuclear activities (BNI licensees, industrial users of ionising radiation, researchers, physicians, etc.):
- creation, major or minor modification, or final shutdown of BNIs;
- water intake and effluent discharge by BNIs;
- licensing of activities using ionising radiation.

Coordinating examination of these applications is the responsibility of the DGSNR. Issue of the licences is the responsibility of the ministers.

In BNIs, this supervision concerns not only regulations regarding nuclear safety specific to BNIs, but also the regulations relative to radiation protection, water intake and effluent discharges, installations classified on environmental protection grounds (ICPEs) and pressure-vessels (ESPs). In the local nuclear field, this supervision is carried out without prejudice to the other inspections, in particular that of the inspectorates for labour and for classified installations.

In emergency situations, the DSNRs have a two-fold role to support the département Prefect, who is responsible for protection of the populations, and to monitor the site, if it is accessible and repre-

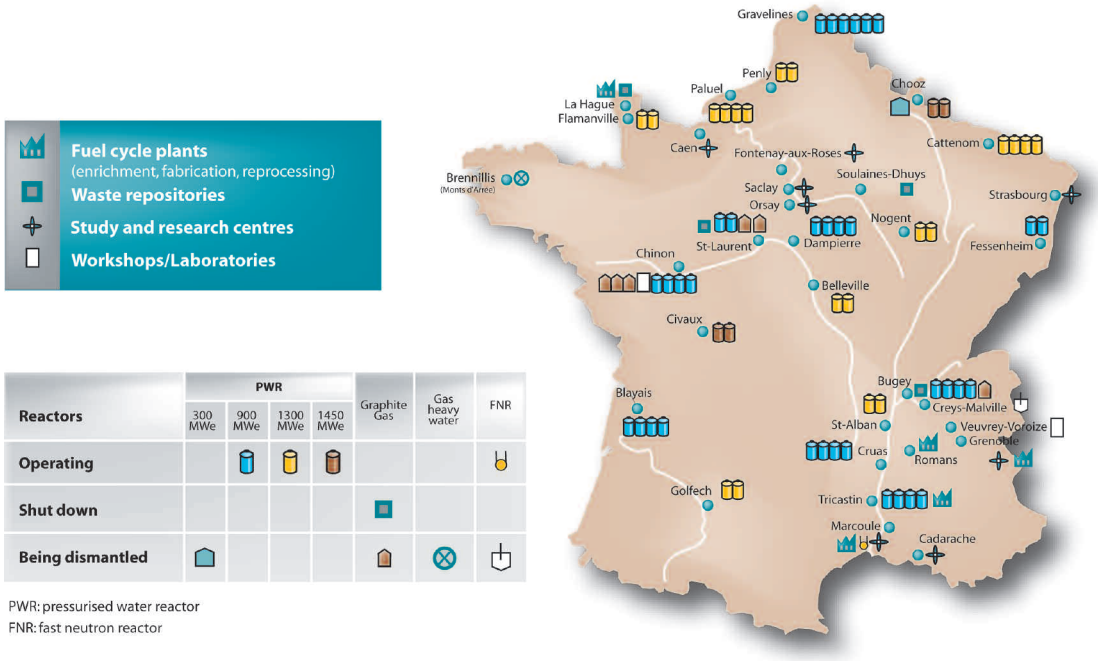
The reinforcement of radiation protection supervision will lead the ASN to review its regional organisation

Regions covered by the ASN's Nuclear safety and radiation protection departments:

- BORDEAUX (1) department
- CAEN (1) department
- CHÂLONS-EN-CHAMPAGNE department
- DIJON department
- DOUAI department
- LYON department
- MARSEILLE department
- NANTES department
- ORLÉANS (1) department
- PARIS department
- STRASBOURG department

(1) Orléans, Caen and Bordeaux departments are also in charge of supervising nuclear activities in Ile-de-France, Brittany and Pays-de-la-Loire regions respectively, but only for BNIs.

DSNR map of France



The main nuclear sites

sents no danger. To ensure preparedness for these situations, they take part in drawing up the emergency plans drafted by the prefects and in periodic emergency exercises.

Finally, the DSNRs take part in informing the public in the regions about BNI nuclear safety and radiation protection, by contributing to the ASN's publications, its website and its *Contrôle* magazine, by participating in the local information committees (CLIs), by their information and communication activities - in particular through regular presentations to the media - and via their links with local associations and media.

b) The Regional and Departmental Health and Social Action Directorates (DRASSs and DDASSs)

The DRASSs and DDASSs operate in a given geographical area, either a département or administrative region.

In 2004, on the basis of the conclusions of the DDASS-DRASS-DRIRE working group, a circular to the prefects clarified the duties of the DRIREs, DDASSs and DRASSs with regard to supervision of radiation protection (Circular DGSNR/SD7 04-663 of 29 July 2004 concerning the duties of the regional and departmental directorates of health and social affairs in the field of radiation protection).

The DRASSs and DDASSs take part in supervising radiation protection in both the natural and man-made environments:
- radiological monitoring of drinking water;
- radon monitoring in institutions open to the public and in the home.

The DRASSs and DDASSs also take part in preparing for and managing radiological emergency situations, in particular by:
- providing the Prefect with support in the event of an incident or accident;
- contributing to drafting the emergency plans drawn up by the prefects;
- stockpiling and distributing iodine tablets;
- taking part in periodic emergency exercices.

The DRASSs and DDASSs will no longer be required to take part in radiation protection licensing or notification procedures for medical nuclear activities, which have been transferred to the DSNRs, nor to take environmental samples. Their role in supervising the radiation protection of patients has yet to be clarified.

2 | 1 | 3

The working of the ASN

a) Human resources

Workforce

As at 31 December 2005, the ASN total workforce stood at 378 people.

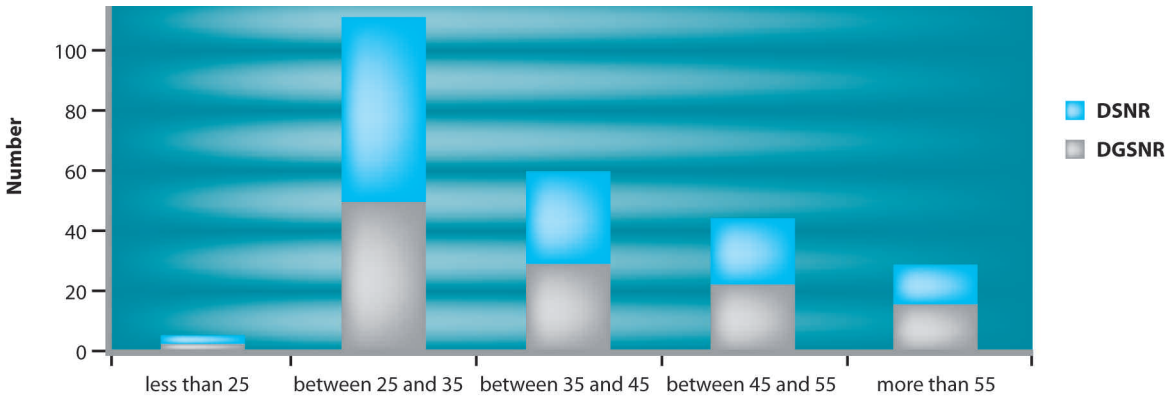
This workforce can be broken down as follows:
- 268 civil servants or contractual State employees;
- 110 staff on assignment from the Ministry of Infrastructure or other public institutions (Assistance publique - Hôpitaux de Paris, CEA, IRSN, ANDRA).

75% of the ASN workforce are executive. Most of these managers come from State technical schools (mining school engineers, State engineering school graduates, industry and mining engineers, State public works engineers, inspector-doctors from the public health service, pharmacists, health engineering specialists) who often have prior experience of supervisory activities (in the nuclear or other fields). This also concerns management staff on assignment from public institutions who have experience of nuclear or radiological activities, as well as contractual engineers specialising in radiation protection.

Workforce as at 31 December 2005

Paris (Bourgoin)	Fontenay-aux-Roses	DSNR	TOTAL
110	84	184	378

The average age of ASN personnel is 40 years and 8 months. Sixty-four percent (64%) of them are under 45 years old. This well-balanced age pyramid enables the ASN to carry out active supervision of nuclear safety and radiation protection, avoiding the pitfalls of habits and routine, while stimulating use of the tutor system with the younger members and the transmission of know-how.



Breakdown of the ASN inspector's ages

Personnel training

Competence is one of the four key values of the ASN. Initial and continuing training is a key element in its professionalism. The system adopted involves complementary training in nuclear technologies, general training and communication training.

• Training in nuclear technologies

An official technical training scheme is one of the key elements in managing the qualification levels within the ASN. This training scheme comprises two levels:
- basic training: technical training in the nuclear industry or activities employing ionising radiation, plus training in the regulatory and supervisory procedures of the ASN;
- advanced training.

The ASN has defined a reference framework of basic training to be followed before achieving qualification as an inspector. Inspectors become senior inspectors on the basis of a reference system which includes advanced training and the experience of the inspector (see below "Inspector Qualifications").

In 2005, 2773 days of technical training were given to ASN personnel. The financial cost of the training courses given by organisations other than the ASN, or its technical support organisation the IRSN, amounted to € 437,000 (or an average training cost of € 2,800 per person trained).

• General training

General training is open to all ASN personnel, both administrative and technical, whatever their status. In the case of engineers and technicians, it supplements the training programmes described above.

The main objectives of general training are to develop professionalism and a sense of responsibility and self-reliance, through:
- proficiency in IT skills;
- mastery of foreign languages, in particular English;
- acquisition of a professional culture and adaptation to various occupations (constitutional bylaw on budget acts, project management, public procurement, public finances, secretarial skills, etc.);
- help with preparation for State competitions and exams.

• Communication training

The communication training programme aims to offer all personnel training tailored to their various responsibilities, in the fields of spoken and written communication and emergency response tactics.

Inspector qualifications

Since 1997, the ASN has followed a program of qualification of its inspectors, based on recognition of their technical competence. This was paralleled by the 25 April 1997 creation of a Safety Authority Accreditation Committee. This is a consultative committee whose role is to rule on the entire qualification system. It examines the training courses and the qualification reference systems applicable to the various units within the ASN. These reference systems in particular comprise a definition of the levels of qualification (inspector and senior inspector), a description of the corresponding tasks and the rules for attaining these levels.

In the light of these reference systems, the Accreditation Committee interviews the inspectors presented by their superiors. It proposes nominations as senior inspector to the Director General of the ASN, who is then responsible for making the decision.

Chaired by Mr Yves Lecointe, the Accreditation Committee is made up half of senior inspectors belonging to the ASN and half of persons with competence in the field of nuclear safety supervision, assessment and teaching, and supervision of classified installations.

The Accreditation Committee met twice in 2005 and proposed that eight BNI inspectors become senior inspectors.

As at 31 December 2005, 40 of the ASN BNI inspectors were senior inspectors, or about 25% of all BNI inspectors.

b) Financial resources

Since 2000, all the personnel and operating resources involved in the performance of the duties entrusted to the ASN have been covered by the State's general budget.

The ASN budget is contained within the "Economic development and regulation" mission, in particular its programme No. 127 "Supervision and prevention of technological risks and industrial development". The combination of the DGSNR and the eleven DSNRs is budgeted in action No. 3 of programme No. 127, "Supervision of nuclear safety and radiation protection".

The budget for action No. 3 of programme No. 127 in 2006 amounts to € 34.17 million. The ASN complete cost budget, excluding financing of the IRSN expertise (see below) must be increased by the budget for management of the DSNRs in the DRIREs and a fraction of the budget for the Personnel, Modernisation and Administration Directorate (DPMA) at the Ministry of the Economy, Finance and Industry. In 2006, the ASN complete cost budget therefore amounted to € 48.5 million, after consolidation of the management budgets.

On behalf of the State, the ASN is responsible for issuing collection notices for the annual tax payable by the nuclear licensees and introduced by article 43 of the 2000 budget act. In 2005, the revenue from this tax amounted to 347 million. It is paid into the general budget.

In order to encourage rapid dismantling of nuclear installations, article 77 of the supplementary budget act for 2005, set this tax at a lower rate of 50% for installations shut down and undergoing dismantling. The tax ceases to be due on delicensing of the installation.

The revenue from this tax amounted to € 213 million in 2003, € 346 million in 2004, and € 347 million in 2005. The breakdown of contributions is shown in the following table:

LICENSEE	BNI tax for 2005 in thousands euros
EDF	307 668
COGEMA	18 867
CEA	8 531
ANDRA	6 403
EURODIF	1 829
FBFC	1 220
OTHERS	2 729
TOTAL	**347 247**

c) The ASN information system

The ASN information system (ASN IS) is now used throughout the ASN. In 2005, various adaptations and ergonomic improvements were made to its professional applications, accessible from the Oasis intranet. Extension of the ASN IS to the ASN's new duties, in particular those specific to the medical field, will continue in 2006.

d) ASN internal communications

Oasis, the ASN intranet, remains the primary means of sending out information within the ASN.
In-house actions in recent years concerning internal communications continued in 2005:
- presentation of each subject in the *Contrôle* magazine to the DGSNR staff and exchanges with the management prior to presentation of the publication to the media;
- organisation of introductory sessions for new recruits in May and October;
- regular visits by DGSNR officials to each of its component entities (general secretariat, sub-directorates, DSNRs).

e) quality organisation and management

To guarantee and improve the quality and effectiveness of its actions, the ASN defined and implemented a quality management system inspired by the ISO and IAEA international standards and based on:
- listening to the needs of all parties involved (the public, elected representatives, associations, media, trade unions, industry) within the context of procedures stipulated by the regulations (public enquiry) or less formal frameworks (opinion polls, hearings, internal consultations, etc);
- action plans setting ASN targets and annual priorities, adjusted during the course of the year by exchanges between entities (discussions, periodic meetings, internal memos, etc.);
- organisation notes and procedures, gradually structured and compiled to form an organisation manual, defining the ASN internal rules for the correct performance of each of its duties and roles;
- internal audits and inspections by the General Mining Council and context, activity and performance indicators, for monitoring and improving the quality and effectiveness of the actions taken by the ASN.

2 | 2

The Institute for Radiation Protection and Nuclear Safety (IRSN, www.irsn.fr)

When preparing its decisions, the ASN calls on the expertise of technical support organisations, mainly the Institute for Radiation Protection and Nuclear Safety (IRSN). For a number of years now, the ASN has been following a policy of technical support diversification, both nationally and internationally.

Role of the IRSN

The Institute For Radiation Protection and Nuclear Safety, an industrial and commercial public establishment created by law 2001-398 of 9 May 2001, carries out research and assessment duties in the following fields, although with no responsibility as nuclear licensee:
- nuclear safety;
- safe transport of radioactive and fissile materials;
- protection of man and the environment against ionising radiation;
- protection and supervision of nuclear materials;
- protection of nuclear installations and transports of radioactive and fissile materials against malicious acts.

Activities of the IRSN

The duties of the Institute for Radiation Protection and Nuclear Safety include:
- assessments, research and other work, in particular analyses, measurements and dose-taking, on behalf of French and foreign, public and private organisations;
- defining research programmes, either carried out in-house or entrusted to other French or foreign research organisations, in order to maintain and develop the skills required for expertise in its fields of activity;
- contributing to radiation protection training of health professionals and persons exposed as a result of their professional activities;
- providing technical support for the ASN, the Delegate for Nuclear Safety and Radiation Protection for National Defence Installations and Activities (DSND) and for any State authorities and services as may request it;
- in the event of an incident or accident involving sources of ionising radiation, proposing to the ASN or the DSND measures of a technical, health and medical nature to ensure protection of the population, workers and the environment and to return the installations to a safe condition;
- participating in a permanent radiation protection watch, particularly by contributing to radiological monitoring of the environment and managing and analysing dosimetric data concerning workers exposed to ionising radiation and managing the inventory of ionising radiation sources.

The IRSN provides technical assistance to the Defence High Official at the Ministry for the Economy, Finance and Industry, in particular concerning implementation of the legislative requirements of the Defence Code as applicable to protection and supervision of nuclear materials.

Finally, the IRSN manages a number of radiation protection monitoring tools under the responsibility of the ASN, acting on behalf of the State. This in particular includes the national network of environmental radioactivity measurements, the SISERI database for monitoring and analysing worker exposure or the SIGIS database for monitoring radioactive source licences.

Organisation and budget of the IRSN

The IRSN is under the joint supervision of the ministers for Defence, the Environment, Industry, Research and Health. The ASN has direct responsibility for the institute on behalf of the Minister for Health. Furthermore, the Director General of the ASN is automatically a member of the institute's Board.

The general budget subsidy granted to the IRSN is consolidated in action No. 3, "Evaluation and prevention of nuclear risks" of programme No. 189 "Research in the field of risks and pollution" of the "Research and higher education" interministerial mission.

The IRSN's state subsidy amounted in 2006 to € 236.8 million. Action No. 3 is split into three sub-actions. Sub-action 3.2 contains the assessment budgets for public authorities, including the ASN. These budgets amount to a total of € 81.3 million (annual performance project No. 189), of which € 71.1 million (staff and operation) is earmarked for the assessment activities carried out on behalf of the ASN (revenue and spending forecast for 2006, Board decision of 6 December 2005). For information, before 2002, the share of the subsidy allocated to the IPSN for work on behalf of the ASN (article 20 of chapter 44-40 of part IV, Minister for the Environment budget subsidies) stood at € 54 million.

Communication of IRSN works

Subject to the legislation concerning limitations on the right of free access to information, the IRSN releases the scientific data resulting from the research programmes under its initiative, except for those concerning defence.

The nature and results of the research programmes conducted by the Institute are communicated to the relevant authorities in charge of supervising nuclear safety and radiation protection, as well as to the High Council for Nuclear Safety and Information, the French High Public Health Council and to the High Council for Prevention of Professional Risks.

The IRSN contributes to information of the public, in particular by drafting and - after advice from its scientific council - publishing an annual activity report. The report is sent to the supervisory ministers and is presented to the High Council for Nuclear Safety and Information, to the French High Public Health Council and to the High Council for Prevention of Professional Risks.

2 | 3

Expert groups

When preparing its decisions, the ASN asks for opinions and recommendations from expert groups:
- the Advisory Committees;
- the Standing Nuclear Section of the Central Committee for Pressure Vessels;
- the radiation protection section of the French High Public Health Council.

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Advisory Committees

Four Advisory Committees (GPs) comprising experts and representatives of the French administration were created to assist the Director General of the ASN by ministerial decision of 27 March 1973, amended in particular by a decision of 1 December 1998. They analyse the safety-related technical problems raised by the construction, commissioning, operation and shutdown of nuclear facilities and their auxiliaries and the transport of radioactive materials.

Meetings of the "Advisory Committee for Nuclear Reactors" in 2005

Theme	Date
PWR – Review of commissioning of two NPP units at Civaux	20/01
PWR – Review of the results of level 1 and 2 probabilistic safety studies	03/02
PWR – Review of the behaviour of the 900 MWe reactor containments	03/03
PWR – Review of the state of knowledge on the fire risk and the protection of installations against explosions occurring within the site	10/03
PWR – Periodic safety review concerning the third ten-yearly outages of the 900 MWe reactors (1st and 2nd sessions)	24/03
PWR – Periodic safety review concerning the third ten-yearly outages of the 900 MWe reactors (3rd session devoted to the fuel building pit)	21/04
PWR – Review of operating experience from French and foreign pressurised water reactors during the period 2000 to 2002 (2nd session)	16/06
EPR – Review of draft preliminary safety analysis report (3rd session)	05/07
Awareness-raising day dealing with human and organisational factors impacting high-risk systems	20/10
PWR – Review of equipment qualification for accident conditions (2nd meeting)	17/11
EPR – Review of draft preliminary safety analysis report (4th meeting)	01/12
Periodic safety review of the MASURCA experimental reactor (BNI no. 39) and review of the orientations adopted by the licensee for the renovation work	08/12
PWR – Periodic safety review concerning the second ten-yearly outages for the 1300 MWe reactors	22/12

Chaired by Mr Pierre Govaerts, the Advisory Committee for nuclear reactors comprises representatives of the French administration, experts nominated on proposals from the IRSN, EDF and Framatome, and experts chosen for their particular competence.

Advisory Committee for laboratories and plants

In 2005, the Advisory Committee for laboratories and plants met on five occasions.

Meetings of the "Advisory Committee for laboratories and plants" in 2005

Theme	Date
Romans-FBFC – Increase in the annual production capacity of the BNI 98 installations on the Romans-sur-Isère site and review of the corresponding preliminary safety analysis report	16/03/2005
Pierrelatte – Review of the preliminary safety analysis report on the centrifugal uranium enrichment plant (Georges Besse II)	20/04/2005
Visit to the COGEMA/La Hague installations in the run-up to the 28/09/2005 meetings	21/09/2005
La Hague (COGEMA) – Review of waste management policy	28/09/2005
Awareness-raising day dealing with human and organisational factors impacting high-risk systems	20/10/2005

Chaired by Mr Pierre Chevalier, the Advisory Committee on laboratories and plants comprises representatives of the French administration, experts appointed on proposals from the IRSN, EDF, the CEA, COGEMA and ANDRA, and experts chosen for their particular competence.

Advisory Committee for waste

In 2005, the Advisory Committee for waste held five meetings.

Chaired by Mr Pierre Bérest, the Advisory Committee for waste comprises representatives of the French administration, experts nominated on proposals from the IRSN, CEA and ANDRA, experts representing the producers of radioactive waste and experts chosen for their particular competence in the nuclear, geological and mining fields.

Meetings of the "Advisory Committee for waste" in 2005

Theme	Date
Summary concerning deep geological disposal	01/02 and 01/07
Recovery of former waste from Cogema La Hague (with the Advisory Committee for laboratories and plants)	16/11
ANDRA's "Clay 2005" dossier	13/12 and 14/12

Advisory Committee for transport

The Advisory Committee for transport did not meet in 2005.

Chaired by Mr François Barthélemy, the Advisory Committee for transport comprises representatives of the French administration and the French committee for certification of contractors for the training and monitoring of personnel working with ionising radiation, experts appointed on proposals

from the IRSN, the CEA, EDF and COGEMA, as well as experts chosen for their particular competence.

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Standing Nuclear Section of the Central Committee for Pressure Vessels

The Central Committee for Pressure Vessels (CCAP, article 26 of decree 99-1046 of 13 December 1999 concerning pressure vessels) is a consultative organisation reporting to the Minister for Industry.

It comprises members of the various administrations concerned, persons chosen for their particular competence and representatives of the manufacturers and users of pressure vessels and of the technical and professional organisations concerned. It is chaired by Mr Rémi Guillet.

It may be referred to by the Director for Regional Action, Quality and Industrial Safety or the Director General of the ASN for all matters affecting implementation of the laws and regulations on pressure vessels. Pressure vessel accident reports are also forwarded to it.

For particular supervision of the more important pressure vessels in nuclear installations, it set up a Standing Nuclear Section (SPN), the role of which is to issue recommendations on application of pressure vessel regulations to the main nuclear steam supply systems.

On 13 January, a plenary session of the CCAP reviewed the draft order concerning nuclear pressure vessels.

On 1 March, the SPN reviewed:

- EDF strategy for in-service supervision of main secondary system protection valves on pressurised water reactors;
- the request for a waiver to the order of 10 November 1999 presented by EDF and concerning performance of a detailed inspection 30 months after replacement of the steam generators at Fessenheim 1.

On 26 April, the SPN reviewed the design options for the EPR reactor control cluster mechanisms.

On 24 May, the SPN reviewed:

- the request for a waiver to the order of 10 November 1999 presented by EDF and concerning early performance of certain checks in the complete inspection carried out for post-maintenance testing of the main secondary systems;
- the first part of the reference files produced by EDF under article 4 of the order of 10 November 1999.

On 21 June, the SPN reviewed the demonstration designed to show that a main primary and secondary pipe break in the EPR reactor is ruled out.

On 27 September, the members of the SPN held a working meeting to review the workings of the SPN and its relations with the rapporteur for the subjects brought before the section.On 18 October, the SPN reviewed:

- the justifications provided by EDF concerning the in-service behaviour of the 900 MWe reactor vessels;
- the second part of the EDF reference files, in application of article 4 of the order of 10 November 1999.

On 13 December, the SPN reviewed the design choices for the EPR vessel, vessel head and steam generators.

In a context of harmonisation of conventional and nuclear pressurised equipment regulations, reforms are planned for the expert bodies placed at the disposal of the Ministry for Industry. These reforms would include the creation of an Advisory Committee for nuclear pressurised equipment, which would issue technical recommendations on questions concerning this equipment. The CCAP would continue to deal with questions concerning the regulations.

2 | 4

The other leading supervisory players

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Parliamentary Office for the Assessment of Scientific and Technological Options (OPECST)

The Parliamentary Office for the Assessment of Scientific and Technological Options was created by law 83-609 of 8 July 1983. It is a parliamentary delegation comprising 18 deputies and 18 senators. Its composition is proportional to the political groups in each parliamentary assembly and was renewed followign the senatorial elections of 26 September 2004.

The role of the Parliamentary Office is to inform Parliament of the consequences of the scientific or technological options chosen, in particular so that it can make its decision in full possession of the facts. The Parliamentary Office is assisted by a Scientific Council comprising 24 members, with the composition of the Council reflecting the diversity of scientific and technical disciplines.

Since it was first set up, the Parliamentary Office has issued 23 reports on nuclear issues, including 11 dealing with supervision of the security and safety of nuclear installations.

In 1990, the highest instances of the *Assemblée Nationale* and the Senate, that is their respective Bureaux, commissioned a study from the Parliamentary Office into supervision of the security and safety of nuclear installations. Since then, Mr Claude Birraux, member of the *Assemblée Nationale* for the Haute-Savoie *département*, has been confirmed in this role, year after year, and has prepared 11 reports on the supervision of safety and security in nuclear installations, adopted by the Parliamentary Office between 1990 and 2001. Mr Henri Revol, Senator for the Côte-d'Or *département* and Chairman of the Office, published a report jointly with the Chairman Christian Bataille, member of the *Assemblée Nationale* for the Nord *département* concerning the environmental and health impacts of the nuclear tests carried out by France between 1960 and 1996.

In the field of nuclear safety, the Parliamentary Office concentrates on the organisation of safety and radiation protection within the French administration and by the licensees, on the structures adopted in other countries, on the adequacy of the resources given to the ASN for the performance of its duties and on the leading nuclear safety and radiation protection issues. The studies carried out by the Office have also concerned the working of the administrative structures, technical subjects such as management of radioactive waste, the life of nuclear reactors, as well as socio-political issues such as the conditions in which information about nuclear matters is disseminated and perceived.

The report by Mr Christian Bataille, member of the *Assemblée Nationale* for the Nord *département*, and Mr Claude Birraux, member of the *Assemblée Nationale* for the Haute-Savoie *département*, entitled "The long-term view: a radioactive waste sustainable management law in 2006", was drafted in response to the request from the Chairmen of the four political groups in the *Assemblée Nationale* for "a statement on the progress of and prospects for research into radioactive waste management". The report was adopted by the Parliamentary Office on 15 March 2005, unanimously minus one vote.

The report by Messrs Bataille and Birraux follows on from the 10 reports published by the Parliamentary Office dealing with radioactive waste, the first of which - adopted in December 1990 - heavily influenced the law of 30 December 1991 concerning research into radioactive waste management.

The preparation of this report mobilised the full resources of the Parliamentary Office. Missions to the United States, Finland, Sweden, Switzerland, Belgium and Germany, during the course of which the rapporteurs had discussions with 180 people, painted a picture of the research and actual implementation situation in these six major nuclear countries. In France, the rapporteurs visited research installations and during these visits, and a number of private hearings, met more than 70 scientists and officials. The rapporteurs also met elected officials from the Haute-Marne and Meuse *départements* as well as from the Champagne-Ardenne and Lorraine regions.

Three full days of public hearings were held in late January - early February 2005, each of which was devoted to one of the three areas of the 1991 law. 73 speakers, including 15 international experts and two Nobel prize-winners, presented the results of the research in detail, during sessions that were open to the press and broadcast live over the Internet. The audience was nothing if not eclectic, with all trade unions, environmental protection associations and consumer associations being invited.

The March 2005 report from Messrs Bataille and Birraux was based on a full and detailed survey and was sent out in several thousand copies. It presented an overview of the available research results and a set of recommendations paving the way for a 2006 law on sustainable management of radioactive waste.

The Parliamentary Office recommends an overall approach dealing with information, research, spin-offs, management methods, the principles underpinning the radioactive waste management policy, financing and ANDRA.

The Parliamentary Office therefore proposes seven objectives for the 2006 law. Information about the results of research into radioactive waste management must be improved at all levels, whether local, national or international. Research into the three areas of the 1991 law must continue under the impetus of Parliament and in preparation for the assessments scheduled at regular intervals. Local and national exploitation of the research resulting from the 1991 law is a valuable source of data for scientific, university and industrial use. Three decisions of principle concerning the use of transmutation, geological disposal and long-term storage must be taken by the law, along with a schedule of decisions required of the public authorities. The national plan for management of radioactive waste and reusable materials, an essential general framework, must be enshrined in law. The very long-term guaranteed financing of research and industrial management of radioactive waste could be strengthened by the creation of a dedicated fund. Finally, ANDRA will have to be strengthened to deal with its new duties.

Following the adoption of their report in March 2005, Messrs Bataille and Birraux took part in numerous meetings in France and abroad (United Kingdom and United States), during which they presented the recommendations from the Office in this field.

The Parliamentary Office will be present during the debate on the bill announced by the Government for early 2006, with the rapporteurs attending hearings with the competent commission(s). The MPs who are members of the Office will personally propose amendments, as necessary,

as was already the case during the Parliamentary debate on the energy bill, based on other work by the Office, which led to the law of 13 July 2005, setting energy policy guidelines.

Similarly, on the basis of work done on the subject of nuclear safety, the Parliamentary Office will be closely involved in the debate on the bill concerning nuclear safety and transparency. Its chairman, Mr Henri Revol, Senator for Côte-d'Or, has already been appointed rapporteur to the Senate for this bill. The text will then be examined by the *Assemblée Nationale*.

2 | 4 | 2

Consultative bodies

a) The High Council for Nuclear Safety and Information (CSSIN)

The High Council for Nuclear Safety and Information (CSSIN) created by decree 87-137 of 2 March 1987 amending decree 73-278 of 13 March 1973 provides the ministers responsible for nuclear safety with a highly competent consultative organisation for all issues concerning nuclear safety and information of the public and the media.

It brings together prominent personalities from widely different walks of life, comprising parliamentarians, personalities selected for their scientific, technical, economic or social competence, information or communication experts, members of representative trade unions and associations for the protection of the environment, representatives of the licensees and members of the governmental departments concerned (Prime Minister, ministries for Defence, the Environment, Industry, the Interior, Health, Labour).

The Council provides the ministers responsible for nuclear safety with recommendations deemed appropriate in the interests of the greater efficiency of the overall efforts pursued in the field of nuclear safety and information. The CSSIN may decide to entrust the investigation of specific topics to working parties, where necessary requesting the assistance of outside personalities. The ASN keeps the CSSIN informed of its actions, in particular those concerning nuclear information, sends it its annual nuclear safety and radiation protection report and provides it with secretarial services.

The interministerial order of 27 May 2005 appointed Mr Michel Van der Rest as Chairman of the CSSIN. He was formerly assistant director of the École Normale Supérieure in Lyons and is currently director of the Life Sciences department at the CNRS. The CSSIN met in its new configuration on 28 September 2005.

b) The Interministerial Commission for Basic Nuclear Installations (CIINB)

The Interministerial Commission for Basic Nuclear Installations (CIINB), set up by decree 63-1228 of 11 December 1963, as modified, concerning nuclear installations, must be consulted by the ministers responsible for nuclear safety on the applications for BNI authorisation, modification or final shutdown decrees and on the individual requirements applicable to each of these installations. It is also required to give its opinion on the drafting and application of general BNI regulations. An internal Standing Section has full competence in the name of the Commission to issue the opinions specified in article 3 bis of above-mentioned decree 63-1228 and opinions on the authorisation applications required under article 6 of the same decree, in the event of a change in licensee, modifications likely to lead to non-compliance with the requirements, or a modification of the boundary of the installation.

In 2005, the Commission, which is required to meet regularly and at least once a year, held five sessions under the chairmanship of Mr Yves Galmot, Honorary section chairman of the Council of State. These sessions discussed 16 draft regulations.

The CIINB is chaired by Mr Yves Galmot and at the end of 2005 comprised representatives of the French administration, the CEA, the CNRS, EDF, the IRSN, and personalities chosen for their particular competence in the nuclear field. In order to increase its efficiency, reorganisation of the CIINB was initiated in 2005 when decree 63-1228 of 11 December 1963 was revised.

Secretarial services are provided by the ASN.

c) The French High Public Health Council (CSHPF)

The French High Public Health Council (CSHPF) is a consultative body of a scientific and technical nature, reporting to the Minister for Health and competent in the field of public health.

It is responsible for issuing opinions and recommendations and for predicting, evaluating and managing health hazards. Without prejudice to the legislative and regulatory provisions making consultation of the CSHPF mandatory, the Minister for Health or any other minister may submit any draft legislation or regulations, draft administrative decisions and any question within its area of competence to the Council.

The CSHPF comprises four sections (water, communicable diseases, natural environments, radiation protection), each comprising 23 members appointed by order of the Minister for Health, with a 5-year mandate. The opinions of the sections are issued in the name of the CSHPF and published in the official bulletin of the Ministry for Health.

Although the CSHPF is a long-standing institution, the radiation protection section was only created in 1997 (decree 97-293 of 27 March 1997). Its membership was renewed by an order of 20 September 2002. The section's activity reports for the years 1997 to 2002 are available on the ASN web site.

A standing committee ("Ionising radiation sources" committee) reporting to the radiation protection section, was also created by the order of 27 January 2004 creating a "Ionising radiation sources" committee within the radiation protection section of the French High Public Health Council. Its main role is to propose opinions or recommendations on all subjects dealing with radiation protection and linked to the use of ionising radiation sources, with the exception of questions concerning the protection of persons exposed for medical purposes, and to take part in drafting regulations and technical instructions on this subject.

Chaired by Mr André Aurengo, the radiation protection section comprises members nominated on proposals from the national academy of medicine, the national academy of pharmaceuticals, the academy of sciences, the national medical council, the national pharmacists council, the national veterinarian council, the CEA and the INSERM, as well as personalities chosen for their particular competence.

Secretarial services are provided by the ASN.

In the first quarter of 2006, the CSHPF will be replaced by the High Council for Public Health, created by law 2004-806 of 9 August 2004 concerning public health policy. During the last two years of operation, the radiation protection section will have examined most regulatory texts prepared by the ASN for transposition of community directives and published four opinions and a report that can be accessed on the CSHPF website (sante.gouv.fr).

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High Health Authority (HAS)

The High Health Authority, which is a key element in the new French public health landscape, is an independent scientific public organisation. It was created by law 2004-810 of 13 August 2004 concerning health insurance. The High Health Authority is responsible for:

Meetings of the CIINB in 2005

29 April	• Draft decree authorising the Société industrielle de combustible nucléaire to carry out decommissioning and dismantling of basic nuclear installation No. 65 known as the nuclear fuel fabrication plant at Veurey-Voroize (Isère *département*) • Draft decree authorising the Société industrielle de combustible nucléaire to carry out decommissioning and dismantling of basic nuclear installation No. 90 known as the pellet fabrication shop at Veurey-Voroize (Isère *département*). • Draft decree authorising the Commissariat à l'énergie atomique to carry out decommissioning and dismantling of basic nuclear installation No. 52 known as the enriched uranium shop at Saint-Paul-Lez-Durance (Bouches-du-Rhône *département*). • Draft decree authorising la Compagnie générale des matières nucléaires to carry out decommissioning and dismantling of basic nuclear installation No.134 known as the uranium store at Istres (Bouches-du-Rhône). • Draft decree modifying decree 63-1228 of 11 December 1963, as modified, concerning nuclear installations.
11 May	• Draft decree concerning the final stage in decommissioning and complete dismantling of basic nuclear installation No. 91, known as the 1200 MWe fast neutron nuclear reactor at Creys-Malville, referred to as Superphénix, in Creys-Meypieu (Isère *department*). • Draft decree modifying the decree of 24 July 1985 authorising the creation by the Société centrale à neutrons rapides S.A. (Nersa) of the shop for removal of fuel from the Creys-Malville nuclear power plant (Apec). • Draft decree authorising the Commissariat à l'énergie atomique to create a basic nuclear installation No. 165, called Procédé, to replace basic nuclear installations No. 57 and 59, and to carry out decommissioning and dismantling of this installation in Fontenay-aux-Roses (Hauts-de-Seine *département*). • Draft decree authorising the Commissariat à l'énergie atomique to create a basic nuclear installation No. 166, called Support, to replace basic nuclear installations No. 34, 57 and 73, and to carry out decommissioning and dismantling of this installation in Fontenay-aux-Roses (Hauts-de-Seine *département*).
2 June	Session of the standing section: • Draft decree modifying the decree of 2 March 1978 authorising the creation by the Société franco-belge de fabrication de combustibles of a nuclear fuel fabrication unit (BNI No. 98) on the Romans-sur-Isère site (Drôme *département*). Plenary session: • Draft order concerning nuclear pressure vessels.
6 July	Session of the standing session: • Draft decree modifying the decree of 4 September 1989 authorising the Commissariat à l'énergie atomique (i.e. ANDRA) to create a radioactive waste disposal facility at Soulaines-Dhuys and La Ville aux Bois (Aube *département*) • Draft decree modifying decree 96-761 of 27 August 1996 authorising the Société pour le conditionnement des déchets et des effluents industriels to create a basic nuclear installation, known as Centraco (BNI no. 160), in Codolet (Gard *département*) Plenary session: • Draft decree authorising Louis Pasteur University in Strasbourg to carry out decommissioning and dismantling of basic nuclear installation No. 44, known as the Strasbourg university reactor, located in Schiltigheim (Bas-Rhin *département*). • Draft decree authorising Electricité de France to carry out decommissioning and dismantling of basic nuclear installation No. 162, known as EL4-D, an installation for interim storage of equipment from the monts d'Arrée nuclear power plant.
10 November	• Draft order modifying the order from the Minister for the Economy, Finance and Industry and the Minister for Regional Planning and the Environment of 31 December 1999 setting the general technical regulations designed to prevent and limit detrimental effects and external risks resulting from the operation of basic nuclear installations.

-assessing the medical usefulness of all health procedures, services and products covered by the social security health insurance;
-carrying out health institution certification;
-promoting good practices and good use of care among health professionals and the general public.

The High Health Authority takes over the duties of the National Health Accreditation and Evaluation Agency (Anaes), the Transparency Commission and the Products and Services Assessment Commission, and has been assigned new functions.

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Public health and safety agencies

a) The French Health Monitoring Institute (InVs, www.invs.sante.fr)

The French Health Monitoring Institute is a state institution under the authority of the Minister for Health. It is responsible for permanently monitoring and observing the health of the population, and for collating, analysing and updating knowledge of health risks, their causes and trends, and for detecting any event modifying or likely to alter the health of the population. Finally, it is responsible for taking all steps necessary to identify the causes of a change in the state of health of the population, particularly in an emergency situation.

More particularly with respect to monitoring of cancers likely to be linked to ionising radiation, The InVS proposes and implements appropriate monitoring systems, for example the system for monitoring thyroid cancers, and particularly the national registers (leukaemia register, child cancers register, etc.). The InVS is also competent in assessment of epidemiological risks and surveys. The InVS/IPSN report on the assessment of risks in France linked to fallout from the Chernobyl accident and the ongoing survey on risk factors involved in the increased risk of thyroid cancers are two examples.

b) The French Health Product Safety Agency (AFSSAPS – www.afssasp.sante.fr)

The French Health Product Safety Agency is a state institution under the authority of the Minister for Health. It takes part in implementing laws and regulations concerning all activities affecting health products intended for use by man, as well as cosmetic products, and in particular drugs, biomaterials and medical devices, in-vitro diagnostic medical devices, including those using ionising radiation.

With regard to health products generating radiation, the AFSSAPS issues radiation protection authorisations for distribution of radio-pharmaceuticals and medical devices emitting ionising radiation (radioactive sources, electric equipment generating X-rays, and so on). It is also responsible for organising supervision of medical devices and in particular issues certification for the organisations in charge of this supervision and defines the corresponding reference frameworks for each equipment category.

In 2005, the AFSSAPS and the ASN collaborated in particular on technical analysis and public communication concerning the medical incidents which occurred in the Joliot-Curie hospital in Orsay (Ile-de-France region) and the Grenoble university hospital).

c) The French Food Product Safety Agency (AFSSA, www.afssa.fr)

The French Food Product Safety Agency is a state institution under the authority of the ministers for Agriculture, Consumer affairs and Health. Its role is to help to guarantee health safety in the field of food products, from production of raw materials up to distribution to the end-user. It evaluates the possible health and nutritional risks of the food products intended for humans and animals, includ-

ing those which could come from water intended for human consumption. In the field of ionising radiation, the AFSSA's role is to issue opinions concerning the radiological quality of foodstuffs and water intended for human consumption, in particular in an accident or post-accident situation.

d) The French Agency for Environment and Labour Health Safety (AFSSET, www.afsset.fr)

The French Environmental Safety Agency became the French Agency for Environment and Labour Health Safety in 2005 (ordinance 2005-1087 of 1 September 2005).

The French Agency for Environment and Labour Health Safety is a state institution under the authority of the ministers for the Environment and Health. Its role, with the aim of protecting human health, is to help guarantee public health safety in the environmental field and to evaluate health risks linked to the environment.

The AFSSET's contribution to appraisal work in the field of ionising radiation, as well as the links to be created with the IRSN and the InVS, has yet to be clarified.

2 | 4 | 5 Other consultative bodies

In application of the regulations, the ASN is either Chairman or Secretary for several consultative committees:

- the national Committee responsible for examining certification applications by organisations carrying out radon measurements in premises open to the public;
- the national Committee responsible for examining certification applications by organisations measuring radioactivity in the environment;
- the national consultative committee for radiological monitoring of the environment.

3 OUTLOOK

The 2002 institutional reform led to nuclear safety and radiation protection being combined within the ASN. The ASN scope was extended to include, besides nuclear installations, local nuclear facilities, including the research and medical sectors.

The inventory of equipment now supervised by the ASN is one of the world's largest and most diverse. It in particular comprises standardised nuclear reactors which produce most of the electricity consumed in France, all the fuel cycle installations, research installations and plants that are virtually without equivalent in the world.

The ASN also aims to develop a broad vision of its scope of supervision: in the field of nuclear safety, it takes account of material aspects and organisational and human factors. In radiation protection, it monitors the impact of activities on both people and the environment and ensures that there is clear, exhaustive and safe management of radioactive waste.

The ASN's role is to provide effective, relevant and transparent nuclear supervision, ensuring continuous progress. The ASN thus bears responsibility for the major issues facing the population and the environment. Nationally, it is responsible for protecting and informing the citizens, while internationally it is required to act as one of the world's leading nuclear safety authorities, sharing its work with

its peers and taking account of nuclear safety and radiation protection principles employed worldwide.

The ASN's goal is to offer effective, legitimate, credible nuclear supervision that is recognised by the citizens and constitutes an international reference.

In 2006, the ASN will continue its radiation protection organisation work, which has been in progress since 2002. It will in particular take part in setting up the specialist committees of the High Council for Public Health which are to examine the questions of health and ionising radiation. At the same time, the ASN envisages creating a radiation protection advisory committee similar to those created in the field of nuclear safety.

With the aim of ensuring permanent progress of its nuclear safety and radiation protection supervision work, the ASN will at the end of 2006 submit to an international audit by its peers, run by the IAEA. The conclusions of this audit will be made public.

Finally, the ASN will play an active role in the government's work to modify its status, leading to the creation of an independent administrative authority responsible for supervising nuclear safety and radiation protection.