

INTERNATIONAL RELATIONS

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CHAPTER 7

1 ASN OBJECTIVES IN EUROPE AND WORLDWIDE

The range of nuclear installations regulated by ASN is one of the world's largest and most diverse. ASN therefore devotes considerable efforts to international relations with its foreign counterparts.

1 | 1 ASN international actions

Article 9 of the TSN Act states that "The Nuclear Safety Authority sends the Government its proposals to define the French position in international negotiations in the fields of its competence" and that "it participates, on request by the Government, in the French representation in the bodies of international organisations and of the European Communities competent in these fields". Finally, the Article states that "To implement international agreements or European Union regulations relative to radiological emergency situations, the Nuclear Safety Authority is empowered to warn and inform the authorities of third States or to receive their warnings and information". These legislative arrangements underpin the legitimacy of ASN's international actions.

ASN is thus required to devote considerable resources to cooperative work, both in a multilateral and EU context and as part of bilateral agreements with its foreign counterparts, with the aim of contributing to strengthening the culture of safety and radiation protection around the world, and with the goal of becoming recognised as an "international benchmark".

1 | 2 Actions in Europe

Europe is the main focus of international action by ASN, which thus aims to contribute to building a Europe that is at the forefront of nuclear safety, the safe management of waste and spent fuel and radiation protection.

Through the work of WENRA (Western European Nuclear Regulators' Association), an informal club created in 1999 at the initiative of the ASN Chairman, which today comprises the heads of all the regulatory bodies of the expanded European Union and Switzerland, harmonisation of safety rules for reactors in operation in Europe should be effective in 2010. In 2009, the association's meetings were opened to the regulators of the ten European countries which do not have NPPs.

In 2008, ENSREG (European Nuclear Safety Regulator Group, previously known as the High-Level Group - HLG), comprising the heads of the European Union's

nuclear regulators, was created at the initiative of the Council of Europe in March 2007. Based on guidelines defined by the Council of Ministers, it began to review safety, management of waste and spent fuel and transparency in the nuclear sector in Europe. This work received particular support from the French presidency of the European Union (second half of 2008), during which the initial debates on a nuclear safety directive were held. This directive, finally adopted on 25 June 2009, constitutes a binding EU framework for nuclear safety and contributes to harmonising the safety requirements of the Member States. ENSREG also submitted its first activity report in July 2009. This report was presented to the Council of Ministers and the European Parliament.

In the field of radiation protection, the work done by HERCA (Heads of European Radiation Control Authorities) strengthened European cooperation. Significant progress has been made by this committee and its working groups since it was created in 2007.

In the European bilateral context, ASN strengthened its ties with countries which announced their intention of building new plants in order to provide safety and radiation protection assistance with future decisions and those already taken. ASN therefore makes efforts to share its experience of licensing new EPR type reactors with the nuclear regulators of these countries and to support those countries which do not yet have such a regulator, with the essential process of creating one. It maintains close ties with a large number of countries, in particular neighbouring countries.

1 | 3 Harmonisation of nuclear safety worldwide

Outside Europe, a large number of initiatives have been taken to harmonise nuclear safety practices and regulation.



Signing of a cooperative agreement between the Finnish nuclear regulator (STUK), represented by its Director General Mr Laaksonen and ASN, represented by its Chairman, Mr Lacoste, on 26 January 2009 in Paris

Table 1: table of area of competence of the main civil nuclear activity regulating authorities

	Status			Activities						
Country/ Safety authority	Adminis- tration	Government agency	Independent agency	Safety of civil installations	Radiation protection			Safety (protection against vandalism and malicious acts)		Transport safety
					BNI	Other installations	Patients	Sources	Nuclear materials	
Europe										
Germany/ BMU + Länder	•			•	•	•	•	•	•	•
Belgium/ AFCN		•		•	•	•	•	•	•	•
Spain/ CSN			•	•	•	•	•	•	•	•
Finland/ STUK		•		•	•	•	•	•		•
France/ ASN			•	•	•	•	•			•
United Kingdom/ HSE/ND		•		•	•			•	•	•
Sweden/ SSM		•		•	•	•	•	•	•	•
Switzerland/ ENSI			•	•	•				•	•
Other countries										
Canada/ CCSN			•	•	•	•	•	•	•	•
China/ NNSA	•			•	•	•		•	•	•
Korea/ MOST	•			•	•	•			•	•
United States/ NRC			•	•	•	•	•	•	•	**
India/ AERB		•		•	•	•	•	•	•	•
Japan/ NISA + NSC + MEXT	•			•	•	•	•	•	•	
Russia/ Rostekhnadzor	•			•	•			•	•	•

*This table gives a schematic, simplified representation of ASN's current knowledge of the main areas of competence of the entities (administration, government agency or independent agency) responsible for regulating nuclear activities in the world's leading nuclear countries.

**Domestic transport only.

Within the International Atomic Energy Agency (IAEA), ASN plays an active part in the work of the Commission on Safety Standards (CSS) (see point 2|2) which is drafting international standards for the safety of nuclear installations, waste management, the transport of radioactive materials and radiation protection. Although not legally binding, these standards do constitute an international reference, including in Europe. The ASN Chairman has been the Chairman of the CSS since 2005.

ASN is also very much involved in the IRRS (Integrated Regulatory Review Services) audit missions. It voluntarily underwent one of these audits in 2006 and its follow-up mission in 2009. It frequently takes part in the IRRS teams reviewing on other nuclear regulators.

The MDEP initiative

The US “Nuclear Regulatory Commission” (NRC) and ASN have been working closely for many years and took the initiative of launching an international project known as the “Multinational Design Evaluation Program” (MDEP) for joint evaluation of the design of new reactors. This programme, which was expanded to take in a large number of new partners around the world, and for which the OECD’s Nuclear Energy Agency (NEA) provides the secretariat, is currently focused on the safety assessment of the EPR and the AP1000. The initiative eventually aims to

harmonise the safety objectives, the codes and the standards associated with the safety analysis of a new reactor.

Assistance requests

In 2008, the ASN Commission defined the policy of the French nuclear regulator with regard to the assistance requests it receives. ASN analyses the nuclear safety situation in each country that contacts it for assistance with the regulatory infrastructure and the regulation of safety.

Assuming that, following this analysis, ASN was to conclude that safety could not be guaranteed, it may express reservations with regard to the suitability of the envisaged cooperation. In cases in which ASN does decide to go ahead with cooperation, it does so in order to enable the country concerned to acquire the independence and the safety and transparency culture essential to a national system of nuclear safety and radiation protection regulation such as to guarantee effective protection of man and the environment.

By taking part in a large number of international events and discussion forums dealing with nuclear safety and radiation protection issues, ASN, whose aim is to achieve recognition as an international benchmark for good practice, is at the forefront of promoting nuclear safety and radiation protection.

2 EU AND MULTILATERAL RELATIONS

2|1 European Union

With the Treaty setting up the European atomic energy community (Euratom) and its derived law, and with the work done by the WENRA association, the European Union is today at the very heart of the regulatory work being done in the field of nuclear safety and radiation protection. The European Union is among ASN’s top priorities, to the extent that in 2010, ASN will adopt an action plan dedicated to EU actions.

2|1|1 The Euratom Treaty

The Euratom Treaty enabled harmonised European development of a strict system of regulation of nuclear safety¹ (chapter 7) and radiation protection (chapter 3). In an order of 10 December 2002 (aff. C-29/99 Commission of European Communities against Council of the European Union), the Court of Justice, ruling that no artificial boundary could be established between radiation protection and nuclear safety, recognised the principle of the existence

1. In France, nuclear security as defined by the TSN Act covers civil security in the event of an accident and the protection of installations against malevolent acts, while nuclear safety is the safe operation of the installation and radiation protection, aiming to protect individuals and the environment against the effects of ionising radiations. For IAEA, nuclear security includes measures to prevent and detect theft, sabotage, unauthorised access, illegal transfer or other malevolent acts involving nuclear materials and other radioactive materials, or the associated installations, and the appropriate response in such cases.

of community competence in the field of nuclear safety, linked to chapter 3 of the treaty. ASN actions at European level contribute to the development of this new area of EU competence.

2 | 1 | 2 The European Nuclear Safety Regulators' Group (ENSREG)

On 30 January 2003, following the above-mentioned ruling by the European Court of Justice, the European Commission adopted two proposals for a directive, one defining general principles concerning installation safety, the other concerning the management of spent fuel and radioactive waste. It was however impossible for the Council of the European Union to adopt these two texts, commonly referred to jointly as the “nuclear package”, owing to opposition from several Member States.

At the invitation of the European Council in March 2007, a “High-Level Group” (HLG) on nuclear safety and waste management, subsequently renamed ENSREG, was created. ASN, which believes that nuclear safety principles and standards must be harmonised throughout Europe, is actively participating in this work in order to strengthen the extent to which nuclear safety and the safe management of radioactive waste and of spent fuel are taken into account in Europe. The ASN Chairman is a member of ENSREG. Three working groups, devoted to installations safety, the safe management of radioactive waste and of spent fuel and transparency in the nuclear sector were created. ASN is the Vice-Chair of the “installations safety” group and takes part in the other two working groups.

In 2008, ENSREG met six times, in particular to debate the timeliness of an EU instrument in the field of nuclear safety. During these debates, the ASN Chairman took the initiative of suggesting the terms of a possible nuclear safety directive, giving a tangible framework for the ongoing discussions. In autumn of 2008, the European Energy Commissioner, Andris Piebalgs, submitted a new draft directive to the members of ENSREG, and in December 2008 this was discussed by the Council of Ministers during the French presidency of the EU.

2 | 1 | 3 The European Directive on the safety of nuclear installations

The debate initiated in November 2008 under the French presidency on a directive “establishing a Community framework for the nuclear safety of nuclear installations” (2009/71/EURATOM) continued until 25 June 2009, when the Czech presidency of the EU concluded the debate on this important directive. The EU therefore now has a regulatory

framework for nuclear safety enshrined in community law. This directive in particular obliges all the member States of the EU (present and future) to implement a legislative framework for nuclear safety (Article 4) and to set up an independent regulatory authority (Article 5). It also defines the obligations of nuclear installation licensees (Article 6), stresses the question of the availability of skills and expertise (Article 7) and public information (Article 8). It also makes provision for a “peer review” system (Article 9) which, in accordance with the principles of nuclear safety, allows “continuous improvement” of practices in this field.

Although it takes the form of a “framework” directive laying down the broad outlines of nuclear safety, this regulatory text is of great importance, in that it finally puts an end to an absurd situation in which there was no European legislation on nuclear safety even though the EU, with the EURATOM Treaty, has enjoyed the most advanced nuclear legislation for more than 50 years and counts to nearly 150 nuclear reactors within the borders of its 27 member States. Another advantage is that its requirements are binding. The transposition of this directive into law in the 27 member States should be completed in July 2011.

2 | 1 | 4 The European working groups

ASN also takes part in the work being done by the Euratom Treaty committees and expert groups:

- scientific and technical committee (STC);
- article 31 experts group (basic radiation protection standards);
- article 35 experts group (checking and monitoring radioactivity in the environment);
- article 36 experts group (information concerning regulation of radioactivity in the environment);
- article 37 experts group (notifications concerning radioactive effluent discharges).

Finally, regular contacts with the European Commission (Directorate General for Transport and Energy - DGTREN in particular) are a means of reviewing progress and upcoming regulatory work in the several areas of nuclear safety and radiation protection: in particular transposition of directives into national law and the workings of the Euratom Treaty committees.

2 | 1 | 5 The western european nuclear regulators' association (WENRA)

The WENRA association was officially created in February 1999, the founder members being the heads of the nuclear regulatory bodies of Belgium, Finland, France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland

and the United Kingdom. The ASN Chairman was its first Chair for four years. Mrs Judith Melin (Sweden) succeeded him from 2003 to 2006, followed by Mrs Dana Drabova (Czech Republic) from 2006 to 2009. Jukka Laaksonen (Finland) is now the Chair.

Since 2003, the heads of the regulatory bodies of Bulgaria, the Czech Republic, Hungary, Lithuania, Romania, Slovakia and Slovenia have become members of the association.

In 2009, the heads of the regulatory bodies of the ten countries which do not have a NPP were, at their request, invited to take part in the association's meetings.

The objectives defined by the WENRA members when the association was created are:

- to provide the European Union with an independent appraisal capability for examining the issues of nuclear safety and its regulation in the countries applying for membership of the European Union;
- to develop a common approach to nuclear safety and regulation, in particular within the European Union.

The first of these tasks was successfully completed during the EU enlargements of 2004 and 2007.

With regard to the second task (harmonisation of national approaches to safety), WENRA created two working groups:

- the NPP group (see chapter 12) which, after being run by the British regulatory body, it now chaired by one of ASN's Deputy Directors General;
- the group dealing with spent fuel and radioactive waste management and decommissioning operations (see chapter 16), chaired by a member of the Swiss regulatory body.

In each of these fields, the groups began by defining the reference levels for each technical topic, based on IAEA's most recent standards and on the most demanding approaches employed within the European Union (and therefore, for all practical purposes, in the world).

After an initial pilot study into harmonisation of nuclear reactor safety in the founding countries, which demonstrated the pertinence and effectiveness of the methodology chosen, a process to assess national practices against these reference levels was then implemented.

In 2006, the members of WENRA developed national action plans for power generating reactors, designed to ensure that for all technical areas in which differences had been identified, national practices were brought into line with the reference levels defined in 2005. The objective is to harmonise national practices by the year 2010.

In 2008, in addition to continuing the work already under way, the association launched new work to harmonise safety objectives for the new reactors. For the longer term, the "reactors" group could also prepare for the possible harmonisation of safety objectives for the generation IV reactors. The possibility of expanding WENRA activities to research reactors and the problems involved in extending reactor operations are currently being discussed within WENRA.

ASN considers that all this work confirms WENRA's ability to carry out "bottom-up" technical harmonisation of nuclear safety, to complement any Community "top-down" initiatives of a political nature and more general scope (see points 2 | 2 | 1 and 2 | 1 | 2 above).

Finally, in 2008 and 2009, ASN made use of the network of its WENRA and ENSREG correspondents to ensure rapid and harmonised information of all its European partners with regard to several incidents that occurred in France and which received extensive media coverage (Tricastin, Mafelec, ATPu) or ASN interventions which were also widely reported (EPR instrumentation and control system).

2 | 1 | 6 The group of the Heads of the European radiation protection regulatory authorities (HERCA)

The national regulations constituting practical implementation of European radiation protection directives comprise significant differences for the same uses of ionising radiation sources, or in the vicinity of the same nuclear installation. This is for example the case with the distribution of iodine tablets to populations living near a nuclear installation.

ASN is therefore convinced that if rules and practices in Europe are to be harmonised, close collaboration is needed between those in charge of regulating radiation protection in Europe, in the same way as in the field of nuclear safety.

ASN organised an initial meeting of the heads of the European radiation protection regulatory authorities in Paris on 29 May 2007, followed by a second meeting on 19 May 2008. Given the success of these two meetings, the participants decided to meet more frequently. A third meeting was therefore held in Paris on 12 December 2008, under the Chairmanship of the head of the Norwegian radiation protection regulatory body.

Most of the EU Member States are represented at these meetings. They encouraged continuation of the work by

the five working groups created in 2007 and set up a new group to discuss the main radiation protection issues in Europe, which are as follows: radiation protection of itinerant workers and the “dosimetric passport”, intra-community transfers of radioactive sources and the justification for their use, the involvement of all stakeholders in medical practices, the position of the regulatory authorities faced with the development of new medical techniques using ionising radiations, harmonisation of the reference levels for response to an emergency situation and monitoring of the collective dose in the medical sector.

The six working groups reported on the progress made and the results achieved during the fourth HERCA meeting on 1 December 2009 in Paris, with Norway acting as chair. Of the many subjects of common interest, the members of HERCA in particular discussed with the European Commission the draft directive on basic standards, which should follow on from the “basic standards” directive of 1996. The decision was also taken to create a working group responsible for looking at improvements to the working of HERCA and how it could communicate better about its activities.

2 | 1 | 7 Multilateral assistance actions

As a consequence of the Chernobyl accident of 26 April 1986 and the opening up of the Soviet bloc, the G7 summit of July 1992 in Munich defined three priority areas for assistance to the countries of Eastern Europe in the field of nuclear safety:

- contribute to improving the operating safety of existing reactors;
- provide funding for short-term improvements to the least safe reactors;
- improve the organisation of safety regulation, making a clear distinction between the responsibilities of the different entities concerned and reinforcing the role and scope of local nuclear regulatory bodies.

Assistance programmes were set up by the European Commission to achieve these goals. They constituted the nuclear part of PHARE (Poland Hungary Assistance for Restructuring of the Economy), which were more particularly targeted at the candidates for accession to the European Union, and TACIS (Technical Assistance for the Commonwealth of Independent States) programmes, intended for the countries of the former Soviet Union.

These two programmes were replaced in 2007 respectively by the Instrument for Pre-Accession Assistance (IPA) and by the Nuclear Safety Cooperation of Instrument (IMSC) which covers all countries worldwide, with no geographical limits.

The European Commission set up the Regulatory Assistance Management Group (RAMG) to collect opinions and advice concerning the assistance requests submitted by third party countries. The nuclear safety and radiation protection regulatory bodies of the countries of the European Union are members of the group.

ASN is the coordinator for the programmes conducted in Ukraine, Kazakhstan and Egypt and took part in regulatory assistance projects for the Russian Federation, Ukraine and Kazakhstan.

These actions are supplemented by other international technical assistance programmes in accordance with the resolutions adopted by the G7 to improve nuclear safety in third party countries, and which are financed by contributions from donor States and the European Union.

ASN is thus a participant in the expert groups reporting to the EBRD (European Bank for Reconstruction and Development), responsible for managing multilateral funds to finance the following actions:

- delicensing of nuclear reactors in Bulgaria (Kozloduy 1 to 4), Lithuania (Ignalina 1 & 2), and Slovakia (Bohunice V1 1 & 2);
- installation of a new shelter for Chernobyl Unit 4, the origin of the April 1986 disaster and construction of interim storage and reprocessing installations respectively, for the spent fuel and waste still present on the site;
- dismantling of decommissioned Russian nuclear submarines and radiological clean-out of the White Sea military bases.

Finally, with regard to nuclear safety, ASN advises the French delegation to the Nuclear Safety and Security Group (NSSG) of the G8 (G7 + Russian Federation). It in particular took part in this group’s February, May and October 2009 meetings in Italy, the country which chaired the G8 in 2009.

ASN observed that significant progress had been made in the three priority areas defined by the G7 and that the regulatory authorities of the States which joined on the EU on 1 May 2004 had consequently reached a level which no longer required assistance.

However, in the States of the ex-USSR, the objective will not be reached for some time, due to the profound changes it implies: adaptation of the structures of the State itself, change in mentality to admit the independence of the nuclear safety authorities and thus underpin their credibility, reinforcement of their status and the resources at their disposal. In this respect, the reorganisation of the safety regulatory bodies which took place in Russia in 2008 is continuing to demand close scrutiny.

From 14 to 27 November 2009, an IRRS mission, including an ASN expert, was carried out in this country.

Finally, ASN is examining assistance with the creation of safety infrastructures at its main counterparts, particularly within the context of INRA (see point 2|5), with the concern once again to develop harmonised approaches taking account of the experience of all the authorities involved.

2|2 The International Atomic Energy Agency (IAEA)

IAEA is an organisation of the United Nations, with headquarters in Vienna (Austria). In December 2009, it comprised 150 member States. IAEA activities, which cover ASN's fields of competence, particularly consist in:

- **Organising discussion groups at different levels and preparing texts known as “Safety Standards”, describing safety principles and practices which can then be used by Member States as a basis for national regulations.**

This activity is supervised by the Commission on Safety Standards (CSS) set up in 1996. The CSS, made up of representatives from the highest level of the nuclear regulators of the twenty four member countries, appointed for four years, is tasked on the one hand with final approval of the safety standards following a long and rigorous validation process by the member States and, on the other, with proposing them to the IAEA Director General. France is represented on this Commission by a deputy Director General of ASN. At the beginning of 2008, the ASN Chairman was given a second term as Chair of the CSS. The 25th and 26th meetings of the CSS were held in 2009.

This commission coordinates the activities of four committees entrusted with supervising the drafting of documents in four areas: NUSSC (NUclear Safety Standards Committee) for installations safety, RASSC (RADiation Safety Standards Committee) for radiation protection, TRANSSC (TRANsport Safety Standards Committee) for the safe transport of radioactive materials and WASSC (WASte Safety Standards Committee) for safe radioactive waste management. France, represented by ASN, is present on each of these committees, which meet twice a year. Representatives of the various French organisations concerned also take part in the technical groups which draft these documents.

The “Safety Standards”, approved by the CSS and published under the responsibility of the Director General of IAEA, are contained in three types of documents: Safety Fundamentals, Safety Requirements and Safety Guides. In

2006, a single document laying out the fundamental principles for the four areas of safety was published after being approved by the CSS and adopted by the Board of Governors. The CSS then expressed its desire to see the lessons learned from this publication being applied to the lower level documents, safety specifications and guides, so that they can be developed in order to produce a whole approach that is complete, coherent and avoids redundancy. An eleven-point roadmap was produced accordingly in 2008. It is based on the decisions taken and measures adopted by the CSS to reach the goal of harmonisation and consistency of all safety standards. Two points in particular are worth mentioning: the integration of the ongoing revision of the “Basic Safety Standards”, which constitute the radiation protection specifications and the integration of nuclear security aspects. On this last point, the search for greater synergy between safety standards and safety guides was discussed at several meetings in 2009 between the CSS and the committee for nuclear installation safety, the AdSec group. A think tank, consisting of the Chairmen and 3 members of the CSS and the AdSec, met in the autumn of 2009 to define the short and medium-term objectives for enhancing synergy between the safety standards and the safety guides. The meetings of this small group will continue in 2010.

- **Setting up “services” made available to Member States and designed to give them opinions on specific aspects related to safety and radiation protection.**

This category includes the OSART (Operational Safety Review Team) and IRRS (Integrated Regulatory Review Service) missions.

In 2009, ASN also took part in several IRRS missions in Peru, Canada, Lebanon, the United Kingdom, Russia and Vietnam. ASN believes that systematic use of these reviews should help creating a network of experts from the regulatory bodies and contribute to harmonising practices.

From 23 March to 8 April 2009, the Fessenheim NPP received an OSART mission. Like all the other reports concerning OSART missions in France, the corresponding report will be published on ASN's website in English. The preparatory meeting for the OSART mission scheduled for the Saint-Alban NPP in 2010, was also held in September. The Chinon plant audit follow-up mission took place from 7 to 11 December, subsequent to the OSART mission in 2007.

Finally, ASN takes part in radiation protection courses in the regions and in the appraisal missions organised by IAEA, the main beneficiaries being French-speaking countries. In 2009, ASN took part in radiation protection actions for Morocco and Tunisia.

IRRS Mission – Integrated Regulatory Review Service

In November 2006, ASN had hosted an IRRS mission, a peer review coordinated by IAEA. In March 2009, ASN received the IRRS follow-up mission, during which the auditors evaluated the solutions adopted and how they were implemented in response to the recommendations and suggestions issued in 2006 for all ASN activity sectors: regulation of nuclear reactors, research installations, the medical sector, radiation protection of workers. Following their mission, the international experts concluded that ASN had offered a satisfactory response to 90% of the recommendations and suggestions made in 2006. They also underlined ASN's good practices, in particular its role in improving nuclear safety and radiation protection internationally, the relationships it had established at the national level to ensure effective regulation of nuclear safety and radiation protection and the effective implementation of the requirements of the Act on transparency and security in the nuclear field. A number of areas for improvement were identified, in particular in human resources management at ASN, monitoring of the appraisals carried out by the Institute for Radiation Protection and Nuclear Safety (IRSN) on behalf of ASN, and the action plan to be implemented as soon as ASN becomes responsible for regulating radioactive source security.



The members of the IRRS follow-up mission at ASN – March 2009

To supplement the work done on behalf of the French-speaking African countries, the Marseille and Nantes divisions each welcomed two interns for two weeks and introduced them to non-BNI radiation protection inspection experiences and practices.

– Harmonisation of communication tools.

Since 2002, ASN has been looking to develop a communication tool for dealing with radiation protection events. The existing INES scale was felt to be insufficient for communications dealing with exposure to ionising radiations, as its radiation protection classification criterion did not refer to the radiological risk, which is the basis of the current regulations. France therefore made a considerable contribution to revitalising the international consultation process in order to add a radiation protection criterion to the INES scale, enabling the radiation exposure dose or the received exposure volume to be linked to the gravity rating of a radiation protection incident or accident.

The French proposal led to adoption by the IAEA Member States of a new part of the INES scale concerning radia-

tion protection events, which takes account of radioactive sources and the transport of radioactive materials. The new version of the INES scale user's guide was published in June 2009 in English.

ASN hopes that this scale will eventually also include radiation protection of patients, in particular with a system for rating radiotherapy events. The ASN/SFRO scale, produced in collaboration with SFRO (see chapter 6) received a favourable assessment by the working group on the classification of events involving patients, created at the request of France. This working group comprises the IAEA Member States conscious of the stakes involved in radiation protection of patients: Belgium, Finland, France, Germany, Hungary, Japan, Spain, Ukraine and United States. This working group met in Paris in December 2008 and October 2009.

2 | 3 OECD's Nuclear Energy Agency (NEA)

The NEA, set up in 1958, comprises all the OECD member countries, except for New Zealand and Poland, or



M. Jaczko, Chair of the US Nuclear Regulatory Commission (NRC), Mr Lacoste, Chairman of ASN and Mr Echavarri, Director General of NEA, during the press conference on the harmonisation of nuclear safety around the world and the construction of new reactors (11 September 2009, Paris)

28 countries. Its main objective is to promote cooperation between the governments of the participating countries for the development of nuclear energy as a reliable, environmentally and economically acceptable energy source.

Within NEA, ASN takes part in the work of the Committee on Nuclear Regulatory Activities (CNRA), the Committee on Radiation Protection and Public Health (CRPPH), the Radioactive Waste Management Committee (RWMC) and a few working groups of the Committee on the Safety of Nuclear Installations (CSNI). ASN in particular took part in drafting the 2010-2014 strategic plan common to the CNRA and the CSNI.

Multinational Design Evaluation Program (MDEP)

The NEA also handles the MDEP secretariat. This programme is an international cooperative initiative to develop innovative approaches to pooling the resources and know-how of the regulatory bodies, who will have responsibility for regulatory assessment of new reactors.

This MDEP programme, which is built around safety, is a multinational cooperative forum working within the framework of power reactor safety cases and aimed at ensuring the harmonisation and implementation of safety standards. The ultimate goal of this programme is to improve protection of the public and the environment. An ASN agent was seconded to NEA and is responsible for part of the secretarial duties for the MDEP programme.

The MDEP organisation

The MDEP strategy committee and steering technical committee are responsible for implementing the MDEP. The work of the MDEP is performed by the Design Specific Working Groups for nuclear reactors and the Issue Specific Working Groups.

Two working groups were thus set up. One, in which Canada, China, the United States, France, Finland and the United Kingdom are members, is devoted to work on the EPR and the other, in which the United States, United Kingdom and China are members, is devoted to work on the AP1000.

Three working groups were set up for harmonisation of multinational inspection of nuclear component manufacturers, standards and codes concerning the pressure vessel and design standards for digital I&C.

MDEP activities

The MDEP strategy committee, comprising leaders of nuclear regulators from the ten participating countries and chaired by the ASN chairman, met at the beginning of 2009. During this meeting, the decision was taken not to increase either the number of participating countries or the number of subjects dealt with, in order to maintain the effectiveness of this initiative. Moreover, given the MDEP objectives and the work already started, the participants decided to extend the length of the programme to

five years. Finally, the first MDEP activity report, published in June 2009, is helping to improve the information delivered by the MDEP to the stakeholders, in other words the nuclear regulators which are not participants in the MDEP programme, the nuclear industry and the public.

In order to establish long-term dialogue with these stakeholders, an MDEP conference on new reactor design was organised on 10 and 11 September 2009 in Paris. This conference, which was chaired by members of the MDEP strategy committee, was an opportunity to present the initial results of the work done and debate with industry and nuclear regulators. The participants expressed considerable interest in this programme, which brings together a high-level network of experts and whose effectiveness must be maintained by defining clear objectives plus short, medium and long-term targets. The MDEP must also set up appropriate information channels aimed at the nuclear regulators, industry and the public. Following this conference, it was agreed that a similar one could be held in two years time.

2 | 4 The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)

The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) was created in 1955. It examines all scientific data on radiation sources and the risks these radiations represent for the environment and for health. This activity is supervised by the annual meeting of the national representations of the Member States, comprising high-level experts, and at which ASN is represented. The reports published by this scientific body, which constitute the international reference, cover subjects such as the hereditary effects of ionising radiations and the consequences of the Chernobyl accident.

2 | 5 The International Nuclear Regulators' Association (INRA)

The INRA association, which comprises the heads of the nuclear regulatory bodies of Canada, France, Germany,

Japan, South Korea, Spain, Sweden, the United Kingdom and the United States of America, met twice in 2009 (April and October) under the Chairmanship of Messrs. Byung Ryong Moon and Young-Chol Kang, successive Directors General of the atomic energy office of the South Korean Ministry for Education, Science and Technology. These meetings reinforced the leadership role of the association, whose members closely investigated a number of topics of importance for improving nuclear safety around the world. In April 2009 in particular, INRA adopted a stance on the problem posed by the import of metals contaminated by radioactive materials and drafted a letter on this topic for the attention of Dr Soda, the Chair of the review meeting of the Joint Convention on the safety of spent fuel management and on the safety of radioactive waste management.

In 2010, INRA will be meeting in London under the Chairmanship of the head of the British nuclear regulator.

2 | 6 The Association of nuclear regulators of countries operating French designed nuclear power plants (FRAREG)

The FRAREG (FRAmatome REGulators) association was created in May 2000 at the inaugural meeting held in Cape Town at the invitation of the South African nuclear regulator. It comprises the nuclear regulators of Belgium, France, the People's Republic of China, South Africa and South Korea.

Its mandate is to facilitate transfer of experience gained from regulation of the reactors designed or built by the same supplier and to enable the nuclear regulators to compare the methods they use to handle generic problems and evaluate the level of safety of the Framatome type reactors they regulate.

The sixth meeting of this association was held in South Africa in 2009. A particular topic of discussion during this meeting was the operating experience feedback from Framatome reactors over the past two years. The next meeting will be in 2011 in France.

3 BILATERAL RELATIONS

ASN works with many countries under the terms of bilateral agreements signed at various levels:

- governmental agreements (Belgium, Germany, Luxembourg, Switzerland);
- administrative arrangements between ASN and its counterparts (about twenty).

3|1 Staff exchanges between ASN and its foreign counterparts

Better understanding of how foreign nuclear safety and radiation protection regulators actually work is a mean of learning pertinent lessons for the working of ASN itself and enhancing staff training. One way to achieve this goal is to develop the staff exchange system.

The nuclear safety and radiation protection regulators involved so far have been those of Belgium, China, Finland, Germany, Hungary, Japan, Spain, Switzerland, the United Kingdom and the United States.

Provision is made for several types of exchange:

- Very short term actions (one to two days) are a means of offering our counterparts cross-inspections and joint nuclear and radiological emergency exercises. In 2009, thirty joint inspections in the field of nuclear safety and radiation protection were organised. They took place either in France, or in the countries inviting the ASN inspectors, in NPPs in Belgium, China, Finland, France, Germany, Japan, Spain and Switzerland. Some of these joint inspections also concerned radiotherapy activities in Switzerland and France. In addition, ASN took part in an emergency exercise in the United States.
- Short-term assignments (3 weeks to 6 months), aimed at studying a specific technical topic. A civil servant from the Hungarian nuclear regulator spent one month at various ASN entities.
- Long-term exchanges (about one to three years) in order to take part in the working of foreign nuclear safety and radiation protection regulators, to gain in-depth knowledge of them. Whenever possible, this type of exchange must naturally be reciprocal.

Since the end of 2006, a French inspector from the Lyon division has been seconded to the British nuclear safety regulator, where he is working on the fuel cycle plants, while a British inspector has been seconded to ASN and is working in the Nuclear Power Plants Department on the evaluation and licensing of the EPR in Flamanville. Another inspector from the Lyon division is working on

the team responsible for organising IRRS (Integrated Regulatory Review Service) missions at IAEA. Finally, an ASN engineer, today hired by IAEA, is also working at the Agency on safety standards and acts as the scientific secretary for the CSS (Commission on Safety Standards).

In exchange for the secondment to the Spanish Consejo de Seguridad Nuclear (CSN) of an engineer from the Research Facilities and Waste Department for a three-year period starting on 1 February 2009, a CSN engineer had her secondment to the Nuclear Power Plant Department extended until 2011. She will also be taking part in inspections.

Finally, in April 2009, a DEP agent joined the NRC's Office of Nuclear Reactor Regulation for three years. In exchange, an agent from this same NRC office joined the DEP in August 2009 for a period of one year.

These exchanges will continue to enhance ASN practices, using proven methods and good practices employed by our counterparts. Furthermore, the experience acquired by ASN and its counterparts for nearly ten years now, shows that inspector exchange programmes are an important factor in energising bilateral relations between nuclear safety and radiation protection regulators.

It is also worth underlining the appointment of representatives of foreign safety regulatory bodies to the Advisory Committees of experts. ASN has developed this practice, which enables experts from other countries not only to take part in these Advisory Committees, but also occasionally to act as Chair or Deputy Chair. This extensive involvement by experts from foreign regulatory bodies led in particular to the publication of a joint position statement by ASN, STUK (Finnish nuclear regulator) and HSE/ND (British regulator) following the 2009 meeting of the Advisory Committee for reactors, to deal with instrumentation and control system of the Flamanville 3 (FA3) EPR reactor.

3|2 Bilateral cooperation between ASN and its foreign counterparts

Bilateral relations between ASN and its foreign counterparts are built around a nuclear safety and radiation protection approach for each of the countries with which ASN enjoys priority relations. The following can be offered as examples.

South Africa

Bilateral exchanges continued as part of the actions decided on during the first meeting of the steering committee



Bilateral meeting between the Spanish nuclear regulator (CSN) and ASN on 20 November 2009 in Madrid (Spain)

in 2008. These exchanges mainly concerned nuclear and radiological emergency preparedness, with the participation of the South-African nuclear regulator (NNR) in a field assessment of French practices, especially the management of post-accident situations. The ASN and NNR steering committee met on 29 October 2009 in South Africa, following which, new cooperative actions were defined.

Germany

In 2009, the Franco-German Commission on nuclear installation safety issues (Deutsch-Französische Kommission für Fragen der Sicherheit kerntechnischer Einrichtungen – DFK) held its thirty-fifth meeting on 18 June 2009 in Strasbourg. The topics dealt with include comparison of the French and German regulations concerning event notification. In France and in Germany, the licensees are required to notify the regulator of significant events that occur in their installations. The notification criteria are specific to each country: the German notification criteria are numerous (50) and primarily focused on technical failures. There are 10 French notification criteria and they focus on the potential consequences of an event and on non-compliance with technical operating specifications.

The statistical survey of the events which occurred in 2007 showed that there is very little overlap between the

French and German criteria: only 3 to 4 events per year and per reactor are declared in each country on the basis of comparable criteria. The other events notified are specific to each country, hence a greater number of events in France (11 per year and per reactor) than in Germany (6 per year and per reactor).

Belgium

Relations with the Belgian federal nuclear regulatory agency (AFCN) cover all ASN's areas of competence: safety, waste management, transport and radiation protection. The ASN and AFCN steering committee met on 22 and 23 January 2009 in Brussels and identified a large number of joint actions, especially in the field of medical exposure.

China

Analysis of the authorisation dossier for the construction of two EPRs in Taishan involved ASN welcoming a Chinese delegation in June 2009, consisting of representatives of the National Nuclear Safety Administration (NNSA), the technical support organisation (Nuclear Safety Center – NSC) and a number of research organisations. A list of about forty questions had been prepared, the vast majority of which were dealt with and answered by the ASN and IRSN representatives present.

Another delegation, consisting primarily of members of the *Conseil d'État*², visited the ASN premises in early November, to look at the emergency management centre and discuss practices in force during an emergency situation.

Spain

Other exchanges, in addition to the personnel secondments mentioned above, took place in 2009 with ASN's Spanish counterpart, the Consejo de Seguridad Nuclear (CSN). The bilateral steering committee met in November 2009 in Madrid, in the presence of the ASN and CSN Chairs. Following this meeting, new cooperative agreements were signed by the two regulators.

United States

The will of both ASN and the Nuclear Regulatory Commission (NRC) to continue their collaboration led to a number of actions covering all types of cooperation, at all levels. Examples are the invitation to the ASN Chairman to present the work of the MDEP at the Regulatory Information Conference in 2009, the invitation to an ASN director to attend a public hearing of the Commission on manufacturing inspections of components of new reactors, the participation by an ASN Deputy Director at the NRC fuel cycle conference, a visit by the Strasbourg division and the Fessenheim CLIS to the Beaver Valley plant, the invitation to ASN to take part in the emergency exercise at Comanche Peak, several visits to the EPR construction site at Flamanville, to the installations at La Hague, Le Creusot and Saclay, the creation of staff exchange programmes, an NRC contribution to the *Contrôle* magazine devoted to continued operation of NPPs, a joint inspection of the EPR construction site at Flamanville, and so on. These details of these actions were finalised at two management and technical discussion meetings (one in May and the other in December 2009).

Finland

On 27 and 28 January 2009, the General Directorate of the Finnish nuclear regulator (STUK) visited the EPR FA3 construction site in Flamanville and the information exchange arrangement between ASN and STUK was renewed. A particular cooperative arrangement was signed by ASN and STUK concerning the construction of new reactors. This arrangement reinforces the MoU signed in 2008 and makes provision for cross-inspections, rapid notification in the event of a significant event occurring on the construction sites of the Flamanville 3 and Olkiluoto 3 reactors and regular transmission of summary reports.

Ireland

On 27 August, the 5th bilateral meeting of ASN and RPII (Radiological Protection Institute of Ireland) was held in

Troyes, during which ANDRA's disposal facilities in the Aube département were visited. The meeting confirmed the good relations between the two organisations and a large number of radiation protection actions were initiated, primarily concerning radiotherapy, radon and NORM. The ASN Chairman was invited by the RPII chairman to a meeting of the RPII Board and the ASN Ionising Radiation and Health Department Director was invited to sit on one of the RPII Consultative Committees as a permanent member.

Italy

Since the Italian Government announced its "return" to nuclear power, ASN has received several delegations of Italian MPs, on 19 February, 5 March and 8 July 2009, as well as the Minister for the Environment, Mrs Stefania Prestigiacomo, on 25 March 2009.

The ASN Chairman also went to Italy in October 2009. On this occasion he met the Minister for Economic Development, Mr Scajola, and the heads of ENEA and ENEL. ASN is also a member of the Franco-Italian agreement monitoring committee, which met on 16 October.

Japan

In 2009, the cooperative agreement with MEXT (Ministry of education, culture, sport, science and technology), the regulatory body, was renewed.

MEXT and ASN held a bilateral meeting in June 2009. This meeting was an opportunity for the two delegations to discuss research reactor ageing, NORM and radioactive sources. The principle of an annual meeting was adopted.

A number of Japanese delegations, comprising representatives of the Nuclear and Industrial Safety Agency (NISA) and its technical support organisation (JNES), were received at ASN, in particular to discuss aspects concerning fire prevention in plants and the management of emergency situations. Renewal of the cooperative agreement with NISA should be followed by a NISA and ASN steering committee meeting.

Luxembourg

On 2 July 2009, the eighth Franco-Luxembourg joint commission met in Paris. This meeting was an opportunity to review the current nuclear safety and radiation protection situation in the two countries and to schedule a number of joint actions for the coming year. The Luxembourg delegation took this opportunity to visit the Bure underground laboratory (Meuse/Haute-Marne départements³).

2. France's highest administrative court.

3. Administrative region headed by a *Préfet*.

Czech Republic

In 2009, an exchange was organised between ASN and the Czech radiation protection authority (SUJB), on the subject of exposure to naturally occurring radioactive materials (including radon).

United Kingdom

ASN and the British Health and Safety Executive / Nuclear Directorate (HSE/ND) have cooperated for many years and the arrangement has been enhanced and improved over time. In 2009, cooperation between these two entities was in particular augmented by meetings and information exchanges linked to the assessment of new reactors. Furthermore, in order to enable HSE/ND to benefit from its expertise, ASN seconded an agent to HSE from its Nuclear Pressure Equipment Department under the terms of an assistance contract.

The annual meeting of the heads of the two entities was held on 25 and 26 June 2009 in France and was followed by a visit to the La Hague installations. This meeting was an opportunity to review assistance and cooperation between the two regulatory bodies. The ASN-IRSN/ND Franco-British steering committee will meet in February 2010 in France. This will be an opportunity to visit the AREVA fabrication plants.

Switzerland

The 20th meeting of the Franco-Swiss Commission was held in Geneva on 11 and 12 June 2009. It in particular dealt with the exchange of information on the safety of nuclear installations and radiation protection in the two countries, coordination of emergency protection measures, the requirements applicable to new NPPs and progress in radioactive waste management.

On 17 June 2009, ASN also organised an international scientific seminar in Strasbourg, with the Swiss nuclear regulator (ENSI) and IRSN, on the seismic risk in nuclear installations. The aim of the seminar was to determine the impact of recent scientific advances in the field of seismic risk and of the improved knowledge of seismic history on the level of safety in nuclear installations. International experts presented the most recent research on the assessment of seismic hazards, consideration of uncertainties and site effects and the engineering methods used to evaluate the consequences of an earthquake for nuclear installations (see chapter 6, point 1 | 3 | 2).

3 | 3 ASN bilateral assistance

At a time when new nuclear power generating programmes are being announced and developed, ASN is receiving increasing numbers of requests for assistance, with a view to creating a safety infrastructure compliant with the leading international principles such as those expressed in the Convention on Nuclear Safety. These requests come primarily from countries which have as yet never resorted to nuclear energy, particularly in Asia and the Middle East.

ASN pays very close attention to nuclear installation projects in the “new nuclear countries”, where the implementation of a safety plan means a minimum lead time of fifteen years before a nuclear power reactor could begin operations in good conditions. These countries will have to create a legislative framework and an independent and competent safety authority, as well as develop a safety capability and a safety and regulatory culture.



Visit by delegations from the Irish and French nuclear regulators to the Aube radioactive waste repository on 26 August 2009, on the occasion of their annual bilateral meeting



Visit by the Luxembourg delegation and ASN to the Bure underground laboratory (Meuse/Haute-Marne départements) – July 2009

ASN undertook to establish a realistic and effective system for answering the requests it receives. Implementation of this system, with the corresponding human resources, will enable ASN to conduct this new mission, with the aim of maintaining a high level of nuclear safety, worldwide. ASN will thus make efforts, on a case by case basis, to verify that safety conditions are met when assessing the suitability of any particular cooperation in the nuclear field.

In 2009, ASN assisted the nuclear regulator of the United Arab Emirates (FANR – Federal Authority for Nuclear Regulation) with drafting of this country's nuclear legislation, sending it comments on the draft Act.

At the request of the Société tunisienne de l'électricité et du gaz (STEG), the forerunner of the future Tunisian regulator in charge of drafting legislative and regulatory texts, ASN analysed these texts on two occasions and offered advice on how to draft them.

4 INTERNATIONAL AGREEMENTS

In the aftermath of the Chernobyl accident (26 April 1986), the international community negotiated a number of conventions designed to prevent accidents linked to the use of nuclear power and mitigate their consequences should they occur. These conventions are based on the principle of a voluntary commitment on the part of the States, who retain sole responsibility for the installations placed under their jurisdiction.

Two conventions deal with the prevention of nuclear accidents (Convention on Nuclear Safety and Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management), while two others deal with management of their consequences (Convention on early notification of a nuclear accident and Convention on assistance in the case of a nuclear accident or radiological emergency). France is a contracting party to these four conventions. IAEA (see point 2|2) is the depositary of these conventions and provides the relevant secretarial services.

4|1 The Convention on Nuclear Safety

The CNS concerns civil nuclear power generating reactors. It was adopted in June 1994 and France signed it in September 1994 with ratification in September 1995. The convention came into force on 24 October 1996. As at 31 December 2009, it was ratified by 66 States.

In ratifying it, the contracting parties agreed to provide a report describing how the fundamental safety principles and good practices are implemented in their respective countries. The reports from the contracting parties are examined during a review meeting at which each party may ask questions of the others.

The next CSN review meeting is scheduled for April 2011 at IAEA. An initial stakeholder meeting was held at the end of September in order to take account of the changes and improvements proposed at the fourth review meeting in April 2008 and to appoint the Chair, Vice-chairs and liaison officers for the next review meeting.

4|2 The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

The "Joint Convention" as it is often called, is the counterpart of the CNS for management of the spent fuel and radioactive waste produced by civil nuclear activities. France signed it on 29 September 1997 and it entered into force on 18 June 2001.

As at 31 December 2009, 51 contracting parties were registered.

The third review meeting for the Joint Convention took place from 11 to 22 May 2009 at IAEA. It was the first participation by South Africa, China, Nigeria and Tajikistan. One of the ASN Commissioners chaired the one-week session devoted to presentation of the national reports from one of the groups of countries.

In the same way as for the CNS, the contracting parties submitted their national reports at the beginning of October 2008, describing how they meet the obligations of the Joint Convention. These reports were the subject of questions from the other contracting parties, which each contracting party was required to answer. A summary of this work was presented at the review meeting.

ASN contacted by IAEA in 2009 under the international convention on assistance in the case of a nuclear accident or radiological emergency

On 23 April 2009, ASN received an official request from the Ecuadorian authorities, via IAEA, for international assistance in treating a worker accidentally irradiated on 12 April by an industrial radiography source (Iridium 192).

As soon as they were informed of the accident, the Ecuadorian authorities rapidly took all steps to ensure that their citizen was given the necessary care and contacted IAEA which, as of 15 April, got in touch with IRSN through a diagnostic mission that was in place. The Percy armed forces hospital in Clamart, which is a world specialist in cellular therapy, was also placed on alert.

ASN, jointly with IRSN, the Ministry for Defence and the Ministry of Foreign Affairs, confirmed that the Percy armed forces hospital in Clamart was the competent establishment for treatment of the victim, in the light of its prior experience of treating irradiated patients from South America and North Africa.

On 28 April, the patient was admitted to Percy hospital, where he was taken into care by a high-level multi-disciplinary team and given cellular therapy. After treatment, the young worker was able to return home in mid-August.

France's report was presented by the ASN Director General, with the participation of the Director General of ANDRA and in the presence of members of the ASN Commission and the main nuclear waste and spent fuel management stakeholders in France.

Several good practices were identified in France, such as the publication of the 28 June 2006 Act, transparency and involvement with local communities and other stakeholders, as well as the steps taken to limit the production of radioactive waste. The representatives of the contracting Parties also identified particularly important challenges such as the disposal of legacy waste, the creation of new

treatment solutions for low, intermediate and high level long-lived waste, and the development of an international approach to the technical and social aspects of deep geological disposal options.

Generally speaking, progress has been observed concerning the creation of national plans for management of radioactive materials and waste. Their actual implementation constitutes a challenge for the coming years. Many countries also presented projects for the creation of national radioactive materials and waste management agencies, which are at varying stages of completion. In the light of its experience in these fields, France proposed organising



Presentation of the French report at the Joint Convention 4th review meeting on 13 May 2009 at the IAEA in Vienna (Austria)

technical meetings on these subjects before the next Joint Convention review meeting in May 2012. In 2010, a first meeting of this type will be organised in France jointly by DGEC, ANDRA and ASN.

4 | 3 The Convention on early notification of a nuclear accident

The Convention on early notification of a nuclear accident entered into force on 27 October 1986, six months after the Chernobyl accident and, as at 31 December 2008 there were 103 contracting parties.

The contracting parties agree to inform the international community as rapidly as possible of any accident leading to uncontrolled release into the environment of radioactive material likely to affect a neighbouring State. A system of communication between States is therefore coordinated by IAEA and regular exercises are held among the contracting parties. ASN is the competent national authority for France.

4 | 4 The Convention on assistance in the case of a nuclear accident or radiological emergency

The Convention on assistance in the case of a nuclear accident or radiological emergency entered into force on 26 February 1987. As at 31 December 2008, there were 102 contracting parties.

Its purpose is to facilitate cooperation between countries if one of them were to be affected by an accident with radiological consequences. This Convention has already been used on several occasions for accidents due to abandoned radioactive sources. Within this context, France's specialised services have already taken charge of treating irradiated victims. ASN is the competent national authority for France.

4 | 5 The other conventions linked to nuclear safety and radiation protection

Other international conventions, the scope of which does not fall within the remit of ASN, may be linked to nuclear safety.

This is for example the case of the Convention on the Physical Protection of Nuclear Material, the purpose of which is to reinforce protection against malicious acts and against misappropriation of nuclear materials. This convention entered into force on 8 February 1987 and as at 29 August 2008, there were 137 contracting parties.

Additional information on these conventions may be obtained from the IAEA's website:
www-ns.iaea.org/conventions/.

In the post-accident field, ASN took part in the CORE Health international programme and the EURANOS programme (stakeholder training) financed by the EU and in 2009, with IRSN, it organised the COREX programme (analysis of feedback from actions take in Belarus by the French teams).

5 INTERNATIONAL CONFERENCES

In 2009, ASN played an important role on the international stage, taking part in the major conferences and workshops within its fields of competence.

Table 2 summarises these events.

Table 2: events at which ASN took part

Date	Place and organiser	Title
20-22 January 2009	Tokyo (NEA)	Workshop Towards transparent, proportionate and deliverable regulation for geologic disposal
29-30 January 2009	Paris (NEA)	Workshop on the security of supply of medical radioisotopes
23-27 February 2009	Tarragona (IAEA)	International conference on control and management of occasional radioactive materials in scrap metal
9-12 March 2009	Washington (NRC)	RIC 2009 - Regulatory Information Conference
27-29 April 2009	Vienna (IAEA)	ICARO - International Conference on Advances in Radiation Oncology
10-14 May 2009	Tokyo (AESJ) Atomic Energy Society of Japan	ICAPP 2009 - International Congress on Advances in Nuclear Power Plants
22-23 June 2009	Prague (IAEA)	FISA 2009 - Conference Euratom Research and Training in Reactor Systems
23-26 June 2009	Madrid (EURANOS Consortium)	EURANOS Project Users Groups (RUG, HUG, LTRUG) Meetings Final EURANOS Contractors Meeting
14-18 September 2009	Vienna (IAEA)	<ul style="list-style-type: none"> • 53rd Regular Session of IAEA General Conference • INSAG forum • Round table Meeting: Licensing of geological repositories • Senior Regulators' Meeting • Panel Briefing and Discussion on Reliability of Supplies of Medical Isotopes Produced in Research Reactors – Issues for Regulators
21-23 September 2009	Wiesbaden (IAEA)	Conference Symposium on release of radioactive materials from regulatory requirements - provisions for exemption and clearance
20-25 September 2009	Annecy (SIRLaF)	9th CIRFA – International symposium of fundamental and applied radiobiology
5-9 October 2009	Bucharest (IAEA)	Regional workshop on Transparency, openness and involvement of the public and stakeholders in the regulatory process
8-9 October 2009	Bologna (IAEA)	International Workshop on Nuclear safety and security education and training in countries embarking on or expanding nuclear programmes
21-23 October 2009	Vienna (European ALARA Network)	Workshop - ALARA Issue arising for Safety and Security of Radiation Sources and Security Screening Devices
3-5 November 2009	Vienna (IAEA)	Workshop on Nuclear Power Newcomers and International Cooperative Actions
7-11 November 2009	Kyoto (IAEA)	International conference on Fast Reactors and Related Fuel Cycles – Challenges and Opportunities
14-18 December 2009	Cape Town (IAEA)	International Conference on Effective Nuclear Regulatory Systems: Further Enhancing the Global Nuclear Safety and Security Regime

In 2009, ASN also took the initiative of organising international meetings and conferences, or hosting them in its premises.

Table 3: international meetings and conferences organised or hosted in its premises by ASN

Date	Place and organiser	Title
7-9 January 2009	Paris (ASN)	Artificial radionuclides workshop (REA)
4-6 February 2009	Paris (IAEA)	Meeting on applying the INES scale to medical incidents
5 March 2009	Paris (ASN)	Meeting of scientific advisers to foreign embassies in Paris
27 May 2009	Paris (ERPAN network)	Meeting of European Radioprotection Authority Network (European ALARA network)
17 June 2009	Strasbourg (ASN/ENSI)	International seminar on seismic activity
29 June - 3 July 2009	Paris (IAEA)	Workshop on controlling and assessing the safety culture
1 December 2009	Paris (ASN)	4th HERCA (Heads of European Radiation Control Authorities) meeting
2-4 December 2009	Versailles (ASN)	International conference on modern radiotherapy: Advances and challenges in radiation protection of the patients

6 OUTLOOK

In 2010, in the field of international relations, ASN will endeavour to continue to make an active contribution to improving nuclear safety and radiation protection around the world. This aim will be pursued by maintaining strong and permanent ASN involvement in European and international bodies.

Adoption of the Directive on the nuclear safety of nuclear installations in June 2009 has also paved the way for the creation of an EU regulatory framework going beyond just radiation protection. Particular attention will then be given to EU matters, but without this entailing any withdrawal from or reduction in other international areas of action.