

# Activities of ICRP C4 and potential cooperation with EAN

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EAN Steering Group Meeting  
January 28, 2022

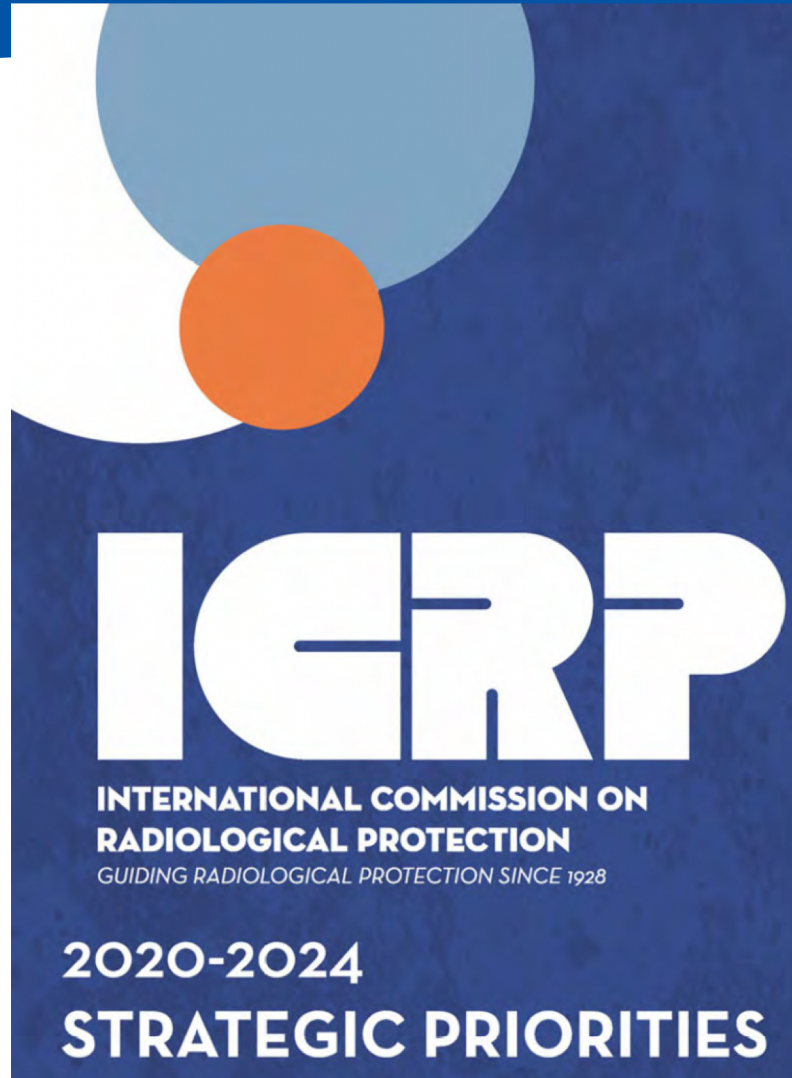
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INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

**Thierry Schneider**

# ICRP Strategic Plan



## STRATEGIC PRIORITIES

*Refine the System  
of Radiological  
Protection*

*Strengthen our  
Engagement with  
Professionals,  
Policy Makers, and  
the Public*

*Ensure ICRP  
Continues to Operate  
as a Well-Governed  
and Forward-Looking  
Organisation*

# Main Commission Members 2021-2025

- **Werner Rühm (Chair)**
- **Donald Cool (Vice-Chair)**
- **Dominique Laurier (C1 Chair)**
- **Francois Bochud (C2 Chair)**
- **Kimberly Applegate (C3 Chair)**
- **Thierry Schneider (C4 Chair)**
- **Simon Bouffler**
- **Kunwoo Cho**
- **Gillian Hirth**
- **Michiaki Kai**
- **Senlin Liu**
- **Sergey Romanov**
- **Andrzej Wojcik**

# C4 Members 2021-2025

- **Nicole Martinez (Vice-Chair)**
- **Jacqueline Garnier-Laplace (Secretary)**
- **Min Baek**
- **Nobuhiko Ban**
- **Yann Billarand**
- **Julie Burt**
- **Analia Cecilia Canoba**
- **Andy Mayall**
- **Anne Nisbet**
- **Sergey Shinkarev**
- **Eduardo Gallego**
- **Daniele Giuffrida**

- **Catrin Bauréus Koch**
- **Yahong Mao**
- **John Takala**
- **Hiroko Yoshida**
- **Friedo Zölzer**

## ***Emeritus C4 member:***

- **Jean-François Lecomte**

## ***Invited from SLO:***

- **Miroslav Pinak (IAEA)**
- **Bernard Le Guen (IRPA)**
- **Stefan Mundigl (EC)**
- **Chris Mogg (NEA)**

# C4 Task Groups (1/6)

- **TG97: Application of the Commission's Recommendations for Surface and Near Surface Disposal of Solid Radioactive Waste (chair: John Takala)**
  - Considerations on long-term management and potential exposures
  - Draft report under review
  - Public consultation expected mid-2022
- **TG98: Application of the Commission's Recommendations to exposures resulting from contaminated sites from past industrial, military and nuclear activities (chair: Mike Boyd)**
  - Specific discussion on managing occupational exposures for existing exposure situations and on stakeholder involvement
  - Draft report expected mid-2022

# C4 Task Groups (2/6)

- **TG99: Reference Animals and Plants Monographs (Chair: Jacqueline Garnier-Laplace)**
  - Focus on the effect data and methodology to derive benchmarks (DCRLs)
  - Draft report expected by the end of 2022
- **TG105: Considering the Environment when Applying the System of Radiological Protection (Chair: David Copplestone)**
  - Identification of case studies to analyse how the environment is addressed when applying the system of RP
  - Connection with on-going research projects (notably from EU)

# C4 Task Groups (3/6)

- **TG106: Application of the Commission's Recommendations to activities involving mobile high activity sources (chair: Eduardo Gallego)**
  - Application of the Commission's Recommendations on RP of workers, the public, and environment to activities involving mobile high activity sources.
  - Uses of sealed sources in industrial radiography, well logging and other instances in which high activity sources are used in a mobile setting, rather than fixed location.
  - RP in such situations is unique because the prevailing circumstances are constantly changing, and the location and control of individuals is not defined by any permanent structures or shielding.
  - The Task Group is the result of solicitation of interest from ICRP to SLO, and was suggested by the European ALARA Network (EAN) and the International Radiation Protection Association (IRPA).

# C4 Task Groups (4/6)

- **TG109. Ethics in Radiological Protection for Medical Diagnosis and Treatment (Chairs: François Bochud and Marie-Claire Cantone)**
  - Application of ethical values from ICRP Pub 138 to the medical sector (introduction of empathy)
  - Relying on a series of practical scenarios for health professionals
  - Draft report expected in Spring 2022
- **TG 110, Radiological Protection for Occupational and Public Exposure in Veterinary Practice (Chairs: Nicole Martinez and Aste Sovik)**
  - Discussions with veterinary professional organization
  - Considerations on pets and ethical issues
  - Report open for public consultation up to March 10, 2022

# C4 Task Groups (5/6)

- **TG114: Reasonableness and Tolerability in the System of Radiological Protection (Chair: Thierry Schneider)**
  - Reflections on the derivation of radiological criteria for tolerability and reasonableness
    - No single/universal value
    - Favour a bottom-up approach and rely on a multi-hazards considerations
  - A continuum from tolerable risk to reasonableness for a specific situation:
    - Not only a matter of level of risk but inclusion of ethical and societal value
  - Key role of optimisation and deliberation procedures
  - Further developments on medical sector, protection of the environment, potential exposures
  - Workshops / webinars to be organised in 2022-2023 with SLOs

# C4 Task Groups (6/6)

- **TG120: Radiological Protection for Radiation Emergencies and Malicious Events (Chair: Anne Nisbet)**
  - Develop ICRP recommendations for small and medium scale radiation emergencies and malicious events (update ICRP Pub. 96)
  - Complement those given in ICRP Pub. 146 for large nuclear accidents

# C4 support to other Committees

- **TG91, Radiation Risk Inference at Low Dose and Low Dose Rate**
  - Report expected for public consultation at the end of 2022
- **TG102, Detriment Calculation Methodology**
  - Report to be published at the beginning of 2022
- **TG115, Risk and Dose Assessment for Radiological Protection of Astronauts**
  - Discussion on: various risk metrics for astronauts, circulatory disease, detriment, protection quantities, reasonableness and tolerability, ethics
- **New TGs:**
  - TG119. Effects of ionizing radiation on diseases of the circulatory system and their consideration in the system of radiological protection
  - TG121. Effects of Ionising Radiation Exposure in Offspring and Next Generations

# The future of Radiological Protection (1/2)

- **Preliminary reflection engaged by ICRP former MC:**
  - Areas of Research to Support the System of Radiological Protection  
ICRP ref: 4812-9422-6917 / DRAFT 29 April 2021
  - Keeping the ICRP recommendations fit for purpose  
Journal of Radiological Protection <https://doi.org/10.1088/1361-6498/ac1611>



# The future of Radiological Protection (2/2)

- Prioritisation for establishing Task Groups on several topics in the next 6-12 months, including:
  - Biomedical research
  - Cancer risk models
  - Ecosystem services approach for protection of the environment (ICRP C4)
  - Effective dose in medicine
  - Justification (ICRP C4)
  - Non-radiation factors in detriment
  - Exposure situations and categories of exposure (ICRP C4)

# Vancouver, Nov 2022



Hosted by CRPA, CNSC & HC - Integrated ICRP/CRPA programme

# ICRP

**[www.icrp.org](http://www.icrp.org)**