ICRP Committee 1 Meeting

6, 10, 11 November 2023 – hybrid meeting in person and on Teams

The C1 autumn meeting was held in hybrid format as a satellite to the ICRP Symposium in Tokyo, Japan. The meeting was organised by D Laurier, G Woloschak and E Ainsbury. Almost all C1 members attended (fully/partially). C1 includes 19 members from 10 countries with expertise in biology, genetics, human medicine, mathematics and statistics, physics and dosimetry, epidemiology, and radioecology. L Hafner attended as C1 intern. The observers from IAEA, MELODI, UNSCEAR, IARC and WHO were also invited, as were colleagues from the Main Commission and other Committees for topics of joint interest.

Update on Task Groups

TG91 Radiation Risk Inference at Low-dose and Low-dose Rate Exposure for Radiological Protection Purposes: Use of Dose and Dose Rate Effectiveness Factors (Chair W Ruhm).

TG99 RAPs Monograph (Co-Chair J Garnier-Laplace and C Adam-Guillermin).

TG111 Factors Governing the Individual Response of Humans to Ionizing Radiation (Chair S Bouffler).

The reports in relation to the abovementioned TG remain close to being finalised, with publication expected in 2025.

TG115 Risk and Dose Assessment for Radiological Protection of Astronauts (Chair W Rühm). Four manuscripts are accepted and two are published. Draft report expected for Committee review in 2025.

TG118 Relative Biological Effectiveness (RBE), Quality Factor (Q), and Radiation Weighting Factor (wR) (Chair G Woloschak). Report writing is progressing. Draft for review by critical reviewers expected for 2025.

TG119 Effects of Ionising Radiation on Diseases of the Circulatory System and their Consideration in the System of Radiological Protection (Co-Chairs T Azizova and D Laurier). Work is progressing well and collaboration with the UNSCEAR CircuDis expert group continues. Draft for review by critical reviewers expected for 2025.

TG121 Radiation-Induced Effects on Offspring and Future Generations (Co-Chairs R Wakeford and P Hande). The special issue on this topic, following the workshop last year, will be published in the Int J Radiat Biol during 2024. Draft for review by critical reviewers expected for 2025.

TG122 Review of cancer risk models and non-radiation-related parameters and data for detriment calculation (Co-Chairs R Wakeford and L Vaillant). Collaboration with the UNSCEAR CanEpi expert group continues and the work is otherwise progressing well.

TG123 Classification of harmful radiation induced effects in human health for radiological protection purposes (Chair L Vaillant, Co-Chairs L Ainsbury and F Zölzer). Consideration of the scientific literature is now well underway, with the assistance of seven newly appointed mentees.

TG128 Individualisation and Stratification in RP: Implications and Areas of Application (Chair S Bouffler). The membership of this joint committee task group is now confirmed. The focus will be low dose, low dose rate and chronic exposures and the TG will consider the evidence, the appropriateness, the benefits and challenges, and the potential consequences of individualisation or stratification of dose, risk, and RP.

Other topics discussed during the meeting

Additional discussed topics included Worker studies including dosimetry, results of the EPI-CT study, the SSK report on exposure limits for the population, Uncertainties in ICRP work, and the UN Sustainable Development Goals.

The next meeting of Committee 1 will take place online during Spring 2024.