Meeting Summary

Date 11-12 December 2023

Time 12:00 PM - 5:00 PM 11/12/2023 (Day1) & 9:00 AM - 3:30 PM 12/12/2023

(Day 2)

Location Mercure Hotel Doncaster and virtual via Microsoft Teams

Present Dr Jane Canestra, Dr Gillian Hirth, Mr Keith Baldry, Mr John Piispanen, Dr

Christine Connors, Mr Chris Perry, Mr Chris Donovan, Prof Mel Taylor, Prof Pam Sykes, Ms Melissa Holzberger (by video-conference), Mr Stuart Parr, Dr

Catherine Olsen.

Invitees Mr Nathan Wahl, Dr Tamie Weaver, Dr Ivan Williams, Mr Jim Scott, Dr Rick

Tinker, Dr Roslyn Drummond, Dr Fiona Charalambous, Dr Arne Biesiekierski.

Apologies Mr Jim Hondros.

Secretariat Dr Adrian Hawley, Mr James Wheaton.

Meeting Opening and Housekeeping

The Chair opened the meeting with an acknowledgement of country. No additional conflicts of interest were declared. The minutes from the August 2023 meeting were noted but not approved. An updated version of the minutes will be circulated out of session for approval once feedback is addressed. The secretariat provided an update on the status of action items from the previous meeting.

<u>Task</u>: Council Minutes from August to be re-circulated to Council for approval prior to publication.

Shielding Standards Working Group

The Council working group on shielding standards provided an update on a scope of future work for the Council to consider, and a draft letter of advice to the CEO of ARPANSA.

It was noted that current shielding methodology is based on two principal United States and United Kingdom reference documents with support from ARPANSA's Radiation Protection Series Code of Practice and Safety Guides. An analysis of State and Territory Guidance documents revealed differences in the interpretation of dose constraints, and differing definitions for 'member of the public' and 'occupationally exposed persons'. It was discussed that the Radiation Health Committee has previously issued a statement on the definition of occupationally exposed persons.

The Council discussed possible recommendations and the draft letter of advice, including the potential development of a shielding standard.

<u>Decision</u>: Council endorsed the development a letter of advice to the CEO on this topic

Skin Cancer Registry Working Group

The Council noted its previous advice of December 2019 that included the development of a national register to cover all categories of skin cancers, including basal cell carcinomas [BCCs] and squamous cell carcinomas [SCCs], not just melanoma.

The working group gave an update on its considerations and challenges, noting that BCCs and SCCs are more typically dealt with in primary care and that notification might be done via pathology providers. The Council discussed the challenge of the data volume involved, and some of the formal processes required for a registry. Council noted that Tasmania is the only jurisdiction that has a comprehensive skin cancer registry that includes all cancer types. It was noted that a statement of benefit is needed, covering the anticipated areas of cost benefit on health budgets, whether or not a scalable approach might be possible (perhaps initially focused on SCCs) and expected timeframes for impact, possibly drawing on Tasmania's experience.

<u>Task</u>: Working group to consider drafting a statement of the benefits of an expanded cancer registry, drawing on the experience in Tasmania for inclusion in a letter of advice to the CEO of ARPANSA.

ARWA update

The Australian Radioactive Waste Agency (ARWA) presented on its background and current plans, including their role within government, scope of work, and waste inventory, noting that radioactive waste from the nuclear submarine program or NORM waste from private industry are not within the scope of ARWA. ARWA noted the objective to align disposal plans to the current waste inventory, establishing a credible permanent disposal pathway. It presented a summary of the decision to not pursue a facility at Napandee, South Australia, and remediation work underway at that site.

Council discussed the need for consistency between waste infrastructure projects, and the importance of understanding projected waste inventories to inform safety cases moving forwards. Council noted ARWAs plan to update its waste management strategy prior to 2026.

Council discussed the value of a roadmap for the management of Australia's radioactive waste including current holdings and from future activities, beyond just establishing a management facility and repository.

Report to Council on status of PhD study into NIR lasers

ARPANSA gave an update on a project on the impact of lasers in the cosmetic industry being undertaken through commissioned postdoctoral research at the Monash Accident Research Centre.

The research had noted a large range of cosmetic uses, with one provider reporting 4.2 million procedures per year. However, there is insufficient data on the impact and healthcare burden and regulation is inconsistent between jurisdictions (or in some cases, non-existent). There are also different restrictions for clinical or therapeutic (licensed by the Therapeutic Goods Administration) compared to non-clinical and cosmetic uses.

The research aims to characterise injuries by frequency, type, and impacts, and review the regulatory environment in Australia including the schemes or processes available for injured persons to seek redress. It was noted that a distinction is required between pain as an expected side effect as part of a cosmetic treatment vs unacceptable injury. The method will include a media analysis, a

consumer survey, legal and regulatory analysis, healthcare data analysis, and a literature review including international practice.

The researcher was invited to update Council at a future meeting as the research progresses.

Member for the General Public

The Council noted a meeting paper from the Member for the General Public which highlighted some concerns from the community on topical issues of radiation safety including those relating to recent high-profile lost or damaged radiation gauges, private radiation waste disposal facilities, shielding standards, and skin cancer registries. Council discussed the importance of transparency and timely communication in relation to lost radiation gauge sources in Western Australia and South Australia.

Emergency Preparedness and Response Working Group

The Council discussed National Uniformity challenges in emergency preparedness and response (EPR), and lessons learned from the lost source incident which occurred in Western Australia, particularly with respect to training and funding for radiological incident preparedness. It was noted that the International Atomic Energy Agency (IAEA) and World Health Organization (WHO) both have assessment capabilities to review national EPR capabilities and make recommendations.

<u>Task</u>: Revise the current EPR draft letter and draft paper considering the comments received and discussion and recirculate to council out of session.

<u>Task:</u> Council to develop a new draft letter of advice to the CEO of ARPANSA on the topic of acting in response to root causes identified from the lost source incident which occurred in Western Australia.

UN Sustainable Development Goals and Radiation Protection

The Council received an update on recent conference sessions at the IAEA and International Committee for Radiological Protection (ICRP) meetings on consideration of the United Nations (UN) Sustainable Development Goals (SDGs) in relation to radiation protection. The UN SDGs are widely endorsed and accepted & globally recognised. The IAEA's approach is to progress sustainable development by making it implicit in radiation systems, taking social and economic factors into account to achieve safety without unduly limiting the operation of facilities. The IAEA and ICRP have separate documents for safety and sustainability which are being reintegrated.

The Council discussed the importance of sustainable development and environment, sustainability, and governance (ESG) in relation to radiation safety, industry, and workforce; and discussed the processes by which the IAEA revises its safety standards. Decommissioning and remediation were noted as significant sustainability issues for nuclear activities where excessively low constraints can create a large burden for waste handling, particularly regarding levels equivalent to naturally occurring radioactive material.

Day 2 Welcome and Introductions

The Council met in a joint sitting with the Radiation Health Committee (RHC) for the first half of day one with the Chair of Council presiding. The Chair opened the joint meeting with an acknowledgement of country.

CEO Update

ARPANSA's CEO gave an update on recent regulatory activities including a virtual public forum on the phase A of decommissioning of the Australian Nuclear Science and Technology Agency (ANSTO) HIFAR reactor; participation in the International Atomic Energy Agency (IAEA) Code of Conduct meeting on the Security of Radioactive Sources; and submissions received from ANSTO seeking approval for OPAL reactor maintenance activities planned for 2024.

Recent international engagements were noted, including the IAEA Safety Standards Committees; the International Commission for Radiological Protection (ICRP) Main Commission; the IAEA Commission on Safety Standards (CSS); a number of side events, bilateral partner meetings and memorandum of understanding updates held during the IAEA General Conference 2023; ongoing projects of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and the World Health Organization Systematic Reviews.

The CEO noted a newly initiated project to develop an external-facing environmental protection framework. This framework will outline a commitment to deliver necessary monitoring, measurement and assessment programs, and will set out and explain how and why we monitor radiation in the environment.

The CEO also noted ARPANSA's recent roles in live ultraviolet (UV) index data for public health information tools and national sun protection campaigns, along with commercial services issuing sunglass swing tags and developing a wet-test method for sun protective clothing. She also noted the delivery of an educational package to primary schools and kindergartens to promote sun smart behaviours during science week, and filming of an educational package for SunSmart on UV Radiation for roll-out in primary and secondary schools in 2024.

ARPANSA will also support the international UV and Skin Cancer Prevention conference to be held in Brisbane in September 2024, and continues to collaborate on research and contribute to national and international standards and guidelines on UV Protection, including with RMIT to develop a non-human testing method to determine the SPF of sunscreens, and contributing to new International Commission Non-Ionizing Radiation Protection (ICNIRP) guidance on the long-term effects of chronic UV exposure.

Reconciliation Action Plan

ARPANSA gave an update on the development of a Reconciliation Action Plan. The Council expressed their support for ARPANSA's work to develop a Reflect RAP and for ongoing work in this area.

Emergency Preparedness and Response (EPR) Activities

ARPANSA presented a summary of key recent emergency preparedness and response activities, including hosting the Radiation Emergency Assistance Centre/Training Site (REAC/TS) course for selected doctors, nurses, paramedics from across Australia; updates to the Reference Incident for nuclear-powered vessels visiting Australia; Commonwealth co-operation on EPR capability and capacity for national radiological plans; and capability support provided to jurisdictions to search for lost radioactive material, noting usually less than 5 lost sources per year are recorded in the Australian Radiation Incident Register. Council noted several issues for further consideration.

Media and Public enquiries dashboards

The Council received updates on recent media enquiries and public enquiries to ARPANSA, noting key areas of public interest in radiofrequency for telecommunications and electrical supply infrastructure near homes. The top three areas of media interest were mobile phone safety, the Australian Border Force seizure of radioactive materials in Arncliffe, and radioactive waste.

Nuclear Safety Committee (NSC) and Radiation Health Committee (RHC) Updates

The Chairs of the Nuclear Safety Committee, Radiation Health Committee, and Radiation Health and Safety Advisory Council provided brief updates on recent activities and considerations of their respective advisory bodies. Meeting summaries are at www.arpansa.gov.au/about-us/advisory-council-and-committees.

Nuclear Powered Submarine Program Implementation

ARPANSA gave an update on activities being undertaken to support implementation of Australia's nuclear-powered submarine program. This included an update on the Australian Naval Nuclear Power Safety Bill 2023, tabled in Federal Parliament on 16 November 2023. Transitional provisions are proposed to be implemented for transition of any licensing activities that ARPANSA might need to oversee prior to the establishment of the new regulator.

ARPANSA also provided a high-level overview of internal changes at ARPANSA to support this work, and a visit to the Office for Nuclear Regulation (ONR) in the United Kingdom (UK) for discussion on emergency preparedness and response experiences, knowledge management and capacity building, and familiarisation of how the interfaces between the ONR and the UK Defence Nuclear Safety Regulator were managed.

2023 IRRS Mission to Australia

ARPANSA's role was considered, with respect to addressing findings from the recent International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) Follow-Up Mission to Australia, which reviewed Australia's national, legal, and governmental framework for nuclear and radiation safety against IAEA Safety Standards. The 2023 IRRS Mission reviewed progress against findings from a 2018 IRRS Mission.

It was noted that the IRRS formally acknowledged two 'good practices' for Australia which the IAEA considers will help 'lift the bar' of international best practice. These were ARPANSA publishing the results of its assessment of leadership for safety and safety culture on its website; and use of an incident management system for routine health and safety incidents which is expected to help ensure that staff are familiar with the system and can use it effectively to respond to emergency situations. The IRRS noted some key areas not yet achieved including the need for a national strategy for radiation safety, and greater uniformity of regulatory approach across Australia such as in the management of sealed sources.

ARPANSA's support was acknowledged, with respect to broader Commonwealth and national activities which address the IRRS findings and help ensure that Australia is consistent with IAEA standards and meets international best practice. ARPANSA's own current and future activities were discussed in terms of how they directly contribute to national uniformity in radiation protection.

The CEO noted that the final IRRS report will be published by the IAEA during the first quarter of 2024.

National Uniformity

The final joint-sitting item for discussion between Council and RHC was how ARPANSA can best support a review of national uniformity, and define its own role moving forward, in the context of existing activities, other increasing commitments as a result of the nuclear submarine program, and the IRRS findings.

Council Closed discussions

The Council adjourned to meet separately from the RHC.

Discussion on IRRS and National Uniformity

The Council discussed considerations and approaches to national uniformity on radiation protection and priority areas of work for ARPANSA. It was noted that the regulatory role of the State and Territory regulators is very different to the role of ARPANSA, in terms of stakeholders and the entities being regulated. The Council discussed whether this creates a difference of approach to achieving broad support for consistency on specific aspects of radiation uniformity.

The Council discussed key areas commonality in radiation safety, particularly around emergency preparedness and response in the future context of the nuclear submarine program, or environmental frameworks for regulatory assessments. It was noted that some aspects could be captured within memorandums of understanding between jurisdictions with the aim to have common wording and definitions.

The Council discussed how the draft National Strategy for Radiation Safety was developed and approved by the Australian Health Protection Principal Committee (AHPPC) for public consultation in 2021, and considered potential of further work once the strategy is finalised to identify areas for improvement based on risk, including for waste management, with opportunities for efficiencies in the areas of waste management, EPR and transport.

Discussion of RHC and NSC Appointments

The Council discussed two papers which the CEO of ARPANSA tabled for consultation with the Council as required by the ARPANS Act, regarding the proposed appointment of members to the Nuclear Safety Committee (NSC) and Radiation Health Committee (RHC) for 2024–2026 terms.

<u>Task</u>: Council members were asked to raise any questions or concerns on the proposed NSC and RHC membership by close of business Thursday 14 December.

Other Business and Close

The Council received a presentation on the future trial of iRefer guidelines at the Alfred Hospital. ARPANSA also noted that the terms of the Radiation Control Officer members were ending, and the Minister would make new appointments in early 2024. Dates for meetings in 2024 were proposed and would be confirmed in early 2024.