# Minutes of Committee 5 Meeting Bethesda North Marriot Hotel and Conference Center, Bethesda, Maryland, USA, 22-28 October 2011

#### Present:

*Members:* J Pentreath (Chair, UK); C-M Larsson (Vice-chair, Australia); A Real (Secretary, Spain); F Brechignac (France); D Copplestone (UK); K Higley (USA); K Sakai (Japan); P Strand (Norway); Alexander Ulanovsky (Germany). *Observer:* G Pröhl (IAEA).

### Sunday 22 October 2011

# 1. Chairman's introduction.

JP welcomed Committee members and the observer to the meeting. Gerhard Pröhl was thanked for his most valuable contributions to the work of C5 since its inception, and was welcomed now as an observer from the IAEA. The new member of the Committee, Alexander Ulanovsky, was warmly welcomed.

# 2. Minutes of the previous meeting in Vienna, Austria, August 21-24, 2010

The minutes were reviewed by the Committee. Actions 10 and 11 from the Vienna meeting were added to the Meeting Agenda for further discussion.

The minutes of the C5 Bethesda meeting will be available in the public area of ICRP website.

# 3. Update on issues being addressed by the Main Commission.

The chairman distributed the "ICRP Strategic Plan 2011-2017" document and the Committee reviewed the different sections. It was noted that one of the identified "Challenges" for ICRP is Protection of the environment, with the objective that protection of the environment from the harmful effects of ionising radiation will be fully integrated into the system of radiological protection.

C5, through the MC, proposes to liaise with UNSCEAR in its current assessment on the environmental impact of the Fukushima accident.

C5 is strongly supportive of the ICRP initiative of "Recommending research needed to strengthen the system of radiological protection". In fact C5 already made a presentation in June 2011 (Hamilton International Conference on Radioecology) on this topic. In addition, in publication 114 (in press) some recommendations have been made on research needs in relation to the transfer factors issue.

C5 intends to prepare a statement on research needs in radiological protection of the environment for the ICRP webpage.

Monday 23 October 2011

[No Committee meeting as the entire Committee attended the ICRP Symposium.]

# Tuesday 24 October 2011

# 4. Review of other activities going on in relation to radiological protection of the environment.

### UNSCEAR:

C5 discussed ongoing activities in UNSCEAR. After publishing the 2008 Scientific Annex on effects of radiation on biota, UNSCEAR does not have any specific action directly related to environmental effects in its work plan, apart from the follow-up of the Fukushima accident.

### <u>IAEA</u>

The Agency is launching a new Programme named MODARIA (<u>MO</u>delling and <u>DA</u>ta for <u>R</u>adiological Impact <u>A</u>ssessments), planned to run for 4 years (2012-2015). The programme will follow up, and further develop, experience gained from earlier Agency Programmes, most recently EMRAS I and II. Although the details of the Programme are yet to be developed, radiological protection of biota will be a topic within MODARIA. The aim is to facilitate a forum in which people from all around the world can participate. The First Technical Meeting will take place 19–22 of November 2012, at the IAEA headquarters in Vienna.

C5 discussed the IAEA Safety Guides under development related to radiological protection of the environment.

IAEA Coordination group for radiological protection of the environment held a meeting in September 2010 in Vienna. It is planned that in the second part of 2012 the group will meet again, and there will be the opportunity to discuss the three Safety Guides currently under development.

#### <u>IUR</u>:

The IUR Board has been re-elected for a four year term: C5 members F. Brechignac and P Strand are the President and General Secretary, respectively. K. Higley (C5 member) is the IUR representative for USA and Canada. D. Copplestone (C5 member) leads a group on radiological protection of the environment. This group is currently defining its future programme of work.

# Networks/Alliances on radioecology:

C5 discussed the research activities going on around the world, including the recently created Networks on Radioecology in Europe (European Alliance on Radioecology and the STAR (Strategy for Allied Radioecology) Network), USA (National Centre for Radioecology, NCoRE), and in Asia (Asian and Indian Networks on radioecology).

### Wednesday 26 October 2011

C5 discussed and evaluated the two Sessions of the Symposium devoted to radiological protection of the environment (Tuesday afternoon). The general feeling was that there had been a very positive feedback from participants, and many expressed their interest and appreciation. Concerns were expressed with regard to data uncertainty in important areas, which is an issue that C5 continues to address.

## 5. Report of TG 72 on RBE and Reference Animals and Plants

The contents of this report were discussed. The TG will circulate the most recent draft to C5 members and C1 and C2 participants by the end 2011 for comments. By beginning of 2012, the draft report will be distributed to C1 and C2 chairmen to solicit comments.

#### 6. Report of TG 74 on More Realistic Dosimetry for Non-human Species

The work done in TG74 was summarised; it had focussed on the principal missing 'pathway' of exposure for terrestrial biota. The draft report will be circulated within C5 by January 2012 for comments.

### 7. IUR Report on an Ecosystem Approach to Environmental Protection and coordination with SETAC.

In relation to C5's remit to draw comparisons with other risk assessment approaches being applied to other industries, an IUR Task group (led by FB, C5 member, including experts from SETAC), has published a summary report on what is generally referred to as the ecosystem approach ("Recommendations from the International Union of Radioecology to Improve Guidance on Radiation Protection". Integrated Environmental Assessment and Management. Volume 7, Number 3. pp. 411–413. 2011 SETAC). The draft full report on the ecosystem approach was also presented to C5, and C5 agreed to send comments by the end of January 2012.

# 8. Draft report of joint C5/C4 TG82 "The ICRP's approach to protection of the environment under different exposure situations".

The contents of this report had already been extensively discussed. The comments from the C4 reviewer were discussed, and the views of C4 as a whole were expected during the meeting. [C4 approved the report, subject to some minor comments]. C5 also approved the report, which will be presented to the MC shortly.

9. Draft Report on the Application of DCRLs for Reference Animals and Plants under Different Exposure Situations

C5 agreed that this report should be published at the same time as the joint C4-C5 TG82 report if possible. Some further drafting was now required to bring it into line with the TG82 report (if it is accepted by the MC). A final draft will be completed by January 2012, and circulated to both C5 and C4 for comment, with the view of presenting it to the MC in April 2012.

#### 10. The Fukushima accident.

Dr Kazuo Sakai (C5 member) made a presentation on the Fukushima accident and preliminary assessment of the environmental consequences. Examples were shown of how C5 reports have already been used in preliminary assessments of the environmental impacts around the site.

### 11. New Task groups

C5 plan to create two new Task Groups to:

a) Assist in the practical implementation of what C5 has already produced by developing a 'tool' to calculate DCC for non-human biota); and

b) To improve the science database upon which C5 advice is founded, by examining in more detail the issues relating to the larger RAPs.

A proposal for a Task Group on the "Practical application" of the ICRP's system to some aspects of the nuclear industry will be prepared for presentation to the MC in April 2012.

# 12. Key messages for ICRP MC later in the week.

- UNSCEAR liaison
- Statement on research needed on issues useful for radiological protection of the environment.
- Status of ongoing Task Groups
- New task groups proposal

# 13. Future meetings and liaison with other bodies/groups

C5 next meeting will be around June 2012 (venue to be decided).