

TASK GROUP 114

Reasonableness and Tolerability in the System of Radiological Protection

ICRP 2023
6-9 NOVEMBER 2023 • TOKYO, JAPAN

Mandate

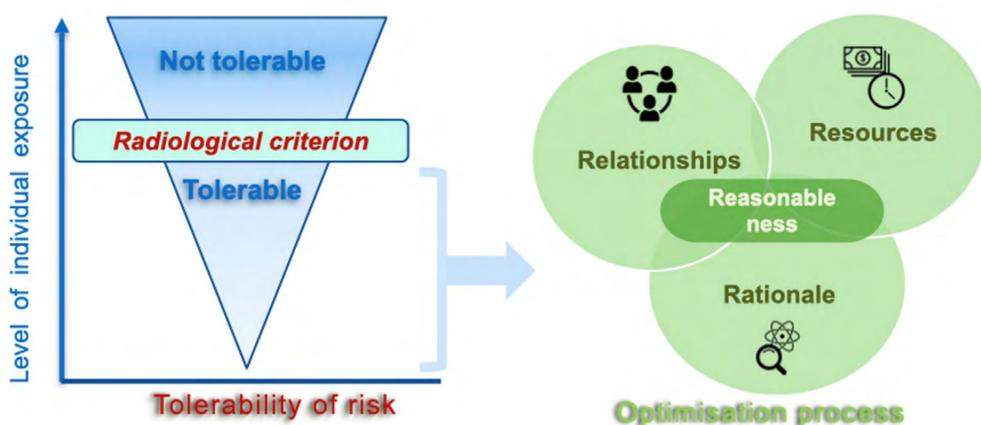
The model of reasonableness and tolerability of radiological risk is a conceptual framework for the implementation of the ICRP principles, largely developed in ICRP Publication 60. More recently, ICRP Publication 101 described the approach to address the implementation of the optimisation process including the involvement of stakeholders and further considerations to be taken into account to elucidate what is reasonably achievable. The introduction of the three types of exposure situations in Publication 103 has opened the reflection on the application of the model of reasonableness and tolerability for each of these situations. With Publication 138 on the ethical foundations of the system of radiological protection, specific attention has been devoted to the concepts of reasonableness and tolerability, calling for revisiting their meaning, role and practical implementation in the light of the core ethical values (beneficence and non-maleficence, prudence, justice and dignity) and procedural values (accountability, transparency and inclusiveness).

Objective

The objective of the TG is to review the historical and current perspectives on reasonableness and tolerability to consolidate and clarify Publication 103, and to prepare the considerations and basis needed for development of future recommendations. In doing so, an examination of the approaches used in other fields, such as chemical risk, will be undertaken. The underlying basis upon which decisions are made will be considered for different contributors to risk, to help inform radiological considerations. The TG will review factors associated with occupational exposure, public exposure, medical exposure, and environmental exposure in planned exposure situations, and those relevant in existing and emergency exposure situations. The TG efforts will provide practical advice on how decisions can be undertaken in light of the concepts, and will provide information to inform Commission discussions on the basis and rationale for selection of recommended ICRP values for various dose criteria.

Some Key Issues to be Addressed

- Considerations and criteria on which the concepts of tolerability and reasonableness are based and their application in the optimization process
- Application of the concepts in the different exposure situations



- Trade-off between level of exposure and benefit
- Accounting for sensitive or vulnerable populations
- Interests reflected and integrated for human and nonhuman exposure
- Strategies to assist in balancing competing values in determining what is tolerable and/or reasonable
- How do we best support reasonable value for society

The Revised Framework for Tolerability of Risk and Reasonableness

Tolerability of risk is a combination of:

- Risk that is bearable in a specific context based on the current values of society
- Individual and societal level of risk (including considerations on the “construction of the health detriment”)
- Qualitative judgement (depending on various components and on the specific exposure situation and context)

Reasonableness refers to:

- Good judgement, fairness, practicability, moderateness, appropriateness
- Optimisation as a deliberative process involving stakeholders to achieve a workable and sustainable protective approach
- Integrating economic, societal and ethical considerations in the process

General Considerations on Tolerability and Reasonableness

- Emphasis to be put on the “level of protection” with due consideration given to the level of risk associated with ionising radiation under the specific circumstances, but not only
- Include considerations on well-being, sustainable development, all hazard approach...
- Importance of considering the “process” (reasonably achievable)
- Articulation between justification and optimisation principles
- Considering the prevailing circumstances and the specificities of the situation
- Ensuring the respect of ethical values
- Relying on stakeholder involvement



TG 121 meets in Fontenay-aux-Roses in July 2023