ICRP needs for its new C5-Task Group dedicated to "Reference Animals and Plants" (RAPs) monographs

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Committee 5 proposes a 2-step work programme to gather and update RAP-related basic data and guidance for their best use and practices in support of the application of the system of radiological protection of the environment in planned, emergency and existing exposure situations. This presentation will describe the Terms of Reference, the planned activities and the associated time schedule of this new Task Group of ICRP Committee 5 entirely dedicated to the update of RAP-related data in a comprehensive manner in order to fulfil the following objectives:

(1) To evaluate the completeness of RAPs and associated data with regard to transfer, dosimetry and effects through a scoping analysis;
(2) To demonstrate to what extent any RAP is representative of a group of species, *e.g.*, at the taxonomic class- and wildlife group- level; the RAP representativeness will be evidenced for transfer, dosimetry and type and intensity of effects of ionising radiation;
(3) For effects, to integrate recent modeling approaches to deal with the issue of the extrapolation from individual to the whole population of a species;
(4) To propose a user-friendly structure of all RAP-related needed information, to be populated in a series of monographs.

By gaining the capability of inferring transfer, dosimetry and effects information from what we know about RAPs to what we do not know about any representative species in a robust and credible way, usable in any environmental risk assessment, step 1 will assist in reaching the ultimate aim of "linking RAPs to Representative Organisms (ROs)". Step 1 will be implemented consistently with (and in support of) the other new TG to be launched in the second half of 2015 to take a step forward on the link with ROs in the environment, based on the concepts and databases already developed for the RAPs. Step 2 of the "RAPs monographs" TG will consist in the development of the monographs according to the outcomes of step 1.

Monographs could be elaborated at the wildlife group level, namely plants, invertebrates and vertebrates (each volume being divided into major classes), where RAP-related knowledge will be highlighted and organised through the three main components of risk assessment: transfers and dosimetry, effects and risk characterisation. As such, this future work will focus on the scientific foundation for the understanding of the primary components of an ecological risk assessment, namely transfer and dosimetry to biota, radiation effects on biota, and implications at higher levels of ecological organisations (populations, communities, ecosystems).