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ICRP PROPOSAL ON RADIATION PROTECTION OF NON-HUMAN SPECIES -WITH TAEA PERSPECTIVE-

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Interest in the protection of the environment has greatly increased in recent years in relation to all aspects of human activities Such interest has been accompanied by the development and application of various means of assessing and managing the many forms of human impact upon it Up to now the International Commission on Radiation Protection (ICRP) has not published any recommendations on how to assess or manage radiation effects in non human species The Turkish Atomic Energy Authority (TAEA) which is the regulatory body of Turkey in radiation protection also recognises that there is a current lack of consistency at international level with respect to addressing such issues in relation to radioactivity and therefore believes that a more proactive approach is now necessary

The Commission has decided to develop a framework for the assessment of radiation effects in non-human species in order to fill a conceptual gap in radiation protection The proposed system does not intend to set regulatory standards but rather to provide guidance and help regulators and operators demonstrate compliance with existing legislation ICRP developed a small set of reference animals and plants plus their relevant data bases to serve as a basis for the more fundamental understanding and interpretation of the relationships between exposure and dose and between dose and certain categories of effect This concept is similar to that of the reference individual (reference man) used for human radiological protection in that it is intended to act as a basis for calculations and decisions The Commission has now established a system to continue the work with defining effects end points of interest the types of reference organisms to be used by ICRP and defining a set of reference dose models for assessing and managing radiation exposure in non human species

This talk will provide a review of ICRP proposed framework for radiation protection of the environment with TAEA comments TAEA believes that it is essential for identifying possible gaps in the evolving environmental radiation protection and for increasing the understanding and acceptance of ICRP relevant recommendations Special emphasis will be given to the reference dose models

Keywords ICRP, radiation protection, environment, reference individual, reference dose models