



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

DIRECTORATE D – Nuclear Energy, Safety and ITER
Radiation Protection and Nuclear Safety

Meeting of the Group of Experts established under Article 31 of the Euratom Treaty

Luxembourg, 17 – 18 May 2017

SUMMARY REPORT

(Approved by the Group of Experts at the meeting 8 – 9 November 2017)

INTRODUCTION

The Director of Directorate D *Nuclear energy, safety and ITER*, welcomed members of the Article 31 Group of Experts and observers from important international organisations as well as from Switzerland to this meeting of the Group of Experts.

In his welcome address, the Director summarised the current agenda of the Directorate mentioning in particular the transposition of the Nuclear Safety Directive, including an enhanced safety objective, the adoption by the Commission of the first report on the radioactive waste management Directive, the adoption of the final version of the illustrative programme on nuclear energy PINC, and the transposition of the basic safety standards Directive. The Director highlighted the role of the Article 31 Group of Experts in various developments. Finally, the Director introduced the new Head of Unit Radiation Protection and Nuclear Safety who took up duty on 1 January 2017.

The Secretariat informed the Experts on a change in membership of the group – two former experts have retired and two new experts have been nominated – and on presence and apologies for this meeting.

1. APPROVAL OF THE AGENDA

The agenda was approved without amendments.

2. APPROVAL OF THE SUMMARY REPORT OF THE MEETING HELD ON 8 – 9 NOVEMBER 2016

The Summary Report of the meeting held on 8 – 9 November 2016 has been approved without amendments and is published on the Europa website¹.

¹ The approved Summary Report of the November 2016 meeting can be found under <http://ec.europa.eu/energy/node/1183>

3. RULES OF PROCEDURE

At the November 2016 meeting, the Article 31 Group of Experts agreed unanimously to amend and modernise the Rules of Procedure, in particular with regard to the Commission rules on transparency and conflict of interest.

The Secretariat presented draft Rules of Procedure for the Article 31 Group of Experts based on the framework set out in the *Commission Decision of 30.5.2016 establishing horizontal rules on the creation and operation of Commission expert groups*² and the standard rules of procedure of expert groups, proposed in Annex 3 therein³. The Secretariat also provided a table relating the text from the new draft rules of procedure to the existing Rules of Procedure (Version 14 November 2007).

The Article 31 Group of Experts discussed the draft Rules of Procedure presented by the Secretariat and approved the text as amended at the meeting. It was agreed that the Article 31 Group of Experts, after the Secretariat has sent a clean version, will be given time to adopt the Rules of Procedure through a silence procedure⁴.

It was further agreed to make the Code of Conduct, included in the 2007 Rules of Procedure, a separate document, and to decide at a later stage whether additional working arrangements for the Secretariat are still needed.

The adopted Rules of Procedure will be published on the Europa website⁵.

4. INFORMATION BY THE COMMISSION

The new Head of Unit D3, Radiation Protection and Nuclear Safety summarised the Unit's recent activities and initiatives and latest developments in the areas radiation protection and nuclear safety. More specifically, the following topics were covered:

- Transposition and implementation of the "Basic Safety Standards (BSS) Directive",
- Transposition and implementation of the "Nuclear Safety Directive (NSD)",
- Non-power applications of nuclear technology (SAMIRA)

5. ISSUES OF INTEREST FROM INTERNATIONAL ORGANISATIONS

5.1. International Commission on Radiological Protection (ICRP)

The representative of the ICRP presented recent activities of ICRP. More information on ICRP can be found on the ICRP homepage <http://www.icrp.org/>.

5.2 International Atomic Energy Agency (IAEA)

² Commission Decision of 30.5.2016 establishing horizontal rules on the creation and operation of Commission expert groups C(2016) 3301

³ C(2016) 3301 (Annex 3)

⁴ The Group of Experts established under Article 31 of the Euratom Treaty adopted the new Rules of Procedure by silence procedure on 30 June 2017.

⁵ The Rules of Procedure are published on <http://ec.europa.eu/energy/node/1183>

The representative of the IAEA reported on the current work programme of the agency, in particular on the programme on patient protection, on the programme on occupational radiation protection, on the programme to strengthen the capabilities for radiation protection of workers in emergency situation, on the development of a radon programme, and on the harmonisation of reference levels for foodstuffs and drinking water contaminated following a nuclear accident. More information on IAEA can be found on the IAEA homepage <https://www.iaea.org/front>.

5.3 World Health Organisation (WHO)

No representative of the WHO could attend the meeting. More information on WHO can be found on the WHO homepage <http://www.who.int/en/>.

5.4 Nuclear Energy Agency (NEA)

The representative of the NEA briefly summarised the recent activities of the NEA and in particular of its Committee on Radiation Protection and Public Health (CRPPH). More information on NEA can be found on the NEA homepage <http://www.oecd-nea.org/>.

5.5. International Radiation Protection Association (IRPA)

The President of IRPA presented the status of IRPA, IRPA's vision, selected strategic priorities of IRPA, and IRPA activities in the areas *Radiation Protection in a Changing Society* and *Radiation Protection Culture*. The next IRPA International Conference IRPA15 will take place in Seoul, Korea, May 2020. More information on IRPA can be found on the IRPA homepage <http://www.irpa.net/>.

5.6. Heads of European Radiation protection Competent Authorities (HERCA)

The representative of HERCA reported on the functioning, internal and external policies, external relations and communication of HERCA. HERCA current activities are in the areas medical applications, emergency preparedness and response, veterinary applications, non-medical sources and practices, European radiation passbook and outside workers, education and training, transposition of the Euratom BSS, and radon. More information on HERCA can be found on the HERCA homepage <http://www.herca.org/>.

6. EMERGING ISSUES IN MEMBER STATES WITH POTENTIAL IMPLICATIONS ON A EUROPEAN LEVEL

Individual members of the Article 31 Group of Experts offered the following presentations:

- Professional webpage spreading wrong information on I-131 levels in air
- The European Spallation Source
- Survey on Radiation Protection Expert and Radiation Protection Officer in case of transport of radioactive substances

Each of the presentations triggered lively discussions and stimulated an exchange of experience. The Group of Experts thanked the experts for their interesting presentations.

The Group of Experts welcomed the contributions to this section on the agenda of the Article 31 Group of Experts and encouraged other members to embark on this initiative.

7. ACTIVITIES RELATED TO THE TRANSPOSITION AND IMPLEMENTATION OF THE NEW BASIC SAFETY STANDARDS DIRECTIVE

The Secretariat presented a brief overview of the European Commission activities related to the transposition and implementation of the new BSS. The Secretariat summarised the ongoing activities to support the transposition of the Directive and reported on projects planned to check compliance with the Directive after the transposition deadline.

A representative from Switzerland reported on the “Transposition” of the Euratom BSS in Switzerland which has been approved by the Federal Council on 26. April 2017 and will enter into force on 1. January 2018. Details can be found on www.strahlenschutzrecht.ch; www.legislationradioprotection.ch; www.dirittoradioprotezione.ch.

8. REVIEW AND PRIORITISATION OF THE ACTIVITIES OF THE WORKING PARTIES AND RELATED PROJECTS

8.1 Natural Radiation Sources

The Vice-Chair of the newly created Working Party on exposure to natural sources of ionising radiations (WP NAT) reported on the kick-off of this working party and on progress made since. The WP NAT held its first meeting 21 – 22 March 2017 at which it elected a chair and a vice chair. Based on the mandate given by the Article 31 Group of Experts, the Working Party developed a work programme for the coming two and a half years. Within the work programme, the Working Party proposes to focus on two issues of major interest for which material shall be developed and presented to the Article 31 Group of Experts for further discussion. The selected topics are:

- Radon in workplaces
- Building materials

The next meeting of the WP NAT is scheduled for October 2017.

The Article 31 Group of Experts welcomed the kick-off of this working party and approved the work programme and the prioritisation proposed. The Article 31 Group of Experts is looking forward to receiving first results for discussion in the group.

8.2. Medical Exposures (WP MED)

The Chair of WPMED reported on the progress of tasks falling within the scope of this group. WPMED held a meeting on 16 May 2017 covering the main topics as described below.

A workshop on the **BSS transposition in the medical area** was held on 24-25 January in Brussels (under contract with EFOMP). A draft final report has been circulated to WPMED (10 May) for comments by the end of May. Following the report approval, the Commission intends to publish the Executive Summary (fall 2017).

The revised specifications for a European **study on clinical DRLs** were published in late 2016. The offer submitted and is being evaluated by the Commission. The study is fundamentally conceptual and methodological rather than intended to produce "European DRLs". A workshop to share national DRLs and discuss the way forward to implementing clinical DRLs will be held in 2019.

The Scientific and Technical Committee (STC) has raised questions regarding **generic justification of new types of medical practice**, and HERCA has been invited to present their

relevant work to the WP MED on 16 May. After the topic was explored in a Multi-Stakeholder Workshop (October 2016, France), a HERCA Position Paper is scheduled for the end of the year. It is unlikely that a single harmonised approach can be achieved. The WPMED commented on the importance of precision rather than evidence based medicine, expert panels to consider new types of practice, the impact of individual justification on generic justification and conditions associated with new types of practice e.g. detailed QA programmes for national screening programmes.

The STC also requested a view on the ***use of Clinical Decision Support (CDS)*** to improve justification of medical radiological imaging. The ESR presented their approach, which consists of a modified software (iGuide) based on the American College of Radiology's appropriateness criteria. The iGuide launch is expected in 2017. The WP MED noted that the BSS Directive does not include for CDS and further concluded that there is no clear evidence that CDS helps to improve justification of medical exposures. Concerns were expressed that CDS could undermine the role of the radiologist in justification *vis-a-vis* the BSS requirements and the best practice in Europe.

WPMED's list of proposals to the Commission on ***potential studies to support BSS implementation*** includes clinical audit of justification, nuclear medicine and BSS implementation. Clinical audit and nuclear medicine are being addressed by HERCA; a greater clarity is expected by early 2018, when synergies with WP MED activities will be explored. WPMED members will further consider key performance indicators that might be used to assess the impact of the BSSD in the medical area (post 2018).

IAEA have discussed with Commission the possibility of a one-hour ***Euratom breakout session in the International Conference on Radiation Protection in Medicine***, 11-15 December 2017, Vienna. The Commission will outline background of the value of European regulations and guidance. HERCA will provide input describing regulatory activities. A member of WPMED will chair the panel with professional bodies.

The next meeting of WP MED will be held on 7 November 2017 in Luxembourg.

8.3. Research Implications on Health and Safety Standards (WP RIHSS)

a. EU Scientific Seminar May 2017 on Emerging Issues with regard to Organ Doses

The *EU Scientific Seminar on Emerging Issues with regard to Organ Doses* took place in the afternoon of 17 May 2017. Internationally renowned scientists presented the following issues with regard to organ doses:

- Cognitive and Cerebrovascular Effects Induced by Low Dose Ionizing Radiation
- Cardiovascular Risk from Exposure to Low-dose and Low-dose-rate Ionizing Radiation
- Issues related to the concept of organ dose
- New data regarding the lens of the eye
- Evaluation of the risk of organ exposure – risk related approach versus effective dose approach

The presentations were followed by a round table discussion, in which the speakers, invited additional experts and the Group of Experts discussed potential policy implications and research needs.

All presentations given at the EU Scientific Seminar May 2017 on *Emerging Issues with regard to Organ Doses* together with a short introductory text and the programme are available on the Europa Website. Summaries of the presentations and the round-table discussion will be published together with the conclusions the Group of Experts drew after the seminar as proceedings in the Radiation Protection Series of the European Commission.

The Chair of WP RIHSS presented the main issues of and preliminary draft conclusions from the EU Scientific Seminar May 2017.

The Group of Experts congratulated the WP RIHSS for the organisation of this interesting EU Scientific Seminar May 2017.

b. EU Scientific Seminar November 2017 on Epigenetic effects – potential impact on radiation protection

The Chair of the WP RIHSS presented the draft programme for the EU Scientific Seminar November 2017 on *Epigenetic effects – potential impact on radiation protection* which will take place in the afternoon of 8 November 2017. The following presentations are currently foreseen:

- General introduction to epigenetics
- Introduction to epigenetic effects and ionising radiation
- Trans-generational effects
- Combined environmental effects – ionising radiation and endocrine disrupters
- Non coding RNAs: a new mechanism to regulate sensitivity to ionizing radiation?

The Group of Experts approved the draft programme for the *EU Scientific Seminar November 2017 on Epigenetic effects – potential impact on radiation protection*.

c. Topic of the next EU Scientific Seminar 2018

Following a proposal from the WP RIHSS, the Article 31 Group of Experts agreed to hold the EU Scientific Seminar 2018 on *Management of long-term exposure after a nuclear or radiological accident*. It is planned to hold the seminar in November 2018.

9. OTHER BUSINESS

Two issues were raised under this agenda item:

- 60 years of European Radiation Protection: Given the fact that the first BSS was published in 1959, the chair of the Article 31 Group of Experts proposed to prepare a document on "Celebrating 60 years of European Radiation Protection". The proposal was welcomed by the Article 31 Group of Experts. Experts were invited to propose potential content of such a document and to provide contributions to this initiative.
- Election of a new Chair: The Article 31 Group of Experts was reminded that the term of the current chair is ending and that a new chair of the group shall be elected at the beginning of the November 2017 meeting. After the summer break, the Secretariat will contact the Article 31 Experts asking for nominations.

10. DATES OF THE NEXT MEETINGS

November 2017

The ***November 2017 meeting*** of the Group of Experts is scheduled for **8 – 9 November 2017**, in Room E, European Convention Center Luxembourg, 1, rue du Fort Thüngen, L-1499 Luxembourg (Kirchberg). The EU Scientific Seminar on ***Epigenetic effects – potential impact on radiation protection*** will take place in the afternoon of **8 November 2017**.

June 2018

The ***June 2018 meeting*** of the Group of Experts is scheduled for **12 – 13 June 2018**, in meeting room EUFO 0001, **European Commission – Euroforum Building, 10, rue Robert Stumper – L-2557 Luxembourg – Gasperich**.