

Summary of feedback received on the role of organisations in the review and revision of the System of radiological protection

Annual Meeting of Senior Representatives in
Formal Relations with ICRP
2 June 2021

Charity 1166304 registered with the Charity Commission of England and Wales

Jacques Lochard
Vice-Chair

Introduction

- **The Commission received 21 contributions from SLOs**
- **All SLOs have presented their organization and activities**
- **Most of them expressed their subjects of interest in relation to the process of revising the Recommendations**
- **Some have made concrete proposals as to their role in the review and revision of the System**
- **The following slides present, in alphabetical order by SLO and very succinctly, these expressions of interest and proposals**

ALLIANCE – European Radioecology Alliance

- **Main topics proposed by Alliance to be included in the review process**
 - **Develop unified definitions**
 - **Develop adequate ecological protection criteria**
 - **Check the (in)adequacy of reference animals and plants and DCRLs**
 - **Clarify the meaning of integrating the protection of humans and wildlife**
 - **Ensure consistency with other environmental protection systems (e.g. chemical risks)**
 - **Integrate societal concerns**

CRCPD – Conference of Radiation Control Program Directors

- **The Conference offers to provide to ICRP:**
 - **A connection to the state territorial and local regulators of US**
 - **To aggregate and share the perspectives of its membership**
 - **To provide insight to the implementation and oversight relative to all aspects of the System**
 - **An effective means of coordination with and feedback from the federal regulatory entities of the US**
 - **A wealth of data and information related to the application of the ICRP recommendations**

EAN - European ALARA Network

- **The Network is ready to support the process of revising the current System with regard to the implementation of the optimisation principle, including the reasonableness and tolerability concepts, by activating its tools:**
 - **Working groups**
 - **Annual workshops**
 - **Member surveys**
 - **Special issues of the EAN newsletter**

EANM – European Association of Nuclear Medicine

- **The Association offers to support the review process by offering the services of its members to:**
 - **Update the ICRP 128 dose coefficients**
 - **Develop methodologies to calculate the doses absorbed to organs and the effective doses**
 - **Clarify the RBEs that must be applied for treatment with alpha emitters**
 - **To resolve the question of how to combine absorbed and effective doses in the case of hybrid imaging (PET and SPECT)**

ENISS – European Nuclear Installations Safety Standards

- **The main message from the organization: the System is too strict and also too complicated**
- **Another message: among others, is there a chance to revise**
 - **The new dose limit for the lens of the eye?**
 - **Radon risk assessment?**
 - **The new dose criteria?**
 - **The choice of DCRLs?**

ESR – European Society of Radiology

Excerpt from the Society's contribution:

'The ESR looks forward to contributing to this important review and revision process with its ideas and suggestions and thanks ICRP for being considered an organization in official relations.'

EURADOS – European Radiation Dosimetry Group

- **The Group can contribute to the next round of recommendations by:**
 - **Work out documents on implications of ICRP recommendations**
 - **Collaborate on ICRP publications**
 - **Propose members from EURADOS for ICRP task groups**
 - **Highlight important areas of development that might be suitable for ICRP Task Groups**

EUTERP – Platform on European Training and Education in Radiation Protection

A message from the Foundation:

‘During the review of the ICRP system of radiation protection, account should be taken of any consequent changes and challenges relevant to the forward planning of Education and Training (E&T) programmes.’

HERCA – Head of the European Radiological Protection Competent Authorities

- **The Competent Authorities suggest that future recommendations address as a priority:**
 - **The simplification of the System**
 - **The justification, optimization and use of reference levels**
 - **The radon issue**
 - **The communication**
- **They also express a strong reluctance regarding the subjects of individual risk and environmental protection**

IAEA – International Atomic Energy Agency

- **The Agency proposes to continue its cooperation with the Commission in accordance with the Agreement signed in 2013, establishing the formal relationship between the two parties, and wishes to strengthen it during the preparation of the future recommendations**
- **It recalls that the cooperation opportunities are:**
 - **The international conferences organized by the Agency**
 - **The Meetings of the Radiation Protection Standards Committee (RASSC)**
 - **The technical meetings and webinars organized by the Agency**

ICRU – International Commission on Radiation Units and Measurements

- **ICRU recalls that the already long-standing collaboration with ICRP can be continued through:**
 - **Publication of ICRU reports resulting from an ICRU/ICRP collaboration**
 - **Collaboration on ICRP publications, in particular content focused on quantities and measurement**
 - **Mutual invitation to conferences and seminars, to promote the exchange of scientific information**
 - **Collaboration on a personal level between members of the 2 organizations**

IEC – International Electrotechnical Commission

- **In its contribution the Commission presents its organization and its activities, in particular the more recent ones**
- **It makes no particular proposal on the role it could play in the review and revision of the radiological protection System**

IOMP – International Organization for Medical Physics

- **The Organization proposes to identify the situations in which the current principles of radiation protection reach their limit drawing on the practical experience of medical physicists**
- **It may also make a concrete contribution to any necessary revision and also make tangible suggestions if the Commission so wishes**

ISO – International Organization for Standardization

- **In its contribution the Organization presents its organization and its activities, in particular the more recent ones**
- **It makes no particular proposal on the role it could play in the review and revision of the radiological protection System**

ISR – The International Society of Radiology

- **In its contribution the Society presents its organization and its activities, in particular the more recent ones**
- **It makes no particular proposal on the role it could play in the review and revision of the radiological protection System**

MELODI – Multidisciplinary European Low Dose Initiative

- **MELODI offers assistance in the revision process concerning the following points:**
 - **Mechanisms of cancer and non-cancer effects induced by low doses and low dose rates**
 - **Relative biological effectiveness**
 - **Tissue weighting factors**
 - **Effects of dose rate**
 - **Form of dose-response for cancer and non-cancerous diseases**
 - **Individual response to radiation**
 - **Factors that modify the risk of stochastic effects**
 - **Impact of dose inhomogeneity**
 - **Transgenerational effect**

NEA – Nuclear Energy Agency

- **The Agency offers a four-part process to help revise the ICRP System:**
 - **Re-establish the Group of Experts on International Recommendations (EGIR)**
 - **Collect comments from ongoing CRPPH expert groups**
 - **Prepare a document bringing together the views expressed by the experts on the requested changes and the suggested way forward**
 - **If necessary, propose expert groups or specific events to advance *some* of the findings, in collaboration with ICRP and other relevant organizations**

NERIS – European Platform on Preparedness for Nuclear and Radiological Emergency Response and Recovery

- **The Platform has identified subjects relating to its field of intervention that could be the subject of interactions with the Commission:**
 - **Optimization in particular the reasonableness and tolerability aspects**
 - **Environmental protection**
 - **Strategies for implementing countermeasures**
 - **Stakeholder participation and the co-expertise process**
 - **Feedback from the management of COVID 19**

UNSCEAR – United Nations Scientific Committee on the Effects of Atomic Radiation

- **The Committee wishes to continue inviting ICRP as a regular observer to its annual sessions and proposes two areas of collaboration for more in-depth discussions:**
 - **Assessment of circulatory diseases**
 - **Improving the exchange of information on the needs for scientific evaluations**
- **It also invites ICRP to the upcoming webinars this year on its latest evaluations in the field of medical exposure and biological mechanisms at low and low dose**

WHO – World Health Organisation

- **As part of the official relations between WHO and the ICRP (established in 1956!) a workshop will be organized on the gaps and needs of the current System. Among others, the following topics will be discussed:**
 - **The implication of the WHO definition of health with its physical, mental and social dimensions**
 - **The consequences of adopting a public health perspective**
 - **The identification of ‘building blocks’ for supporting the update of the System**
 - **The role of stakeholder engagement**

WNA – World Nuclear Association

- **‘The Association is looking forward to continuing supporting the Commission for the challenging and exciting work ahead.’**

To conclude

- **Concrete proposals from several SLOs have been made to accompany and support the process of reviewing and revising the System with a view to elaborate future General Recommendations**
- **The Commission will contact in the coming months the SLOs that made these proposals to explore what could be their implementation modalities**

Thank you all for your contributions