



Radiation Health & Safety Advisory Council (RHSAC)

Meeting Minutes

- Date:** 6-7 March 2018
- Time:** 12.00am-5.00pm (day 1) and 9.00am-3.00pm (day 2)
- Location:** 619 Lower Plenty Rd, Yallambie VIC 3085
- Chair:** Dr Roger Allison
- Members:** Mr Keith Baldry, Dr Jane Canestra, Prof Adele Green, Ms Melissa Holzberger, Dr Carl Magnus Larsson, Mr Niall Byrne, Prof Pamela Sykes, Dr Melanie Taylor, Dr Stephen Newbery, Ms Geraldine Robertson, Mr Frank Harris, Dr Hugh Heggie.
- Apologies:** Ms Tone Doyle
- Secretariat:** Mr James Wheaton, Yvonne Pavey
- Invitees:** Mr Bruce Lehrmann, Dr Craig Sinclair, Dr Hester Viola. Dr Helen Zorbas, Dr Gillian Hirth, Dr Rick Tinker, Dr Ivan Williams, Mr Jim Scott, Mr Ryan Hemsley, Dr Marcus Grzechnik, Dr Fiona Charalambous, Mr Paul Marks, Ms Shailla van Raad, Ms Kathryn Green.
- Observers:** Mr Ben Paritsky (Day 2), various ARPANSA staff at the UVR session (Day 2).

1. Standing items

Item 1.1 Meeting opening and review of action list

The chair welcomed all attendees. The minutes of the November 2017 meeting were noted as having been agreed out-of-session. The outcomes of the November 2017 meeting action items were reviewed.

Action: draft letter of thanks from Council to Simon Critchley.

Item 1.2 Update from RHC and NSC

The CEO of ARPANSA noted that the Radiation Health Committee (RHC) and Nuclear Safety Committee (NSC) were scheduled to meet after the first Council meeting for 2018. It was noted that the RHC agenda would focus on a second edition of the National Directory of Radiation Protection (NDRP) as well as developing the roadmap for national uniformity in radiation protection. The NSC agenda would consider the application from the Australian Nuclear Science and Technology Organisation (ANSTO) for a licence to operate the new ANSTO Nuclear Medicine (ANM) Facility. The NSC is also considering the outcomes of an accident at ANSTO Health in August 2017, involving the radiation contamination of a laboratory worker's hand, including the actions that the Regulatory Services Branch has requested ANSTO Health to complete.

Item 1.3 CEO update on the activities of ARPANSA

The CEO noted that he had tabled a report in federal Parliament on the accident at ANSTO Health, covering details of the accident, ARPANSA's continued monitoring of the worker's health, and the regulatory response. Other activities noted included preparations for the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) mission to Australia scheduled for November 2018, as well as upcoming community consultation visits to South Australia for the Commonwealth Government's proposed National Radioactive Waste Management Facility (NRWMF).

Action: Council Chair and members to be available to attend during IRRS mission. Third meeting for 2018 or separate special RHSAC meeting to be scheduled during IRRS visit to Yallambie.

Item 1.4 International engagement update

Council noted the update provided on ARPANSA's current activities from the last quarter of 2017 for international engagement. They included, but were not limited to, ARPANSA's participation in an International Atomic Energy Agency (IAEA) Response and Assistance Network (RANET) Joint Assistance Team (JAT) Exercise in Japan; participation in an IAEA Integrated Regulatory Review Service (IRRS) Follow-Up Mission to the nuclear regulator Autorité de Sûreté Nucléaire (ASN) of France; and representation at the 42nd meeting of the IAEA Commission on Safety Standards (CSS) as well as various other Safety Standard Committees' meetings in Austria.

ARPANSA's activities also included attendance at meetings of the International Commission on Radiological Protection (ICRP) in France; a visit to the US Department of Energy (DOE) National Nuclear Security Administration (NNSA) and Sandia National Laboratories in New Mexico, USA; and participation in a Comprehensive Nuclear Test Ban Treaty Organisation (CTBTO) Technical Training Program for Radionuclide Station Operators in Tennessee, USA.

Item 1.4.1 Upcoming international meetings or events

Council noted upcoming international meetings including, but not limited to, attendance at an International Regulatory Review Service (IRRS) preparatory meeting at the International Atomic Energy Agency (IAEA) in Vienna (April 2018) to discuss preparations for the IRRS mission to Australia in November 2018; the Commission on Safety Standards (CSS) meeting in Vienna (April 2018); the International Commission on Radiation Protection (ICRP) Main Commission meeting in Canada (April 2018); the 6th Joint Convention Review Meeting in Vienna (May- June 2018); and the Radiation Safety Standards Committee (RASSC) and Transport Safety Standards Committee (TRANSSC) meetings in Vienna (June 2018).

Item 1.5 Report from the member representing the interest of the general public

The member's tabled report noted that no enquiries were received directly from members of the public since the previous meeting. An update was provided on the status of two reports from the Medicare Benefits Scheme (MBS) Review's Diagnostic Medicine Clinical Committee (DMCC). These have been approved by the MBS Review Taskforce but merged into one report which is awaiting release by the Minister. A copy will be forwarded to the Secretariat when available.

The member also re-iterated the view that APRANSA should have an ongoing role to educate and build trust with the public prior to any radiological emergency, with further discussion to be had at item 4.1.

Action: Circulate the MBS Review report to Council members when available.

Item 1.5.1 ARPANSA public enquiries and media dashboards

Statistics on recent enquiries to ARPANSA were discussed, with Council noting that the number of public enquiries has declined over the last twelve months. The main topics of interest from the public in 2017 were noted as being in relation to power lines, mobile phone base stations, and solar public exposure. Council was also provided with statistics on the media enquiries received between August 2017 and February 2018.

2. Quick reviews

Item 2.1 Radiation Risk management – ARPANSA’s new approach (update on progress)

ARPANSA presented an update on the development of a harmonised approach to identify, characterise and communicate health and environmental radiation risks. Council members endorsed this approach at the previous meeting. It was noted that in December ARPANSA held an internal workshop to review its current approaches across different types of exposure and protection, as well as synergies and gaps, and risk treatment options. A work program was created to develop the tools and processes for the new approach.

Item 2.2 Electromagnetic energy (EME) funding

Council discussed the need for ARPANSA to have a role in EME research and advice to the public, particularly with regard to the rollout of 5G technology. Council was provided with background on the status of government funding allocated to ARPANSA for an EME program, which has remained static. A key concern to ARPANSA is the diminishing capability for investment into EME Centres of Research Excellence, which draw together researchers and universities in this specialised research field, to feed into an international research agenda that informs the international standards upon which ARPANSA depends, as a basis for advice given to the Australian public.

It was noted that ARPANSA has initiated discussions with relevant government stakeholders including Department of Communications and the Arts (DoCA), the Australian Communications and Media Authority (ACMA), the National Health and Medical Research Council (NHMRC), and Department of Health, to address the long-term sustainability of the EME Program.

Action: Council to send a letter to the CEO of ARPANSA in support of continued funding from Department of Communications and the Arts for the EME Program.

Item 2.3 Draft code for Radiation Protection in Medical Exposure (RPS C-5)

Council noted the draft Code for Radiation Protection in Medical Exposure (RPS C-5), on which some members had already commented, and discussed in detail some of the limitations outlined in the scope relating to how it does not apply to exposures of patients in dental imaging, nor to exposures of clients in chiropractic imaging.

Action: Circulate draft medical code again after public consultation phase ends on 25 May 2018.

3. Deep Dive

Item 3.1 Emergency Preparedness and Response (EPR) – EPR Strategy and framework, EPR Guide, and stakeholder engagement and implementation strategy

Council was presented with the revised draft strategy for ARPANSA's EPR function. It was noted that the recent adoption of the IAEA's General Safety Requirements (GSR) Part 7 through a revised Emergency Exposure Guide (being released for public comment in March 2018) provides an opportunity to consider ARPANSA's national and international EPR priorities over the next four years.

It was noted that ARPANSA's resources within its EPR function have been reduced since 2014 resulting in a reduction of depth of EPR knowledge across ARPANSA. State jurisdiction capabilities and gaps are also varied, and recommendations from external peer reviews are available to guide improvement actions.

Council agreed that a tiered approach to emergency management based on the US model should be used when reviewing the draft EPR Strategy. Council noted there is an opportunity for enhancements through identifying scenarios and associated risks, including implications for sustained EPR responses.

Action: Council to provide further comments on the draft EPR strategy and consider opportunities for over-the-phone or remote-expertise roles for ARPANSA (e.g. in the provision of dispersion modelling).

4. Action item outcomes for endorsement or noting

Item 4.1 Emergency Preparedness and Response (EPR) – ARPANSA's role in informing the public

Council members tabled and discussed a draft letter from Council to the CEO of ARPANSA, regarding "Nuclear and radiological emergency preparedness – informing the Australian public", focusing on ARPANSA's role in education and information publication for the public prior to any emergency event. It was agreed that the draft be amended and circulated to members for out-of-session approval.

Action: Revised draft of the letter from Council to CEO to be circulated for review and comment.

Item 4.2 Public enquires – operational roadmap

Council was given an overview of the 'Public enquiries –operation roadmap' flowchart and found it to be a useful tool for dealing with public enquiries, enabling targeted responses. Changes were discussed.

Action: Secretariat to amend wording to some parts of flowcharts and circulate to Council.

5. Quick Reviews

Item 5.1 Draft International Commission on Radiation Protection (ICRP) document

The draft ICRP document on NORM radiation protection was presented for comment and support.

Action: Establish a working group to explore how Council can move forward on Naturally Occurring Radioactive Material (NORM) issues, and explore a range of options or practical actions that ARPANSA could take.

Item 5.2 IAEA Draft Safety Guide DS459 – NORM radiation protection

A status update was provided to Council on IAEA Draft Safety Guide DS459 for the Management of Radioactive Residues from Uranium Production and Other NORM Activities. Once published, this Safety Guide will supersede the Safety Guide on Management of Radioactive Waste from the Mining and Milling of Ores, IAEA Safety Standards Series No. WS-G-1.2, issued in 2002. The update was given for noting only.

6. Deep dive

Item 6.1 NORM radiation protection working group

A paper on the status and future direction of the treatment and regulation of Naturally Occurring Radioactive Material (NORM) was presented to Council in accordance with the terms of reference agreed at the previous Council meeting. Council was advised that there is a view that there is no need to develop additional industry-based information on the *identification* of NORM issues, as this is already addressed by Australian and International documents and guidance. However guidance on what to do *following* the identification of NORM issues, such as the application of a graded approach to regulatory treatments, would be of assistance to a wide range of industries, regulators and governments, and would further the objective of nationally uniform approaches to regulation.

7. New items to consider

Item 7.1 Members' suggestions

Members did not suggest any new items to consider.

Item 7.2 Items in Collaboration with the Nuclear Safety Committee (NSC) and Radiation Health Committee (RHC)

Both the RHC and NSC have been advised of the current and upcoming priorities of Council and the Secretariats for each Committee are considering what opportunities there are for collaboration on long-term priorities and specific projects. Council was asked to consider specific areas where further integration with the NSC and RHC are possible and inform the secretariats of such areas.

Item 7.3 Items flagged for next meeting

The Chair noted the summary of agenda items flagged for the next Council meeting.

Item 7.4 Future topics ARPANSA may bring to Council

The CEO of ARPANSA provided a summary of topics that ARPANSA may bring to Council to consider.

Action: Council noted that, within the next six months, it plans to consider ARPANSA's EME Program in further detail and review the advance reference material that ARPANSA is preparing for the IRRS mission.

8. Quick review

Item 8.1 Data use and digital strategy working group – draft digital strategy roadmap

Council was given an overview of the focus areas of user experience, service delivery, productivity and capability, that form part the ARPANSA Digital strategy which the Strategic Management Committee on 20 February 2018. The focus areas leaders within ARPANSA are currently in the process of developing objectives and digital transformation initiatives to achieve the objectives. Council's input on the value of the objectives and initiatives was requested.

Action: Council agreed to review the objectives of each digital strategy focus area and provide feedback.

9. Other business

Item 9.1 Review action items from this meeting

The action items from this meeting were reviewed.

Item 9.2 Review schedule items for next meeting

Items for the next meeting were taken as read at agenda item 7.4.

Item 9.3 Upcoming meetings – locations and dates

The date for the next meeting was noted as 19-20 July 2018 at the Miranda Office in Sydney. The meeting scheduled for 11-12 October 2018 also in Sydney may be moved, or an additional special meeting may be scheduled, at ARPANSA's Yallambie offices during the IRRS mission in November (dates to be confirmed).

10. Deep dive – ultraviolet radiation (UVR)

Item 10.1 to 10.8 Introduction and overview of international and domestic context for UVR activities.

The CEO of ARPANSA welcomed the invitees to a special 'deep dive' session on UVR protection and exposure prevention strategies. A number of external speakers gave informative presentations on the international context for UVR protection, including from Cancer Council regarding the World Health Organisation (WHO) INTERSUN program, and from QIMR Berghofer Medical Research Institute on the Philosophy of UV Radiation Protection.

It was noted that Australia is a key leader in supporting World Health Organisation (WHO) activities in UVR health issues, where there is global recognition that UV radiation causes skin cancer and eye disease. There is also wide recognition internationally that 'prevention is better than cure'. Evidence shows that multi-component and sustained protection programs operating in a united way from government down to the individual are the best approaches to increase sun protection behaviour and reduce overall population UVR exposure. The evidence for the cost-effectiveness of investing in prevention is strong.

For the domestic context of UVR protection, Council heard a summary of the Skin Cancer Inquiry outcomes recently presented to federal parliament, and it again heard from Cancer Council on the key challenges faced in Australia, from QIMR Berghofer on the evidence-based use of sunscreen, from ARPANSA on occupational exposure to UVR, and from the Australian Bureau of Meteorology (BOM) on changes to UV forecasting models.

Key issues raised as part of the domestic context included:

- Around 2,330 Australians died from the disease in 2016
- 2 in 3 Australians will be diagnosed with skin cancer by the age of 70
- Treatments for advanced melanoma now cost the government around \$150,000 per patient
- Treating skin cancer cost the health system more than \$700 million in 2015
- The cost of treating *non*-melanoma skin cancer is approx. 8.1% of health system spending on cancer
- Total number of excisions for BCC/SCC in 2016 were 626,759 (12,053 per week / 301 per business hour)
- Over a third of all hospitalisations for sunburn are children under the age of 10
- When skin cancer is diagnosed early, treatment is significantly cheaper and more effective.

Cancer Council noted that a modest investment in skin cancer prevention does directly reduce skin cancer incidence and provides government an extremely good return on investment of \$3.20 for every \$1 invested. It also noted the last Commonwealth investment in skin cancer prevention was made in 2009/10.

Item 10.9 UVR Discussion

Key questions considered in the discussion following the UVR deep dive session were 'how does Australia sustain and entrench itself as a world leader in sun protection' and 'what role could ARPANSA play'?

There was broad agreement within Council that ARPANSA's role in reducing the burden of UVR health effects should be one of coordination, seeking agreement between jurisdictions, raising the issue within Commonwealth Government, and forming the reliable advice and messaging that will be drawn upon for any public awareness campaigns. It was proposed that ARPANSA should lead a joint position statement from key stakeholder organisations in Australia, to create a unified message, not just on the use of sunscreen, but on all UVR protection measures.

Other suggestions from the discussion included that co-investment may be more effective for progressing the issue, noting that the messaging needs to very clever and well-refined for any public campaigns to succeed. It was also suggested that the CEO of ARPANSA contact the Chair of the Australian Health Protection Principal Committee (AHPPC) to re-raise an agenda item on UVR protection proposed recently, and that ARPANSA should partner with the Australian Medical Association, Cancer Council, BOM, Cancer Australia and the Department of Health to make behavioural change campaigns a priority.

Action: Council to form a working group to draft a position paper on uniform UVR protection messaging.

Action: ARPANSA to do an initial assessment of current UVR messaging and guidelines state-by-state.

Action: ARPANSA to request BOM to raise the issue at the national skin cancer committee.