The System of Protection: Future Developments ICRP Perspective

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- Founded in 1928, International X-ray and Radium Protection Committee
- Renamed ICRP in 1950, broader remit
- Main Commission and 5 Committees
- Registered charity in the UK
- Only 2 paid employees



ICRP

Established to advance for the public benefit the science of radiological protection, in particular by providing recommendations and guidance on all aspects of protection against ionising radiation



- Makes valued judgements based on available science
- Produces recommendations that should be relevant and timely
- Is an evolving organisation



ICRP Information

- Resources regarding ICRP organisation and work:
- Website, revised 2010
- Publications
- First Strategic Plan 2011-2017

Includes:

- Background information
- Structure of ICRP and operations
- ICRP strengths
- Challenges facing radiological protection
- ICRP objectives in coming years
- Some initiatives to achieve these objectives

Challenges in radiological protection:

- Technological developments in medicine
- Non-cancer effects
- Natural sources of radiation
- Protection of the environment
- Maintaining knowledge & expertise in radiological protection

Technological developments in medicine:

- Radiological protection in ion beam radiotherapy (TG 87)
- Radiological protection in cone beam CT (TG 88)
- Justification of imaging of asymptomatic individuals with ionising radiation (TG 86)



Non-cancer effects:

- 'Tissue reactions'
- Publication 118 in press
- Lens of the eye
- Cardiovascular effects

Natural sources of radiation:

- Radiological protection against radon exposure - consultation until 8th June
- Cancer risk from alpha emitters (TG 64)
- Application of the Commission's Recommendations to NORM (TG 76)
- Application of the the Commission's Recommendations to radon exposure (TG81)



Protection of the environment:

- RBE and reference animals and plants (TG 72)
- More realistic dosimetry for non-human species (TG 74)
- Integrating the ICRP system of protection for human and non-human species (TG 82)



Lesson learned from Fukushima:

- Implementation of recommendations in Publications 109 and 111
- Radiological protection of rescuers
- Protection of the public in emergency and existing exposure situations

Other ICRP objectives:

- Improve dissemination of ICRP Recommendations, ideally at low or no cost
- Liaise with organisations to promote scientific research to improve the System of Radiological Protection
- Raise awareness of RP in medicine
- Increased participation of ICRP in RP and other forums

ICRP initiatives:

- Hold regular ICRP symposia
 - First in Bethesda, October 2011
 - Next scheduled in Abu Dhabi late 2013
- Openly seek nominations for new members
 - New election process for Committee members
 2013-2017 term
 - Details to be released on website



www.icrp.org

