

# Recent Recommendations on Emergency Exposure Situations and a Discussion on Setting Reference Levels with the NEA Perspective

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**ABSTRACT** Expert Group on Implementation of New International Recommendations for Emergency Exposure Situations (EGIRES) of the Working Party on Nuclear Emergency Matter (WPNEM) has been mandated by the Committee of Radiation Protection and Public Health (CRPPH) of the OECD Nuclear Energy Agency to investigate issues in, and approaches to, the implementation of the new ICRP recommendations and revised Basic Safety Standards of the IAEA for emergency exposure situations, specifically nuclear/radiological emergencies including accidents and consequence management for malicious acts. This also includes the application of optimisation of protection strategies, setting of reference levels and the inclusion of stakeholder input in this process. The expected output of the expert group is to prepare a report on issues covering mentioned topics. 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 optimisation and the use of reference levels to ensure an adequate degree of protection with respect to exposure to ionising 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.

**Keywords:** Exposure situation / reference level / EGIRES / WPNEM / CRPPH

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