



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

Directorate D – Nuclear energy, safety and ITER
D.3 – Radiation protection and nuclear safety

Meeting of the Group of Experts referred to in Article 31 of the Euratom Treaty

28-29 June 2023

SUMMARY REPORT

(Approved by the Group of Experts at the meeting 21-22 November 2023)

INTRODUCTION

The meeting of the Article 31 Group of Experts (GoE) took place on **28-29 June 2023 in Luxembourg**. The meeting was attended by 28 out of 48 members of the group, representatives from observers (IAEA, ICRP, NEA, IRPA, UK and CH), and representatives from DG SANTE, DG JRC, DG RTD, and DG ENER. Two external experts were invited to present the radioactive discharge monitoring study findings (ref. agenda item 10).

The Chair opened the meeting, and the Head of Unit ENER D3 Radiation protection and nuclear safety welcomed the participants. The Secretariat informed the experts on apologies and gave updates on the group membership. Since the last plenary meeting in November, one new member from the Netherlands was appointed to the group, following the earlier resignation of her predecessor, and two members have resigned - one from Belgium and one from Denmark. The appointment procedures for the replacement of these members are ongoing.

1. APPROVAL OF THE AGENDA

The draft Agenda was adopted adding under agenda item 12 a presentation on “Radiation Protection for the Polish Nuclear Power Programme”.

2. APPROVAL OF THE SUMMARY REPORT OF THE MEETING HELD IN LUXEMBOURG ON 29-30 NOVEMBER 2022

The Summary Report of the meeting held on 29-30 November 2022 was approved with one change under agenda item 8.1 ⁽¹⁾.

⁽¹⁾ The approved Summary Report of the November 2022 meeting can be found under [Group of experts \(europa.eu\)](https://ec.europa.eu/eufo/)

3. PROCEDURAL ASPECTS

3.1. Rules of Procedure and declaration of interests

The Secretariat reminded the group about the main points of the rules of procedure of the Group of Experts. In line with the rules of procedure, the Secretariat invited the group to declare any change in the information provided during the nomination procedure through the experts' Declaration Of Interest (DOI) forms. No conflict of interest or change was declared.

3.2. Election of a new Chairperson for the period June 2023 - December 2025 (members only)

The Group of Experts re-elected ⁽²⁾ Mika Markkanen as the Chairperson for the second half-term of the current mandate.

3.3. Election of a new Vice-Chairperson for the period June 2023 - December 2025 (members only)

The Group of Experts re-elected Helena Janžekovič as the Vice-Chairperson for the second half-term of the current mandate.

4. OPINION OF THE ARTICLE 31 GROUP OF EXPERTS ON ESTIMATION OF EFFECTIVE AND EQUIVALENT DOSE AND RELATED DOSE COEFFICIENTS FOR OCCUPATION EXPOSURE FROM INTAKES OF RADIONUCLIDES (MEMBERS ONLY)

At the last plenary meeting in November 2022, the Commission invited the GoE to examine the scientific developments regarding updated values, relationships, and coefficients since 2007, as presented by the ICRP in their publication series on Occupational Intakes of Radionuclides ⁽³⁾, and to advise the Commission on the future use of these values, relationships and coefficients, in the form of an Opinion. In response to this request, the GoE established a Working Party on Dose Coefficients (WP DC) to work on a draft Opinion.

At this meeting, the Chair of the WP DC presented the draft Opinion prepared by the working party through two online meetings and email exchanges. Following a discussion of the draft Opinion, the GoE adopted, with one minor amendment, the Opinion unanimously. The signed Opinion will be published on the dedicated Group of Expert's webpage ⁽⁴⁾.

Further, the GoE agreed to discuss issues related to the practical implementation of the new dose coefficients (both occupational and public) during a topical session to be organised in an upcoming meeting.

⁽²⁾ The elections under agenda items 3.1 and 3.2 were performed by secret voting in the presence of members only and three Commission staff providing secretarial assistance. A senior member of the group Chaired the respective sessions.

⁽³⁾ ICRP Publication 130 (2015), 134 (2016), 137 (2017), 141 (2019), 151 (2022)

⁽⁴⁾ By the time of this draft Summary report the Commission has published the Opinion on the Article 31 Group of Experts website: [Group of experts \(europa.eu\)](https://ec.europa.eu/experts/)

5. INFORMATION BY THE COMMISSION

5.1. Presentation by DG ENER D

The Head of Unit ENER-D3 presented updates of the ENER-D activities in the areas of radiation protection and nuclear safety and updated the experts on activities in relation to the war in Ukraine. In this context, he updated the experts on the status of compliance checks of EU national legislation with the Euratom Directives for Radiation Protection, Nuclear Safety and Radioactive Waste and Spent Fuel Management, as well as on the implementation monitoring of the Nuclear Safety Directive and on the organisation of the second Topical Peer Review on *fire protection* at nuclear installations. On Ukraine, he updated the experts on the EU coordinated support for Ukraine, including the provided humanitarian aid by the EU Civil Protection Mechanism, on the emergency preparedness and response arrangements ECURIE and EURDEP, and on the cooperation with ECURIE competent authorities to better prepare for a potential nuclear emergency. Furthermore, he updated the experts on Commission activities related to verification of environmental radioactivity monitoring arrangements in the EU, maintaining a RAdioactive Discharge Database (RADD), and delivering Opinions on transboundary radiological impact under Articles 35, 36 and 37 of the Euratom Treaty, respectively.

A representative from Unit ENER-D4 informed the group on status and ongoing activities in fusion. The representative updated the experts on the state of the ITER project as well as on the activities in the wider fusion domain and offered updates on international developments and approaches for regulating fusion. The Commission will continue dialogues with stakeholders as well as contributing to international efforts towards assuring effective and harmonised application of appropriate safety requirements for fusion facilities.

The GoE appreciated the updates and took note of the developments.

5.2. Presentation by DG SANTE

a Updates on the follow up to the cancer screening recommendation

A representative from DG SANTE presented updates on the follow up to the new Council Recommendation on cancer screening which had been adopted in December 2022 ⁽⁵⁾. The recommendation accounts for the latest technology and scientific developments and evidence, and covers breast, cervical and colorectal cancer, as well as three new cancer sites namely, prostate, lung, and gastric cancer. It is supported by the work on new EU screening guidelines and quality assurance schemes. The new EU Cancer screening scheme also includes an initiative to improve monitoring and exchange of data through the European cancer information system and European Health Data Space launched in 2022. The representative further updated the experts on the EU for Health ongoing screening projects and upcoming Joint Action on cancer screening.

The GoE appreciated the presentation and took note of the developments.

⁽⁵⁾ Link to adopted [Council Recommendation of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC 2022/C 473/01](#)

b Updates on the review of the Fukushima measure and the Codex document on natural radionuclides

A representative from DG SANTE presented updates on the status of activities as regards radioactivity in food and feed, namely on the Fukushima Regulation and on the Codex Committee on Contaminants in feed and food (CCCF).

Review of Regulation (EU) 2021/1533 (Fukushima measure)

The representative presented the evolution of the Implementing Regulation on food and feed imports to its last amendment, Regulation No 2021/1533 ⁽⁶⁾, and updated the GoE on the recent review performed as foreseen in June 2023. The Commission examined the effectiveness of the control system put in place by Japanese authorities and the resulting findings at import whereby no non-compliances were found since June 2011, and took also into account the potential impact of the release of contaminated treated water to the Pacific Ocean, expected to start in summer 2023, including the relevant IAEA reports and the decontamination measures prior to release. Based on its observations, the Commission proposed to repeal the Regulation (EU) 2021/1533 and presented and discussed the draft repealing Regulation with Member States at a Standing Committee meeting on 22 June 2023.

Codex Committee on Contaminants in feed and food (CCCF): paper CL 2023/17 on Natural Radioactivity in Food, Feed and Drinking water

The representative presented updates on the work of the CCCF. An information paper on natural radioactivity in food/feed/water, including regional variations, was prepared by the FAO, IAEA and WHO including also input provided by UNSCEAR and is under consultation within CCCF. The document is intended for food safety regulators and is aimed to be finalised by the CCCF's next session in April 2024. The data and the respective statistical analysis in the document do not provide evidence of regional variations in natural radionuclide activity concentrations in foods.

The GoE appreciated the presentations and took note of the developments.

5.3. Presentation by DG RTD

A representative from DG RTD presented updates of the Euratom research funded projects on radiation protection. In this context, he updated the experts on Horizon Europe, Euratom R&T Programme 2021-2025 and the Euratom Work Programme 2023-2025, as well as introduced the European Partnerships through which research in fusion energy, waste management, radiation protection, and materials, will be carried out. He specifically addressed the Euratom Research Partnership for European Research in Radiation Protection and detection of ionising radiation PIANOFORTE - Horizon Europe (2021-2027), and the Partnership EURAD-2 for Radioactive Waste Management in 2024.

The GoE appreciated the presentation and took note of the developments.

5.4. Presentation by DG JRC

A representative from DG JRC presented their ongoing and planned activities in the areas of emergency preparedness and response (EPR) and radioactivity environmental

⁽⁶⁾ Commission Implementing (EU) Regulation No 2021/1533, of 17 September 2021, imposing special conditions governing the import of feed and food originating in or consigned from Japan following the accident at the Fukushima nuclear power station and repealing Implementing Regulation (EU) 2016/6

monitoring, as well as in support of the SAMIRA Action Plan and EU Cancer initiatives. In February 2023, JRC organised the third European High-Level Nuclear Roundtable on medical applications ⁽⁷⁾. A follow up initiative is a series of stakeholder consultation workshops aiming to foster concrete actions in research and innovation to bridge the gap between research and clinical uses of radionuclides. The first workshop focused on the topic “*Translating radiotheranostic cancer research into clinical practice in Europe*” (Ispra 27 April 2023), while the second will focus on competencies (Petten October 2023) and third one on research & innovation for the security of supply of medical radioisotopes (Karlsruhe November 2023). The outcomes will be used to draw recommendations and follow-up actions.

The GoE appreciated the presentation and took note of the developments. In the discussion that followed, the experts asked about the uncertainties of the results of dispersion calculations for EPR due to uncertainties in the source term.

6. EMERGENCY PREPAREDNESS AND RESPONSE

6.1. Study on Implementation of nuclear and radiological emergency preparedness and response requirements in EU Member States and neighbouring countries

A representative from DG ENER presented the main findings and recommendations of the study on implementation of nuclear and radiological emergency preparedness and response (EP&R) requirements in EU Member States and neighbouring countries. The study reviewed and evaluated the practical implementation of national EP&R arrangements, including cross-border cooperation and coordination aspects, in the participating countries. Coherence of such arrangements in a cross-border context was evaluated through case studies based on a fictitious accident scenario with cross-border consequences. By enabling sharing of experience and technical exchanges amongst expert groups and national competent authorities with health, civil protection, radiation protection, and nuclear safety responsibilities, the project promoted stronger coordination and greater harmonisation of approaches. Based on the findings, a set of recommendations for future actions at the EU level were suggested. The final report of the study has been published ⁽⁸⁾.

The GoE commented and took note of the developments.

6.2. Update by the Commission on activities related to emergency preparedness and response

A representative from DG ENER presented updates on activities related to emergency preparedness and response, including follow up activities on the war in Ukraine. Under the current situation, the Commission is contributing through its services with assessments of EP&R impacts as well as by supporting cooperation activities amongst regulatory authorities on better preparedness in case of an accident/emergency at NPP in Ukraine (e.g. exchanging info on dispersion modelling tools/capabilities, examining ways for facilitating coordination of actions by impacted countries, and exchanging information on national approaches to improve mutual confidence). The representative

⁽⁷⁾ Report available on the JRC Publications Repository: [JRC Publications Repository - Third European High Level Nuclear Roundtable on Medical Applications \(europa.eu\)](https://publications.jrc.ec.europa.eu/publication/?type=publication&id=JRC115443)

⁽⁸⁾ [Implementation of nuclear and radiological emergency preparedness and response requirements in EU Member States and neighbouring countries - Publications Office of the EU \(europa.eu\)](https://publications.jrc.ec.europa.eu/publication/?type=publication&id=JRC115443)

also updated the experts on the activities towards promoting more effective and consistent approaches for implementation of specific BSS Directive's requirements (such as for emergency management system, emergency response plans and international cooperation).

The GoE appreciated the presentation and took note of the developments. In the discussion which followed, questions focused on the modalities of the Commission proposal for a benchmarking exercise among ECURIE competent authorities to facilitate information exchange about national approaches on modelling and dispersion calculations in EP&R (to be launched in July 2023).

7. NATURAL RADIATION SOURCES

7.1. Progress report of the Working Party on exposure to natural sources of ionising radiation (WP NAT)

The Chair and the Secretariat of the WP NAT reported on progress made since the last Group of Experts' meeting. The WP NAT had been working on a draft report on "Building materials" since its previous term. Apart from the BSS, the report needs to take also into account the construction products regulation (CPR), Regulation (EU) No 305/2011, as well as standards developed by the CEN/CENELEC⁽⁹⁾ on which the application of the CPR relies. The Secretariat has been in contact with DG GROW with a view to further examine the links of the respective BSS requirements with the CPR and relevant CEN/CENELEC initiatives. The CPR is currently under review (at the phase of discussion in Council and European Parliament) and expected to be finalised next year. In view of this development, the Chair and Secretariat proposed to put the report on building materials on hold until the revised CPR is adopted. In the meantime, the Secretariat would actively follow discussions in the Commission expert groups (run by DG GROW) and developments in CEN Working Groups dealing with radioactivity in construction products and would keep GoE informed about the developments.

The GoE took note of the developments and discussed on the way forward. An expert suggested that WP NAT keeps working on the draft as regards the part of collecting national experiences. Another expert highlighted that the methodology of CEN standard on gamma radioactivity measurements is based on measurements with High Purity Germanium detectors while the industry has been extensively using NaI cheaper but still adequate detectors. An expert also noted the importance, in the calculations, of the fraction of radon exhalation which is being currently investigated. The experts proposed to convene an online meeting of the WP NAT in September/October to discuss recent developments with representatives from DG GROW and CEN/CENELEC. Some members of the WP NAT suggested to organise also an in-person WP NAT meeting, in conjunction with the next GoE plenary. The GoE concluded that the WP NAT should follow the developments as regards building materials, reflect on the way forward in their next

⁽⁹⁾ EN 17637 European Standard - Construction products - Assessment of release of dangerous substances - Dose assessment of emitted gamma radiation, November 2022

CEN/TR 17113 Technical Report - Construction products – Assessment of release of dangerous substances - Radiation from construction products - Dose assessment of emitted gamma radiation, October 2017

prEN 17216 Draft Standard - Construction products: Assessment of release of dangerous substances - Determination of activity of radium-226, thorium-232 and potassium-40 in construction products using semiconductor gamma-ray spectrometry.

meeting(s), and report to the GoE in their November plenary. They also agreed to review the mandate of the WP NAT.

7.2. Draft EC publication National Radon Action Plans: Results of the EU-RAP study's review and evaluation

At the November 2022 meeting, two representatives of the EU-RAP consortium presented the main findings and conclusions of the study on national radon action plans.

At this meeting, a representative from DG ENER presented the final publishable report of the study.

The GoE discussed the draft publication and approved in principle the report for publication in the Radiation Protection series of the European Commission, pending the incorporation of any final comments which should be sent to the Secretariat by 31 August 2023.

8. SCIENTIFIC SEMINARS

8.1. Progress report of the Research Implications on Health and Safety Standards (WP RIHSS)

The Chair of WP RIHSS reported on progress with the work programme of WP RIHSS since the last regular meeting of the GoE. The WP RIHSS met on 31 March and on 30 May 2023. During these meetings, the working party finalised the draft proceedings of the EU Scientific Seminar December 2022 on *RP200-Radiological protection considerations for fusion reactors* and prepared the draft programme for the EU Scientific Seminar 2023 on *Radiation protection issues with modern external beam radiotherapy*. In addition, the WP RIHSS agreed on the Chairperson and rapporteur of the 2023 seminar and prepared a document summarising the objectives and the potential content of the presentations to be shared with the candidate speakers at the time of invitations. The WP members have also started informal contacts with the proposed speakers.

The GoE took note of the progress made.

8.2. EU Scientific Seminar 2022 on Radiological protection considerations for fusion reactors

The Chair of WP RIHSS presented the final version of the draft proceedings of the EU Scientific Seminar 2022 *RP200-Radiological protection considerations for fusion reactors (version 15 June 2023)* as prepared by the WP RIHSS. She also informed of the option offered by the Journal of Radiological Protection to the seminar speakers to further submit their papers for publication in a journal's special issue, noting the view of the WP RIHSS that the publication of the seminar proceedings in the EC Radiation Protection series should not be impacted in such case.

The GoE discussed and approved the draft the proceedings in principle for publication in the Radiation Protection series of the European Commission. They also commended the WP RIHSS for discussing additional possibilities for publication of seminar papers in the peer reviewed journal. Some experts noted this could be a good approach for future seminars while others stressed that the long tradition of publishing the proceedings in the EC's Radiation Protection series should be maintained.

8.3. EU Scientific Seminar 2023 on Radiation protection issues in modern external beam radiotherapy

The Chair of WP RIHSS presented the draft programme of the EU Scientific Seminar 2023 on *Radiation protection issues in modern external beam radiotherapy* as prepared by the WP RIHSS (see in Annex I). The seminar is planned for 21 November 2023.

The GoE discussed and approved the draft programme. An expert proposed to consider opening the scientific seminar to a broader audience via offering also virtual attendance. The secretariat will look into offering this possibility to interested experts in addition to the experts invited to participate in person as per usual practice.

9. MEDICAL EXPOSURES

9.1. SAMIRA Action Plan

A representative from DG ENER updated the GoE on the implementation of the Action Plan under the Strategic Agenda for Medical Ionising Radiation Applications (SAMIRA) ⁽¹⁰⁾.

Focusing on the pillar on Quality and Safety, the representative updated the GoE on the work of the Steering Group on Quality and Safety (SGQS) which aims, together with its working groups, to issue guidance and recommendations were needed, foster support of implementation through European programmes and discuss feedback from implementation in Member States. The working groups on Performance Indicators (KPIs) and on clinical audit met in March 2023 and the SGQS held online its 4th plenary meeting on 12-13 June 2023. The key decisions of this plenary were the adoption of the position paper on clinical audit ⁽¹¹⁾, and the creation of a new working group tasked with the organisation of a workshop on Diagnostic Reference Levels (DRLs) in the first semester of 2024. The representative presented an overview of the position paper on clinical audit. The next SGQS plenary will take place on 15-16 November 2023 in Luxembourg. The representative updated the experts also on the ongoing DG ENER studies EU-JUST-CT, Equipment and SIMPLERAD, with their respective workshops 28-29 September (Luxembourg), 14-15 November (Luxembourg), and 11-12 December (Brussels). He also gave an overview of further ongoing SAMIRA projects under the EU4Health programme, including EU-REST on workforce availability, education and training, and i-Violin on adaptation and implementation of optimisation tools in cancer CT imaging. Further planned studies and activities include a DG ENER KPIs study, and a (preparatory) SAMIRA Joint Action, Clinical audit campaigns, and Medical devices study under EU4Health.

Under the pillar of security of supply of medical radioisotopes, the representative updated the experts on the ongoing actions to prepare a European Radioisotopes Valley Initiative (ERVI). A High-Level Workshop on Security of Supply of isotope took place on 27 April in Brussels, and the ERVI feasibility study will be launched soon. The representative gave also an update of SAMIRA activities on innovation and technological development including the EURAMED rocc-n-roll project exploring synergies between the Euratom research programme and the Health and Digital topics of Horizon Europe.

The GoE took note of the developments.

⁽¹⁰⁾ [SAMIRA Action Plan - European Commission \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/infographic/infographic_samira_action_plan/attachment/101223_samira_action_plan.pdf)

⁽¹¹⁾ The SGQS position paper is published here: [SAMIRA - Library \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/infographic/infographic_sgqs_position_paper/attachment/111223_sgqs_position_paper.pdf)

9.2. Progress report of the Working Party on medical exposures (WP MED)

The Chair of WP MED reported on progress with the work programme of WP MED since the last Group of Experts' meeting.

The WP MED met on 27 June 2023 and confirmed the mandate extension of the Chair and Vice Chair. They also discussed Ethics in Radiation Protection (based on a presentation by ICRP on the work of ICRP TG 109 on the draft report on Ethics in Radiological Protection for Medical Diagnosis and Treatment, and in reference to WHO's relevant policy brief), and Recurrent Imaging/Cumulative Exposures (based on relevant updates by the IAEA).

Furthermore, the MARLIN project coordinator presented the project, which started recently. MARLIN aims to explore the status of incident reporting in Member States and to develop consensus guidelines on reporting and learning from patient-related incidents and near misses in radiotherapy, interventional cardiology, nuclear medicine, and interventional and diagnostic radiology.

The WP MED received also updates from the Commission on SAMIRA activities, on the SGCS position paper on Clinical audit and on its working groups on DRLs and KPIs, as well as on various studies/ projects to which the WP MED provides reviewers. The Chair of WP Med attends also SGQS.

The WP MED discussed which RP series publications need to be updated. RP97 of iodine therapy, RP100 on protection during pregnancy, and RP162 on acceptability criteria for equipment were considered. RP162 was considered most relevant to update considering the fast development of medical technology and awaiting results of ongoing work for the other topics.

As regards future work, the Chair proposed to consider including the topic *Non-Medical Imaging Exposures* in the work programme of the WP MED and presented a summary of status and potential issues. She also presented current work program of the WP MED and gave an outlook on the way forward.

The GoE took note on the progress made. In the discussion that followed, the ICRP observer informed the experts that the mentioned ICRP draft report on ethics in radiological protection is open to consultation until 11 September and invited the experts to provide comments. He also suggested that the issue of Recurrent Imaging/Cumulative Exposures should be looked at, in relation to available epidemiological evidence.

10. STUDY ON MONITORING OF RADIOACTIVE DISCHARGES FROM NUCLEAR FACILITIES IN THE EU

A representative from the consortium led by NucAdvisor presented the main findings and recommendations of the study on monitoring of radioactive discharges from nuclear facilities in the EU.

The GoE appreciated the presentation and took note of the developments. In the discussion that followed, the experts asked about identified trends in releases (generally decreasing in the last 20 years), application of recommendations, and on reporting approaches of activities lower than detection limit.

11. DRAFT EC PUBLICATION - EIVIC-2020 EUROPEAN IN-VIVO INTERCOMPARISON EXERCISE 2020 ORGANISATION OF A EUROPEAN INTERLABORATORY COMPARISON ON WHOLE-BODY COUNTING

At the November 2022 meeting, two representatives from the EIVIC consortium had presented the main findings and conclusions of the study on European Interlaboratory Comparison on Whole Body Counting.

At this meeting, a representative from DG ENER presented the final publishable report of the study. He also informed the experts that the phantom and the radioactive standard sources produced during the study are still in possession of the contractor and are available to interested laboratories.

The GoE discussed the draft publication and approved in principle the report for publication in the Radiation Protection series of the European Commission. They also agreed to send any final comments to the Secretariat by 31 July 2023.

12. EMERGING ISSUES IN MEMBER STATES WITH POTENTIAL IMPLICATIONS ON A EUROPEAN LEVEL - RADIATION PROTECTION FOR THE POLISH NUCLEAR POWER PROGRAMME

A member of the GoE from Poland presented the radiation protection challenges in view of the nuclear power programme approved by the Polish government in 2019. To respond to these challenges and in absence of radiation protection specific research programme in Poland, a national strategic research agenda for radiation protection is in preparation. A report was published (in Polish) to engage stakeholders in the discussion of the research agenda and its priorities with a view to increase possibilities of achieving the needed funding.

The GoE thanked the expert for the very interesting presentation and for sharing their experience with the group. In the discussions that followed, the questions addressed the scope of the research agenda, the foreseen involvement of young researchers, and the collaboration between regulators and scientists.

13. ISSUES OF INTEREST FROM INTERNATIONAL ORGANISATIONS

13.1. Presentation by IAEA

The representative from the International Atomic Energy Agency (IAEA) presented an update of IAEA's activities regarding Supporting implementation of the International Basic Safety Standards, by RP safety standards and reports, occupational radiation protection, radiation safety in medical applications, and maintaining safety and nuclear security during an armed conflict, as well as upcoming activities.

The GoE appreciated the presentation and took note of the newest activities.

13.2. Presentation by ICRP

13.2.a Dose Coefficients (major changes)

The representative from ICRP presented the major changes introduced by the new ICRP dose coefficients for internal occupational exposure. The representative emphasised the scientific validity of the new dose coefficients based on the ICRP experts extensive work (about 20 experts for 10 years produced hundreds of thousands of data files) as well as significant efforts on quality assurance of results. The comparison of new and old data performed by the Task Group 95 on Internal Dose Coefficients led ICRP to conclude overall that "It is reassuring that differences between the old and new data are mostly small, confirming that the protection of workers was already reliably based on existing

data.” and that “The increased sophistication and realism of the new biokinetic and dosimetric models give us additional confidence in the data provided, and contribute to reductions in uncertainties.”

The GoE appreciated the presentation. In the discussion that followed, the experts were interested to know more on the expected timeline for the publication of the new public dose coefficients which are in preparation. The UK observer noted that an impact assessment could be initiated to identify potential changes which could have an impact on the implementation of these public dose coefficients.

13.2.b Updates by ICRP

The ICRP Chair presented the latest updates under its ongoing review of the international system of radiological protection, which has engaged a broad variety of world-wide stakeholders. In the first phase of the review, ICRP stimulated discussions by publishing two open access papers⁽¹²⁾, and collected stakeholders’ feedback by organising two workshops: a digital workshop on *The Future of Radiological Protection* (in 2021), followed by the publication of the workshop report⁽¹³⁾, and a *Workshop on the Review and Revision of the System of Radiological Protection: A Focus on Research Priorities* (during the RP week 9-14 October 2022), the report of which is in preparation. As announced in the 6th Int. Symposium of the System of Radiological Protection (7-10 November 2022), ICRP concluded overall that the most important topics for RP research had been identified and that the first phase of process towards the review and revision of the RP System has come to an end. The representative also presented additional initiatives, such the new mentorship programme and the publication of the paper on the Vancouver call for action⁽¹⁴⁾. The next opportunity for stakeholders to provide feedback will be the ICRP2023 7th Int. symposium on the system of radiological protection 6-9 November 2023 in Tokyo.

The GoE expressed their appreciation for the work of the ICRP and took note of the developments. An expert commented that the impact of measurement of dose rate could be further considered during the review. This issue is being addressed within TG 91.

13.3. Presentation by NEA

The representative from the Nuclear Energy Agency (NEA) presented an update of NEA’s activities in the areas of radiological protection and public health implemented through the programme of work of NEA’s Committee on Radiological Protection and Public Health (CRPPH) and its expert groups. NEA activities related to the conflict in Ukraine were also outlined.

The GoE appreciated the presentation and took note of the newest activities.

13.4. Presentation by IRPA

The representative from the International Radiological Protection Association (IRPA) presented updates on IRPA’s strategic plan 2021-2024 and on activities of IRPA’s task groups (TG), the TG on Review of the System of Radiological Protection, TG on Women in

⁽¹²⁾ [Keeping the ICRP recommendations fit for purpose](#) , and [Areas of Research to Support the System of Radiological Protection](#)

⁽¹³⁾ [Summary of the 2021 ICRP workshop on the future of radiological protection - IOPscience](#)

⁽¹⁴⁾ [Vancouver call for action to strengthen expertise in radiological protection worldwide | Radiation and Environmental Biophysics \(springer.com\)](#)

Radiation (WiR), TG on NORM, TG on Eye Dose and Tissue Effects, TG on Radiation Safety Culture in HealthCare, TG on Non-Ionising Radiation (NiR), and TG on Mentorship in the Young Generation Network-YGN. He also informed the experts of the new memorandum of understanding between IOMP and IRPA and of planned events.

The GoE appreciated the presentation and took note of IRPA's activities.

14. OTHER BUSINESS

No other business was raised.

15. DATES OF THE NEXT MEETINGS

November 2023:

The November 2023 meeting of the Group of Experts will be held on **21 – 22 November 2023** in Luxembourg, in Room E, European Convention Center Luxembourg, 1, rue du Fort Thüngen, L-1499 Luxembourg (Kirchberg)

June 2024:

The June 2024 meeting of the Group of Experts will be held **online** ⁽¹⁵⁾ on **5 – 6 June 2024**

⁽¹⁵⁾ unless an in-person meeting would be deemed necessary

Annex I: Draft programme of the EU scientific seminar 2023

EU Scientific Seminar 2023

Radiation protection issues in modern external beam radiotherapy

Luxembourg, 21 November 2023

starting at 13:30 - ending at 18:00

in Room E, European Convention Center Luxembourg

1, rue du Fort Thüngen, L-1499 Luxembourg (Kirchberg)

Draft Programme

(Version 14 June 2023)

Chairperson: Pawel Olko

Rapporteur: Ivica Prlic

13:30 – 13:40	Objectives of the seminar and introduction to the topic <i>Chair, on behalf of the Article 31 WP RIHSS</i>
13:40 – 14:10	FLASH therapy <i>Speaker tbc</i>
14:10 – 14:40	Proton therapy - Specific radiation protection issues <i>Speaker tbc</i>
14:40 – 15:10	Intraoperative radiotherapy / Radiosurgery <i>Speaker tbc</i>
15:10 – 15:40	Coffee Break
15:40 – 16:10	Radiation protection of specific patient categories & associated uncertainties (such as children, pregnant women) <i>Speaker tbc</i>
16:10– 17:50 16:10-16:50 (8 min for each introductory presentation) 16:50-17:50	Round table discussion: Policy implications and research needs <ul style="list-style-type: none">– Ion therapy (Carbon, Helium ions...), <i>Speaker tbc</i>– Broadening of Magnetic Resonance Imaging Guided Linear Accelerator (MRI-LINAC), <i>Speaker tbc</i>– New developments<ul style="list-style-type: none">○ Accelerator based Boron Neutron Capture Therapy (BNCT), <i>Speaker tbc</i>○ Combined radiotherapy with hyperthermia, <i>Speaker tbc</i>– Policy response/SAMIRA perspective– Discussion

	<i>Moderator: The Chair Pawel Olko</i> <i>Round table: Speakers, panelists, ...</i>
17:50 – 18:00	Concluding remarks and closing of the EU Scientific Seminar 2023 <i>Chairperson</i>
18:15	Cocktail