RECENT RECOMMENDATIONS ON EMERGENCY EXPOSURE SITUATIONS AND A DISCUSSION ON SETTING REFERENCE LEVELS

P. MILLIGAN (USNRC), O. ISNARD (IRSN), H. AALTONEN (STUK), J. M. MARTIN CALVARRO (CSN), D. RAUBER (FCOP), M. L. PERRIN (ASN), E. WIRTH (BFS), T. HOMMA (JAEA), L. HUBBARD (SSM), B. AHIER (HEALTH CANADA), A. LITTLE (HSE), W. RASKOB (KIT), W. WEISS (BMU), H. B. OKYAR (OECD/NEA)

The OECD NEA has a long tradition of expertise in the area of nuclear emergency policy, planning, preparedness and management. Through its technical programmes, the NEA offers its member countries unbiased assistance in the nuclear preparedness arena, with a view towards facilitating improvements in nuclear emergency preparedness strategies and nuclear emergency response at the international level, with a particular focus on decision-making, international communication, information exchange and the compatibility of response actions between various countries.

NEA Working Party on Nuclear Emergency Matters

The mission of the CRPPH Working Party on Nuclear Emergency Matters (WPNEEm) is to improve nuclear emergency management systems within member states, and to share its knowledge and experience widely. Within this framework, WPNEEm activities focus on identified needs in planning, preparedness and response for the “early” and “intermediate” phases of a nuclear/radiological emergency, with a view towards preparation of recovery actions.

The programme of work is developed in co-ordination with member states and other international organizations.

Expert Group on Implementation of New International Recommendations for Emergency Exposure Situations (EGIRES)

With the completion and publication of the 2007 ICRP recommendations (Publication 103) and the revision of International Basic Safety Standards (BSS) in the 2011, the CRPPH has been turning its attention to the practical implementation of these new recommendations and standards in all exposure situations. This includes implications, discussion of good practice, and consideration of emerging radiation protection issues.

Additionally, the past WPNEEm involvement in the review of the ICRP guidance documents on emergency and existing exposure situations (Publications 109 and 111) and in the drafting of the revised BSS has placed the group in a good position to contribute relevant experience to this topic. As such, it is proposed that the WPNEEm establish an expert-group to investigate issues in and approaches to implementation of new international recommendations for emergency exposure situations.

Objectives of EGIRES

The objective of the Expert Group is to investigate issues in, and approaches to, the implementation of the new ICRP recommendations and revised BSS for emergency exposure situations, specifically nuclear/radiological emergencies including accidents and consequence management for malicious acts.

This includes, for example, the application of optimisation of protection strategies, setting of reference levels and the inclusion of stakeholder input in this process.

This work includes provision to emergency management authorities in NEA member countries of clear, concise information and recommendations on key issues, possible approaches and summary of experience for implementing the new ICRP recommendations and revised BSS for emergency exposure situations. It also allows WPNEEm to continue to proactively address topics of interest to its constituency.

Emergency Exposure Situations and Reference Levels

Emergency exposure situations, as defined by the ICRP, are unexpected situations that may require urgent protective actions, and perhaps longer-term protective actions to be implemented. The Commission continues to recommend optimization and the use of reference levels to ensure an adequate degree of protection with respect to exposure to ionizing radiation in emergency exposure situations. Setting reference levels is a responsibility of national authorities and reference levels represent the level of dose or risk, above which it is judged to be inappropriate to plan to allow exposures to occur and for which therefore protective actions should be planned and optimized.

EGIRES decided to analyze the established processes for optimization of the protection strategy for emergency exposure situations and practical implementation of reference levels concept in several member states of the NEA by performing a survey.

It is planned to collect information on the definition of optimization strategy in different countries, optimization of protection for different protective actions and also optimization of urgent protective actions. In addition, national criteria in setting reference levels, its use, relevant processes including specific triggers and dosimetric quantities in setting reference levels are focus points that will be evaluated.

Benefits expected from the work of the expert group will be useful to find a path and even common understanding of surrounding issues in emergency exposure situations with the inclusion of national perspectives and also to discuss stakeholder involvement.

WPNEEm website: http://www.oecd-nea.org/rp/wpneem/
EGIRES website: http://www.oecd-nea.org/rp/egires.html

Ms. Patricia Milligan
Office of Nuclear Security
and Incident Response
MS T3B46M
U.S. NRC
Washington, USA
Tel: +1 301 415 2223
Fax: +1 301 415 2968
E-mail: patricia.milligan@nrc.gov