Application of IDEAS Guidelines: the IDEAS/IAEA Intercomparison Exercise on Internal Dose Assessment

C. Hurtgen\textsuperscript{1}, A. Andrasi\textsuperscript{2}, M. R. Bailey\textsuperscript{3}, A. Birchall\textsuperscript{3}, E. Blanchardon\textsuperscript{4}, V. Berkovski\textsuperscript{5}, C. M. Castellani\textsuperscript{6}, R. Cruz-Suarez\textsuperscript{7}, K. Davis\textsuperscript{3}, H. Doerfel\textsuperscript{8}, B. LeGuen\textsuperscript{9}, I. Malatova\textsuperscript{10}, J. Marsh\textsuperscript{3} and J. Zeger\textsuperscript{7}

\textsuperscript{1}SCK.CEN, Belgian Nuclear Research Centre, Belgium; \textsuperscript{2}KFKI-AERI, Atomic Energy Research Institute, Hungary; \textsuperscript{3}Health Protection Agency (HPA), UK; \textsuperscript{4}Institute de Radioprotection et de Sécurité Nucléaire (IRSN), France; \textsuperscript{5}Radiation Protection Institute (RPI), Ukraine; \textsuperscript{6}ENEA Institute for Radiation Protection, Italy; \textsuperscript{7}International Atomic Energy Agency (IAEA), Austria; \textsuperscript{8}Forschungszentrum Karlsruhe (FZK) GmbH, Germany; \textsuperscript{9}Electricité de France (EDF-GDF), France; \textsuperscript{10}National Radiation Protection Institute (NRPI), Czech Republic

As part of the EU Fifth Framework Programme IDEAS project ‘General Guidelines for the Evaluation of Incorporation Monitoring Data’, and in collaboration with the International Atomic Energy Agency, a new intercomparison exercise for the assessment of doses from intakes of radionuclides was organised. Several cases were selected, to cover a wide range of practices in the nuclear fuel cycle and medical applications. The cases were: (1) acute intake of HTO, (2) acute inhalation of the fission products $^{137}$Cs and $^{90}$Sr, (3) acute inhalation of $^{60}$Co, (4) repeated intakes of $^{131}$I, (5) intake of enriched uranium and (6) single intake of Pu isotopes and $^{241}$Am. This intercomparison exercise especially focused on the effect of the Guidelines proposed by the IDEAS project for harmonisation of internal dosimetry.

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