

ICRP questions

How does the EAN view the role of optimisation of protections/reasonableness and individual dose restrictions/tolerability in the implementation of radiological protection or other fields related to the protection of the people and/or the environment.

The EAN is a non-profit organization that aims at promoting the ALARA-principle for the protection of workers, public and patients in all exposure situations. This means that EAN sees it as its core-business to disseminate good practices in practical applications of the ALARA-principle. Investigating the optimization of radiation protection involves reducing the exposure of the public, workers, patients and the environment as low as reasonably achievable taking socio-economic aspects into account.

Taking into account the socio-economic aspects, looking for the reasonableness, is not a straightforward task and depends on the prevailing circumstances and the exposures situation. Defining the restriction of the individual doses taking the prevailing circumstances into account can lead to different dose constraints or reference levels for the individual or groups. The dose constraints can be well understood for the circumstance for which they are devised, but can lead to discussions or misunderstandings when they are compared without the proper context. Providing a clear and transparent argumentation for the dose constraints or reference levels is therefore essential. Also giving clear messages on the ICRP system for radiation protection, dose management and the dose-effect curve could help reduce misinterpretation and mal constructed comparisons between dose constraints and/or reference levels.

In discussing reasonableness we need also to broaden the scope from only radiation protection to all risk factors the workers, patients, public and the environment are exposed to in order to channel the resources to the most effective integrated protection. This is an important element knowing that we do not possess unlimited resources and need to optimize them to achieve the best protection.

Beyond this forum how can ICRP most effectively engage the radiological protection community and other interested stakeholders in the reflection on these concepts ?

To our opinion this can be done by stimulating discussions in the different liaison organizations on this topic. A first is already realized by the upcoming SFRP-IRPA workshop on the topic. Also the integration of ALARA in non-radiological risk can help to reflect on the topic (cfr. 4th European ALARA Workshop on "Managing of Occupational Radiological and Non-Radiological Risks"). The concepts discussed above will also be addressed at the 17th joined EAN-NERIS workshop on emergency and post-accident situations.

The public, as an important stakeholder, should be allowed to take a proactive role in decision making regarding their protection against ionising radiation. While consultation processes are already implemented in several countries, this approach needs to be applied more often. This will lead to clearer more transparent decisions agreed by the public. Therefore, initiatives should be further developed to facilitate an improvement of risk awareness and the radiation protection knowledge of the public. A more clear stakeholder involvement needs participants that understand the risk concept and can relate it to the different exposure situations.