

**MINUTES OF THE MEETING OF ICRP COMMITTEE 3
Vienna, 5-7 September 2012**

Participants:

VANO Eliseo (Spain) Chairman
COSSET Jean Marc (France) Vice-Chairman
REHANI Madan (IAEA) Secretary

ÅHLSTRÖM RIKLUND Katrine (Sweden)
BAEZA Mario (Chile)
DAUER Lawrence (USA)
GUSEV Igor (Austria)
HOPEWELL John W (UK)
KHONG Pek Lan (Hong Kong, China)
MATTSSON Sören (Sweden)
MILLER Donald (USA)
ORTIZ LOPEZ Pedro (Spain)
RINGERTZ Hans (Sweden)
ROSENSTEIN Marvin (USA)
YONEKURA Yoshiharu (Japan)
YUE Baorong (China)

Observers:

PEREZ Maria del Rosario (WHO)
MALONE Jim (IEC)
KESMINIENE Ausra (IARC)
SHANNOUN Ferid (UNSCEAR)
SIMEONOV Georgi (EC)

The Chairman, Professor Eliseo Vano, welcomed members and observers. He thanked the IAEA for hosting this meeting. The proposed agenda was approved. The minutes of 2011 meeting held in Washington were approved.

- 1. Chair's report and discussion:** Professor Vano presented his report drawing attention to need for C3 members to actively review C3 documents, emphasizing Chairs of TGs and WPs to take into account the work of other organization or other committees of the ICRP. There was discussion on criteria for the full and corresponding members of the TG and WPs. It was deemed appropriate to suggest following of guidelines of ICMJE for authorship of documents. C3 expressed the need to prepare guidance of ICRP on how to report radiation quantities and units. Prof. Vano drew attention of C3 to the 2013-2017 ICRP membership elections. He mentioned that the current meeting is the last meeting of this C3, but current C3 will continue till June 2013 when new committee shall take over. The election process was briefed.
- 2. The status of three publications of C3 approved last year is as:**
 - a. Radiological Protection in Fluoroscopically Guided Procedures Performed outside the Imaging Department (Chair: Madan Rehani): Published as Publication number 117, released on 13 July 2012 but with year of publication 2010
 - b. Radiological Protection in Cardiology (Chair: Don Miller and Claire Cousins). To be released in December 2012 as Publication number 120 with year of publication 2013.
 - c. Radiological Protection in Paediatric Diagnostic and Interventional Radiology (Chair: Pek L Khong and Hans Ringertz). To be released in early January 2013 as Publication number 121 with probably year of publication 2013.

3. **TG 87: Radiological Protection in Ion Beam therapy:** Yoshiharu Yonekura presented the document. It is expected to have a refined final draft in mid April 2013.
4. **TG85: Practical Radiological Protection Recommendations on Mitigating Secondary Cancer Risks in Modern Radiation Oncology.** Mario Baeza presented the progress. Next draft is expected to be ready in mid-2013 and shall be considered in next meeting of C3 in 2013.
5. **TG 89: Occupational Radiological Protection in Brachytherapy.** Lawrence Dauer presented an initial working outline and set of section notes for discussion and review from the TG. Aim for this document will be to develop a clear, concise, and valid set of practical recommendations for clinicians. Next draft is expected to be ready in mid-2013 and shall be considered in next meeting of C3 in 2013.
6. **TG 86: Justification in Imaging of Asymptomatic Individuals with Ionising Radiation.** Katrine Åhlström Riklund presented It was deemed appropriate to merge the two groups working on the justification (see item 9 below).
7. **TG 88: Radiological Protection in Cone Beam CT.** Madan Rehani presented the Table of contents and initial draft. Next draft is likely to be available in early 2013 for finalization in 2013.
8. **TG36: Dose to patients from radiopharmaceuticals.** Sören Mattsson reported activities of Task Group which is combined with C2.

Work on individual substances

Ready for MC and for public consultation	In progress	New substances (list and priorities to be discussed)
F-18 FET	Rb-82 chloride	Ga-68, DOTA –TOC, -NOC, TATA
F-18 FLT	C-11 PiB	Cu-62, 64 ATSM
F-18 choline	I-123,124,125, 131 iodide	F-18 flutemetamol
C-11 raclopride	I-123 FP-CIT (ioflupane)	Tc-99m annexin V
F-18 fluoride	C-11 choline	I-124 Mab, I-124 mIBG
Tc-99m tetrofosmin, at rest (corrections).		
F-18 FDG (correction of the text)		

Data for the substances in the left column will hopefully soon be put on the on the ICRP website for public consultation.

9. **WP: Justification: Framework for Justification in Medical Uses of Ionizing Radiation.** Hans Ringertz presented the progress of WP on practical guidance of medical professionals to take into account Level 2 and 3 justification. It was decided to merge TG 86 (item 6 above). Based on draft received by C3 in its next meeting, C3 will consider setting up TG.
10. **WP: Occupational protection issues in interventional procedures (fluoroscopy guided).** Pedro Ortiz- Lopez presented. It was clarified that this WP is not addressing interventionalists who have been addressed already in ICRP Publication 85,117 and 120. This WP is considering RPOs, regulators, dosimetry service providers and in relatively higher exposure situations. Based on draft received by C3 in its next meeting, C3 will consider setting up TG.
11. **WP: Radiological Protection in Therapy with Radiopharmaceuticals.** Sören Mattsson presented. It was clarified that the report shall also include combinations of the radiopharmaceutical therapy and external radiotherapies as well as new radionuclides and radiopharmaceuticals where fewer advices are available. This is based on need expressed by users. There will be advice on occupational protection. Minimum infrastructure to start therapy could also form part. Based on draft received by C 3 in its next meeting, C3 will consider setting up TG.
12. **WP: Diagnostic reference levels for diagnostic and interventional imaging.** Eliseo Vano presented the status of the WP. There was extensive discussion on the nomenclature for the document, its scope and intent. There is clearly a need to expand on the application of the DRL concept to interventional procedures, nuclear medicine procedures, and other procedures that use more than one imaging

modality (e.g., PET plus CT). The discussion suggested using not only a percentile (e.g., 75th percentile) of the patient dose distributions but a more complete use of the full distribution to help in the further optimization of radiological protection for imaging procedures using ionizing radiation. A suggestion was also made to refer to the overall optimization of radiological protection in the title, but this can be decided at a later time. Based on the draft received at its next meeting, C3 will consider setting up a TG.

13. Effective dose. Pedro Ortiz-Lopez presented the update. It was pointed out that there is too much overuse and misuse of effective dose in recent years. Although there has been some clarification from time to time, there is lack of alternative to effective dose, which obviously has not helped the situation. The progress made by the TG was discussed.

14. Educational slides ICRP 106. Sören Mattsson presented. After updating, Prof. Mattsson will submit for seeking approval of C3 and then proceed with the ICRP rules for upload on public part of the ICRP website.

15. Future Topics

It was decided to keep all these topics under review

- a. Review existing documents by the IAEA and others on occupational protection issues in PET/CT and cyclotron use; decide action. It was observed that PET guided interventional to be included somewhere otherwise existing documents and information seem adequate.
- b. Framework for optimization of individual patients. There is sufficient framework on optimization of individual patient. However, the original intent of this item was to cover radiation protection based on cumulative dose to an individual for which this topic needs to be kept under review.
- c. Dose quantities for display in imaging equipment for suggestions to IEC. It was reemphasized the need for guidance to IEC on dose quantities for interventional, CT, CBCT etc. on a periodic basis. In order to improve cooperation, IEC observer should provide a short note for adding to C3 minutes. Similar for WHO and other observers.
- d. Communication of benefits and radiation risks to medical professionals and public. Prof Rehani briefed about changes in scenarios occurring with social media.

16. Information from Observers

Following presentations were made:

- a. IARC (Ausra Kesminiene)
- b. IEC (Jim Malone)
- c. European Commission (Georgi Simenov)
- d. WHO (Maria Perez)
- e. UNSCEAR (Ferid Shannoun)

17. Information about IAEA activities was provided by Madan Rehani