



## SUMMARY OF MEETING OF 5 AUGUST 2005

### **OPENING OF MEETING, ATTENDANCE, APOLOGIES & MINUTES**

Council met at ARPANSA's Miranda office on 5 August 2005. All members were present except for Em Prof Lowe. The minutes were confirmed without amendment. Council noted that it had recommended to the CEO out of session that the Code of Practice for Exposure of Humans to Ionizing Radiation for Research Purposes be adopted and published.

### **ADVICE TO CEO ON NORM**

The Council discussion paper had been updated to reflect submissions that had commented on errors in the data or had provided additional data. The update did not attempt to respond to all issues raised in submissions. Dr Cooper would similarly update his report in relation to data. Council agreed that a table including all of the submissions and the responses to them, and a summary outlining the main issues from submissions and the Mining Conference should be prepared for the web site. All submitters and attendees at the Mining Conference would be notified that the responses were available on the ARPANSA web site. Council discussed the draft advice to the CEO. Council noted that guidance on NORM would need to be developed in a transparent manner to gain the confidence of the stakeholders. Council's advice should reflect that it was better to manage the issue than to ignore it, and should acknowledge the difficulty in controlling the risks, and the magnitude of the risks in comparison with other risks.

### **ADOPTION OF CODE OF PRACTICE ON RADIATION PROTECTION AND RADIOACTIVE WASTE MANAGEMENT IN MINING AND MINERAL PROCESSING**

Council was informed of the process to develop the Code and Safety Guide. The draft Code and RIS had been released for public comment, and there had been further consultation at the National Conference on Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing April 2005. A table providing the working group's responses to submissions and comment had been prepared and would be available on the web site. The draft Code and Safety Guide had now been approved by the RHC, and the final RIS had been cleared by the Office of Regulation Review. Council noted the process used to develop the Code and Safety Guide and recommended that the CEO adopt and publish the Code and Safety Guide.

### **EMERGING MEDICAL RADIATION ISSUES**

Council noted the report outlining progress in consideration of emerging medical radiation issues. The CEO advised that he was seeking a brief high level overview of how changing technology and changing medical practice interacted in terms of the balance between the risks and benefits of radiation in medicine.

### **Presentation from Dr Dickie on Radiation Oncology**

Dr Dickie informed Council of the range of treatments options and technological developments in treatment and planning in radiation oncology. These included conventional radiotherapy, intensity modulated radiotherapy (IMRT), tomotherapy, stereotactic

radiosurgery (GammaKnife and CyberKnife), intravascular radiotherapy, prostate brachytherapy, protons and developments in image guidance in both planning and verification (such as CT attachment to a linear accelerator). He pointed out that with the considerable development in technology of treatment systems, human checking of treatment has become more complex.

Dr Dickie noted the following points in discussion:

- Reporting of incidents was very important to ensure that others learned from the information;
- Dose to non-target organs is particularly important if treating young patients and non-cancerous conditions;
- Staff doses were generally low due to shielding and interlocks;
- There had been a few patient incidents with brachytherapy; and
- It was important that ARPANSA progress the Radiology, Radiotherapy and Nuclear Medicine Codes.

### **Presentation from Mr John Robinson, Univ of Sydney**

Mr John Robinson, Lecturer, Diagnostic Radiography, School of Medical Radiation Sciences, University of Sydney, gave a presentation to Council on emerging issues in the training of medical radiographers and nuclear medicine technologists. He advised that there were 8 training schools in Australia and described the current arrangements and the trend towards graduate entry programs. Mr Robinson said that there was an undersupply of diagnostic and therapy radiographers and an oversupply of nuclear medicine technologists (NMT). He noted that it was impossible for an undergraduate/post-graduate program to deal with technology change. The professional development year (PDY) was required for this.

Council members noted that using new technology effectively and keeping doses low is also an issue for radiographers in practice, particularly in computed radiography.

### **SECURITY OF SOURCES**

The CEO informed Council of progress on a range of actions taken in response to the Code of Conduct on the Safety and Security of Sources. In regard to security an Australian Code of Practice is being developed. The Code is progressing well and will be a leader in this area. A working group had been formed to consider the question of how to look for and deal with orphan sources in Australia. The basic framework for emergency response was already in place. The Code of Conduct also required a national register as a mechanism for tracking the movement of sources. Initially a simple database will be established and will be developed further over time. Export controls are needed and amendments to the Customs Regulations for this purpose are expected to be in place before the end of 2005. The Code of Conduct is not a legally enforceable convention however many countries, including Australia, have given a political commitment to comply with it.

### **COUNCIL TRIENNIUM AND ANNUAL REPORT**

Council discussed the draft triennium report and agreed that it encapsulated the business conducted over the past three years and addressed the functions stipulated under the ARPANS Act, including the provision of an Annual Report. The Chair and Secretariat will finalise the report out of session.

## **REPORT FROM THE CEO**

The CEO advised Council that the construction of the OPAL Reactor had reached the pre-commissioning stage. In regard to the operating licence application, a number of questions had been sent to ANSTO and answers were being obtained. A public forum would be held on 8-9 December 2005.

The CEO had also found ANSTO to be in breach of the construction licence in regard to construction of an additional hoist on a crane without prior approval.

ANSTO may have to arrange for some more to be manufactured if HIFAR needs to operate to the end of 2006

The CEO reported that Dr Nelson, Minister for Education, Science and Technology, had advised of 3 sites under consideration for Commonwealth radioactive waste facility in the NT. DEST is to undertake exploration of the sites in more detail over the next 12 months.

Regarding the radioactive waste management strategy, agreement on the forms for an audit of radioactive waste on a nationally consistent basis was close, and proposals for the pre-disposal management of sealed sources were being developed.

International developments included:

- ICRP foundation documents were now available and the new recommendations would probably not be finalised until 2007.
- IAEA was starting a review of the Basic Safety Standards (BSS), but needed to have ICRP recommendations finalised before the BSS review could conclude. Options for the type of document to be produced were also being considered.
- The Bordeaux conference on Security of Sources was an initial discussion on implementation of the Code of Conduct.

## **COMMITTEE REPORTS**

Reports from recent meetings of the Radiation Health Committee and Nuclear Safety Committee were tabled and noted.

## **CLOSURE AND NEXT MEETING**

The next meeting was scheduled for 25 November 2005 at Miranda. The Chair noted that this had been the last meeting for the triennium and thanked Council members for their contributions over this period.