5 IRRS: an international audit of ASN in 2006

The International Atomic Energy Agency (IAEA) draws up international standards regarding safety of nuclear installations, transport of radioactive materials, management of radioactive waste and protection against ionising radiation. The IAEA is also active in their dissemination and implementation. These standards consolidate the international consensus on matters relating to nuclear safety and radiation protection in terms of the responsibility of operators, supervisory bodies and States. Some of these standards concern the organisation and legislative and regulatory framework of the nuclear safety authorities.

IAEA audit service

The IAEA offers national nuclear safety authorities a service assessing the extent to which the standards it publishes are taken into account and implemented. Several audits have been conducted worldwide over the past few years, generally in emerging countries, EU candidate countries or countries with a small nuclear fleet. Through the IRRS (Integrated Regulatory Review Service) missions recently set up, the IAEA proposes an approach leading to auditing of the nuclear safety authorities in the fields of nuclear safety, radiation protection and safe transport of radioactive materials, areas which hitherto were the subject of separate audit missions.

The IRRS mission in France

Further to an ASN request in 2005, an IRRS audit mission was carried out in France from 5 to 17 November 2006. For the first time anywhere in the world, this audit was "full-scope", in other words, it covered all the nuclear safety and radiation protection fields planned for the IRRS missions. It also covered a nuclear safety authority regulating one of the largest and most diverse range of nuclear activities and installation fleets. In addition to the topics normally dealt with by the IRRS missions, and in order to be as complete as possible, ASN had also asked that the experts to examine its organisation and practices with regard to provision of information to the public.

The auditors thus looked at all of ASN's areas of responsibility: nuclear reactors, research installations, medical sector, worker radiation protection, etc., in each of its professional sectors: regulation, supervision and information. However, since ASN underwent a TranSAS audit in 2004, the portion of the IRRS audit relating to transport of radioactive materials was devoted to follow-up of the implementation of the action plan following this audit.

The IRRS audit of ASN was carried out by a team of 16 peers from nuclear safety authorities from other countries, under the coordination of 6 IAEA experts. An additional two foreign observers supervised the process in order to learn the lessons for a future audit of this type in their own countries. In small teams of two or three experts, the members of this audit mission examined all areas of ASN activities and looked at all ASN practices. This audit comprised classroom presentations, interviews with personnel from ASN and technical support organisations, in particular the Institute for radiation protection and nuclear safety (IRSN). It comprised appraisals of ASN's organisation and practices at national and regional level. In order to gain maximum benefit from this mission, ASN made sure that the experts were able to carry out their investigations freely in an open and frank atmosphere. The auditors accompanied ASN's inspectors in their

The IRRS mission team of international experts

[1] In particular the IRRT (International Regulatory Review Team) missions which only concerned nuclear safety and the RaSSIA (Radiation Safety and Security Infrastructure Appraisal Service) missions which concerned radiation protection.

field inspections, technical meetings and emergency management exercises.

The findings of the IRRS mission

The IRRS audit was written up in a report published in full on the www.asn.fr website. This report gives a list of the recommendations, suggestions and good practices identified by the IRRS mission experts. The recommendations generally involve discrepancies with regard to IAEA standards and require action. The suggestions are guidelines for improving the efficiency of the audited authority. The good practices are flagged for the attention of other authorities examining the report. ASN will make efforts to disseminate these good practices.

The conclusions of this audit confirm ASN's position as an international benchmark for good practice in the fields of nuclear safety and radiation protection. In a large number of areas such as inspection, emergency preparedness, public information, and even the role of ASN internationally, ASN's actions are perceived as being among the best practices in the world. The experts also considered ASN response to the conclusions of the TranSAS audit to be exemplary. ASN will ensure that all the good practices identified during this audit are maintained over the long term.

The areas for improvement identified in the mission report include drafting of procedures for application of the new sanctions stipulated in the law of 13 June 2006 on transparency and security in the nuclear field (fines, formal notices, installation shutdown decisions, etc.), more strictly formalised internal practices within ASN or continued work into managing the consequences of nuclear accidents.

The IRRS mission follow-up

To take account of the recommendations and suggestions highlighted by the IRRS mission, ASN has developed and implemented an action plan to guarantee full conformity of its practices and organisation with the best international standards. A follow-up mission will be organised by the IAEA within two years to assess the progress made with implementing this action plan.

In requesting this, the world's first full-scope IRRS audit of a safety authority in charge of regulating a large and diverse nuclear fleet, ASN had three objectives.

The IRRS close out meeting in France on November, 17th 2006

Firstly, it wanted to be submitted to an external, frank and open assessment by its peers, to ensure that its organisation and practices were compliant with international standards, taking full account of the recommendations made further to the audit, in order to improve its efficiency and the relevance of its actions.

Secondly, wanted to present a number of its practices to its peers, in particular those that it feels go beyond the IAEA recommendations, such as those mentioned above.

Thirdly, ASN hoped to trigger a general trend so that in the next few years, all large safety authorities would also request an IRRS audit. This would indeed seem to be the case and several IRRS missions have already been scheduled for 2007 and 2008, one of which will be headed by the Chairman of ASN. This global approach should lead to benchmarking which should benefit all the safety authorities and thus enhance harmonisation of nuclear safety and radiation protection supervisory organisations and practices, to ensure progress and developments in these fields.

ASN believes that they have been achieved.

In order to learn the lessons from this first IRRS full-scope audit and promote this tool, organised by the IAEA to help advance nuclear safety and radiation protection and welcomed by the ASN, a workshop will be held on 22 and 23 March 2007 for the world's nuclear safety authorities.