

## SUMMARY

# 2016 Meeting of Senior Representatives of Organisations in Formal Relations with ICRP

2016 November 24

Vienna International Centre, Vienna, Austria

### Present

International Commission on Radiological Protection (ICRP): **Claire Cousins** (Chair), **Jacques Lochard** (Vice-Chair), **Werner Rühm** (C1 Chair), **Carl-Magnus Larsson** (Main Commission), **Christopher Clement** (Scientific Secretary), **Haruyuki Ogino** (Assistant Scientific Secretary)

Conference of Radiation Control Program Directors (CRCPD): **William Irwin**

European ALARA Network (EAN): **Fernand Vermeersch**

European Nuclear Installations Safety Standards Initiative (ENISS): **Bernd Lorenz**

European Platform on Preparedness for Nuclear and Radiological Emergency Response and Recovery (NERIS): **Thierry Schneider**

European Radiation Dosimetry Group (EURADOS): **Werner Rühm**

European Radioecology Alliance (ALLIANCE): **Hildegarde Vandenhove**

Heads of the European Radiological Protection Competent Authorities (HERCA): **Sigurður Magnússon**

International Atomic Energy Agency (IAEA): **Peter Johnston, Miroslav Pinak, Tony Colgan**

Information System on Occupational Exposure (ISOE): **Jizeng Ma**

IndustriAll Global Union's International Network (INWUN): **Robert Walker**

International Radiation Protection Association (IRPA): **Roger Coates**

Multidisciplinary European Low Dose Initiative (MELODI): **Jacques Repussard**

National Council for Radiation Protection and Measurements (NCRP): **Kathryn Held**

United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR): **Ferid Shannoun**

World Health Organisation (WHO): **Maria del Rosario Perez**

World Nuclear Association (WNA): **Binika Shaw**

Several observers from IAEA, the host organisation, were also present.

Organisations provided written reports to supplement the meeting.

## Meeting Summary

Claire Cousins welcomed all present, and thanked the IAEA for acting as host. She noted the recently announced Committee restructuring and revised mandates. Carl-Magnus Larsson expanded on the rationale for this restructuring.

Peter Johnston, Director, NSW, made welcoming remarks on behalf of the IAEA.

Jacques Lochard thanked all present for the reports already received, described the structure of the meeting, and introduced the two questions of focus for the day.

Following recent work on the ethical foundation of the System of Radiological Protection, ICRP is embarking on a reflection on the ethical and social values embodied in the concepts of tolerability (which underlies the setting of individual dose restrictions including limits, constraints, and reference levels) and reasonableness (which lies at the heart of the implementation of the optimisation of protection principle). The intention is to focus on the concepts, rather than numerical values.

*Q1. How does your organisation view the role of optimisation of protection / reasonableness, and individual dose restrictions / tolerability, in the implementation of radiological protection or other fields related to protection of people and/or the environment?*

*Q2. Beyond this forum, how can ICRP most effectively engage the radiological protection community and other interested stakeholders in the reflection on these concepts?*

Each organisation present was invited to make brief remarks on these questions. Participants were divided into two breakout groups as follows:

### Group 1

Moderator: Jacques Repussard

Rapporteur: Roger Coates

CRCPD, IRPA, INWUN, MELODI, WHO, UNSCEAR, ENISS, EURADOS, ISOE

ICRP: Jacques Lochard, Christopher Clement

### Group 2

Moderator: Sigurður Magnússon

Rapporteur: Thierry Schneider

EAN, NCRP, HERCA, IAEA, WNA, NERIS, ALLIANCE

ICRP: Claire Cousins, Haruyuki Ogino

Rapporteurs Roger Coates and Thierry Schneider summarised the results of the discussions of the breakout groups. A few points from these reports follow.

It was noted that justification and optimisation are sometimes closely interrelated concepts, depending on the sector (e.g. medicine vs. nuclear industry). The distinction between these

concepts may be most relevant for planned exposure situations, and less relevant for the others. In the end, a combination of science, experience and value judgement is needed.

It was generally agreed that radiological protection in planned exposure situations is relatively mature, and well managed within a regulatory framework. In contrast, radiological protection in existing exposure situations is more challenging, and has more scope for societal self-governance. A clearer framework for decision making may be helpful, focusing not only on radiological risk but also other risks and on concomitant benefits. In relation to this, although LNT continues to be a reasonable basis for radiological protection, in decision making related to relatively low exposures factors other than radiation risk predominate. Tolerability is related to the level of exposure, but there is no universal level of exposure or risk that is tolerable.

Medical exposures are recognised to have different characteristics than other exposures in planned exposure situations. They involve the deliberate exposure of individuals for their own benefit.

There was some discussion on “save vs not safe”. ICRP recommendations may be able to provide a rationale, although communication would be difficult. One approach could be comparisons with other industries and other hazards (such as chemical hazards).

The usefulness of dose limits for members of the public was questioned. It may be possible to move from a limit to a constraint, but this may cause confusion and unintended difficulties.

Related to the second question:

- A wide variety of stakeholders should be considered, including in the social sciences, although would be helpful to first engage with organisations in formal relations with ICRP;
- ICRP is encouraged to use channels through other agencies to pass key messages e.g. to governments;
- More knowledge is needed on effects at low doses and low dose rates; it would be helpful for ICRP to clearly and publicly identify this as a priority for research;
- It may be useful to introduce key subjects for debate in fora beyond ICRP; and,
- It was recognised that ICRP has limited resources, thus there is a need for prioritisation and collaboration with other organisations.

Jacques Lochard made concluding remarks, noting that the discussions had been stimulating, and had opened new perspectives.