



Radiation Health and Safety Advisory Council – Meeting Minutes

Date:	18 August 2022
Time:	9:00 AM - 12:20 PM
Location:	Virtual Meeting
Present:	Dr Roger Allison (Chair), Mr Keith Baldry, Mr John Piispanen, Prof Adele Green, Prof Mel Taylor, Prof Pam Sykes, Dr Trevor Wheatley, Ms Melissa Holzberger, Dr Jane Canestra, Mr Jim Hondros, Dr Gillian Hirth (CEO of ARPANSA), Mr Peter Karamoskos.
Invitees:	Dr Charles Pain, Tone Doyle, Nathan Wahl, Ivan Williams, Jim Scott, Rick Tinker, Ben Paritsky, Ryan Hemsley, Kathryn Scully, Adrian Hawley, Marcus Grzechnik, Chris Nickel, Katie Volter, Kelly Edser, Caitlin Waugh, Ken Karipidis, Chennell Allan.
Absent:	Dr Hugh Heggie, Myra Thompson, Frazer Evans, Yvonne Pavey.
Note Taker:	James Wheaton.

1 - Meeting open and housekeeping

The Chair opened the formal meeting with an acknowledgement of country. No conflicts of interest were declared. The minutes from the June 2022 meeting were noted as circulated, and comments were requested by 26 August 2022.

Task: Review Council minutes (June 2022) 26/8/2022

2 - Update from ARPANSA CEO on ARPANSA, RHC and NSC

The CEO gave an overview of ARPANSA's activities, including those of its statutory committees and the agency's involvement in the nuclear-powered submarine program.

It was noted that ARPANSA has engaged a consultant with experience in the UK regulation of naval nuclear propulsion to review how Australia's regulatory framework could be further optimised in terms of radiation protection and nuclear safety with the proposed introduction of a nuclear submarine program. The consultant will be in Australia for three weeks in August and September to

deliver workshops to ARPANSA on the UK model and undertake a gap analysis of ARPANSA's regulatory systems.

The Nuclear Safety Committee (NSC) met on 10 June 2022 in-person for the first time since March 2020. It was noted that two members had previously disclosed conflicts of interest as they were working on the development of the ANSTO Intermediate level waste capacity increase (ILWCI) facility. At this stage both have short-term limited contracts that will end in October. The NSC discussed the latest information regarding the OPAL reactor riser defects and ARPANSA's ongoing approach to this, especially regarding a request to reduce the frequency of certain inspections that monitor crack growth (no growth has been identified since these inspections started). A discussion on ARPANSA's approach to reviewing the OPAL reactor periodic safety and security review was held. ARPANSA has engaged a contractor to undertake a high-level review and ANSTO's report but will also undertake an in-house review that will focus on areas that are identified by the consultant. The next NSC meeting will be in late October 2022.

The Radiation Health Committee (RHC) last met on 26 June 2022. A guest was the Chair of RHERP (an advisory body to enHealth – the Environmental Standing committee which in turn advises AHPPC). RHERP works on implementation issues for codes and standards RHC develops. The RHC referred some issues to enHealth, such as exemptions for radiation apparatus, as well as radiation practitioner competencies. Ongoing work at RHC includes efforts to finalise a compliance testing standard for radiation equipment, and a dose conversion factor update. The Council discussed related but independent work on competencies by the Australasian Radiation Protection Accreditation Board.

The RHC also established working groups to finish significant work underway to update the dentistry code (RPS 10), consolidate certain codes and Radiation Health Standards (for radiation gauges, well-logging, and x-ray equipment), and develop guidance for the medical exposure code.

ARPANSA noted that work is underway to prepare for the follow-up mission in October 2023 which will consider Australia's progress in addressing the 23 recommendations and 12 suggestions that were generated from the 2018 mission. ARPANSA has made good progress on the findings addressed directly to ARPANSA with all but two finalised, and the agency is actively supporting the Department of Health with work to address the cross-jurisdictional findings. With 12 months left before Advanced Reference Material is submitted for the next IRRS mission, there is going to be increased focus on making sure all findings are addressed as best as possible, although it is expected that some findings (particularly relating to cross-jurisdictional matters) will remain outstanding as they are tied to broader reforms being pursued.

It was noted that ARPANSA had no significant update to provide on the Australian Radioactive Waste Agency's (ARWA) preparations for the National Radioactive Waste Management Facility (NRWMF), however the Department of Environment's regulatory involvement was discussed and it was noted that the usual pathway for referral of 'nuclear actions' to ARPANSA for input under Environment Protection and Biodiversity Conservation (EPBC) process would likely not occur due to a conflict of interest between separate regulatory processes. The Council requested a high-level summary of the EPBC requirements and process.

The Council reviewed ARPANSA's dashboards with data on public and media enquiries. No major concerns were noted.

Task: Circulate a summary of the EPBC process 11/11/2022

3 - Member representing the interests of the general public

There were no enquiries or correspondence from the general public for this meeting. There was further discussion of ARWA's proposed NRWMF planning, and it was noted that transport security is likely to be considered. However, ARPANSA noted it would be premature to do any 'pre-approval assessment' at this stage of the project (before ARPANSA has received a license application), but that these issues will be considered as part of any regulatory approval by ARPANSA.

4 - Nuclear-powered submarines

The Council considered a draft letter of advice to CEO of ARPANSA regarding principles and attributes of an effective independent regulator for nuclear-powered submarines. It was noted that this letter may be the first as part of ongoing advice to the CEO on this topic. Council will continue to review the situation and offer further advice if appropriate.

Regarding the current draft letter, it was noted that its recommendations would apply to any future regulator or regulatory structure and lays out Council's perspective about what is best for Australia and Australians, focusing on principles and attributes.

The Council discussed the recommendations and international reference points in relation to safety, security, and safeguards principles. It noted that there is a standard for international best practice, and Australia has been involved for a long part of this process. Australia was a co-author of international benchmarks including the protocol to allow inspections of undeclared assets, so that safeguards inspectors can investigate anywhere. The Council was to ensure that the draft letter reflected some degree of the level of safeguards that Australia signs up to as part of our treaty obligations, however noted that that ASNO has the role relating to safeguards. It would be important to acknowledge that this role is ASNO's and make the delineation clear in the letter.

The Council discussed the relationship between nuclear-powered submarines and the national harmonisation of other types of radiation regulation. It discussed that national harmonisation has a material effect on the safety of Australians in the future. Council members discussed that the letter could note that Australia's current federalised system of regulation may not be appropriate for the required responsiveness of a future system. The Council discussed that national harmonisation is an important issue from the perspective of protecting the Australian community and environment, particularly around emergency preparedness and response, transport, and waste management, where a nationally uniform and consistent system becomes more important in those areas.

Task: Re-draft the letter of advice to the CEO of ARPANSA based on today's discussions 25/8/2022

5 - ICRP working group update

The Council working group on the International Commission for Radiological Protection (ICRP) review of the system of radiological protection gave a short update following its first substantial meeting. It noted the need for constructive alternatives wherever providing criticism to the ICRP's

review. This should include concrete proposals and legitimate solutions for how radiological protection could operate in the future.

The working group had discussed taking a principled approach, looking at the criteria for a new system of protection and what such a system may look like if its design 'started from scratch', with the aim of simplicity and ensuring a system which is not an 'elite' system with too high-a-barrier for entry and participation. The Council discussed that radiation has many benefits to humanity, and the ICRP was established in an era when the harms of radiation were paramount. This raised the prospect of reconsidering the current system's 'protection' focus and instead considering what is required for a system of 'management' may better acknowledge positive applications of radiation such as cancer treatment.

The Council discussed how to seek public feedback, and what ARPANSA might do in terms of gaining views of stakeholders across Australia, and the process for evaluation of what does and doesn't work in the whole system. It noted that an area of focus for the working group could be to consider how the ICRP principles are translated into Australian context and where improvements might be achieved. The Council noted that the ICRP Symposium will be held in Canada in November 2022.

6 - Lasers

ARPANSA provided Council with an update, including recent discussions with online marketplaces, noting the increasing availability of higher-powered lasers, and that a draft letter is being prepared for Council as a formal response to its earlier advice.

It was also noted that the advertised PhD position in relation to cosmetic laser injury research was coming closer to fruition after two rounds of advertising with no applicants. This is expected to be confirmed by November, although there remains the possibility of scaling down the project into a series of honours programs.

7 - New issues to consider

The Secretariat called for ideas to contribute to agenda planning for the next in-person meeting.

8 - Other Business

The Council reviewed its tasks and decisions. It was noted that the next meeting is planned to occur in-person in Brisbane on 24-25 November 2022.