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Report of the International Commission on Radiological Protection

for the

IAEA Radiation Safety Standards Committee

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Olga German, Christopher Clement, ICRP

Review and Revision of the System of Radiological Protection

As it was confirmed during a series of workshops and meetings held by ICRP 2021-2023, the System of Radiological Protection ('the System') is robust and has performed well. The analysis of the current System has revealed the need to adapt to address current state of development in the area of use of radiation sources, changes in science and society to remain fit for purpose. The System should also consider the experiences gained since the latest update in beginning of 2000. Therefore, ICRP has initiated a review and revision of the System, laying the groundwork for new General Recommendations to supersede the 2007 Recommendations.

This will be the foundation of radiological protection standards, regulations, guidance, and practice world-wide for the next generation. Cooperation and collaboration are essential, across borders and generations, and involvement of the next generation of RP professionals is crucial.

To prepare for the new generation of the General Recommendations and, taking into account the identified gaps, ICRP is assessing several elements of the System through Task Groups (TG) now underway:

- TG36 Radiation Dose to Patients in Diagnostic Nuclear Medicine
- TG91 Radiation Risk Inference at Low-dose and Low-dose Rate Exposure for RP Purposes
- TG95 Internal Dose Coefficients
- TG99 Reference Animal and Plant (RAP) Monographs
- TG103 Mesh-type Reference Computational Phantoms (MRCP)
- TG105 Considering the Environment when Applying the System of Radiological Protection
- TG106 Application of the Commission's Recommendations to Activities involving Mobile High Activity Sources
- TG112 Emergency Dosimetry
- TG119 Effects of Ionising Radiation on Diseases of the Circulatory System and their Consideration in the System of RP
- TG120 RP for Radiation Emergencies and Malicious Events
- TG121 Effects of Ionising Radiation Exposure in Offspring and Next Generations
- TG122 Update of Detriment Calculation for Cancer
- TG123 Classification of Harmful Radiation-induced Effects on Human Health for RP Purposes
- TG124 Application of the Principle of Justification
- TG125 Ecosystem Services in Environmental RP
- TG126 RP in Human Biomedical Research

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- TG111 Factors Governing the Individual Response of Humans to Ionising Radiation
- TG113 Reference Organ and Effective Dose Coefficients for Common Diagnostic X-ray Imaging Examinations
- TG114 Reasonableness and Tolerability in the System of RP
- TG115 Risk and Dose Assessment for RP of Astronauts
- TG116 Radiological Protection Aspects of Imaging in Radiotherapy
- TG118 Relative Biological Effectiveness (RBE), Quality Factor (Q), and Radiation Weighting Factor (wR)
- TG127 Exposure Situations and Categories of Exposure
- TG 128 Individualisation and Stratification in Radiological Protection: Implications and Areas of Application
- TG 129 Ethics in the Practice of Radiological Protection
- TG 130 Doses from Diagnostic Radiopharmaceuticals During Pregnancy and Breastfeeding

Several additional topics are under consideration for development in the coming years.

ICRP holds online webinars and workshops to actively involve with the interested parties and to allow broad participation in the work of ICRP experts from many different regions of the world. In these events your voluntary fees are important contribution to allow for continued support of ICRP and making the events possible to the less privileged regions and organisations.
ICRP continues the implementation of the Mentorship Programme established in 2019, that has by the date included 82 Mentees in total, with 66 currently in the programme.

Call for nominations to Task Group 130 is open until 27 June, 2025.

ICRP term 2025 – 2029

The International Commission on Radiological Protection (ICRP) is pleased to announce the new Main Commission for the 2025-2029 term, beginning 1 July 2025. The Main Commission is the governing body of ICRP, responsible for setting policy and providing strategic direction. As trustees of ICRP, Main Commission members also oversee the proper functioning of the organisation as a charity registered with the Charity Commission of England and Wales. As a self-perpetuating board, the Main Commission determines its successors for the following term through a formal election process. In the coming term, the Main Commission will continue the important work of ICRP, including its ongoing efforts to review and revise the System of Radiological Protection to meet the needs of the next generation.

Leadership of the Main Commission will remain unchanged in the new term, with Werner Rühm (Germany) continuing as Chair and Simon Bouffler (United Kingdom) as Vice-Chair. Returning members include Dominique Laurier (France), Chair of Committee 1 (Effects); François Bochud (Switzerland), Chair of Committee 2 (Doses); Thierry Schneider (France), Chair of Committee 4 (Application); along with Kunwoo Cho (South Korea), Andrzej Wojcik (Sweden), and Senlin Liu (China). Joining the Main Commission for the first time are incoming Chair of Committee 3 (Medicine) David Sutton (United Kingdom), Nobuhiko Ban (Japan), Nicole Martinez (United States), Eduardo Gallego (Spain), and Makoto Hosono (Japan).

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ICRP Symposia

The last two ICRP symposia, held in Vancouver ICRP 2021+1 and in Tokyo 2023, were dedicated to discuss the identified gaps of the System and the impact of the future work of the review and revision of the System of Radiological Protection.

The 8th International Symposium on the System of Radiological Protection to be hosted by FANR in Abu Dhabi, UAE 7-9 October, 2025 will further discuss the advancement of the Radiological Protection covered in 28 sessions. Pogramme layout and other practical information is available online. Abstracts submission deadline is June 30, 2025.

ICRP Publications

Recent ICRP publications:

- Publication 156 Paediatric Mesh-type Reference Computational Phantoms (Published on 28 November 2024);
- Publication 157 Ethics in Radiological Protection for Patients in Diagnosis and Treatment (Published on 28 February 2025).

In 2025 we are expecting the publication of:

- [P158] TG95 Dose Coefficients for Intakes of Radionuclides by Members of the Public: Part 1;
- [P159] TG97 Radiological Protection in Surface and Near-Surface Disposal of Solid Radioactive Waste;
- [P160] TG108 Practical Aspects in Optimisation of Radiological Protection in Digital Radiography, Fluoroscopy, and CT;

Reports approved for publication:

- TG117 Radiological Protection in PET and PET/CT;
- TG113 Reference Organ Absorbed and Effective Dose Coefficients for Common Radiographic Examinations;
- TG98 Radiological Protection in Areas Contaminated by Past Activities;
- TG95 Dose Coefficients for Intakes of Radionuclides by Members of the Public: Part 2.

Many of the ICRP repots have been translated into other languages (Japanese, Korean, Russian, Italian).

The Secretariat has also provided summaries of many publications in plain language for general public as well as technical summaries. This work is carried out by the ICRP Technical Secretaries.

Public Consultations and Webinars

- **TG116** Radiological Protection Aspects of Imaging in Radiotherapy [Closing date: 30 May 2025];
- **TG91** Scientific Evidence Relevant to the Assessment of Solid Cancer Radiation Risk at Low-Dose and Low-Dose Rate [Closing date: 13 June 2025];
- **TG103** Pregnant-female Mesh-type Reference Computational Phantoms [Closing date: 11 July 2025];

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- **TG99** Considering the Environment When Applying the System of Radiological Protection: Part 1 Broadening the Reference Animals and Plants Approach and Related Derived Consideration Reference Levels [Closing date: 8 August 2025];
- **TG36** Radiation Dose to Patients in Diagnostic Nuclear Medicine [Closing date 5 September 2025].

Most of the public consultations are supported by a digital event, where the main concepts of the report are presented and discussed with the participants, allowing for broader interaction with the users of the ICRP publications. Written comments received during the public consultation are carefully considered and addressed by the Task Group members prior to finalising the report. We encourage you to follow up and engage on this process with ICRP at www.icrp.org.

ICRP events

- Webinar The Contribution of Radiological Protection to Sustainable Development – 31 January virtual;
- TG116 Webinar Radiological Protection Aspects of Imaging in Radiotherapy – 8 April virtual;
- TG 91 Radiation Risk Inference at Low-dose and Low-dose Rate Exposure for Radiological Protection Purposes – 28 May virtual;
- 2025 ICRP Madan Rehani Award Lecture by Fracois Paquet "20 Years of ICRP Work in Internal Dosimetry: An Overview of Challenges Overcome and Major Successes – 3 June virtual;
- TG99 Considering the Environment When Applying the System of Radiological Protection: Part 1 Broadening the Reference Animals and Plants Approach and Related Derived Consideration Reference Levels – 26 June virtual;
- Joint World Nuclear Association-ICRP Workshop: Enabling Sustainable Development Through the System of Protection: Practicality and Alignment – 11-12 September, Hamilton Canada;
- Introduction webinars on publications 154 – 159 – dates tbd.

Members of the RASSC and observing organisations are invited to download the publications and use them in their work. We also encourage active participation in public consultation process and digital events in conjunction with the consultations.

2025 Meeting of Organisations in Formal Relations with ICRP was held 23 June 2025 in Vienna, Austria. The day was dedicated to continued reporting on the specific actions taken by the organisations to support the ICRP Vancouver Call for Action; discussion on the UN Sustainable Development Goals and the System of Radiological Protection and presentation of the progress and outlook on the Review & Revision of the System of the System of Radiological Protection.

We are looking forward to seeing and hearing you at ICRP 2025 Symposia, hosted by FANR in Abu Dhabi 7-9 October 2025, as well as other ICRP events.

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