

# Integration of Radiological Protection of the Environment into the System of Radiological Protection

K. A. Higley

*School of Nuclear Science and Engineering, Oregon State University, 141 Batcheller Hall, Corvallis, OR, 97330, USA; e-mail: kathryn.higley@oregonstate.edu*

**Abstract**—In 2005 the International Commission on Radiological Protection (ICRP) decided to create a new committee, Committee 5 (C5), to take charge of the Commission’s work on environmental radiological protection. C5 was tasked with ensuring that the system for environmental radiological protection would be reconcilable with that for radiological protection of man, and with the approaches used for protection of the environment from other potential hazards. The task was completed over three consecutive terms resulting in inclusion of protection of the environment in the 2007 Recommendations; in *Publications 108* and *114* where the concept of Reference Animals and Plants (RAPs) and their corresponding data was described; in *Publication 124* on how to apply the system in planned, existing and emergency exposure situations, and in publications on improved dosimetry (approved as pending *Publication 136*) and ecologically relevant ‘weighting factors’ for different types of radiation (being finalised for public consultation). With the beginning of this new term, ICRP has moved to integrate its approach to protection of people and of the environment within the system of radiological protection by tasking aspects of an integrated system to each of the committees. Acknowledging that C5 had fulfilled its mission, ICRP in 2016 revised the mandates for the Committees effective of 1 July 2017 (the C3 mandate was also widened to include exposures incurred in veterinary practices). ICRP is moving towards the future, building on the previous successes, and will under these revised mandates approach radiological protection in a holistic manner (an integrated system) where appropriate consideration is given to the understanding of exposures and effects in the environment under different exposure situations and scenarios, and what protective actions might be warranted under such circumstances.