The System of Protection: Future Developments

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ICRP Perspective

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ICRP

- 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



ICRP

- 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

