International Commission on Radiological Protection

Task Group 93: Radiological Protection of People and the Environment in the Event of a Large Nuclear Accident



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Terms of Reference:

To update ICRP Publications 109 and 111 in the light of the lessons from Fukushima and recent international developments concerning the protection of people in emergency exposure situations, and people living in long term contaminated areas after a nuclear accident or a radiation emergency.

Related symposium and meetings:

- ✓ ICRP-QST Symposium on Radiological Protection of People and the Environment in the Event of a Large Nulcear Accident, 25 Oct. 2019, Tokyo.
- ✓ NERIS: PREPARE workshop, 20-22 Jan, 2016, Bratislava.
- ✓ NCRP annual meeting 2015, 16-17 Mar 2015, Washington.
- ✓ The International workshop, Nov. 2015, Date city, Japan
- ✓ ICRP Dialogue in Fukushima, 12 meetings from 2011 to 2015.
- ✓ Fukushima Dialogue from 2016 until now organized by local stakeholders in cooperation with ICRP

Current Work

The MC approved public consultation of the TG93 draft report in Houston. The draft report completed public consultation for approximately 120 days.

Main Points of the draft report

- To organise activities and actions, the Commission distinguishes between an emergency response, managed as an emergency exposure situation, and transitioning to a recovery process, managed as an existing exposure situation.
- The principle of optimisation of protection applied with reference levels, considering all impacts (radiological, non-radiological, social, economic, and environmental), is essential to mitigate the consequences during the emergency response and to improve living conditions in affected areas during the recovery process.
- For protection of responders and the population during the emergency response, the reference level should not generally exceed 100 mSv, while recognising that higher values may be necessary to save lives and for the prevention of catastrophic conditions.
- For people living in long-term contaminated areas during the recovery process, progressive reduction in exposure will result from continuing optimisation of protection. Reference levels should be selected to support this progressive improvement, taking into account the progress already achieved. Levels should be within or below the Commission's recommended 1–20-mSv band taking into account the actual distribution of doses in the population and the tolerability of risk for the long-lasting existing exposure situations, and would not generally need to exceed 10 mSv per year. The objective of optimisation of protection is a progressive reduction in exposure to levels on the order of 1 mSv per year.
- For protection of the public and the environment during the recovery process, the Commission recommends a 'co-expertise' approach in which authorities, experts, and stakeholders work together to share experience and information in affected communities, with the objective of developing a practical radiological protection culture to enable individuals to make informed decisions about their own lives.

Looking Ahead

> The revised draft report will be discussed to be approved for publication in Adelaide.