



# Terms of Reference

## Task Group on Tissue Reactions

### 2021-24

#### Objective

To contribute in creating awareness about early and late effects of radiation in tissues and organs, considering the basis of ICRP Publ. 118 (2012) with the recommendations for the reduction of equivalent dose to the lens of the eye for occupational exposures (20 mSv, averaged over 5 years with the dose not exceeding 50 mSv in any year) and the attention towards heart or brain exposure in considering that a dose as low as 0.5Gy, as foreseen in complex interventional procedures, could affect the circulatory system.

To promote a wide exchange of knowledge, experience and points of view, at an international level and among the IRPA ASs, on progress updates on the TG subject as result of continuous dedicated research, including the aspect of the better understanding of radiation impact on the disease processes, and towards the use of absorbed dose, in place of equivalent dose, as the quantity in setting limits on tissues and organs doses to prevent tissues reactions, as introduced in ICRP Publ.147 (2021).

#### Membership

Chair: Marie Claire Cantone (AIRP, Italy)

Vice-Chair: tbc

Exec Liaison: n/a

Nominees from AS will be invited with the objective of wide participation ideally covering all regions: Africa, North and South America, Asia, Australia, and Europe.

#### Key Tasks

To focus on literature and related views of the ASs on radiation tissue reactions including lens of the eye and other interested tissues and organs.

To collate and share information on eye dosimeters being developed and introduced in different countries and related publications for an improved knowledge exchange.

To analyse the pertinent application of workers dosimetry in different sectors from medicine, nuclear and industrial radiology, and evaluation of dose for exposed patient, in relation to tissue reactions.

To collate the view of the ASs in considering the use of absorbed dose in place of equivalent dose for the dose limits of tissues and organs, and on the justification of different limits for workers and members of the public, as for skin and lens of the eye.

To prepare a report on the TG findings in 2023, followed by publication in an appropriate open access journal.

## **Working Methods**

The work of the Task Group will be conducted principally via email, internet, and telephone. No physical meetings are envisaged.

The IRPA ASs will be asked to provide their views about the updated considerations that are introduced in the effects of radiation in tissues and organs, and related aspects, on the basis of a questionnaire developed by the TG.

The TG report will try to capture the statements and suggested approaches by the various countries to summarize the professional views as taking also in consideration the different sectors of radiation protection.

The ASs will be invited to offer documents related to the TG thematic, they have produced directly or in cooperation with other organisations, to create a wide exchange of views through IRPA website, and to provide these documents as free access publications.

The TG Chair will provide a written process report to the IRPA Executive Council at least annually, and interim status information could be provided on request.

*Approved by the IRPA Executive Council*

*Date: 17/12/21*