Radiation Protection

Committee on Radiation Protection and Public Health (CRPPH)

The CRPPH is contributing to the definition of new directions and approaches for the international system of radiological protection in order to achieve a clearer and more streamlined result. The ultimate objective is to achieve a system that will better address regulator and practitioner needs, and will more appropriately position scientific radiological protection considerations within the broader context of social judgement and risk governance.

Towards new ICRP recommendations: stakeholder input

The CRPPH continued to provide direct scientific and technical feedback and input to the International Commission on Radiological Protection (ICRP) as the latter's new recommendations are developed to replace its current ones (as documented in ICRP Publication 60 of 1990 and subsequent publications). The Commission's goal is to simplify and consolidate its current recommendations, and to publish its new recommendations in the 2005 timeframe. Based on the work of an expert group, the CRPPH published its views on several key areas in which current ICRP recommendations could be improved (*The Way Forward in Radiological Protection*, OECD/NEA, 2002). To validate these ideas a case-study approach was undertaken, which showed that the CRPPH ideas, if applied, would be of assistance to regulators and practitioners.

NEA/ICRP workshops

In parallel with its efforts to develop ideas and approaches, the CRPPH has been providing comments on the ideas put forth by the ICRP. The Commission published, during 2002, two significant framework documents describing its new approach to general recommendations on a new system of radiological protection, and to the new and more specific area of the radiological protection of non-human species. The CRPPH collected comments from within the NEA family of technical committees and commissioned a study of the possible implications of the draft ICRP ideas and concepts. This feedback to the ICRP should assist it in the preparation of recommendations useful to regulators and practitioners concerned with their application.

In order to encourage the broad participation of stakeholders in the development of new ICRP recommendations, the NEA has launched a series of fora in collaboration with the ICRP. The 1st NEA/ICRP Forum on the "Radiological Protection of the Environment: The Path Forward to a New Policy?" took place in February 2002, in Taormina, Italy, and was hosted by the Italian *Agenzia*

Nazionale per la Protezione dell'Ambiente (ANPA). The meeting focused on identifying the policy aspects needed to support the development of protection objectives. Proceedings and a policy-level summary document have been published.

To further broaden its base of input, the CRPPH held an "Asian Regional Conference on the Evolution of the System of Radiological Protection", in September 2002 in Tokyo, to collect regional and cultural suggestions and concerns. Conference proceedings and a policy-level summary document will be published in 2003.

Continuing this work, preparations have been made for the 2nd NEA/ICRP Forum on "The Future Policy for Radiological Protection: A Stakeholder Dialogue on the Implications of the ICRP Proposal". Possible policy, regulation and application implications of the ICRP recommendation framework documents will be discussed. The Spanish *Consejo de Seguridad Nuclear* (CSN) will host this meeting in Lanzarote, Spain. Proceedings and policy-level summary documents will be published following the forum.

Stakeholder participation in decision making involving radiation

The CRPPH has explored in detail the implications of stakeholder involvement in decision-making processes for several years and held important workshops in this area in 1998 and 2001. Based on this experience, the CRPPH has been exploring various process aspects of stakeholder involvement. Three specific case studies have been analysed to extract commonalities of stakeholder involvement process aspects that, to some extent, transcend geographic and cultural frontiers. These analyses will be used as fundamental input to a workshop that will take place in October 2003. Stakeholder aspects also form an essential element in the evolution of the system of radiological protection. This work will therefore also serve as NEA input to ICRP discussions on new recommendations. For a fuller description of NEA work in this area, see the section on "Nuclear Energy and Civil Society" (page 32).

Highlights

Implications of effluent release options

Radioactive effluent releases from nuclear installations during normal operation have been reduced in recent years, but are still subject to discussion. The demand for further reductions is generally driven by societal concerns about the protection of the environment. Regarding the optimisation of effluent releases, several different approaches exist, such as the concept of "best available technology" (BAT), or the "as low as reasonably achievable" (ALARA) approach that is well known in radiation protection. The OSPAR Commission, a political body concerned with the pollution of the marine environment, introduced the OSPAR Strategy with Regard to Radioactive Substances (Sintra, 1998), which calls for a reduction of radioactive emissions to a level that would result in concentrations of artificial radionuclides in the environment that are "close to zero". In order to assist experts and decision makers in fully understanding the technical implications and feasibility of the various effluent release options being discussed, an expert group was created. Its work will serve as background information for CRPPH members and other experts faced with decisionmaking choices, as well as input to the CRPPH views on the evolution of the system of radiological protection. The group's final report will be published in 2003.

View of the Penly nuclear power plant, France.



- The Committee finalised its views on how the system of radiological protection should evolve, and performed a road test of its key ideas (using a case-study approach) to illustrate the practical benefits.
- The policy aspects and broad framework of radiological protection of non-human species were actively debated at the 1st NEA/ICRP Forum.
- The Committee analysed ICRP draft framework documents for their possible implications on policy, regulation and application.
- Commonalities of stakeholder involvement processes have been extracted from existing cases and analysed.
- The "Asian Regional Conference on the Evolution of the System of Radiological Protection" highlighted the importance of flexibility to allow for cultural differences.
- The Emergency Management Programme consolidated its INEX experience and assessed member country needs to develop its future programme of work.

in decision-making mechanisms in the medium and late phase after a nuclear or radiological accident with serious contamination. This could include various aspects of the appropriate management of severe contamination after an accident, such as agricultural countermeasures, food restriction, socio-economic aspects, psychological damage, compensation issues, decisions on "soft/light" countermeasures, trade and travel, and harmonisation of response. This exercise would be co-ordinated with the NEA Nuclear Law Committee in order to include compensation and liability aspects. It would also be co-ordinated with other interested international organisations. The new INEX 3 exercise may take place in the 2004-2005 timeframe.

In 2002, the NEA performed a survey on national practices regarding the implementation of short-term countermeasures after a nuclear accident. The results of this survey will be published early in 2003.

Nuclear emergency matters

After successful completion of the first series of international nuclear emergency exercises (INEX 1 in 1993; the INEX 2 Series from 1996 to 1999; INEX 2000 in 2001), the NEA has started the preparation of INEX 3. Member countries expressed specific interest



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