



## SUMMARY OF MEETING OF 27 FEBRUARY 2009

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

Council met at ARPANSA's Miranda Office on 27 February 2009. All members were present except Em Prof Lowe and Mr Critchley. The minutes of the last meeting were noted. The Chair welcomed all members to the first meeting of the new triennium.

### **COUNCIL'S ROLE AND FUNCTIONS**

The Chair informed Council members of the functions and membership of Council specified in the ARPANSA Act, and the provisions of the ARPANS Regulations related to Council operations. The relationship of Council to the Radiation Health Committee and Nuclear Safety Committee, and the functions of the Committees were also discussed. The Chair also described the key issues on which Council has previously provided advice to the CEO, noting that this advice and the CEO's responses were all placed on the ARPANSA web site.

### **ARPANSA'S ROLE AND FUNCTIONS**

Mr Burns, the Acting CEO, described the background to the formation of ARPANSA, noting that while all States and Territories regulated radiation practices, until ARPANSA was formed the Commonwealth did not. He informed Council of ARPANSA's functions, including the regulation of Commonwealth entities, promoting uniformity of radiation protection and nuclear safety policy and practices, and to provide advice, undertake research and provide services in relation to radiation protection and nuclear safety. Mr Burns also described the structure of ARPANSA's Branches and their roles.

### **ARPANSA'S INTERNATIONAL & REGIONAL ROLE**

Ms Rhonda Evans, Director, Regulatory and Policy Branch, informed Council of the wide range of international and regional activities undertaken by ARPANSA, and their importance in relation to ARPANSA's strategic plan. A priority area is to "Deepen and strengthen our knowledge of radiation protection and nuclear safety through research and engagement of the international community." Council noted the tabled papers describing ARPANSA's involvement with a range of international organisations and activities. These included IAEA, UNSCEAR, ICRP, ICNIRP, WHO, OECD (NEA), Asian Nuclear Safety Network (ANSN), CTBT, and international conventions. It was noted that there was an increase in emphasis on the South-East Asian region as several countries were developing nuclear power programs. Council members asked for clarification of training undertaken via ANSN and were advised that the ANSN public web site did not provide access to all of the material available to members.

Council was informed that UNSCEAR reviewed and published information on doses and effects, ICRP turned this information into recommendations on radiation protection, and IAEA and NEA used this information to prepare publications in a regulatory and advisory format.

### **ONGOING TOPICS ARISING FROM LAST COUNCIL TRIENNIUM**

The Chair informed Council of a number of key issues where advice had been provided to ARPANSA in the last triennium. A list outlining the issues discussed by Council was maintained as part of the action list. This provides the opportunity for members to identify

other matters which should be considered in the course of Council's work and serves as an indicator of issues likely to require further follow up in the next triennium. In particular, topics on security of sources, ELF magnetic and electric fields, and radiation protection for non-human species and the environment were likely to arise again.

## **MANAGEMENT AND DISPOSAL OF LONGER-LIVED INTERMEDIATE LEVEL WASTE**

Mr Melbourne provided a summary of an International Workshop on Intermediate Depth Disposal of Radioactive Waste held in Gyeongju, Korea in December 2008. The Workshop discussed national strategies, disposal options, safety concepts, and existing and planned facilities. In particular, there were presentations from a number of countries on facilities in operation or being planned. Approaches taken varied widely, due to the types of waste, geological issues and other factors. Depths of disposal ranged from 80 metres to 1300 metres, using abandoned mines, excavations in salt, underground silos, galleries in granite and fields of boreholes. The borehole concept for particular types of intermediate level wastes was a key point of discussion.

The Chair provided an overview of the report to the CEO on intermediate level waste that was completed in the last triennium, comments from the Department of Resources, Energy and Tourism (RET) on that report, and the CEO's response to the report. The Chair noted that the three recommendations in Council's report, on the feasibility of borehole disposal, international collaborations, and development of regulatory guidance, had basically been supported by RET. The CEO noted in his response to Council's recommendations that borehole disposal was an important option for the safe and secure disposal of disused sealed sources and legacy radium; that international collaborations was a commonsense recommendation that needs developing in more detail, both to broaden Australia's expertise and to enhance Australia's reputation and strategic interest; and that the development of regulatory guidance is a practical means by which ARPANSA and the Council can contribute to clear and technically sound national policy for the management and disposal of long-lived intermediate level waste.

The CEO requested that Council undertake a scoping review of the type of waste that is relevant and the type of guidance required. The Chair and Secretariat will prepare a workplan for the project before the next meeting. Council also noted the need to characterise waste, to consider the suitability and sustainability of long term storage, and that the outcomes of the Joint Convention review meeting in May would be relevant.

## **ARPANSA PUBLICATION PROGRAM AND NATIONAL UNIFORMITY**

Council was briefed on the publication of codes and standards and the national uniformity process. The development of these codes and standards with reference to the Radiation Health Committee (RHC) was highlighted and the history of the national uniformity agreement that was put to AHMC in August 1999 was described. This agreement provided the path for the formulation of the National Directory for Radiation Protection Ed. 1.0 (NDRP) in 2004. Details were presented on the structure of the directory and how an amendment system is in place. This system allows for new material to be added to the directory on an ongoing basis and maintains the NDRP as a living document that the States and Territories can use in drafting their legislation.

The ARPANSA publications (Radiation Protection Series) were also discussed. An outline of the four levels of material that are produced, these being, (i) Standards, (ii) Codes, (iii) Safety

Guides and (iv), Recommendations was given. The Standards and Codes may form part of regulatory requirements developed by various jurisdictions. As part of the development of these publications, the Regulatory Impact Statement (RIS) process was summarised. This was noted to be in two parts with a consultation and final RIS being presented to the Office of Best Practice Regulation. The role of the Council in the adoption of ARPANSA publications was also discussed.

## **AUSTRALIAN AND OVERSEAS RADIOTHERAPY ACCIDENTS**

Dr David Webb, Manager, Ionising Radiation Standards Section, Medical Radiation Branch, ARPANSA, joined the meeting via videoconferencing and described some of the recent radiotherapy incidents that have occurred both in Australia and internationally. Dr Webb also outlined ARPANSA's ongoing role in radiation safety within the radiotherapy community, including the publishing in 2008 of the *Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation* and the *Radiotherapy Safety Guide*, maintaining the Australian Standard of exposure/air kerma and absorbed dose, providing radiotherapy centres with the calibration of dosimeters, undertaking surveys of radiotherapy departments and research radiation dosimetry with regard to radiotherapy.

Dr Webb also informed Council of ARPANSA's new multi-energy medical linear accelerator (LINAC). This machine will provide calibration information that matches those used clinically as well as provide a platform for ongoing study and research into dosimetry.

Dr Webb summarised incidents that occurred in **France** (Jean Monnet General Hospital, Epinal), **Canada** (Ottawa Hospital Cancer Centre), and **Australia** (Royal Adelaide Hospital and Coff's Harbour Integrated Cancer Care Centre).

Dr Webb outlined the common factors with these incidents. These included the long lead time before the error was noted, changes in procedures or protocols, competing priorities, staffing issues (insufficient, inexperienced), and inadequate quality assurance. Council members also commented that the incidents each related to different aspects of radiotherapy – photons, backscatter factors, treatment planning and electrons respectively. A lack of Radiation oncology Medical Physicists (ROMP) and particularly experienced ROMPs was a difficulty in Australia.

Council discussed the proposed Australian Clinical Dosimetry Centre, which is being considered by the Department of Health and Ageing (DHA). Council was given an overview of what would be required to set up the centre and what its role would be.

## **ROLE AND MEMBERSHIP OF RADIATION HEALTH COMMITTEE AND NUCLEAR SAFETY COMMITTEE**

Council noted the role and functions of the Committees that are specified under the Act. The CEO advised that he was about to appoint members to the Committees for the new triennium and provided Council with the list of proposed members. He asked Council to endorse the proposed appointments. Council endorsed the proposed appointments to the committees.

## **COMMITTEE REPORTS**

### **Report from the Radiation Health Committee (RHC)**

Council was advised that the Committee was preparing a strategic directions document for the new triennium. Priorities being considered included the review of RPS1 to incorporate the 2007 ICRP Recommendations, continuing work on uniformity, NORM, review of codes on

industrial radiography, borehole logging and irradiation facilities, solarium, and radiation protection competencies. A draft report on competencies would be discussed in March and a final report would be discussed at the July meeting. Council noted that discussion points around uniformity included what is a uniform outcome, and what is international best practice for NIR? Council requested to see the strategy paper when it is developed, and requested an update on the project on classification of radioactive waste.

### **Report from the Nuclear Safety Committee (NSC)**

Council noted the report of the last meeting of the Committee and the Triennium Report.

### **ADMINISTRATIVE ARRANGEMENTS**

Council was informed of arrangements for Council meeting schedules, communication methods, reimbursement and remuneration, Secretariat support, reporting and the Council web site. Council noted that it was proposed to develop a secure web site for Council and committee activities.

### **OTHER BUSINESS**

Council noted that there had been regulatory action in some jurisdictions regarding laser pointers and requested a briefing for next meeting.

### **CLOSURE AND MEETING DATES FOR 2009**

The Chair advised members that the proposed dates for 2009 meetings were 11-12 June (possibly in Melbourne) and 5-6 November (possibly in Canberra).