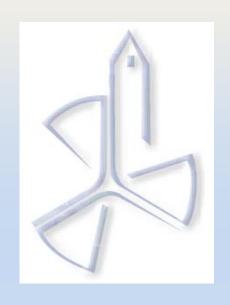
International Radiation Protection Association 12th International Congress Buenos Aires, Argentina – October 19-24, 2008



IRPA 12

Concluding Plenary Session II

Developing Protection Policies, Criteria, Methods and Culture

Renate Czarwinski



Developing Protection Policies, Criteria, **Methods and Culture**

- TS II 2.1 Scope of Radiation Protection
- TS II 2.2 Protection of the Public & the Environment
- TS II 2.3 Occupational Protection
- TS II 2.4 Protection of Patients



Refresher courses

| RC-9. Environmental surveillance progra and dose assessment. Characterization individual members of the public. | |
|---|---|
| RC-10. ALARA and professional network Promoting optimisation of protection thro professional networking | |
| RC-5. Diagnostic reference levels in medical practice. Establishing diagnostic reference levels in medical practice. | Michel Bourguignon. Commissaire Autorité de Sûreté Nucléaire (France) |



Scope of Radiation Protection

ICRP60 replaced by ICRP 103 in 2007 – a challenge for radiation protection

(including supportive documents)

There is a need to share understanding of emerging challenges for radiation protection among scientific and regulatory communities, public and other concerned stakeholder and develop a pluralistic evaluation of the issues at hand. (NEA workshop Helsinki 2008, next planned for end 2009)

Keynote lecturePresentationsPosters



Scope of Radiation Protection

Who can take actions to protect from radiation, where their empowerment comes from and what knowledge they need to act appropriately? (information needs for radiation protection)

Nuclear energy – approaches to seek social consensus building and to gain the public trust and confidence (stakeholder involvement)



Protection of the Public and the Environment

- Radiation Protection of environment (non-human species) is progressing at national and international level
- Nevertheless it should be noted that the radiological protection of the environment is not an urgent or important issue in developing countries, that obviously have other priorities.
- Safety criteria and safety guides are being developed

Keynote lecture
2 Topical Sessions
16 Presentations
105 Posters



Protection of the Public and the Environment

- It is of interest to mention that there is some evolving work in monitoring and techniques derived from improvements in instrumentation and software or requirements in decommissioning of installations including the legacy of old uranium mines.
- Important development of methodologies and tools to assess the protection of animals and plants, pointing up the presentation of the tool developed within the European Project ERICA.



Occupational Protection

UNSCEAR:

Except for medical applications the occ. exp. related to manmade sources have decreased;

in the medical field interventional procedures identified as critical;

estimated collective dose due to natural sources about 8 times higher (high average effective dose and large number of workers, largest component from mining)

 A number of countries reported on the implementation of a radiation protection program and national dose distributions and trends

need for RP support in developing countries

Development of harmonized safety standards and guides

Keynote lecture 57 Posters 6 Presentations



Occupational Protection

 Important issue for practical RP: application of constraints

Good examples were given for design and operation phases

 A prerequisite for the application of the principle of optimization of occupational RP is information exchange on methods for dose reduction through <u>networking</u>



Radiation Protection of Patients

UNSCEAR 2008 data for medical exposures are alarming

Accidents in the medical area: examples from France and how to communicate with patient and public (a scale for rating)

Medical imaging has become the largest controllable source of radiation exposure

Improving the radiation protection of patients requires engagement of all involved parties to strengthen cooperation

Error reporting systems are required and should be both graded and harmonized





Radiation Protection of Patients

Reducing dose in CT is important and can be achieved by tailoring the protocols for the level of acceptable noise according to *the clinical indication and *the size of the patient

Diagnostic reference levels (DRL's) should be used appropriately as a tool for optimization after engagement by professional bodies (demand to reduce)

<u>Training</u> should be undertaken (e g before the transition from film/screen to digital imaging)

Aim: broaden and sharing the knowledge of RP to professionals involved

<u>Justification</u> of medical exposure (quantitative assessment of detriment versus benefits?)

