## **EDITORIAL**



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he regulation of nuclear safety and radiation protection in France is a major issue. In order to carry out this regulation under optimum conditions, the Nuclear Transparency and Security Act (TSN) of 13 June 2006 introduced a new legal framework and established the Nuclear Safety Authority (ASN), an independent administrative authority.

ASN, run by a five-member commission, regulates the whole of the sector, acting in a completely impartial manner. The ASN Commission presents its report on the state of nuclear safety and radiation protection in France in 2008, the second such report since the TSN Act came into force.

The mission of ASN, on behalf of the State, is to regulate nuclear safety and radiation protection in France, in order to protect workers, patients, the public and the environment from the hazards involved in nuclear activities and to contribute to informing the citizens.

The legitimacy and credibility of ASN are based first of all on its independence, defined by its statutes and embodied by the five member Commission: appointed for six years, they cannot be removed from office and receive no instructions from the government or any other institution. This legitimacy is also based on the other values embodied by ASN: the rigour that it demands of its staff as

well as of those it regulates; the competence of its trained and qualified teams; transparency, with the tools that it has developed to listen to and communicate with all the stakeholders.

After more than two years of application of the TSN Act, ASN has naturally been guided by the principles defined by the Act, but perhaps more significant is its successful implementation of a new way of working with high added value. The Commission defines the policy of ASN. It adopts positions on fundamental issues. It holds periodic hearings with the directors of the major nuclear operators and meets persons working in the sector. It makes the major decisions and approves the penalty policy. It makes its decisions in a collegial manner, after discussion between the members to take account of all aspects of the issues. The ASN departments examine requests and draw upon the high-quality technical expertise of the Institute for Radiation Protection and Nuclear Safety (IRSN). This system provides a clear formal framework for the decisions for which ASN is responsible and allows it to make these decisions fully independently. However, independence does not mean isolation, and ASN is working to develop its relations with the stakeholders, for example through the local information committees (CLI) and the national association of local information committees (ANCLI). It considers that it has a duty to report: that is why it will present this 2008 annual report, like the previous annual

report, to the Parliamentary Office for the Evaluation of Scientific and Technological Choices (OPECST), a joint body of the National Assembly and the Senate.

In addition to defining overall strategy, the Commission has wanted to continue discussion and action on topics that are going to determine its development and its policy and are backed by each of its members: Europe, international affairs and the new positioning of ASN; research and promotion of key subjects in nuclear safety and radiation protection; transparency and the means to provide credible and comprehensible information; the medical field and the means to ensure the safety of the growing use of ionising radiation for diagnosis and treatment purposes; the mechanisms for funding ASN linked with its independence.

The new status of ASN has contributed much to its actions: stronger positions on the important issues, new initiatives for transparency, legal powers to impose penalties in the case of non-compliance with licences, and better time management, with the ability to respond immediately in emergency cases and a long-term approach for the difficult issues that need it.

2008 thus saw full application of the TSN Act and application of the Act of 28 June 2006 on sustainable management of radioactive materials and waste. The incidents in July 2008 on the Tricastin site have generated a great deal of attention from the public, confirming the very high level of sensitivity to the regulation of nuclear safety and radiation protection and the necessity for substantial transparency. ASN welcomes the analysis of these incidents conducted by the High Committee for Transparency and Information on Nuclear Safety (HCTISN). The year was relatively satisfactory in terms of nuclear safety, but strong action was needed to ensure that the operators maintain the necessary rigour. The situation remained delicate in the area of smallscale nuclear activities: ASN inspections continued, and most medical establishments have made genuine efforts, but the situation is still very mixed.

Among the notable elements of its policy, the ASN Commission – as it had announced last year – decided to adopt a public position on the conditions of construction of nuclear plants in new nuclear countries. In order to maintain global safety, the Commission considers that it is essential to make such countries aware of their responsibilities and to plan a stepwise approach to establishing independent authorities in them. It must be realised that it will then take fifteen years or so before the startup of a power reactor.

In the area of informing the citizens, ASN decided, with effect from July 2008, to publish the follow-up letters to its

inspections of radiotherapy centres, starting to practise in the medical field the transparency that it applies already to nuclear safety.

Another sign of ASN rigour was the suspension of construction work on an EPR reactor at Flamanville, in the Manche département, because of inadequate quality management. Work resumed only after three weeks, when EDF had reinforced the effective application of its quality system.

In 2009 the Commission will continue to develop the action of ASN while maintaining the same values.

The ASN priorities are set out below:

- ASN will continue the reinforcement of its action for transparency and informing the citizens. After the publication since 2002 of the follow-up letters to the inspections that it conducts in nuclear installations, and that of the follow-up letters to its inspections of radiotherapy installations since 2008, its objective is to publish all the inspection follow-up letters for all the activities using ionising radiation. In 2009 ASN will also issue the opinions of the advisory committees of experts on which it has based its most important decisions. This means that everyone who wishes will have access to the actual information used in the ASN's decision-making process. More generally ASN, which applies the transparency rules to itself, will make sure that they are applied effectively by the operators that it regulates. The TSN Act makes these operators responsible for the communication of any requested information to the persons who wish to obtain it.

- In 2009 the French nuclear plant fleet will be faced with a major issue: the service life of the plants, as the oldest of them approach 30 years. The first reactors of the 900 MW series, such as Tricastin 1 and Fessenheim 1, will soon be undergoing their third ten-year inspection. ASN will examine the safety review files of these installations and the results of in-depth inspections of the main equipment items. It will subsequently decide whether their operation should continue and, in the case of continuation, what changes should be incorporated in order to improve their level of safety. More generally, it is important to take a forward-looking approach to the generic issue of plant service life, and ASN expects of EDF that it contributes to the discussion on this issue with technical information rather than by announcements. Another issue will be related to the continuation of the nuclear programme in France. The government has announced the construction of a second EPR at Penly (Seine-Maritime département). The State has also acknowledged the intent of GDF SUEZ to own and operate a future EPR in France. ASN considers that this possibility can contribute to improving the safety of French nuclear plants, as long as the new operator has satisfactory technical and financial resources – which ASN will verify – and will be able to introduce new working methods with a strong safety policy.

- In the medical sector ASN has two concerns. The first is radiotherapy, which is a beneficial medical technique. However, this is still a difficult period for the radiotherapy centres, with a severe shortage of personnel, in particular radiation physicists (persons specialised in medical radiophysics, or PSRPM). ASN considers that the practical measures for training new radiation physicists are unsatisfactory and that the time necessary to have sufficient numbers available is much too long. A difficult transition period will have to be managed for several years, with the involvement of the healthcare establishments and the National Cancer Institute (INCa), under the responsibility of the Minister for Health. The second concern is the growing use of ionising radiation for disease diagnosis and treatment, which generates the risk of an uncontrolled increase of collective doses. ASN considers that this use of ionising radiation must be safe for sector personnel and for patients.

– The security of radioactive sources, in particular sealed sources – which can be used with malicious intent by dissemination or by irradiation – must be improved. The tracking and protection measures to be implemented for this are similar to those implemented for radiation protection. In almost all other countries the nuclear safety authority carries out this mission. ASN has proposed to the government that, for reasons of efficacy, it be designated as competent authority for the security of radioactive sources, on condition that it receives the necessary resources and is able to apply its transparency rules to inform the public.

- In view of the increasing globalisation of nuclear safety issues, ASN will involve itself to an even greater extent in the harmonisation of international safety and radiation protection rules and practices. ASN - which regulates the second-largest nuclear fleet in the world, after the United States - intends to remain a world benchmark, and has undertaken a deliberation on the means to promote the adoption of its doctrine in other countries. This means devoting substantial resources to harmonisation, with participation in multilateral bodies (IAEA, NEA, WENRA and ENSREG, the latter succeeding the High Level Group) and with bilateral actions. 2009 will be important for the finalising of the draft European directive on nuclear safety, proposed under the French presidency of the European Union, and for the convergence by 2010 of the various countries on the WENRA safety rules for existing power reactors. Partnerships with our safety authority counterparts will be particularly strengthened through personnel exchanges with the United Kingdom, the United States and Spain. Lastly, ASN responds to requests

for assistance, either from safety authorities of countries preparing their access to nuclear energy or from authorities wanting to obtain expertise on reactors such as the EPR with which they are not familiar.

Over the last two years ASN has demonstrated its capacity to provide enhanced regulation of nuclear safety and increased transparency. Its ambition is to provide efficient, impartial, legitimate and credible nuclear regulation, recognised by the citizens and regarded internationally as a benchmark for good practice. The Commission has worked to affirm the new status of ASN as an independent administrative authority. The ASN staff have made a strong contribution to this performance through their competence and their involvement. ASN's technical support organisation, the IRSN, has also contributed its vital know-how and the abilities of its teams.

The stakes remain very high for 2009. Our strategy aims to affirm the primacy of ASN's values of independence, rigour, competence and transparency, with two very clear objectives: continue to improve nuclear safety levels, and provide stakeholders with the information they want to have in order to form an opinion on the state of nuclear safety and radiation protection in France.