Australian Government

Australian Radiation Protection and Nuclear Safety Agency

arpansa

22 23 annual report

Contents

Preliminary pages

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Distribution

This report is available from ARPANSA, the ARPANSA website at: arpansa.gov.au/annual-reports and on the Transparency Portal website at transparency.gov.au/publications

Acknowledgements

Thank you to all ARPANSA employees who have contributed to this report.

Designed and typeset by ARPANSA.

Printed by CanPrint

Acknowledgement of Country

ARPANSA respectfully acknowledges Australia's Aboriginal and Torres Strait Islander communities and their rich culture and pays respect to their Elders past and present. We acknowledge Aboriginal and Torres Strait Islander peoples as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

We recognise and value the ongoing contribution of Aboriginal and Torres Strait Islander peoples and communities to Australian life and how this enriches us. We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

Reader's guide

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) 2022– 2023 annual report has been prepared in accordance with the Department of the Prime Minister and Cabinet's *Resource Management Guide No. 135, Annual reports for non-corporate Commonwealth entities* updated in May 2022. The guide sets out ARPANSA's annual report obligations under section 46 of the *Public Governance, Performance and Accountability Act 2013* and the Public Governance, Performance and Accountability Rule 2014.

This year's annual report has been prepared to inform Parliament about ARPANSA's performance and activities in 2022–2023.

The report is available online at ***www.arpansa.gov.au/annual-reports*** as well as on the transparency portal.

PART 1: CEO foreword	CEO Gillian Hirth's foreword.
PART 2: Agency overview	An overview of ARPANSA, including its role and functions, and organisational structure.
PART 3: Report on performance	ARPANSA's Annual Performance Statement, report on financial performance and key performance highlights.
PART 4: Management and accountability	Information about ARPANSA's governance, external scrutiny, fraud and risk management arrangements, workforce planning and human resources. Part 4 also contains information about workplace health and safety, and freedom of information.
PART 5: Financial statements	Contains ARPANSA's audited financial statements and a report by the Auditor-General.
PART 6: Appendices	This section includes the *Australian Radiation Protection and Nuclear Safety Act 1998 requirements*, including details of advisory bodies and staffing statistics.
PART 7: Reference material	Comprises an abbreviations list, glossary, reporting requirements and alphabetical index and annual report requirements.

Letter of transmittal

Australian Government
Australian Radiation Protection and Nuclear Safety Agency

arpansa

The Hon Ged Kearney MP
Assistant Minister for Health and Aged Care
House of Representatives
Parliament House
CANBERRA ACT 2600

Re: 2022–2023 Annual Report of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

Dear Minister

I am pleased to present to you the 2022–2023 Annual Report for ARPANSA pursuant to section 46 of the *Public Governance, Performance and Accountability Act 2013*, which requires that an annual report be given to you as ARPANSA's responsible Minister for presentation to the Parliament, and section 59 of the *Australian Radiation Protection and Nuclear Safety Act 1998* (the *ARPANS Act*).

As required by the *ARPANS Act*, this report provides details on:

- the activities of the Chief Executive Officer (CEO), ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Nuclear Safety Committee (NSC), and the Radiation Health Committee (RHC)
- any directions given to me by the current or previous responsible Ministers under section 16 of the *ARPANS Act* and any breach of licence conditions by a Licensee, of which I am aware
- all reports I have received from the Council on matters related to radiation protection and nuclear safety or the NSC on matters related to nuclear safety and the safety of controlled facilities
- any directions I have given as CEO under section 41 of the *ARPANS Act* and improvement notices that ARPANSA inspectors have given under section 80A of the *ARPANS Act*.

I also certify as the accountable authority for ARPANSA that, in compliance with section 10 of the Public Governance, Performance and Accountability Rule 2014, the agency has conducted fraud risk assessments and developed and implemented fraud control plans; has in place appropriate fraud prevention, detection, investigation and reporting mechanisms that meet the agency's specific needs; and I have taken all reasonable measures to appropriately deal with fraud relating to the agency.

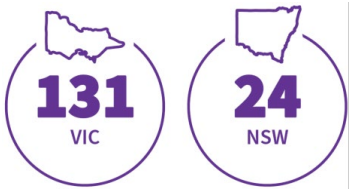
Yours sincerely

Dr Gillian Hirth
CEO of ARPANSA

ARPANSA snapshot

Talk to a Scientist enquiries *for 2022–23*

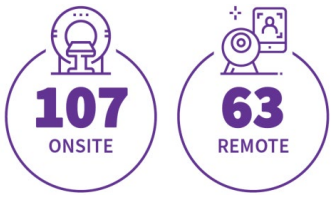
Staff location *as at 30 June 2023*



Our services *for 2022–23*

UV swing tags *for 2022–23*

ACDS audits *for 2022–23*



Licences *as at 30 June 2023*

Media mentions *for 2022–23*

Part 1: CEO foreword

I am pleased to be leading the agency as we address important strategic national initiatives and programs, including the development of robust stewardship arrangements for an Australian nuclear-powered submarine capability and ensuring that Australia is prepared for any radiological or nuclear incident – both domestically and abroad.

Despite the ongoing challenges of a changing operating landscape over the financial year, ARPANSA continues to meet its mandate of protecting the Australian people and the environment from the harmful effects of radiation. We do this through understanding risks and supporting best-practice regulation, research, policy, services, partnerships and engaging with the community.

In this foreword I will take the opportunity to reflect on the last year and provide an update on key areas and our outlook for the next reporting period.

Strategic Australian government initiatives – acquisition of nuclear-powered submarines

During 2022-23 ARPANSA continued to provide expert advice to the Nuclear-Powered Submarine Task Force (NPSTF) on developing a system of regulation that would meet Australian needs, while upholding the highest standards of nuclear safety and radiation protection. In March 2023, the Australian Government announced the optimal pathway for the acquisition of conventionally armed nuclear-powered submarines as part of the trilateral security partnership between Australia, the United Kingdom and the United States (AUKUS). This included the government's intent to establish the Australian Submarine Agency (replacing the NPSTF) to implement the capability, and the new Australian Nuclear-Powered Submarine Safety Regulator (ANPSSR) to oversee this capability.

As the Australian Government's primary authority on radiation protection and nuclear safety and regulator of Commonwealth entities which use radiation, ARPANSA has a critical role to play in this whole-of-government effort to develop new and fit for purpose nuclear regulatory arrangements. ARPANSA is committed to supporting the establishment of the ANPSSR, and will continue in 2023-24 to work with the Australian Submarine Agency (ASA) and the Office of Nuclear-powered Submarine Regulatory Design – and more broadly across government – to support the development of appropriate standards of regulatory control for the nuclear-powered submarine enterprise. A key part of this includes supporting related activities under the Department of Defence's Visiting Ships Panel (Nuclear) (VSP(N)). This collaborative work will help to ensure robust nuclear stewardship now, and into the future.

Radiological and nuclear preparedness and response – Ukraine conflict and the Western Australia missing radioactive source.

ARPANSA's role in preparedness and response to a radiological or nuclear incident is captured under the Australian Government Crisis Management Framework (AGCMF) and its relevant plans, and the agency works with a range of

stakeholders across both Commonwealth and state and territory governments to give effect to these. Over the financial year, ARPANSA has continued to provide support on both domestic and international incidents.

Ukraine – threat to nuclear infrastructure

Russia's illegal and immoral invasion of Ukraine has presented a major challenge for the international community, with continued reports of conflict and military operations near Ukrainian nuclear facilities – particularly the Zaporizhzhia Nuclear Power Plant (ZNPP). ARPANSA is designated as the National Competent Authority for radiation emergencies occurring both domestically and overseas. ARPANSA provides the link to the IAEA, as a global coordination point, in the event of any radiological emergency. ARPANSA continued over the financial year to provide support to the Department of Foreign Affairs and Trade in responding to the changing environment in Ukraine. Further information on ARPANSA's role in this situation is included in Case Study 1.

Western Australia - missing radioactive source

In January 2023, the Western Australian (WA) Government announced that a caesium-137 source of radiation (a capsule) was lost during the transportation of a damaged gauge between a mining site to Perth. The incident was under the jurisdictional control of the WA Government, however ARPANSA provided a range of support, including advice to WA authorities and deployment of resources to enable the search for the source. Following an extensive search, the capsule was successfully recovered and attracted significant domestic and international attention. While WA authorities continue to investigate the incident, ARPANSA continues to monitor and consider what improvements may be required to improve the regulatory framework and emergency response arrangements. Further information on ARPANSA's role in this response is included in Case Study 3.

Radiofrequency electromagnetic energy

Mobile phone networks and other wireless telecommunications sources emit low-level radiofrequency (RF) electromagnetic energy (EME), with some members of the public concerned this might have adverse health effects. As ARPANSA reached the completion of year 3 of its 2020-2024 EME Program Action Plan – which supports the Australian Government's EME Program – we have continued to engage extensively with international health authorities on the development of key guidelines and statements. We have also delivered on major milestones in our action plan, including the official opening of ARPANSA's new anechoic chamber in November 2022, the completion of surveys of the radiofrequency EME environment in Melbourne and publication of our research in peer-reviewed international literature. Each of these deliverables has provided a return on the government's investment in our EME program. These actions demonstrate to the Australian community that high-frequency wireless technologies are well researched and well managed to ensure public safety. The investment in our research laboratory means we will be at the forefront locally and internationally in providing science-based health advice on EME – now and into the future. More information on the progress of our 2020-2024 EME Action Plan is available in the fourth issue of ARPANSA's EME newsletter.

Update on ARPANSA's performance and financial results

ARPANSA's performance during 2022–23 is reported on in detail in Part 3: Report on Performance. Our analysis reflects on key activities and the associated performance measures in our Corporate Plan 2022–23 (which

demonstrate how we have achieved our purpose). Our performance framework further encourages business areas to seek efficiencies and foster innovation. We have successfully managed our finances and detailed results are contained in this report. ARPANSA's dedicated and highly capable and specialised staff underpin all that we deliver and continue to ensure that ARPANSA is Australia's leading authority on radiation protection and nuclear safety.

For the financial year ending 30 June 2023, ARPANSA reported an operating deficit. This deficit relates to depreciation and amortisation expenses not requiring appropriation. ARPANSA's financial performance during 2022–23 is reported on in detail in Part 5: Financial Statements.

Gillian Hirth
CEO of ARPANSA

Part 2: Agency overview

ARPANSA at a glance

Our purpose

Our purpose is to protect the Australian people and the environment from the harmful effects of radiation.

Key activities

- Initiate, maintain, and promote frameworks for protection and safety.
- Undertake research and provide expert evaluations, advice and services.
- Ensure effective and risk-informed regulation.
- Enhance organisational innovation and capability.

Our outcome and objectives

ARPANSA has a single outcome as set out in the Portfolio Budget Statement:

Outcome 1:

Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation.

Program Objective – Program 1.1: Radiation protection and nuclear safety

Protect the Australian people and the environment from the harmful effects of radiation through effective, risk-informed regulation and delivery of services under the *ARPANS Act*. Scientific knowledge and international best practice are applied to promote awareness of the effects of radiation and a nationally uniform approach to radiation protection of people (the public, workers and patients undergoing medical procedures using radiation) and the environment.

Linked Program – other Commonwealth entities that contribute to Outcome 1

Department of Health and Aged Care (Health) Program 1.8: Health Protection, Emergency Response and Regulation.

The Department of Health and Aged Care (Health) contributes to Outcome 1, as Health has strategic regulatory policy and national leadership responsibility for radiation protection and nuclear safety. This includes best practice health technologies related to radiation and nuclear safety.

Role of ARPANSA

ARPANSA, on behalf of the Australian Government, protects the Australian people and environment from the harmful effects of radiation by performing the following functions:

An independent regulator	A health advisor	A service provider
We are the independent regulator of Commonwealth entities that use or produce radiation. Using a risk-informed regulatory approach, we ensure that Licensees take responsibility for protection of people and the environment from the harmful effects of radiation.	We build and maintain expertise in the measurement of radiation and assessment of health impacts, including the assessment of risks and responses to radiation incidents. We provide high quality advice to the government and the community.	We offer high quality services for the purpose of protection against the harmful effects of radiation.

Accountable authority

Established by the *ARPANS Act*, ARPANSA commenced operations on 5 February 1999. ARPANSA replaced the Nuclear Safety Bureau and the Australian Radiation Laboratory.

The CEO, Dr Gillian Hirth, is the accountable authority of ARPANSA for the 2022-2023 reporting period. Dr Hirth was appointed as Chief Executive Officer of ARPANSA from 22 March 2022.

Responsible ministers and portfolio

ARPANSA sits within the Department of Health and Aged Care portfolio.

As of 30 June 2023, portfolio responsibility for ARPANSA sat with the Hon Ged Kearney MP, Assistant Minister for Health and Aged Care.

Location

ARPANSA has offices in Victoria (Yallambie) and New South Wales (Miranda). Eighty-five per cent of staff are located in the Victorian office.

Our staff

As of 30 June 2023, ARPANSA had 143 ongoing staff, 12 non-ongoing staff and one statutory appointment.

Organisational structure

Chief Executive Officer

Dr Gillian Hirth has held the position of Chief Executive Officer (CEO) since March 2022.

The CEO's functions (as set out in the *ARPANS Act*) include:

- regulating Commonwealth radiation sources and facilities
- promoting uniformity of radiation protection and nuclear safety policy and practices across jurisdictions of the Commonwealth, the states, and the territories
- providing advice on radiation protection, nuclear safety and related issues
- undertaking research and providing services in relation to radiation protection, nuclear safety and medical exposures to radiation
- monitoring the operations of ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Radiation Health Committee (RHC) and the Nuclear Safety Committee (NSC)
- reporting on the operations of ARPANSA, the Council, RHC and NSC.

Executive Group

The CEO is supported by the Executive Group (EG), which is comprised of 3 branch heads and 3 office heads. This group provides the CEO with high-level policy and strategic advice, and reports on matters relating to their individual business groups. Together, the CEO and the EG form the leadership team for day-to-day management of ARPANSA.

ARPANSA business groups

ARPANSA has 6 business groups that deliver components of the agency's strategies and services.
Figure 1. 'Organisational chart' shows ARPANSA's organisational structure as of 30 June 2023.

Regulatory Services Branch

Regulatory Services Branch provides an independent regulator service to Commonwealth entities that use or produce radiation. Using a risk-informed regulatory approach, we ensure that Licensees take responsibility for protection of people and the environment from the harmful effects of radiation. This branch comprises 3 sections: Source Safety and Security; Facility Safety; and Safety Systems. We:

- assess licence applications, issue authorisations, perform compliance inspections and promote best practice
- assess and issue import and export permits for radioactive material
- assess transport plans and grant approvals for transport of radioactive material
- promote national uniformity in radiation protection policies and practices
- work to achieve the security of radioactive material.

The branch currently oversees 33 facility licences and 59 source licences. The costs for regulatory services are recovered from licence holders and applicants through annual charges and application fees.

Radiation Health Services Branch

The Radiation Health Services Branch provides expertise, specialised resources and services to support the protection of the public, workers and the environment from the hazards of both ionising and non-ionising radiation (NIR). We undertake a range of scientific activities and services to characterise sources of radiation exposures, to assess the risks to people and the environment from exposure to radiation, and to reflect this understanding into advice and guidance to our stakeholders. This branch comprises 4 sections: Radiation Protection Services; Radiation Research and Advice; Modelling, Assessment and Emergency Preparedness; and Monitoring and Emergency Response. The branch undertakes a range of national initiatives, including the ultraviolet radiation (UVR) monitoring network, the Australian National Radiation Dose Register (ANRDR) and the radiation monitoring network (established under the terms of the Comprehensive Nuclear-Test-Ban Treaty). Emergency preparedness and response (EPR) systems for field, network and laboratory measurements and information management and decision-support systems are maintained by the branch and aligned with national planning. This branch is also responsible for the delivery of the enhanced EME program, as well as research across all modalities of radiation to underpin our advice.

Medical Radiation Services Branch

The Medical Radiation Services Branch provides safety and quality advice on the use of radiation in medicine to all Australians. The branch has 3 sections: Medical Imaging; the Primary Standards Dosimetry Laboratory (PSDL); and the Australian Clinical Dosimetry Service (ACDS). The Medical Imaging section is responsible for dose data collection and advice on patient safety within diagnostic imaging and nuclear medicine. The PSDL maintains the Australian Primary Standard for absorbed dose and, by calibrating hospitals' radiation detectors against the primary standard, ensures that the radiation equipment used by a hospital operates accurately. The ACDS carries out dosimetric audits of linear accelerators used by radiotherapy providers in Australia and New Zealand to verify that the radiation exposure of patients undergoing treatment is correct.

Office of the CEO

The Office of the Chief Executive Officer (OCEO) facilitates, coordinates and supports the activities of the CEO. The OCEO comprises 3 sections: Risk and Quality; Governance and Strategic Partnerships; and Communications. The OCEO leads collaboration and communication with the public and government, coordinates international engagement, and supports effective risk and compliance management including maintenance of the ARPANSA Management System. The OCEO also provides advice to the agency and government on emerging and strategic issues.

Office for Business Support

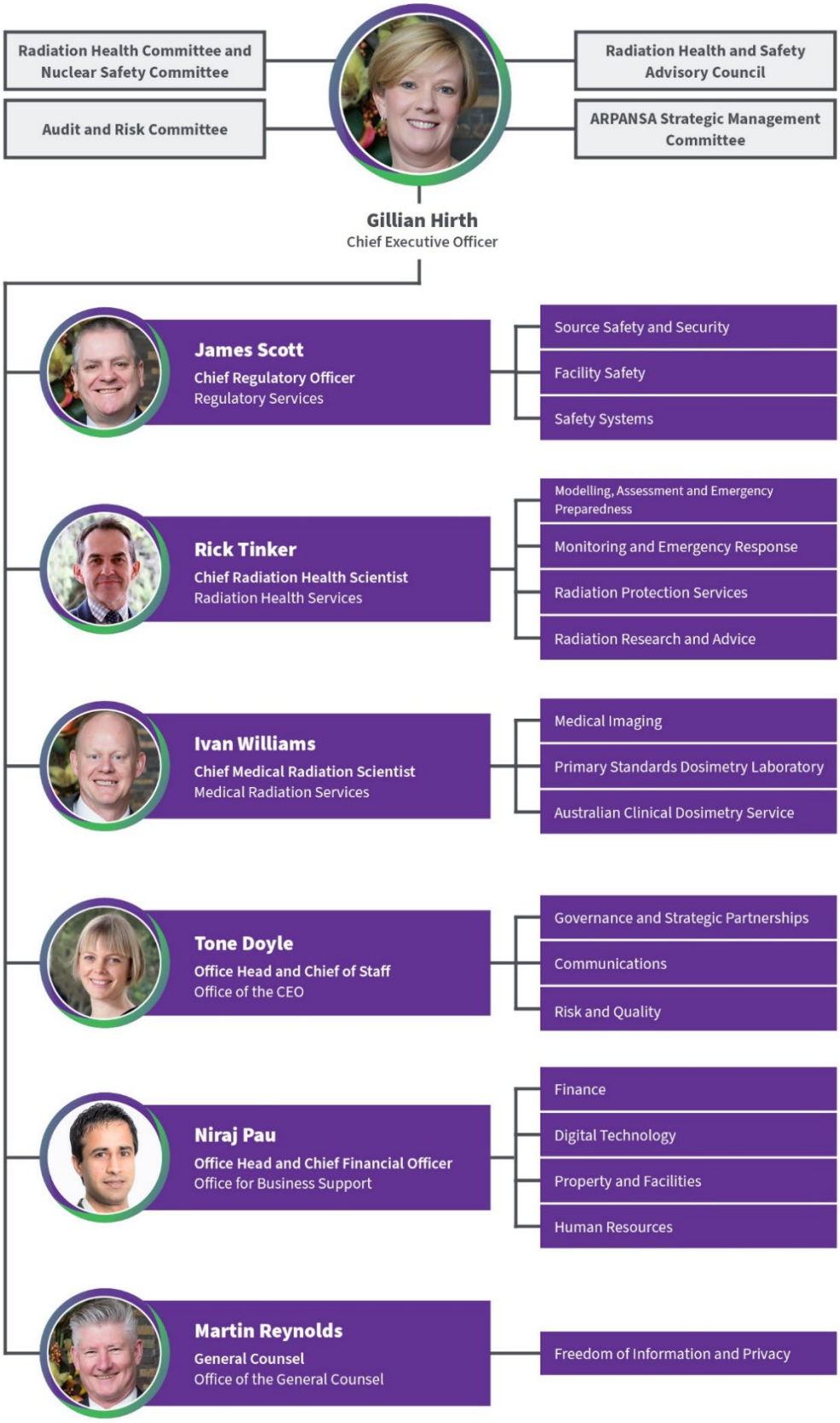
The Office for Business Support (OBS) is home to several enabling services and works closely with all branches and offices across the agency to support their operations. The OBS is responsible for 4 key areas: Finance; Digital Technology; Human Resources; and Facilities and Engineering. The office is continuing to modernise the delivery of customer-centric enabling services to the wider agency by finding opportunities to enhance business partnering, uplift strategic workforce management and planning, adopt new technologies and continually review our business models to ensure the agency remains fit-for-purpose to deliver its key activities.

Office of the General Counsel

The Office of the General Counsel provides legal advice and strategic support to staff regarding all aspects of the agency's operations and assists the CEO in achieving her statutory mandate. The Office of the General Counsel provides legal services to support staff to perform their functions and to ensure that in doing so they are compliant with relevant government policies and legislation. The Office also performs Freedom of Information (FOI) and privacy functions on behalf of the agency.

Organisational chart

FIGURE 1: ORGANISATIONAL CHART



Part 3: Report on performance

Annual performance statements

Introductory statement

I, as the accountable authority of the Australian Radiation Protection and Nuclear Safety Agency, present the 2022–2023 Annual Performance Statement of ARPANSA, as required under paragraph 39(1)(a) of the *Public Governance, Performance and Accountability Act 2013* (*PGPA Act*). In my opinion, this annual performance statement is based on properly maintained records, accurately reflects the performance of the entity, and complies with subsection 39(2) of the *PGPA Act*.

Dr Gillian Hirth
CEO of ARPANSA

Purpose

ARPANSA's purpose is defined in section 3 of the *Australian Radiation Protection and Nuclear Safety Act 1998* (*ARPANS Act*) - to protect the health and safety of people, and to protect the environment, from the harmful effects of radiation.

As Australia's primary authority on radiation protection and nuclear safety:

- We are the independent regulator of Commonwealth entities that use or produce radiation. Using a risk-informed regulatory approach, we ensure that Licensees take responsibility for protection of people and the environment from the harmful effects of radiation.
- We build and maintain expertise in measurement of radiation and assessment of health impacts, including the assessment of risks and responses to radiation incidents.
- We offer high quality services for the purpose of protection against the harmful effects of radiation.

Performance framework

Our framework provides an overview of what we did and how it supported the achievement of our purpose.
Our outcome, as set out in the Portfolio Budget Statement (PBS), is to protect people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation. This is

specifically measured by 4 PBS measures, which have been correlated to 4 key activities representing significant areas of work:

1. Initiate, maintain, and promote frameworks for protection and safety.
2. Undertake research and provide expert evaluations, advice and services.
3. Ensure effective and risk-informed regulation.
4. Enhance organisational innovation and capability.

ARPANSA demonstrates its performance against its purpose using a range of performance measures, which are outlined in the PBS 2022–23 and the ARPANSA Corporate Plan 2022–23. For the 2022-23 reporting period, the agency identified 20 performance measures, 16 of which were developed under the Corporate Plan, and 4 established under the ARPANSA PBS 2022–23. To allow for transparent monitoring of measures with contributions from multiple branches/offices, PBS 1 and PBS 3 were divided into result components and assigned to their respective contributors. For annual reporting purposes, targets and planned performance results will be assessed to determine if the correlated measure has been achieved, partially achieved, or not achieved.

Corporate Plan performance measures are referenced numerically as they appear in the 2022-23 Plan, while PBS measures are distinguished with the PBS prefix. All measures assessed in this report can be cross-referenced in the 2022-23 Corporate Plan and 2022-23 Health PBS.

ARPANSA has evaluated each measure based on the following (Table 1: evaluation criteria).

TABLE 1: EVALUATION CRITERIA

Achieved	The agency has succeeded in reaching the agreed target/planned performance result and work has been completed effectively and to the required standard.
Partially achieved	The agency has not succeeded in meeting the anticipated target/planned performance result, however significant progress has been made. Work will remain ongoing until completion (>3 to <6 months).
Not achieved	The agency has not succeeded in meeting the anticipated target/planned performance result, and significant progress (> 9 months' work remaining) has not been made to assess performance of this measure. The agency will review the resourcing around delivery of this performance measure and undertake a review to assess impact on our purpose.

Overarching entity-wide analysis of performance against ARPANSA's purpose

The 2022–23 annual performance statement reflects on how ARPANSA has delivered against its purpose of protecting the Australian people and the environment from the harmful effects of radiation.

Radiation protection and nuclear safety is a highly specialised, technical field that presents a complex operating environment with longstanding and emerging challenges. To ensure we meet our purpose, the agency consistently

reviews and reprioritises in light of emerging challenges, so we can ensure radiation protection and nuclear safety standards are maintained.

ARPANSA's resilience and ability to adapt to new challenges is reflected in our achievements against each of our key activities. Overall, in 2022–23, ARPANSA achieved 16 performance measures out of 20 (80%), a 7.5% decrease in the performance outcomes achieved when compared to 2021–22. ARPANSA diligently worked to deliver on our key activities and ultimately on our purpose, despite a shifting operating environment. The following factors have contributed to the entity's performance:

Resourcing

ARPANSA was constrained by the agency's average staffing level, which meant existing resources had to be realigned to support rapidly evolving government initiatives and priorities. Factors such as a tight labour market, national skills shortage and relatively small pool of qualified radiation protection and nuclear safety experts within Australia made it difficult to recruit, and challenging to retain suitably qualified staff. This created periods where our staffing capacity was stretched to meet the agency's increasing scope of works. To manage workload in the short term, ARPANSA delayed new projects and approved project time extensions where practicable. This delayed the completion of proactive initiatives, however reduced the psychosocial safety risk to our staff and ensured the quality of our outcomes were not compromised. As a long-term approach, this year options were considered to strengthen training and professional development opportunities for staff. Further focus was given to opportunities to attract new staff, including the recommencement of the ARPANSA Graduate Program. It is anticipated that these activities will help retain staff and assist in balancing the age profile within the agency, as the graduates will gain broad, cross-agency experience in environmental monitoring, ionising and non-ionising radiation, public and occupational radiation exposures and the Commonwealth's regulatory framework. ARPANSA has also been open to recruiting internationally and as part of our Workforce Strategy has undertaken work to define the needs, skills and processes required for our operating environment.

Australian Government initiatives

Specialists and experts from ARPANSA have been embedded within, and closely engaged with the Department of Defence's Nuclear-Powered Submarine Taskforce. In 2022-2023, supporting the Taskforce impacted ARPANSA's resourcing, as some of our employees were engaged to provide direct advice to the Australian Government on aspects of nuclear stewardship, including the regulation of nuclear safety and radiation protection. Although the agency received additional resourcing to support this work in 2022-23, these positions were occupied by internal subject matter experts and, as a result, business as usual activities were impacted. This has required the agency to flexibly respond, re-evaluating regulatory priorities and other initiatives guided by our risk appetite. As a result, some of our deliverables cannot be completed within estimated time-frames. APRANSA has therefore determined penultimate milestones for delayed projects to minimise impacts to our stakeholders and ensure that dependant processes can continue uninterrupted. ARPANSA will ensure that our activities achieve intended outcomes and outstanding work will still be progressed to completion. The agency has evaluated the impact associated with this work being delayed and verified that our effectiveness in radiation protection and nuclear safety was not compromised.

Infrastructure and organisational uplift

ARPANSA has prioritised projects focusing on the development of innovative approaches that create efficiencies and streamline the agency's resourcing. These projects have been a priority, primarily because they support operational sustainability and also ensure we are equipped to deal with emerging challenges. A few key projects included:

- The new anechoic chamber, which has enabled ARPANSA to deliver better information and build the Australian community's understanding of the health implications of technologies that utilise EME.
- The Platforms and Systems project, which continued the uplift of our Information Management Systems and aims to enhance the management and delivery of our scientific and regulatory services to ensure a responsive and sustainable future.
- Workforce Program of Work, which is operationalising our Workforce Strategy and enabling the agency to identify, develop and resource the workforce needed to deliver on our dynamic remit.

ARPANSA recognised that the continuation of our high value strategic projects was critical to maintaining our effectiveness and enhancing our capability as an agency. As such, the agency prioritised the completion of projects and – where necessary – instigated the closure of projects that were no longer viable or were incompatible with our strategic direction. A summary of all projects active during this financial year has been provided in the projects section of this report, to provide further context around how the agency's initiatives and our resources have been utilised.

The following statements provide more detailed analysis of ARPANSA's performance results.

TABLE 2: SUMMARY OF RESULTS

Key activity	Measure achieved	Measure partially achieved	Measure not achieved	Overall result
1. Initiate, maintain, and promote frameworks for protection and safety	4	2	0	Achieved
2. Undertake research and provide expert evaluations, advice and services	4	2	0	Achieved
3. Ensure effective and risk-informed regulation	6	0	0	Achieved
4. Enhance organisational innovation and capability	2	0	0	Achieved
Summary	16	4	0	-

Performance results for Key Activity 1: Initiate, maintain and promote frameworks for protection and safety

ARPANSA developed scientific knowledge to support the frameworks for radiation protection and nuclear safety. These frameworks sit across various sectors, nationally and internationally, and provide guidance that facilitates optimisation of protection against radiation exposure and any associated health impacts. ARPANSA has successfully initiated, maintained and promoted frameworks for protection and safety, with 4 out of 6 performance measures achieved. Two measures were assessed to be partially achieved as at 30 June 2023. This was predominantly due to resourcing constraints, however as these were multi-target/planned performance result measures, this delay did not substantially compromise the delivery of this key activity. Progress on outstanding measures will be monitored to completion.

Number	Measure	2022-23 Target	Outcome
1	Number of Diagnostic Reference Level (DRL) surveys per category are sufficient to infer national characteristics per annual survey period.	>2,400 surveys per reporting period.	Achieved
2	Radiation doses of occupationally exposed workers indicates optimisation of radiation protection.	Worker radiation dose trends, published annually, indicate optimised radiation protection.	Partially Achieved
3	Compliance with international radiation protection and nuclear safety and security related agreements and treaties.	Submission of two Australian National Reports and completion of the peer-review processes as per the requirements of peer review and/or periodic meeting schedules. Proactive collaborations are sought with key international stakeholders, to foster international agreements, best practice, and compliance.	Achieved
4	Provide dosimetry support and measurement services to radiotherapy clinics.	45 audits delivered according to schedule.	Achieved
Number	**Measure**	**2022-23 Planned Performance Result**	**Outcome**
PBS-1	Provide high quality advice to government and the community on health, safety and environmental risks from radiation.	Identify, assess and communicate health, safety and environmental risks from radiation to the Australian Government and community through research, communication, provision of radiation protection services, and community consultation and awareness activities.	Partially Achieved
		Provide information, advice and standards on electromagnetic energy and health to the Australian Government and community through exposure assessment, research, facility upgrades and engagement with international health authorities.	
		Provide support and analysis to the Nuclear-Powered Submarine Task Force to prepare a safety framework for nuclear-powered submarines.	

PBS-2	Provide emergency preparedness and response systems for a radiological or nuclear incident.	Emergency preparedness and response systems for field, network and laboratory measurements, and information management and decision support systems, are calibrated, tested and exercised to ensure availability, and personnel are trained.	Achieved

Performance measure 1: Number of Diagnostic Reference Level (DRL) surveys per category are sufficient to infer national characteristics per annual survey period.

Target: >2,400 surveys per reporting period.

Source: ARPANSA Corporate Plan 2022-23, page 19.

How was this performance assessed?

Examination of survey data submitted to the National Diagnostic Reference Level Service (NDRLS). This helps avoid excess radiation dose associated with diagnostic imaging to patients.

Result: Achieved

Analysis: ARPANSA's NDRLS received 3,999 surveys of patient dose in computed tomography (CT) scans during the 2022-23 financial year, successfully achieving the target. NDRLS surveys, completed by participating imaging facilities, collect patient dose data from ionising radiation in diagnostic imaging, particularly for CT. The NDRLS operates on a calendar year: 4,186 surveys were received in 2022, compared to 3,829 in 2021 and 5,078 in 2020. Survey numbers are dependent on submissions provided to ARPANSA. At a minimum, ARPANSA believes 2400 surveys is sufficiently representative to be a good basis for periodically updating the national DRLs. The reduction in submissions in the last two years is attributed to a large radiology network not being able to send a bulk submission for either 2021 or 2022. Typically, this network has contributed more than 1,100 surveys in past years. The data received includes surveys from around 400 to 500 scanners for each of the 8 scan categories covered by the DRLs. Based on the number of submissions, ARPANSA was able to calculate and establish DRLs for the common types of CT scans in Australia. The collection and analysis of DRL surveys directly promotes the safe and effective use of ionising radiation in medicine. The DRLs are used by imaging facilities to compare their practice with that of their peers. This encourages imaging facilities to review their practice and ensure an appropriate balance of benefit and risk for patients. This helps to avoid excessive radiation dose to patients from medical imaging.

Performance measure 2: Radiation doses of occupationally exposed workers indicates optimisation of radiation protection.

Target: Worker radiation dose trends, published annually, indicates optimised radiation protection

Source: ARPANSA Corporate Plan 2022-23, page 19.

How was this performance assessed?

The Australian National Radiation Dose Register (ANRDR) database collects and stores worker dose information. Radiation doses for a range of dosimetric quantities and exposures will be assessed on a quarterly basis. The data will be used to generate annual statistics and exposure trends, that will improve safety for occupationally exposed workers in Australia.

Result: Partially achieved

Analysis: ARPANSA has maintained the ANRDR database throughout the reporting period, but worker radiation dose trends for 2021 have not been published in time. This is due to resourcing issues, delays in submission of data from some reporting groups and higher priority business as usual activities. Publication of 2021 and 2022 data is anticipated by the end of 2023. Reporting groups providing submissions are required to provide an assessment of their organisational dose trends to their regulators to ensure they are meeting regulatory requirements. This delay in publication will consequently result in a delay in benchmarking by 6 months, which is anticipated to have a minimal impact to optimisation of radiation protection.

A project is underway to enable dosimetry service providers to upload radiation dose data directly to the database, increasing efficiency and reducing reporting times. This is expected to be completed towards the end of 2023, enabling earlier publication of future radiation worker dose trends.

The provision and maintenance of the ANRDR is significant, as it provides radiation workers with a record of their exposure history, regardless of their employer. Overall trends help to demonstrate optimisation of the protection of workers from the harmful effects of radiation across all industries.

Performance measure 3: Influence international radiation protection, nuclear safety and security to facilitate compliance with related agreements and treaties.

Target: Submission of two Australian National Reports and completion of the peer-review processes as per the requirements of peer review and/or periodic meeting schedules. Proactive collaborations are sought with key international stakeholders to foster international agreements, best practice and compliance.

Source: ARPANSA Corporate Plan 2022-23, page 19.

How was this performance assessed?

In 2022-23 this was determined through submissions of National Reports and participation in the peer review activities associated with the implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and the Convention on Nuclear Safety (CNS). This measure will also establish a baseline to track

contributions that influence international safety frameworks and active engagement in the international radiation and nuclear safety sector.

Result: Achieved

Analysis: During the year, ARPANSA continued to influence international radiation protection, nuclear safety and security. ARPANSA's delegates represented Australia by contributing to – and attending – a range of events to promote international radiation protection. There were a range of other key international engagement activities – most notable being the 66th International Atomic Energy Agency (IAEA) General Conference, with support provided by the agency on the Nuclear Safety Resolution and bilateral engagement with international counterparts. ARPANSA also continued to provide support to IAEA Safety Standard Committees, whereby we are able to influence international best practice and ensure any standards developed are fit for purpose and can be adopted within Australia. ARPANSA also met all relevant Convention obligations. Following delays due to the COVID-19 pandemic, ARPANSA led the Australian delegation to the Joint Eighth and Ninth Review Meeting of the Contracting Parties to the Convention on Nuclear Safety (CNS) on 20-31 March 2023. Australia's report and national presentation were well received by the Country Group, which identified three challenges and two areas of good performance at the meeting. The good performances were for the work conducted by ARPANSA to date on stakeholder engagement for the National Radioactive Waste Management Facility (NRWMF) and for the implementation of an independent verification environmental monitoring programme. Australia identified and presented on three challenges related to workforce planning, ongoing stakeholder engagement for the NRWMF and the implementation of an action, from the 2018 Integrated Regulated Review Services mission, to develop and implement a National Strategy for Radiation Protection across Australia's states and territories to strengthen harmonisation and national uniformity. ARPANSA also presented Australia's National Report on the Implementation of the Code of Conduct on the Safety and Security of Radioactive Sources in Vienna, 29 May to 2 June 2023. This Code aims to help national authorities ensure that radioactive sources are used within an appropriate framework of radiation safety and security. The Code is a well-accepted, non-legally binding international instrument. Australia is one of more than 130 Member States that politically support this Code.

Performance measure 4: Provide dosimetry support and measurement services to radiotherapy clinics.

Target: 45 audits delivered according to schedule.

Source: ARPANSA Corporate Plan 2022-23, page 19.

How was this performance assessed?

Measured progressively and reported quarterly based on signed audit reports. The national radiation oncology dosimetry audit program ensures the safety of cancer patients receiving radiation therapy treatment across Australia and New Zealand.

Result: Achieved

Analysis: ARPANSA's Australian Clinical Dosimetry Service (ACDS) performed a total 60 remote and 61 on-site scheduled audits in 2022-23. Additional audits were requested by the community for new linacs, specialty

techniques and repeats/follow ups following ambiguous audit outcomes. In total, 3 remote and 46 extra on-site audits were completed, bringing the total number of audits completed in 2022-23 to 63 remote and 107 on-site. Audit reports and certificates are issued to participating facilities upon completion of an entire audit process, dosimetry measurements and subsequent data processing. In 2020-21, ACDS completed 42 remote and 131 on-site audits. In 2021-22, ACDS completed 65 remote and 110 on-site audits. The number of on-site audits has remained relatively stable over the last three years, while the increase in the number of remote audits from 2020-21 reflects variations in audit cycles and the addition of newly opened radiotherapy facilities to the ACDS audit schedule. There were no factors which restricted ACDS performance of audits in 2022-23. ACDS audits are a powerful quality control tool and provided a systemic measure of the accuracy and precision of radiotherapy treatment for over 70,000 Australians during 2022-23. The ACDS audits also increase confidence in radiotherapy treatment quality and patient safety, enabling clinicians and treatment staff to further drive improvements in contemporary treatment techniques and technology. ACDS audit services align with the key activity of ARPANSA in promoting the safe and effective use of medical radiation.

PBS measure 1: Provide high quality advice to government and the community on health, safety and environmental risks from radiation.

Source: ARPANSA PBS 2022-23, page 220.

How was this performance assessed?

ARPANSA's collaboration with a range of international partners contributes to the evolution of the international radiation protection and nuclear security and safety framework. This enables ARPANSA to provide expert and technical advice to the Australian Government and community.

Overall Result: Partially achieved. Advice has been provided when requested, and communications on key topics published on social media in cooperation with ARPANSA's Office of the CEO.

Planned Performance Result: Identify, assess and communicate health, safety and environmental risks from radiation to the Australian Government and community through research, communication, provision of radiation protection services, and community consultation and awareness activities.

Result: Partially achieved

Analysis: ARPANSA provided high quality advice to government and the community on health and safety and environmental risks from radiation. This has been demonstrated through the:

- Provision of radiation protection advice to Australians abroad (through DFAT) in relation to the increased risk of a nuclear emergency due to the Ukraine conflict.
- Provision of advice on Environmental Protection and Biodiversity Conservation (EPBC) referrals from government.

- National and international engagement on radiation protection, modelling, dose assessment and waste management.
- Development of safety standards for protection of people and the environment, internationally, through active engagement with the International Atomic Energy Agency (IAEA), and nationally through the Radiation Health Committee (RHC).
- Provision of website updates and advice on radiation protection and waste management.

Sound advice with a solid scientific basis provides an assurance that the public and environment are being protected from the harmful effects of radiation.

The Australian Radiation Incident Register (ARIR) annual summary report has not yet been produced for incidents occurring in 2021. There were many late submissions and data quality issues, which initially delayed the agency's ability to perform the required analysis. These issues have now been largely resolved, in part through the use of technology-based solutions. However, reduced resources in the section due to the redirection of staff to other higher priority agency tasks has prevented the report from being prepared. It is anticipated that the report will be finalised by end of 2023 (Q2 of 2023-24). Failure to produce a report will not have any safety implications, but may impact ARPANSA's reputation.

The provision of high-quality advice is significant, as it underpins the basis for decision-making in the protection of the public and the environment. ARPANSA has been able to consistently provide timely, high-quality advice – often within tight timeframes – although the ARIR aspect of this measure was not delivered.

This measure has been evaluated to be partially achieved and will be tracked to completion over the coming months.

Planned Performance Result: Provide information, advice and standards on electromagnetic energy (EME) and health to the Australian Government and community through exposure assessment, research, facility upgrades and engagement with international health authorities.

Result: Achieved

Analysis: ARPANSA provided information, advice and standards on electromagnetic energy and health to the Australian Government and community through exposure assessment, research, facility upgrades and engagement with international health authorities to successfully achieve this planned performance result. A number of key activities were undertaken in accordance with the EME Program Action Plan 2020-2024 to fulfil this measure. Highlights included:

- Participation in the World Health Organization Radio Frequency (RF) Task Group Meeting in Geneva, Switzerland.
- Publication of several papers, including a paper on EME environmental measurements across the city of Melbourne, and a systematic map on environmental effects of RF.

- Attendance at several key international meetings, including the International Commission on Non-Ionizing Radiation Protection main commission and scientific group meetings in Rome, Italy (November 2022) and Munich, Germany (June 2023), the World Health Organization International Advisory Committee on Electric and Magnetic Fields (EMFs) and Optical Radiation in Geneva, Switzerland (June 2023) and the New Zealand Interagency Committee on near infrared (NIR).
- Officially opening ARPANSA's new anechoic chamber on 17 November 2022.
- Hosting a free 'Misinformation' event at the University of Melbourne for National Science Week. This event had an overall media reach exceeding 17 million.

These activities and achievements ensure that ARPANSA maintains and continues to build expertise on EME, undertakes and supports high priority research on EME and health, and continues to follow and influence international best practice. These aspects are essential to providing high quality advice to government and the community on health, safety and environmental risks from radiation.

Planned Performance Result: Provide support and analysis to the Nuclear-Powered Submarine Task Force to prepare a safety framework for nuclear-powered submarines.

Result: Achieved

Analysis: ARPANSA provided significant support to the Nuclear-Powered Submarine Task Force on issues relating to nuclear safety and the design of a regulatory system for the enterprise. This included providing expert and technical advice at inter-departmental committee meetings on regulation and radioactive waste issues. ARPANSA's input ensured the strategic direction of the nuclear-powered submarine enterprise took into account international best practice on nuclear safety and regulatory structures. ARPANSA had a dedicated embedded officer in the Task Force until February 2023, who provided liaison and technical support on regulatory and nuclear matters.

ARPANSA's contributions helped shape the outcome of the optimal pathway for Australia to acquire nuclear-powered submarines. The announcement of the pathway included the direction to establish an independent nuclear safety regulator within the Defence portfolio, but outside the Australian Defence Force chain of command.

ARPANSA's support in the nuclear-powered submarine enterprise is important in building social license within the Australian community. ARPANSA is seeking to ensure any new regulator and regulatory system represents international best practice in nuclear safety and is harmonised to the greatest extent possible with Australia's existing framework for safety.

PBS measure 2: Provide emergency preparedness and response systems for a radiological or nuclear incident.

Source: ARPANSA PBS 2022-23, page 220.

How was this performance assessed?

Based on data collected via network and laboratory measurements, as well as information management and decision support systems.

Planned Performance Result: Emergency preparedness and response systems for field, network and laboratory measurements, and information management and decision support systems, are calibrated, tested and exercised to ensure availability, and personnel are trained.

Result: Achieved

Analysis: ARPANSA has provided emergency preparedness and response systems for a radiological or nuclear incident, as demonstrated through participation in exercises and response activities in Australia and internationally. Key contributions that demonstrated ARPANSA's capability have involved:

- Coordination with the International Atomic Energy Agency (IAEA) to donate radiation measurement and personal protective equipment to Ukraine. Under the IAEA program, the equipment was some of the first to be received by Ukraine. ARPANSA's donation forms part of the IAEA's wider call for international support, under the IAEA's Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (which has been answered with contributions from many countries). ARPANSA also supported Australia's response with regular modelling and advice provided to the Australian Government.
- Provision of assistance to Western Australia under the Australian Government Disaster Response Plan (COMDISPLAN). ARPANSA staff responded to the request from the Western Australian Government to assist in the search and recovery of a small radiation source, which was part of a portable radiation gauge. The missing radioactive material became detached during transit between a mine north of Newman and Perth, Western Australia, on 10 January 2023. ARPANSA sent a deployment team with specialised car-mounted and portable detection equipment to support the search of the transport route. The source was found two metres from the roadside on the Great Northern Highway near the town of Newman on 1 February 2023. ARPANSA's equipment and expertise forms part of Australia's radiation protection and emergency response capability.
- ARPANSA has supported planned port validations for visiting Nuclear-Powered Vessel (NPV) visits, which have increased in frequency. Port validations include assessing the emergency plan, running a desktop exercise and physically inspecting anchorage locations and emergency response facilities. ARPANSA has maintained greater than 95% data availability for early warning system monitoring networks, undertaken water sampling and analysis for environmental protection and provided live information systems and modelling to state or territory based operations centres. ARPANSA's resourcing in this area has been impacted as a result of the increased frequency of NPV visits and associated port validations, which has increased the agency's required work output. Port visits to Australia by naval vessels of allied nations, and reciprocal visits by ships of the Royal Australian Navy, are one of the most visible aspects of the defence cooperation between Australia and other countries during peacetime.

- ARPANSA is revising the reference accident used for accident planning, and completion is anticipated by the end of 2023. Much of the Australian Government's planning for managing potential radiation exposures is based on the 'Reference Incident' detailed within the *2000 Reference Accident* report. The Reference Incident refers to a hypothetical scenario for a severe accident involving a nuclear-powered vessel, which results in the release of radionuclides from the ship's nuclear reactor.
- Participation in two international exercises as part of ARPANSA's role as the 'National Competent Authority' under the Conventions on 'Early Notification of a Nuclear Accident' and 'Assistance in the Case of a Nuclear Accident or Radiological Emergency'. ARPANSA also participated in jurisdictional exercises, and training relating to emergency response and medical response.

The maintenance of emergency preparedness and response capability helps to ensure that the Commonwealth is able to maintain the resources and expertise to support states and territories in preparing for or responding to a nuclear or radiological incident or emergency when required. This enhances protection of the public in the unlikely event of an emergency.

Performance results for Key Activity 2: Undertake research and provide expert evaluations, advice and services

ARPANSA provided accessible, evidence-based, and risk-informed advice to the Australian Government, industry, and the public through our research advice and services. Our aim is to promote continuous improvement and provide useful and current information to a broad range of audiences, so practices can be optimised. ARPANSA has successfully delivered this key activity, with 4 out of 6 performance measures achieved. Two measures were assessed to be partially achieved as of 30 June 2023. This was due to environmental factors and resourcing constraints. Progress on outstanding measures will be monitored to completion.

Number	Measure	2022-23 Target	Outcome
5	High quality research in radiation protection, nuclear safety and medical exposures to radiation is undertaken to improve understanding of radiation and its effects among professionals and the public.	ARPANSA to publish >7 peer-reviewed publications.	Achieved
6	Operation of the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) International Monitoring System (IMS) radionuclide stations to meet Comprehensive Nuclear-Test-Ban Treaty (CTBT) targets for data availability.	Stations operational and reporting verified data to the CTBTO at >95% average per reporting period.	Achieved
7	Operation of the ultraviolet radiation (UV) monitoring network with a high level of data availability to the public	UV monitoring network data available to the public >95% of the time.	Achieved
8	High quality and efficient radiation protection services are provided to customers.	Survey results indicate we improved satisfaction scores and supported continuous improvement.	Achieved
9	Engagement with the Australian public through the ARPANSA Talk to a Scientist (TTAS) service.	Increase in service engagement over previous year.	Partially Achieved
Number	**Measure**	**2022-23 Planned Performance Result**	**Outcome**
PBS-3	Promote patient safety in radiotherapy and diagnostic radiology.	Report annually on significant deviations and trends discovered through the ACDS.	Partially Achieved
		Report annually on significant deviations and trends discovered through the National Diagnostic Reference Level (NDRL) programs.	

Performance measure 5: High quality research in radiation protection, nuclear safety and medical exposures to radiation is undertaken to improve understanding of radiation and its effects among professionals and the public.

Target: ARPANSA to publish >7 peer-reviewed publications.

Source: ARPANSA Corporate Plan 2022-23, page 22.

How was this performance assessed?

Peer reviewed publications determined by emerging issues and of public interest will be published online progressively.

Result: Achieved

Analysis:

ARPANSA exceeded this target, delivering 13 publications in the 2022-23 period. Publication in national and international peer reviewed journals is a cornerstone of our reputation as radiation protection and nuclear safety experts. Publications also enable Australian and international operators of radiation equipment and measuring devices to access the best and most reliable data and techniques. This is the second year that ARPANSA has exceeded this target. These increases can be attributed to circumstances presented during the pandemic, which permitted our specialists time to redirect their efforts towards research. The number of publications has also been influenced by the funding associated with our new EME policy proposal and the lag time in first commencing the research and publications being accepted.

Peer reviews provide an independent form of governance, which validates ARPANSA's research as being of a high standard. Publications in respected journals are important in maintaining our reputation as experts in the radiation protection, nuclear safety and medical field.

1. Editorial - Quantifying and communicating radiation dose and risk from imaging procedures
2. Typical median effective radiation doses using an anthropomorphic bone fracture phantom for initial radiographic skeletal surveys in the investigation of suspected physical abuse
3. Adoption of respiratory motion management in radiation therapy
4. Trends in brain cancers (glioma) in New Zealand from 1995 to 2020, with reference to mobile phone use
5. Measuring dose in lung identifies peripheral tumour dose inaccuracy in SBRT audit
6. Comparison BIPM.RI(I)-K6 of the standards for absorbed dose to water of the ARPANSA, Australia, and the BIPM in accelerator photon beams
7. Key comparison BIPM.RI(I)-K2 of the air-kerma standards of the ARPANSA, Australia, and the BIPM in low-energy x-rays
8. ACPSEM position paper: dosimetry for magnetic resonance imaging, linear accelerators
9. Aerosol Generation During High Intensity Exercise—Implications for COVID-19 Transmission

10. A survey of the radiofrequency electromagnetic energy environment in Melbourne, Australia
11. Re: Impacts of smartphone radiation on pregnancy: A systematic review. Heliyon 2022, p.e08915
12. What evidence exists on the impact of anthropogenic radiofrequency electromagnetic fields on animals and plants in the environment? A systematic map
13. Vancouver call for action to strengthen expertise in radiological protection worldwide | SpringerLink

Performance measure 6: Operation of the CTBTO International Monitoring System (IMS) radionuclide stations to meet Comprehensive Nuclear-Test-Ban Treaty (CTBT) targets for data availability.

Target: Stations are operational, and reporting verified data to the CTBTO at >95%.

Source: ARPANSA Corporate Plan 2022-23, page 22.

How was this performance assessed?

Data collected from IMS stations maintained by ARPANSA located in Australia and its territories, Fiji and Kiribati.

Result: Achieved

Analysis: The CTBTO International Monitoring System (IMS) radionuclide stations maintained by ARPANSA located in Australia and its territories, Fiji and Kiribati met CTBT targets for data availability. Over the reporting period all stations were operational and reported >95% verified data. This minimum requirement was achieved in quarters 1, 2 and 3. In quarter 4, stations reported 94.8% verified data. The lower data availability in quarter 4 was due to detector failure at the Kiribati station and detector down-time due to the Macquarie Island station being moved to a new location.

ARPANSA is responsible for carrying out Australia's radionuclide monitoring obligations to the CTBT. The treaty aims to eliminate nuclear weapons by restricting the development and improvement of new types of nuclear weapons, playing a critical role in working towards a safer and more secure world. In addition to its primary purpose of detecting nuclear explosions, the CTBTO network provides information that supports tracking of airborne radiation, allowing ARPANSA to provide informed advice in the event of an emergency. In the past, ARPANSA has used products from the IMS to support risk assessment for people and the environment in Australia.

Performance measure 7: Operation of the ultraviolet (UV) radiation monitoring network with a high level of data availability to the public

Target: UV monitoring network data available to the public >95% of the time.

Source: ARPANSA Corporate Plan 2022-23, page 22.

How was this performance assessed?

Data extracted from UV network monitoring system and analysis based on average network availability over year.

Result: Achieved

Analysis: The ARPANSA ultraviolet (UV) monitoring network has maintained >95% data availability to the public over the reporting period. This minimum requirement was achieved each quarter.

UV exposure is the leading cause of skin cancer in Australia, and Australia has one of the highest UV exposure levels in the world. ARPANSA maintains a network of solar UVR detectors in major Australian cities and in the Australian Antarctic territories. The UVR data is collected continuously by detectors that respond to UVR in a manner similar to human skin and then updated in the UVR index every minute. The intensity of the sun's UVR that you are exposed to, and the length of time you are exposed for, together determine the UVR dose that you receive on any day. The UV network provides data to the public to allow them to make risk informed choices and take preventative actions to minimise UV exposure. This in turn results in the minimisation of health effects associated with radiation exposure.

Performance measure 8: High quality and efficient radiation protection services are provided to customers.

Target: Survey results indicate we improved quality satisfaction scores

Source: ARPANSA Corporate Plan 2022-23, page 22.

How was this performance assessed?

Use of customer service satisfaction surveys to show we have improved our service delivery. The data is obtained from surveys by the following services: Australian Clinical Dosimetry Service (ACDS), Primary Standards Dosimetry Laboratory (PSDL), Personal Radiation Monitoring Service (PRMS), Radioanalytical Services (RAS), CTBTO Radionuclide Laboratory (CRL), Ultraviolet Radiation Services (UVRS), Radio Frequency Calibration (RFC) and Meter Hire customers.

Result: Achieved

Analysis: The ARPANSA customer survey was issued to 2022-23 customers and closed on 1 March 2023. In line with expectations, the survey achieved a response rate of 12.65% and an overall net promotor score of 51. This target focused on the overall "Quality of the service", for which we achieved a rating of 90.4%. Overall, the survey indicated positive results. However, as this is the first year ARPANSA distributed a consolidated customer survey, results cannot be accurately trended over time. Surveying our customers in a consistent format has provided a point of comparison between services and information as to how the agency can foster continuous improvement

and continue to operate sustainably. Maintaining high customer quality satisfaction levels is important to delivering this key activity and a practical way to measure our success.

Performance measure 9: Engagement with the Australian public through the ARPANSA Talk to a Scientist service (TTAS).

Target: Increase in service engagement over previous year.

Source: ARPANSA Corporate Plan 2022-23, page 22.

How was this performance assessed?

Analysis of monthly reports from the TTAS system to determine average availability.

Result: Partially achieved

Analysis: The TTAS call centre has been available for 100% of the advertised time during the 2022-23 financial year and the total number of enquiries for this financial year was 898. This is comparable to the previous financial year, in which the total number of enquiries received was 924, but as it was slightly lower, the target was assessed to be only partially achieved. The total number of TTAS enquiries is measured across phone call, email, social media and other modes of enquiry engagement. In general, the number of enquiries has been decreasing over the past few financial years. This is due to a number of factors, such as the absence of any new technologies being announced during this period (such as 5G). However, it can also be attributed to the increase in proactive efforts by the agency to address public concerns. Correspondingly, as part of the EME Program, ARPANSA has significantly increased the number of communication activities that counter misinformation, which is likely to also have contributed to the reduction in comparable enquiry numbers. As a result, this target will be reevaluated to ensure it is fairly measuring TTAS engagement. The update will then be presented in the Corporate Plan. The TTAS program is a key part of ARPANSA's communication strategy, allowing both the provision of clear, reliable, and reputable information on radiation and health to the public, while also allowing ARPANSA to track what the public is concerned about and tailor our communications messages accordingly.

PBS measure 3: Promote patient safety in radiotherapy and diagnostic radiology

Source: ARPANSA PBS 2022-23, page 221.

How was this performance assessed?

Measured through a combination of annual publications and evaluations based on data collected from the ACDS and DRL programs.

Overall Result: Partially achieved

Analysis: This work helps communicate best practice to the user community and ensure a rigorous expert review of their practices.

Planned Performance Result: Report annually on significant deviations and trends discovered through the ACDS

Result: Achieved

Analysis: The ACDS provides clinical dosimetry audits to radiotherapy treatment facilities throughout Australia and New Zealand. Auditing helps identify specific issues in radiotherapy systems which, if unidentified, would have significantly impacted patient treatment. The annual report provides a review of all suboptimal audit outcomes. Significant deviations and trends in audit results are reported in the ACDS Australia and New Zealand audit result datasets, the ACDS 2021-22 Year in Review and the Clinical Advisory Group (CAG) Report 2021-22 (available on the ARPANSA website), while the ACDS and CAG annual reports are ready for submission to the Australian Health Protection Principal Committee. ACDS audit results, including significant deviations, are maintained and monitored through the ACDS National Data Set (ANZDS). Trends in audit outcomes have not changed significantly, as compared with those reported in previous years' ACDS annual reports, with outcomes mostly affected by beam modelling, treatment planning system utilisation, and image guidance. ACDS audit results, including significant deviations and outcome trends, are a valuable resource to the clinical community in ensuring radiotherapy treatment quality and patient safety. Reporting of ACDS audit results align with the key activity of ARPANSA in promoting the safe and effective use of medical radiation.

Planned Performance Result: Report annually on significant deviations and trends discovered through the National Diagnostic Reference Level (NDRL) programs.

Result: Partially Achieved

Analysis: ARPANSA collects data on metrics for patient dose from ionising radiation in diagnostic imaging, particularly for computed tomography (CT). ARPANSA analyses NDRL survey data to calculate Australian diagnostic reference levels (DRLs). Summary data for the 2022 calendar year has been uploaded to the statistics section of the National Diagnostic Reference Level Service (NDRLS) pages on the ARPANSA website and can be accessed by relevant stakeholders. Summary reports for both 2021 and 2022 have been slightly delayed (due to competing agency priorities), but are expected to be completed by December 2023. In general, the survey data indicates downward trends in typical dose levels for common procedures over time and a narrowing in the range of variation. This is evidence that the benefit to risk ratio for diagnostic imaging procedures using ionising radiation is improving over time, avoiding excessive radiation dose to patients and contributing to safe and effective use of ionising radiation in medical imaging.

Performance results for Key Activity 3: Ensure effective and risk-informed regulation

As the regulator of Commonwealth entities, ARPANSA took a graded, risk-informed approach to regulation of radiation sources, radiation facilities and nuclear installations with regulatory activities including licencing, compliance, inspection and enforcement. ARPANSA has successfully delivered this key activity, with 6 out of 6 performance measures achieved.

Number	Measure	2022-23 Target	Outcome
10	Communication with regulated entities, licence applicants and key stakeholders is open and transparent.	Regulated entities, licence applicants and key stakeholders are consulted on major licence decisions and key ARPANSA initiatives.	Achieved
11	Airborne discharges and radiation dose rates near major nuclear installations are at low concentrations, well below notification level.	Independent assessment of the licence holders environmental monitoring program verifies their reported results.	Achieved
12	Commonwealth licence holders apply the principles of radiation protection: - justification - optimisation - limitation.	The radiation dose of the 100 most exposed workers at licensed Commonwealth entities trends downwards over the monitoring period.	Achieved
13	Implement regulatory activities in accordance with Commonwealth Government guidelines for regulator performance.	An annual review of regulatory performance is undertaken and demonstrates conformance with Commonwealth Government guidance for regulatory functions.	Achieved
154	Constructive feedback from licensed entities is encouraged to highlight strengths, and opportunities are used to drive improvements in our regulatory approach.	Above average satisfaction levels.	Achieved
Number	**Measure**	**2022-23 Planned Performance Result**	**Outcome**
PBS-4	Ensure protection of people and the environment through efficient and effective regulation.	Finalise the 14 ARPANSA-specific findings from the IAEA IRRS mission to Australia. Support the implementation of multi-jurisdictional findings via the enHealth process, including development of the National Strategy for Radiation Protection.	Achieved

Performance measure 10: Communication with regulated entities, licence applicants and key stakeholders is open and transparent.

Target: Regulated entities, licence applicants and key stakeholders are consulted on major licence decisions and key ARPANSA initiatives.

Source: ARPANSA Corporate Plan 2022-23, page 25.

How was this performance assessed?

Analysis of records associated with formal consultation activities. This process will also provide awareness as to which mechanisms (e.g., public forums, the 'Have your say' webpage, national advertisements, etc) are being used.

Result: Achieved

Analysis: During the 2022-23 financial year, 32 consultation meetings were held – exceeding the annual target of 30. These meetings included regular liaison meetings with major licence holders such as ANSTO, CSIRO and Defence, plus additional meetings to discuss specific topics and initiatives. ARPANSA uses a risk informed regulatory approach to ensure that licence holders take responsibility for protection of people and the environment from the harmful effects of radiation. It does this transparently, through a range of measures ranging from encouragement and advice on regulatory expectation, through to formal enforcement action. Consultation is an important aspect of a strong safety management system and ensures all stakeholders have a clear understanding of regulatory expectations.

Performance measure 11: Airborne discharges and radiation dose rates near major nuclear installations are at low concentrations, well below notification levels.

Target: Independent assessment of the licence holder's environmental monitoring program verifies their reported results.

Source: ARPANSA Corporate Plan 2022-23, page 25.

How was this performance assessed?

Analysis of Australian Radiation Monitoring System (ARMS) gamma dose rate data, captured via an automated cloud-based system. Environmental and stack radiation levels are verified in ARPANSA's radiochemistry laboratory and compared to confirm that the majority of the radionuclides released to the environment are at levels below the detectable level.

Result: Achieved

Analysis: During the 2022-23 financial year, ANSTO provided a range of samples to ARPANSA for independent verification measurement. All measurements indicate that ANSTO's reported measurements could be accepted. When combined with gamma dose rates continuously reported by a sensor operated by ARPANSA near ANSTO's site and monitoring results provided by ANSTO, these results demonstrated that radiation levels near major facilities are well below notification levels and the Australian population has not been exposed to harmful radiation

from their operations. As a regulator, ARPANSA is required to ensure that regulatory requirements are appropriate to protect people and the environment. Additionally, social license to operate is critical for the health and wellbeing of local communities. Providing publicly available information on radiation dose rates and exposures in the vicinity of major nuclear installations provides public confidence in both regulators and operators.

Performance measure 12: Commonwealth licence holders apply the principles of radiation protection (justification, optimisation, limitation).

Target: The radiation dose of the 100 most exposed workers at licenced Commonwealth entities trends downwards over the monitoring period.

Source: ARPANSA Corporate Plan 2022-23, page 25.

How was this performance assessed?

Analysis of ARPANSA Personal Radiation Monitoring Services records – based on the quarterly dosimetry data submitted by licenced Commonwealth entities. Any observed trends are assessed to identify causal association.

Result: Achieved

Analysis: Since this measure was introduced in 2017, the average dose to the 100 most exposed workers at each licenced entity has continued to show a small decline. During the 2022-23 financial year, this was noted to be 0.5 mSv to 0.4 mSv per quarter. This result is slightly higher when compared to the last financial year (0.5 mSv to 0.35 mSv per quarter), however situations such as an accident, a major maintenance activity, or a prolonged shutdown at a controlled facility, may impact these results. As the annual dose limit is 20 mSv, these results are considered to be very low. For the 2023-24 financial period, this metric will concentrate on a rolling 3-year period to provide greater trend sensitivity. By looking at the 100 most exposed workers at each licensed facility, ARPANSA can better understand our licence holder performance and monitor whether ongoing efforts to reduce occupational radiation exposure are being made.

Performance measure 13: Implement and enhance regulatory activities in accordance with the Commonwealth Regulator Performance Guide.

Target: An annual review of regulatory performance is undertaken and demonstrates conformance with Commonwealth Government guidance for regulatory functions.

Source: ARPANSA Corporate Plan 2022-23, page 25.

How was this performance assessed?

An annual review of regulatory performance is undertaken and demonstrates conformance with Commonwealth Government guidance for regulatory functions.

Result: Achieved

Analysis: ARPANSA has an established set of 12 metrics used to gauge its performance against the Commonwealth Government guidelines for regulator performance. These cover the key objectives of: continuous improvement and building trust; risk based and data driven regulation; and collaboration and engagement.

Over the year, ARPANSA met 10 of its 12 metrics. This is considered a strong performance, given a challenging environment of high demand and the limited resources that ARPANSA operated under.

The first measure that was not met related to inspection frequencies. An average of 46% of licences were in conformance with the required scheduled inspection frequencies during the year, down from the previous year. During the year ARPANSA prioritised the assessment of applications where any delay would have an immediate impact on the business activities ARPANSA regulates.

Application numbers have trended upwards over several years and many are complex, requiring significant resources to assess. Added to this, the agency has also operated in a challenging resource environment due to Australia's rapidly expanding nuclear industry. ARPANSA is recruiting new staff to address the increased demand for its regulatory services. However, ARPANSA continues to maintain overall regulatory oversight, as well as productive, open and transparent communication with its licence holders and applicants, to support nuclear safety and radiation protection.

The second metric not met was the annual review of ARPANSA's risk informed approach – particularly its regulatory priority system. This is an annual review that takes account of the level of controls and past safety performance of each facility licence and is used to allocate regulatory resources where most needed. Often no changes are made to individual priorities and where there is an identified safety issue, the priority index is usually adjusted outside of the annual review. Therefore, failure to meet this target is unlikely to have an immediate safety impact. Resource constraints and higher priority work have prevented this task being undertaken annually. ARPANSA is in the process of developing a new regulatory administration database system which will be rolled-out in 2024 to support this ongoing review process. This new system is a business intelligence system, which will provide management and analytical capabilities that have not been previously available. Once implemented, it will provide efficiencies in our regulatory service for both ARPANSA and its applicants and licence holders.

All other measures met their targets, and highlight ARPANSA's commitment to openness, transparency and continuous improvement. ARPANSA also engages both nationally and internationally with other regulators to continuously share approaches for safety regulation. ARPANSA regularly meets with other regulators to share information and approaches to licence holders that we jointly regulate. ARPANSA is currently preparing for a Follow-up Mission of its 2018 IAEA Integrated Regulatory Review Service, which is a major benchmarking exercise against international standards.

It is important to note that two other measures were only marginally achieved. The first is the record of areas for improvement(AFI) where actions were initiated within three months. This is a measure of regulatory influence. Over the year, 57% of actions were recorded as 'initiated'. These results may in part be due to inspectors failing to follow-up on AFI actions.

The second measure was the number of information sharing meetings, which totalled 32 against a target of 30. However, it should be noted that this target was raised from 20 a couple of years ago to provide a better stretch goal. Performance of each of these measures was impacted by limited resources.

Performance measure 14: Constructive feedback from licenced entities is encouraged to ensure consistency and continuous improvement in our regulatory approach.

Target: Above average satisfaction levels

Source: ARPANSA Corporate Plan 2022-23, page 25.

How was this performance assessed?

Analysis of ARPANSA regulatory surveys. The agency reviews information from post regulatory service surveys to ensure consistency and continuous improvement in our regulatory approach. Post inspection survey results indicate an improvement in average satisfaction levels. Qualitative analysis of survey commentary is utilised to highlight opportunities for improvement.

Result: Achieved

Analysis: During the 2022-23 reporting period, 17 post inspection surveys were received. Although the overall participation rate of the surveys was not high, the high satisfaction levels (>95%) and lack of negative feedback was found to be a positive reflection of ARPANSA's regulatory service. ARPANSA's regulatory approach is risk informed, and strives for constructive engagement, understanding and continuous improvement. Feedback from regulated entities provides an opportunity for ARPANSA to reflect on our regulatory approach. Feedback also helps identify areas for improvement and has often led to a constructive dialogue with our stakeholders which supports radiation protection and nuclear safety.

PBS measure 4: Ensure protection of people and the environment through efficient and effective regulation.

Source: ARPANSA PBS 2022-23, page 221.

Part 3: Report on performance

How was this performance assessed?

Quarterly analysis of project progress in accordance with schedule.

Planned Performance Result: Finalise the 14 ARPANSA-specific findings from the International Atomic Energy Agency Integrated Regulatory Review Service (IRRS) mission to Australia. Support the implementation of multi-jurisdictional findings via the enHealth process, including the development of the National Strategy for Radiation Protection.

Result: Achieved

Analysis: The IAEA's IRRS supports ARPANSA's ongoing implementation of international best practice. The review in 2018 focused on Australia's legal and regulatory framework for safety which included the Regulatory Services Branch's licensing, inspection and enforcement processes. With the Follow-up Mission scheduled for October 2023, ARPANSA has actively been working on the development of Advanced Reference Material (ARM) to support the consideration of findings allocated exclusively to the agency. Work is on track to finalise our response to all findings for submission of the ARM in August. It has been determined that further work may be required to enable closure of some of the ARPANSA-specific findings. Some findings have been affected by the significant delay between the original mission due to the COVID-19 pandemic and the changing nuclear landscape in Australia. It will be critical for ARPANSA to continue working on the findings leading up to the Follow-Up Mission to enable closure of all 14 ARPANSA-specific findings. In some cases, alternative approached have been implemented which may support equivalent or better safety outcomes and will be reviewed in the follow up mission.

ARPANSA has also been actively supporting the development of work to address the multi-jurisdictional findings owned by enHealth, and it is expected that a number of these national findings will remain open due to the challenging environment for national consistency of regulation.

Performance results for Key Activity 4: Enhance organisational innovation and capability

By enhancing our organisational innovation and capability, ARPANSA ensures that systems, assets, and staff effectively support and efficiently deliver on our purpose. ARPANSA has successfully delivered this key activity, as both performance measures have been achieved.

Number	Measure	2022-23 Target	Outcome
15	Efficient implementation of a whole of agency information technology roadmap to support the modernisation of services provided.	Implement digital technology initiatives to enhance service delivery, improve customer experience and streamline internal processes.	Achieved
16	Implement the ARPANSA Workforce Strategy and develop a Knowledge and Learning Management Plan	Deliver the Workforce Strategy as per the program plan schedule.	Achieved

Performance measure 15: Efficient implementation of a whole of agency information technology roadmap to support the modernisation of services provided.

Target: Implement digital technology initiatives to enhance service delivery, improve customer experience and streamline internal processes.

Source: ARPANSA Corporate Plan 2022-23, page 28.

How was this performance assessed?

Analysis of project records – comparison between projected and actual milestones and budget for IT roadmap program of works.

Result: Achieved

Analysis: The aim of the prioritised whole of agency information technology program was to enhance business delivery and support future growth.

The program commenced in 2021-22, and in 2022-23 the following was completed:

- Replacement of legacy laboratory software with a contemporary Laboratory Information Management System for two laboratories, and the establishment of infrastructure and platforms for future uptake by other suitable agency laboratories.
- Provision of a prototype self-service web portal to allow customers to manage their own data and communicate securely with the agency.
- Definition of requirements and commencement of the replacement of legacy systems and manual processes that manage issuance, review and management of licences and permits.
- Digital technology system replacements and infrastructure upgrades, including Multi-Function Devices, laptop and mobile phone fleet upgrades and data centre improvements.

These new technologies have improved agency capability and the use of innovative business systems has advanced the delivery of our key activities. This ensures ARPANSA's digital technology systems' environment is robust and resilient enough to support business continuity and avoid degradation to our systems.

Performance measure 16: Implement the ARPANSA Workforce Strategy and develop a Knowledge and Learning Management Plan.

Target: Deliver the Workforce Strategy as per the program plan schedule.

Source: ARPANSA Corporate Plan 2022-23, page 28.

How was this performance assessed?

Analysis of project records – program plan milestones are met according to the agreed schedule.

Result: Achieved

Analysis: The Workforce Strategy and Plan were created to articulate a whole-of-enterprise approach to the priorities shaping our workforce and therefore position the agency to better respond to emerging challenges. The strategy spans three years, as it was recognised that there is an expansive body of work needed to build and shape the ARPANSA workforce for today and into the future. The initial focus has been on strengthening technical role pipelines through a new graduate program; refreshing the induction and onboarding processes (including automation); the creation of a Diversity, Equality and Inclusion Plan and the commencement of a Reconciliation Action Plan. Eight key HR processes have been automated to improve efficiency and accuracy of frequent actions, including the annual performance development process. Workforce planning tools have also been introduced, as well as the upskilling of managers concerning recruitment processes to better ensure transparency, integrity and compliance. Significant work has been undertaken to define the needs and skills required for the AUKUS uplift. Collectively all of this work is enabling the agency to effectively plan, develop and resource the workforce needed to deliver on the dynamic remit of ARPANSA.

ARPANSA case studies

The following case studies provide a holistic view of our performance across key areas of work, and highlight some of the agency's achievements in 2022–23.

Case Study 1: ARPANSA provides nuclear safety assistance to Ukraine

In February 2022, Russia initiated an unprovoked and illegal invasion of Ukraine. The war has created global concerns regarding the potential for a nuclear accident if the Zaporizhzhia Nuclear Power Station is damaged, or from Russia's possible use of nuclear weapons.

Australia unequivocally supports Ukraine against the invasion and is working alongside international partners to empower Ukraine to resolve the conflict. As part of this ongoing support, in June 2022 ARPANSA donated radiation measurement and personal protective equipment to Ukraine, following calls for international aid from the International Atomic Energy Agency (IAEA).

ARPANSA is Australia's designated national authority under the IAEA Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. This means that the agency is available to provide support when requested in the form of experts, equipment, and materials.

Ukraine's State Nuclear Regulatory Inspectorate (SNRIU) requested equipment that would:

- maintain the safety and security of nuclear facilities and activities with radioactive sources and radioactive waste
- prevent the occurrence of nuclear and radiological emergencies
- detect timely radiological risks
- restore lost capabilities in the field of nuclear safety and security in light of the declaration of martial law.

ARPANSA quickly responded to the request, partnering with the Australian Nuclear Science and Technology Organisation (ANSTO) and the Department of Foreign Affairs and Trade (DFAT) to donate a range of equipment to enable workers to monitor radiation in the event of a nuclear incident. The donation will also assist in the event of stolen or damaged monitoring equipment supplies.

The equipment and supporting documentation were shipped from Australia to the IAEA Headquarters in Vienna. Despite our distance from the region, Australia's delivery was amongst the first to be received by the SNRIU in Kyiv under the IAEA program, arriving on 13 July 2022.

The collaboration forms part of ARPANSA's remit to work with agencies and stakeholders at national and international levels to protect the environment, workers and communities from the harmful effects of radiation.

Throughout the 2022-23 financial year, ARPANSA has continued to remain up to date with the ongoing Ukraine conflict, providing support and advice to Australian government colleagues and considering nuclear safety risks through engagement with the IAEA.

Case Study 2: Australia's new primary standard

Each year around 70,000 Australians receive radiotherapy for the diagnosis or treatment of cancer.

ARPANSA's work in maintaining a national standard for the dosimetry of ionising radiation assists medical facilities across Australia and New Zealand to safely calibrate their radiation delivery systems. This, in turn, helps ensure patients receive the correct and safe radiation dose during treatment.

In May 2023, ARPANSA commissioned a new national primary standard for ionising radiation dosimetry. The new standard was based on 7 months of testing, modelling and assessments of the agency's new water calorimeter, which will eventually replace the existing graphite primary standard after a period of long-term testing.

Water calorimetry is a technique used to measure the 'absorbed dose' – an important quantity in radiotherapy. The calorimeter works by measuring the temperature rise in water when the instrument is exposed to a source of radiation. Because human tissue and organs comprise up to 80% water, a water-based calorimeter is considered a more accurate calibration device for radiotherapy than a graphite-based primary standard.

ARPANSA's new high precision instrument is estimated to support the treatment of more than one million patients over its operational lifetime of 30 years.

ARPANSA spent a year preparing for the delivery of the water calorimeter, which was sourced from the National Research Council Canada (NRC). Researchers from NRC also visited ARPANSA to train staff on how to use the new device. It was then fully tested on ARPANSA linear accelerator beams and checked against computer models to ensure the standard was accurate.

The final proof of accuracy was completed through a comparison to the primary standards of other countries. This data is held by the International Bureau of Weights and Measures, located in Paris. The comparison, performed indirectly during the commissioning phase, successfully confirmed the new calibration device as accurate against international standards. A more direct comparison will form the final stage of implementation.

When the testing phase was completed, Australia's Chief Metrologist Bruce Warrington visited ARPANSA to assess and re-authorise ARPANSA's primary standards for ionising radiation dosimetry.

Primary standards are maintained under an authorisation from the National Measurement Institute under the National Measurement Act 1960. The National Measurement Institute Standards Authorisation Committee meets each year to authorise the standards for radiation dose and radioactivity. These are then maintained at ARPANSA and the Australian Nuclear Science and Technology Organisation (ANSTO) respectively.

Contributing to dose accuracy in radiotherapy is an important part of ARPANSA's work to support patient safety and protect people from the harmful effects of radiation.

Case Study 3: Radioactive source search support

ARPANSA is the designated national authority for nuclear or radiological emergencies in Australia. This means that we are available to provide specialist technical advice, equipment and operational field support during the response and recovery phases of an incident involving radiation.

In late January 2023, ARPANSA was asked to assist the Western Australian (WA) Government to locate a missing radiation source. The tiny object was lost in transit between a mine site in the Pilbara region and a repair facility in Perth – separated by a 1,400km stretch of highway.

The source was part of a portable industrial radiation gauge, which is commonly used in the mining industry.

The ceramic radioactive material was encased in a 6 mm by 8 mm metal capsule and – although tiny – had the potential to cause harm if someone was to remain in contact with the material for extended periods of time.

ARPANSA quickly joined a coordinated emergency response with other state and Commonwealth authorities, including the WA Radiological Council, the Department of Fire and Emergency Services and WA Police Force, the Australian Nuclear Science and Technology Organisation, the National Emergency Management Agency and the Department of Defence.

The agency deployed five expert personnel to the area, along with specialist car-mounted portable detection equipment, to search a designated 750km section of the transport route.

The search concluded on 1 February, when one of the Commonwealth search teams located the missing source 2km off the side of the highway. The team verified the serial number and confirmed that that capsule was intact, with no leakage of radiological material, before returning the source to Perth.

The event captured the attention of national and international media and is an example of successful inter-agency collaboration. The teams combed a massive area spanning from the outback to main roads of Perth. The capsule was located because of the detailed plans, specialised equipment and perseverance of all those involved.

This incident provides a clear case for the appropriate management, safety protocols and regulation of radioactive materials. Radiation used for industrial and medical purposes provides economic, societal and health benefits; however, the risks of accidental exposure must be carefully managed, and incidents must be taken seriously and responded to appropriately.

Case Study 4: ARPANSA’s Electromagnetic Energy Program

The Australian Government has run an Electromagnetic Energy (EME) Program since 1997. Following community concern about 5G, the program was enhanced by the government in 2019, allowing ARPANSA to bolster our activities under this program. Namely, to conduct research on EME and health, engage with international health authorities, and to provide clear and reliable information to the public on their EME exposure from wireless technology, with a particular focus on newer technologies using higher frequencies. To achieve this, we established a four-year action plan in 2020. One of the key goals under this plan was to upgrade ARPANSA’s EME laboratory.

ARPANSA's new EME laboratory

ARPANSA's EME laboratory comprises an anechoic chamber and associated calibration equipment. Built in 1979, the chamber had reached its end of life, due to its limited capability to only measure and calibrate modern equipment up to 8 GHz. 5G uses radio waves at frequencies beyond this range.

ARPANSA's new $2.35 million anechoic chamber was opened by ARPANSA CEO Dr Gillian Hirth and The Hon Ged Kearney MP, Assistant Minister for Health and Aged Care on 17 November 2022.

The new anechoic chamber is a world-class facility that enables research on EME at much higher frequencies – up to 100 GHz. The research undertaken at this chamber will help to build the Australian community's understanding of health protection relating to technologies that use EME.

The investment in our research laboratory means ARPANSA can remain at the forefront locally and internationally in providing science-based health advice on EME now and into the future.

Other EME Program activities

In addition to the delivery of an upgraded EME laboratory, there were a range of other key achievements under the EME Program Action Plan during the 2022–23 financial year:

- In March 2023, the EME program team published the results of a 2022 measurement study of 50 sites across Melbourne. The results were published in peer-reviewed journal *Radiation Protection Dosimetry* and shared through ARPANSA's communication channels.
- In May 2023, an ARPANSA-led research team published a systematic map of research into effects of EME on plants and animals in the environment. The systematic map, published in peer-reviewed journal *Environmental Evidence*, identified areas where further research is required, including gaps in knowledge on the effects of EME from emerging technologies on plants and animals.
- In 2022-2023, our scientists answered close to 900 queries from the public through our Talk to a Scientist service. We also regularly promoted information about EME through our communication channels. The most popular topic of enquiry from the public was whether EME from telecommunications infrastructure impacts health, however we saw a decline in questions relating to concern about 5G mobile telecommunications. This may be due to greater public awareness about ARPANSA's health advice, combined with acceptance of new technology following implementation.

The team continues to actively engage with government authorities such as the Australian Communications and Media Authority and international health authorities including the World Health Organization (WHO) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

These actions and other ongoing work are a key part of the wider Australian Government EME Program's aim to demonstrate to the Australian community that wireless technologies are well researched and well managed to support public safety.

Case Study 5: Developing the workforce of the future

ARPANSA has close and productive relationships with academic institutions, research bodies and professional associations. In the past year, these connections have helped the agency share ideas and expertise with students, expand and extend research opportunities, and helped position ARPANSA as an employer of choice for STEM graduates and scientific experts.

In 2022, our Australian Clinical Dosimetry Services (ACDS) collaborated with the University of Melbourne to develop a prize-winning app aimed at making radiotherapy audits more efficient. The final year MSc engineering and IT students that worked on this project received first prize in the School of Computing and Information Systems Engineering, winning $2000.

ACDS has also formed an industry partnership with the University of Melbourne's Data Science program. Two groups of graduate students are working closely with our scientists to identify trends and outcomes from more than ten years of Australasian clinical dosimetry audit data. We are looking forward to sharing the findings from this important research. This work is a vital part of ARPANSA's ongoing commitment to providing quality assurance for radiation oncology providers and patients.

ARPANSA has also been collaborating with an RMIT research team led by Professor Vipul Bansal, Director of Sir Ian Potter NanoBioSensing Facility to develop a sunscreen testing prototype sensor and protocols. The new method will allow for sunscreen testing without exposing humans or animals to harmful ultraviolet (UV) radiation, and also enable the rapid innovation of new and better sunscreens.

In addition to academic institutions, ARPANSA also engages with bodies like the World Health Organization, the International Atomic Energy Agency and the International Commission on Radiation Protection (ICRP). For example, during 2023, an ARPANSA staff member is participating in a menteeship with the ICRP to support the development of communications protocols for nuclear emergencies.

The changing nuclear landscape resulting from Australia's plans to acquire nuclear-powered submarines has led to an increase in opportunities for nuclear professionals and a competitive job market. Supporting pathways for education and development is therefore critical to ensure ARPANSA continues to attract and retain talented professionals to support radiation protection and nuclear safety.

Changes to ARPANSA's operating and regulatory environment mean the agency's workforce needs to adapt and increase its STEM skillset and expertise. The reinstatement of the Graduate Program and recruitment of three graduates commencing in early 2023 has been a key strategy in the agency's talent acquisition program and aims to support sustainable capability and capacity.

By nurturing close collaborations with tertiary and professional institutions, ARPANSA is supporting and enriching undergraduate learning, enhancing the agency's research capacity, and cementing our reputation as an employer of choice.

ARPANSA projects

ARPANSA's EG monitors all strategic projects to ensure the agency's priorities are managed and resources transparently utilised. All our projects have been aligned to a key activity, ensuring the work undertaken underpins the delivery of our purpose. Below is a summary of all projects that were active in 2022-23.

Project Activity in 2022-23

Key Activity	Project	Overall Status	Annual Summary of 2022-23 Project Progress
2	Radiation Protection of Patients (RPOP) Review	Closed	ARPANSA, in collaboration with the medical sector, produced a Radiation Protection of the Patient (RPOP) Module to increase understanding of the radiation safety aspects of medical imaging. This project was focused on updating the RPOP module to reflect changes in clinical practice over the last decade. Work on this project was initially impacted by the COVID-19 pandemic, which limited collaboration with external providers and partners. Much of the work on the printed material review was completed, along with the qualitative research component and a review and new case-based module by the Australian College of Rural and Remote Medicine. Due to funding constraints, this project was directed to be closed and re-evaluated by ARPANSA leadership.
4	Platforms and systems	Completed	The agency embarked on a prioritised Platform and Systems (PAS) program, spanning three years. In 2022-23 this project progressed according to schedule in the following areas: • Services: obsolete and manual laboratory management and reporting systems for the UV and RFC laboratories were replaced by a standardised, cloud-based Laboratory Information Management System. • Customers: standardised customer self-service web portals were introduced to provide customers with the capability to manage their own data, retrieve reports, request and track delivery of services and communicate securely with ARPANSA. • Regulation and compliance: increasing functionality and replacing legacy systems and manual processes managing issuance, review and management of licence and permits under the remit of ARPANSA. • Digital Technology Platforms: update of an Internet Gateway Migration, hardware refreshes and the introduction of the Microsoft Suite, including Power BI and Power Automate.
2	Sunscreen testing	Continuing in 2023-24	The current international standard to rate sunscreen UV protection performance involves volunteers wearing a sunscreen and being exposed to artificial solar UV, to measure the time taken for sunburn to occur. This research program is a collaboration between ARPANSA, RMIT University and Cancer Council Victoria and aims to develop evidence-based methodologies for sunscreen testing technology that do not place humans at risk as part of the testing. In 2022-23, testing plate medium, sunscreen application and solar simulator exposures were investigated. Developing a reproducible, human-free sunscreen SPF test method will not only protect human volunteers from the harmful effects of radiation, but will also allow more regular testing

			and compliance monitoring of sunscreen to increase public confidence in sunscreens.
1	Sandy Ridge assessment	Completed	ARPANSA was contracted by the Radiological Council of Western Australia to review the safety case for the proposed disposal of radioactive waste at the Sandy Ridge site in Western Australia (WA). The safety case is an independent assessment of the radiological aspects for a proposed near-surface waste repository at Sandy Ridge. In 2022-23, a report was provided to the WA Radiological Council to assist with their licencing decision, successfully delivering the project on time. This assessment enables ARPANSA to build our competence and knowledge in radioactive waste disposal facilities, while also promoting national uniformity.
2	Radiological legacy of nuclear testing - Montebello Islands	Continuing in 2023-24	In partnership with a researcher from Edith Cowen University (Western Australia), this project aims to address the potential impact of radioactive contaminants in the marine environment following British nuclear weapons tests conducted in 1952 and 1956. Previous assessments did not consider recreational activities (such fishing and camping) or impacts to the marine environment. In 2022-23, additional samples were analysed, and an interim report developed, however the project experienced delays when key technical personnel required extended leave. As such, the project timeframes were revised to accommodate these factors. This work will verify that that current radiation protection advice is appropriate, ensuring the Australian public is protected from the harmful effect of radiation.
1	Anechoic chamber upgrade	Completed	Under the Federal Government's Enhanced Electromagnetic Energy (EME) Program, the agency received funding to replace the existing anechoic chamber, which had reached end of life. The project delivered a state-of-the-art microwave anechoic chamber, extending ARPANSA's measurement capability to the millimetre wave range. In 2022-23 the following was completed: • Building works in preparation for new chamber installation. • Installation of the new chamber. • Decommissioning of the old anechoic chamber with a refit of the new chamber operations area. • Commissioning and acceptance testing of the chamber and instrumentation. The facility was officially opened in November 2022. Successful completion of this project has ensured ARPANSA can support health research relating to the current 5G network and future generations of EME technology, and continue to provide science-based health advice to the Australian community.

3	General Safety Guide (GSG) 12 & 13 Alignment	Continuing in 2023-24	This project is focused on aligning the ARPANSA regulatory framework with best practice as presented by the IAEA guidance GSG-12 (Organization, Management and Staffing of the Regulatory Body for Safety) and GSG-13 (Functions and Processes of the Regulatory Body for Safety). This project commenced in 2019 with a review of ARPANSA against these guides. The identified gaps resulted in recommendations and an action plan consisting of five tasks, which ARPANSA is working through. This work will remain ongoing, as the project was first impacted by the loss of the Project Manager, as well as regulatory resourcing constraints as a result of the nuclear-powered submarine taskforce.
4	Digital Technology Program (DTP Year 4)	Completed	This project involved the implementation of digital technology projects which had been identified in a review of business systems and technology platforms. In 2022-23 the following elements were completed: • Mobile phone refresh, including improved cybersecurity. • Server room rack Power Rail replacement due to EOL and failing hardware. • Multi-Function Device (MFD) EOL hardware replacement. The laptop hardware refresh (including new Windows 11 Standard Operating Environment, Video Conference Monitor, keyboard and mouse) work was delayed as a result of the cybersecurity devices uplift.
4	Risk Management update	Closed	The Risk Management project was instigated to update and align the agency's Risk Management Framework (RMF) with the Commonwealth Risk Management Framework and International Organization for Standardization (ISO) practices. The project delivered a draft framework; however resourcing issues significantly impacted the implementation of project goals. In 2022-23, ARPANSA identified that the risk software solution required further assessment. Executive management reviewed this work package and determined that the project should be closed due to the project scope no longer being fit for purpose. Additionally, it was determined that software options should be reconsidered as part of a separate project. Building upon this project, a separate program of work was underway over the second half of the year to prepare a RMF that supports the better delivery of agency key activities through more effective decision-making, greater preparedness for unexpected events and support for innovation.

2	A primary standard water calorimeter	Continuing in 2023-24	This project will deliver a water calorimeter system that will replace the existing graphite calorimeter as the Australian Primary Standard for radiation dose in megavoltage photon and electron beams. The primary standard underpins radiation oncology treatment domestically, presenting the opportunity to provide primary measurements of radiation dose in new proton facilities in Australia. The calorimeter was constructed in Canada and shipped to Australia, where it was reassembled. Two calorimeter experts from Canada provided training to ARPANSA staff in the use of the calorimeter. The training was highly successful and demonstrated that the system can calibrate ion chambers at the same level of accuracy as achieved in Canada using an identical instrument. This work will continue into 2023-24, as the agency finishes the special glass cell for proton beams, as part of the contract with NRC Canada. Successful implementation of the water calorimetry system will ensure that ARPANSA is able to provide traceability to an Australian Primary Standard for megavoltage photon, electron and proton beams.
1	ANRDR data assimilation	Continuing in 2023-24	To improve the storage and maintenance of occupational dose records in Australia, ARPANSA entered into an agreement with Dosimetry Service Providers (DSPs) involving the submission of dose records into a newly developed register. The aim of this project was to construct and implement the new register, based on data transfer specifications developed early in the project. This will provide a platform for DSPs to submit and maintain dose records. The project commenced in March 2022 and was planned for completion by the end of that calendar year, but factors such as user acceptance testing and digital technology resourcing have led to significant delays. During the last financial year, the project delivered: • DSP workshop to discuss transfer specifications and other issues. • Completion of phase 1 User Acceptance Testing. • Minor amendments to the transfer specifications to include the capture of some optional fields. The project is scheduled to go live in November 2023.

4	Upgrade of security alarm and access control systems	Closed	ARPANSA was required, under the Protective Security Policy Framework, to upgrade areas of the agency's security system within both the Miranda and Yallambie sites. This project was initiated to ensure the transition and upgrade were achieved and aligned to the Project Management system, which requires an appropriate level of management, oversight and reporting for a project of this nature. Following third party site inspection and witness testing of the security upgrade, the work was certified, meeting all relevant requirements. Operational documentation is currently under review by ARPANSA staff and additional work has been incorporated in business-as-usual activities which will be managed under the Agency Security Group's oversight.
2	Software developer for Australian Clinical Dosimetry Services	Completed	The ACDS has reached a critical stage in maintaining and developing the National Data Set (NDS) which houses the entire Australian and New Zealand clinical audit database. The NDS was stored in an Excel spreadsheet and therefore at risk of corruption, data loss, and errors. Transferring this information into an online database was recognised as an important step towards future proofing this information. An integrated, comprehensive multi-user database solution was developed to ensure data integrity, and to perform more in-depth data mining processes – initially for Level III specialised audit data. The ACDS audit program provides dosimetry support and measurement services to radiotherapy clinics, underpinning safe and accurate treatment for radiotherapy patients in Australia.
4	Cyber Security Improvement Plan	Completed	In July 2021 a review of ARPANSA's cyber security position was undertaken and a 3-year Cyber Security Improvement Plan produced. The detailed plan contains approaches to address identified risks, enhance understanding and implement improved practices to strengthen the agency's cyber security capability and resilience. During the last financial year, the project delivered penetration testing of internet facing systems in the agency's protected zone, the implementation of web application firewalls for customer facing applications and other improvements contributing to an uplift in ARPANSA's Essential 8 Maturity levels. An assessment of agency cyber security posture will be undertaken via the Defence Cyber Uplift program from the Cyber Hub program. This will inform requirements for ongoing cyber security improvements as part of the Cyber Security Program 2023.

1	New linac	Continuing in 2023-24	ARPANSA is purchasing a second linac (identical to that installed in 2018) to replace an older linac purchased in 2008. A contract to replace the linac was signed with Elekta in the 2022 FY. The project includes an upgrade to the original linac operations area, and, in the current FY, drawings of the required changes were completed and signed off by ARPANSA. Construction works commenced in April 2023, but water ingress was identified under the bunker floor, requiring an engineered solution with dual pumps in a specially designed sump pit beneath the floor. This work delayed construction. The linac has been shipped to Australia and is being stored by the vendor, Elekta, to be delivered when the building works are ready (anticipated late July). Exemptions from site and construction licences were issued by the Regulator, and a licence has been issued to operate the linac for the purposes of acceptance testing by ARPANSA, which is expected to commence in August. Once the acceptance testing results are provided to the CEO of ARPANSA, routine operation can be authorised, and the new licence will be merged with the previous one. ARPANSA requires two linacs to audit radiotherapy providers and allow calibration of hospital equipment, thereby underwriting safe and accurate treatment for radiotherapy patients in Australia and supporting research.
4	Website rebuild	Completed	ARPANSA undertook a project to rebuild the www.arpansa.gov.au website, due to GovCMS requirements to upgrade from Drupal 7 to Drupal 9. As there was no direct upgrade pathway, the project required a full rebuild of the website. Following limited tender, Salsa Digital was engaged to complete the build. Due to budgeting constraints, the scope of the project was adjusted to remove bespoke careers and consultation modules (which were anticipated to be shortly replaced with external products through Aurion and Citizen Space). The project was delivered on time and on budget based on this redefined scope. Follow-up issues relating to links and media items were resolved prior to closure. Successful completion of this project allowed ARPANSA to maintain its website presence, which is critical to the agency's role in informing stakeholders, meeting compliance requirements and protecting people and the environment from the harmful effects of radiation.

4	Implementation of ARPANSA Workforce Strategy	Continuing in 2023-24	The workforce program plan is progressing according to the project schedule. During this financial year the following initiatives were progressed: • Current graduates are progressing well in the Graduate Program and recruitment for 2024 intake is on track for August/September 2023. A review of the Graduate Program for 2023-2024 will be completed by end of August, with a greater emphasis on placement-based (practical learning), rather than training. The development of the Cross Agency Nuclear Program is also progressing. • The workforce planning pilot is underway and work has also commenced on a capability framework for regulatory services accompanying the Workforce Plan. • Manager Connect sessions are continuing to strengthen leadership practices across the agency and defined coaching programs to strengthen leadership capability are also being considered and piloted. • The Induction Program has been reviewed and updated to incorporate new APS eLearning modules and an Induction Executive Meet and Greet. • Safety hub modules have been embedded into LearnHub to track all learning within the LearnHub system. As part of this, the learning and development plan is progressing. • APDS processes are currently being developed for incorporation into LearnHub. This automation will streamline the process, improve the user interface and support compliance activities. • Nine health and wellbeing seminars were delivered between September and December 2022. Onsite counsellor services are available to staff and the *Flourish Wellbeing* e-magazine has been published monthly.
1	Nuclear Powered Vessels Reference Accident Project	Continuing in 2023-24	In 2022, ARPANSA was commissioned by the Department of Defence to update the 'Reference Accident' used to assess the suitability of Australian ports for visits by Nuclear Powered Vessels (NPV). ARPANSA will deliver a review of the Reference Accident for Nuclear Powered Vessels (NPVs) that may visit Australian ports in the form of an Interim Technical Report and a Final Technical Report to the Visiting Ships Panel (Nuclear) (VSP(N)), by addressing: • The occurrence and features of nuclear reactor types found in current NPV types. • The factors that influence core fission product inventory estimates in different nuclear reactor types. • The different accident sequences and their likelihood to release radionuclides to the environment. • Evidence-based validation of a single or multiple Reference Accidents. Thus far, the occurrence and features of nuclear reactor types found in current NPV types and the factors that influence core fission product inventory estimates in different nuclear reactor types, have been completed. The project is on track for completion for December 2023. Port visits to Australia by naval vessels of allied nations, and reciprocal visits by

			ships of the Royal Australian Navy, are one of the most visible aspects of the defence cooperation between Australia and other countries during peacetime. By completing these assessments, ARPANSA ensures the safety of the public during port visits.
3	Regulatory Administration Database (RAD)	Continuing in 2023-24	The RAD project will overhaul our regulatory information management system, focusing on licencing and permit information. This includes an external facing portal. The RAD system will manage licences, inventory, inspection, assessments, applications and permits. It includes customer portals and management tools for regulatory users. The full system includes analytical and oversight features to allow the agency to gain insights into human, organisational and technical factors, as well as capturing routine regulatory work. RAD will deliver a system of work to help ensure efficient and effective regulation.
4	Aurion uplift	Continuing in 2023-24	The Aurion Uplift Project is focused on improving integrated processes, streamlining approvals and automating payroll transactions to reduce the administrative burden, processing times and business continuity risks within the HR team. The project was approved to deliver e-Recruitment and onboarding modules, security clearance reporting and 10 Business Process Automation (BPAs) workflows using the AURION portal. The BPAs include: higher duties;work pattern changes; Tax Declaration variation; superannuation choice variations; probation, contract extension, separation, casual timesheets, contractor engagement; and ongoing allowances. The AURION uplift project is scheduled to be completed in 2023. The successful completion of this project will reduce HR administrative tasks and provide efficiencies in team capacity and reduce the risk of single points of failure.
2	PRMS Customer Portal	Continuing in 2023-24	The development of a customer portal for the Personal Radiation Monitoring Service (PRMS) was based on customer requests for a portal that would allow them to manage their own accounts effectively, empowering them to easily submit details such as new wearers, track monitor issues and download reports themselves. A portal is also essential for PRMS to boost productivity by streamlining our customer management processes.This project commenced in 2022-23 and the following milestones have been accomplished: • Fifteen workshops were conducted in 2023 to define the specific features and functionalities of the customer portal based on the project scope. • An interactive prototype was created to showcase the design and functionality of the portal. • A usability study was conducted, involving a diverse group from scientific and non-scientific backgrounds, to assess the usability of the prototype. • Database development has commenced.

			The successful completion of this project will ensure that we can continue delivering high-quality personal radiation monitoring services, while improving our customer service.
3	OPAL PSSR	Continuing in 2023-24	The OPAL periodic safety and security review (PSSR) is undertaken every 10 years. The PSSR Project has been instigated to track progress and completion of the work, given its safety and security significance. The PSSR process is used to demonstrate that the OPAL reactor is safe and secure to operate up to 2031, in accordance with ARPANSA regulatory guides. ARPANSA will review a significant amount of documentation to determine if the OPAL reactor is safe and secure for ongoing operation. ARPANSA engaged an external consultant to conduct a high-level review during 2022, with ARPANSA's own reviews commencing in January 2023. The review outcome will be presented in an ARPANSA review report, which will inform regulatory oversight and may include actions for ANSTO to implement. The PSSR is linked to a previous licence condition applied by the ARPANSA CEO to the OPAL facility licence.
1	Integrated Regulatory Review Service (IRRS) Follow Up Mission 2023	Continuing in 2023-24	The project will focus on the review of the recommendations and suggestions from the initial 2018 IRRS mission. The mission will provide ARPANSA and other stakeholders an opportunity to exchange professional experience. During the Follow Up Mission, the IRRS team will evaluate the progress made on each recommendation and suggestion from the 2018 mission. This exercise will strengthen and enhance the effectiveness of ARPANSA’s regulatory infrastructure.

Regulator performance

The Regulator Performance (RMG 128) outlines performance expectations for Commonwealth regulators through three principles of best practice, which are:

1. Continuous improvement and building trust.
2. Risk based and data driven.
3. Collaboration and engagement.

Although the guidance does not apply to Commonwealth entities whose regulatory function is only to regulate Commonwealth agencies or employees (such as ARPANSA), the agency applies this guide to demonstrate best regulatory practice. The outcome of the self-assessment is summarised in 'Performance measure 12: Commonwealth licence holders apply the principles of radiation protection (justification, optimisation, limitation)'.

Further details on ARPANSA's assessment of its regulatory performance can be found on the ARPANSA website (www.arpansa.gov.au) including past self-assessments: www.arpansa.gov.au/about-us/corporate-publications/regulator-performance-framework.

Financial performance

For the financial year ending 30 June 2023, ARPANSA reported an operating deficit of $3.192 million. This deficit relates to depreciation and amortisation expenses not requiring appropriation.

Total operating revenue for the year was $31.262 million and consisted of:

- government appropriation of $15.190 million
- regulatory license fees and charges of $5.751 million
- sale of goods and provision of services and other revenue of $10.321 million.

ARPANSA's total operating expenses were $34.454 million and consisted of:

- employee benefits of $20.407 million
- supplier and other expenses of $10.534 million
- depreciation and amortisation expenses of $3.513 million.

The agency will continue to review the efficiency and effectiveness by which it delivers its program, to ensure it operates within available resourcing.

Assets management

The agency manages non-financial assets totalling $67.489 million and its asset management strategy emphasises whole-of-life asset management. The capital investment plan is reviewed annually to ensure appropriate prioritisation of building infrastructure and renovation investment and that laboratory equipment purchases and IT infrastructure upgrades meet future research and operational requirements.

Purchasing

The agency's procurement policies and practices reflect the principles set out in the Commonwealth Procurement Rules (CPRs) and focus on encouraging competition, value for money, transparency and accountability, as well as the efficient, effective and ethical use of Commonwealth resources. During 2022–23, ARPANSA procurement activities complied with the CPRs.

Consultants

EXPENDITURE ON REPORTABLE CONSULTANCY CONTRACTS

Reportable consultancy contracts 2022-23	**Number**	**Expenditure $**
New contracts entered into during the reporting period	10	606,898
Ongoing contracts entered into during a previous reporting period	4	36,000
Total	14	642,898
Organisations receiving a share of reportable consultancy contract expenditure 2022-23	**Expenditure $**	
Nuclear and Industrial Engineering ABN Exempt	171,000	
Swinburne University of Technology ABN 13628586699	150,000	
Frazer-Nash Consultancy Limited ABN 20578377332	142,635	
Sentech Consulting ABN Exempt	90,822	
Centium Pty Ltd ABN 30646309015	30,360	

During 2022-23, 10 new reportable consultancy contracts were entered into, involving total actual expenditure of $606,898. In addition, 4 ongoing reportable consultancy contracts were active during the period, involving total actual expenditure of $36,000.

Decisions to engage consultants during 2022-23 were made in accordance with the *PGPA Act* and related regulations, including the Commonwealth Procurement Rules and relevant internal policies.

ARPANSA engages consultants where there is a requirement for specialist expertise that is not available within the agency, or where an independent assessment is required. The Agency selects consultants through the use of panel arrangements by making an open approach to market, or direct engagement of a recognised or pre-eminent expert.

Annual reports contain information about actual expenditure on reportable consultancy contracts. Information on the value of reportable consultancy contracts is available on the AusTender website.

EXPENDITURE ON REPORTABLE NON-CONSULTANCY CONTRACTS

Reportable non-consultancy contracts 2022-23	**Number**	**Expenditure $**
New contracts entered into during the reporting period	**74**	3,399,144
Ongoing contracts entered into during a previous reporting period	**50**	4,286,265
Total	**124**	7,685,409
Organisations receiving a share of reportable non-consultancy contract expenditure 2022-23	**Expenditure $**	
Rohde & Schwarz (Australia) Pty Ltd ABN 78002328449	874,515	
Hays Specialist Recruitment (Australia) Pty Ltd ABN 47001407281	582,929	
Paras and Partners Pty Ltd ABN 20340146881	570,113	
Wormald Australia Pty Ltd ABN 800008399004	396,941	
The Trustee for CPC Unit Trust T/A Commercial Property Concepts ABN 58537398916	335,166	

Annual reports contain information about actual expenditure on reportable non-consultancy contracts. Information on the value of reportable non-consultancy contracts is available on the AusTender website.

Procurement initiatives to support small business

ARPANSA supports small business participation in the Commonwealth Government procurement market. Small and Medium Enterprises (SME) and Small Enterprise participation statistics are available on the Department of Finance website: www.finance.gov.au.

ARPANSA's engagement with SMEs is predicated on communicating in clear, simple language and presenting information in an accessible format. ARPANSA's procurement practices support SMEs through the use of the Commonwealth Contracting Suite for low-risk procurements valued under $200,000.

Advertising and market research

Under Section 311A of the *Commonwealth Electoral Act 1918,* ARPANSA is required to disclose details of payments of $15,200 or more (inclusive of GST) relating to advertising and market research.

ARPANSA resource statement 2022–2023

RESOURCE STATEMENT 2022-23

	Actual available appropriation for 2022-23	Payments made 2022-23	Balance remaining 2022-23
	$'000	$'000	$'000
	(a)	(b)	(a)-(b)
Ordinary annual service[1]			
Departmental appropriation			
Prior year departmental appropriation[2]	5,895	5,895	-
Departmental appropriation[3]	17,242	11,244	5,998
Total	**23,137**	**17,139**	
Total ordinary annual services	**23,137**	**17,139**	
Other services			
Departmental non-operating			
Equity injection[4]	-	545	(545)
Total	**-**	**545**	**(545)**
Total other services	**-**	**545**	
Special Account[5]			
Opening balance	5,182		
Appropriation receipt[6]	17,684		
Non-appropriation receipts to Special Accounts	13,587		
Payments made		35,096	
Total Special Account	**36,453**	**35,096**	**1,357**
Total resourcing	**59,590**	**52,780**	
Less departmental appropriations and equity injections drawn from the above and credited to Special Account	(17,684)	(17,684)	
Total net resourcing for ARPANSA	**41,906**	**35,096**	

1 *Appropriation Act (No.1) 2022-23* and *Appropriation Act (No.3) 2022-23*.

2 Balance carried forward from previous year for annual appropriations.

3 Includes an amount of $2.052 million in 2022-23 for Departmental Capital Budget. For accounting purposes, this amount has been designated as 'contributions by owners'.

4 *Supply Act (No. 2) - Equity Injections 2020-21*.

5 Does not include 'Special Public Money' held in accounts like Other Trust Monies accounts (OTM). Services for other Government and Non-Agency Bodies accounts (SOG), or Services for Other Entities and Trust Moneys Special Accounts (SOETM).

6 Appropriation receipts from ARPANSA's annual and special appropriations for 2022-23 included above.

ARPANSA expenses for outcome 1

ARPANSA Expenses for Outcome 1

Outcome 1:
Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation

	Budget* **2022-23**	**Actual expenses 2022-23**	**Variation 2022-23**
	$'000	$'000	$'000
	(a)	(b)	(a)-(b)
Program 1.1: (Radiation protection and nuclear safety)			
Departmental expense			
Ordinary annual services			
Departmental appropriation[1]	15,190	14,111	1,079
Special accounts	12,939	17,046	(4,107)
Expenses not requiring appropriation in the budget year[2]	2,863	3,297	(434)
Subtotal for Program 1.1	**30,992**	**34,454**	**(3,462)**
Total for Outcome	**30,992**	**34,454**	**(3,462)**
Average staffing level (number)	146	143	

* Full year budget including any subsequent adjustment made to the 2022-23 budget at Additional Estimates.

1 *Appropriation Act (No.1) 2022-23* and *Appropriation Act (No.3) 2022-23*.

2 Expenses not requiring appropriation in the budget year are made up of depreciation and amortisation expenses.

Part 4: Management and accountability

Enabling legislation

The *ARPANS Act* establishes the Office of the CEO of ARPANSA. The Act also establishes ARPANSA as a listed non-corporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (*PGPA Act*) and a statutory agency under the *Public Service Act (1999).*

Corporate governance

The *ARPANS Act* and the *PGPA Act* are the foundation of ARPANSA's governance process. Our Corporate Plan is complemented by our internal business plans and governance structure, which facilitates risk informed decision-making, the consistent application of resourcing priorities and the escalation and resolution of issues. Our reporting arrangements ensure section and team activities are aligned with our purpose and efficiently undertaken.

As CEO of ARPANSA, Dr Gillian Hirth is responsible for the agency's activities, policy directions and efficient performance. ARPANSA's core governance structure includes 3 statutory advisory bodies and 2 senior committees. Our extended governance structure includes internal management committees that support our EG[1] in providing oversight and accountability.

Advisory bodies

The *ARPANS Act* establishes the Radiation Health and Safety Advisory Council ('the Council'), the Radiation Health Committee (RHC) and the Nuclear Safety Committee (NSC) to advise the CEO of ARPANSA.

Radiation Health and Safety Advisory Council

The role of the Council, in relation to radiation protection and nuclear safety, is to: identify emerging issues; examine matters of major concern to the community; consider the adoption of recommendations, policies, codes and standards; and advise and report to the CEO, at the CEO's request or as Council considers appropriate, on the above and any other matters.

A summary of the issues considered and discussed at Council during 2022–23 can be found in Appendix 2.

[1] The ARPANSA Executive Group comprises our CEO and branch and office heads

Radiation Health Committee

The role of RHC, in relation to radiation protection, is to: advise the CEO and the Council; develop policies and prepare draft publications for the promotion of uniform national standards; formulate draft national policies, codes and standards for consideration by the Commonwealth, states and territories; from time to time, to review national policies, codes and standards to ensure that they continue to substantially reflect world best practice; and consult publicly in the development and review of such policies, codes and standards.

A summary of the issues considered and discussed at RHC during 2022–23 can be found in Appendix 2.

Nuclear Safety Committee

The role of NSC, in relation to nuclear safety and the safety of controlled facilities, is to: report to and advise the CEO and the Council; review and assess the effectiveness of standards, codes, practices and procedures; develop detailed policies and to prepare draft publications for the promotion of uniform national standards; and advise the CEO and the Council (or at the CEO's request report on the above matters).

A summary of the issues considered and discussed at NSC during 2022–2023 can be found in Appendix 2.

Senior committees

Audit and Risk Committee

The *PGPA Act* requires Commonwealth entities to establish an audit committee. ARPANSA's Audit and Risk Committee (ARC) provides independent assurance and advice to the CEO on the agency's financial reporting, performance reporting, system of risk oversight and management, and system of internal control.

During 2022-23, the ARC met on 5 occasions.

The ARC charter can be viewed on the ARPANSA website at: www.arpansa.gov.au/about-us/corporate-publications/audit-and-risk-committee.

Audit and Risk Committee members

Member name	Qualifications, knowledge, skills or experience	Number of meetings attended/total number of meetings	Total annual remuneration
Margaret Donnan Current Committee Member: appointment commenced 2021.	Master of Science (Chemistry) Bachelor of Science Associate Fellow of Institution of Chemical Engineers Member Australian Institute of Company Directors Member Australian Institute of Health & Safety Member Australian Institute of Occupational Hygienists	Margaret attended 4 ARC meetings during 2022–23.	$4,000 per meeting. Total to date of $16,000.
Claire Miller Current Committee Member: appointment commenced 2021.	Bachelor of Laws Bachelor of Arts Graduate Diploma of Applied Corporate Governance Associate Member of Governance Institute of Australia Member Australian Institute of Company Directors Member Association of Corporate Counsel Australia	Claire attended 5 ARC meetings during 2022–23.	$2,000 per meeting. Total to date of $10,000.
Dennis Clark Current Committee Member: appointment commenced 2021.	Bachelor of Economics Company Directors Diploma Fellow Governance Institute of Australia Fellow Australian Institute of Company Directors Fellow Chartered Accountant Fellow Certified Practicing Accountant Member Institute of Internal Auditors Australia	Dennis attended 5 ARC meetings during 2022–23.	$2,000 per meeting. Total to date of $10,000.
Richard Thornton Current Committee Member: appointment commenced 2022.	Bachelor of Science (Physics) PhD (Physics) Graduate Member Australian Institute of Company Directors Member Institute of Physics Member Institute of Electrical and Electronics Engineers Member International Association of Wildland Fire	Richard attended 5 ARC meetings during 2022–23.	$2,000 per meeting. Total to date of $10,000

Strategic Management Committee

The Strategic Management Committee (SMC) considers the threats and opportunities that may influence the strategic direction of the agency and contributes at key times throughout the year to ARPANSA's planning and performance framework. The SMC met 2 times in 2022–2023 and comprises the CEO (Chair), branch and office heads, and an external member appointed by the CEO.

Management committees

ARPANSA ensures effective decision-making, management and oversight of the agency's operations and performance through the following management committees:

Executive Group

The EG is ARPANSA's operational management forum and comprises the CEO, and branch and office heads. The EG is responsible for monitoring the strategies and initiatives used to implement agency business plans. The EG met 13 times in 2022–23.

Work Health and Safety Committee

The Work Health and Safety (WHS) Committee assists the agency to review and update measures used to protect the health and safety of workers. Members of the committee assist in developing procedures and instructions relating to health and safety, and their participation sets the standard for safety culture at ARPANSA.

The WHS Committee provides the agency with a consultative mechanism that enables management and worker contributions to WHS improvements across all operations. The WHS Committee is supported by the CEO and has a rotating chair from the Executive Group. The group also comprises Health and Safety representatives, management representatives, and the WHS Advisor/Radiation Safety Officer. Other subject matter experts may participate in meetings as required. The WHS Committee met 7 times in 2022–23.

The Radiation Safety Committee

The Radiation Safety Committee (RSC) is a sub-committee of the WHS Committee and provides support to the Radiation Safety Officer in reviewing and updating the plans and arrangements that guide the safe use of the radiation sources and facilities used to support ARPANSA's research, service delivery and projects.

The RSC monitors, reviews, and improves radiation safety practices within ARPANSA. It is chaired by the Radiation Safety Officer and involves Radiation Protection Advisors from across the agency. It works closely with the WHS Advisor, the Quality Manager and the WHS Committee. The Radiation Safety Committee met 4 times in 2022–23.

Agency Security Group

The Agency Security Group (ASG) oversees the development and implementation of the protective security program across ARPANSA to ensure our policies, procedures and practices comply with the Commonwealth's

Protective Security Policy Framework; Information Security Manual and promotes a positive security culture integrated into all aspects of ARPANSA's business. The ASG comprises the Chief Security Officer (Chair), the Chief Information Security Officer, the Agency Security Adviser, the Information Technology Security Adviser, the alternate Agency Security Advisor and the Facilities Manager. Other subject matter experts may participate in meetings as required. The ASG met 8 times in 2022–2023.

Project Management Advisory Group

ARPANSA's Project Management Advisory Group (PMAG) is a centralised project coordination function led by the Governance and Strategic Partnerships team. The primary purpose of ARPANSA's PMAG is to provide a proactive, centralised governance mechanism for project managers at the early stages of project development.

PMAG works to achieve internal business alignment of projects with ARPANSA's priorities by ensuring impacted/implicated functional areas have a collaborative platform to engage and provide advice.

The group involves representation from the business support areas (e.g., Facilities, Security, Risk) to ensure key functions have visibility to support upcoming projects, and the opportunity to provide constructive feedback. The group met on 2 occasions in 2022-2023 in support of agency training.

Staff Consultative Forum

ARPANSA's Enterprise Agreement provides for a Staff Consultative Forum (SCF) as the key employee and union consultative body. The SCF comprises the CEO, 9 employees elected by staff (one of which is the Chair) and a representative from each of the unions supporting ARPANSA staff. The SCF met on 7 occasions in 2022–23 to discuss issues relating to management of the agency and associated impacts to staff.

Digital Information Advisory Group

The primary purpose of the Digital Information Advisory Group is to achieve agency-wide information and technology governance and is responsible for the management of agency information, technology and data (including the coordination of agency information and data management frameworks), strategies and policies.

The advisory group is guided by the 'Building trust in the public record: managing information and data for government and community policy', and the actions associated that must be undertaken to meet the requirements set by National Archives Australia. The group met on 2 occasions in 2022-2023.

Accountability and risk management

ARPANSA ensures effective accountability and risk management through the following:

Accountable authority

Under the *PGPA Act,* the CEO of ARPANSA is the accountable authority during this reporting period. The CEO discharges their governance obligations through their involvement in ARPANSA's planning, performance reporting and risk management activities.

Planning

ARPANSA has an integrated planning, budgeting and performance reporting process that supports the alignment of agency-wide initiatives against our key activities. Our planning examines the interdependencies within our agency stakeholder and operating environment and evaluates how our resources will be prioritised to meet our purpose. Our annual planning cycle – informed by risk – strives to align our strategic priorities, operational activities, resource allocation and performance measures.

Performance reporting

ARPANSA's performance structure has been established to ensure transparency, clarity and accountability in how we assess our progress towards achieving our purpose. To assist in this aim, ARPANSA has identified key activities which represent the significant areas of work that contribute to delivering radiation protection and nuclear safety outcomes to the Australian community. To ensure all strategic agency initiatives contribute to achieving our purpose we have also integrated:

- PBS measures to provide greater context and correlation between the agency's planning documents.
- Projects that demonstrate how our operational and strategic priorities align with our purpose.

In line with agency governance processes, all performance information and projects, as outlined in our Corporate Plan, will be monitored and reported to our EG and the Audit and Risk Committee (ARC).

ARPANSA produces quarterly internal reports on non-financial performance. These reports are presented to the EG and the ARC shortly after the end of each quarter.

Financial performance is reported separately through monthly internal financial reports to the EG and to the ARC shortly after the end of each quarter.

The annual report comprises information about the non-financial and financial performance of the agency during the reporting period, including the details of the agency's activities and results. This information helps the public and parliament assess if the agency has achieved its purpose.

Several other mechanisms assist management to monitor performance in a wider context:

- The ARC requires management to regularly provide evidence of performance against the mandatory elements of the *PGPA Act* (and other relevant legislation).
- ARPANSA's strategic internal audit program, informed by risk and overseen by the ARC, is focused on compliance performance and systems of internal control.
- ARPANSA's internal quality audit program (which maintains ISO/IEC 17025 certification for our laboratories) monitors operational performance against the requirements of the relevant standards captured in the documented ARPANSA Management System.

Risk management

ARPANSA has a Risk Management Framework (RMF) that aligns responsibility and accountability for risk across the Agency. Risk management is integrated into our business planning processes, which enables effective identification and management of risks that could impact on the agency achieving its outcomes, or otherwise cause it harm. ARPANSA's RMF aligns with broader requirements, such as the Commonwealth Risk Management Policy and the international standard on risk management (ISO 31000). It also meets the requirements of section 16 of the *PGPA Act*.

In 2023, ARPANSA achieved an 'established' level of maturity in the most recent Comcover Risk Management Benchmarking Survey. This result further highlighted the agency's efforts to improve ARPANSA's risk maturity, which will be addressed through the development and implementation of a revised RMF.

Audit and fraud control

ARPANSA has in place rigorous internal and external audit programs. The internal audits are performed as outlined below. The external audits and certification are undertaken by the Australian National Audit Office (ANAO) and the National Association of Testing of Authorities (NATA). NATA conducts ARPANSA's certification audits to ISO/IEC 17025 competency-based certification every 18 months.

Internal strategic audit program

A new strategic internal plan has been developed and is ready for implementation. The new plan covers 7 key functional areas of ARPANSA and is aligned with the agency's strategic risks and Corporate Plan. These audit areas are designed to ensure our systems of control are robust and functioning as expected and that ARPANSA is meeting its obligations as a government agency. The program is now also aligned with the ARPANSA strategic meetings and financial year, and the audit reports are shared with ARPANSA's Audit and Risk Committee.

Internal quality audit program

ARPANSA's internal quality audit program is scheduled per calendar year in advance. This year a decision was made to align the internal quality audit program to the fiscal year. The planning and scheduling of audits is based on the previous year's performance, and a risk-based logic is applied to calculate the potential future risk of the audited areas. Internal inputs (e.g., management review meetings and previous audit findings) and external factors (e.g., external audits and regulatory inspections) are captured within this risk calculation.

Significant non-compliance issues

During this period ARPANSA commenced two NATA audits.

One audit is the periodic surveillance audit. This audit covered the following areas of ARPANSA:

- Primary Standards Dosimetry Laboratory (PSDL)
- Australian Clinical Dosimetry Service (ACDS)

- Ultraviolet Radiation Services (UVRS)
- Radiofrequency Calibration Services (RFC).

ARPANSA received the audit report from NATA in September 2022. The audit was commenced and completed 5-6 September 2022. As a result, the following conditions were identified:

- One minor non-conformance.
- Six observations.

The second audit from NATA is the 3-yearly recertification audit. This audit covered the following areas of ARPANSA:

- Radioanalytical Services (RAS)
- Personal Radiation Monitoring Service (PRMS)
- CTBO Radio Analytical Laboratory (CRL).

This audit was commenced and completed on 14 June 2022. As a result, a number of major and minor non-conformances were identified along with a number of observations, as summarised below:

- Seven major non-conformances.
- Two minor non-conformances.
- Seven observations, of which one is a positive observation.

ARPANSA has started to implement actions to address the non-conformances and the observations identified by NATA during the recertification audit.

Fraud minimisation strategies

During 2022–23, the agency maintained a rolling program to assess fraud risks embedded within ARPANSA's overarching risk management framework. Treatment strategies were developed and monitored as part of that process in compliance with section 10 of the PGPA Rule. Results of the fraud risk assessment process are used to inform the development of the internal audit schedule.

No instances of fraud were identified during 2022–23.

Work health and safety

ARPANSA strives to achieve an agile health and safety system that can respond to changes in the health and safety landscape. ARPANSA is committed to continuous improvement, such as uplifting our WHS management system to better align to ISO45001 and the relevant codes and standards. This work has focused on the interaction between technology and human and organisational factors to reduce relative risk.

Work health and safety initiatives

WHS initiatives for 2022-2023 focused on making improvements to the Safety Management System, with a key focus on psychosocial and holistic safety, ensuring our technology is safe to use, our people trained and equipped

to perform tasks safely and our managers and leaders committed to fostering a safety culture. This approach includes psychological health to help reduce incidents and accidents whilst promoting employee well-being.

Health and safety representative involvement is an essential component of our safety system. Along with our management health and safety representatives, they undertake vital work in helping us to refine safe systems of work, review procedures and communicate work instructions clearly.

Flexible workplace agreements have allowed the agency to enact 'work from home if you're sick' campaigns to avoid the spread of COVID-19 and other transmissible illnesses. Onsite hearing tests and influenza vaccinations were provided, and staff can go offsite to get a COVID-19 vaccination during work hours.

In the wellness space, the agency has provided an EAP service and skin checks. Our emergency services volunteers include 26 trained first aid officers, 17 fire wardens and 10 radiation protection advisors.

Hazard and incident reporting

Hazard and incident reporting occurred regularly throughout the year at the monthly EG meetings and WHS committee meetings. In 2022–23, ARPANSA recorded 48 total incidents (comprising hazard reports, near misses, injuries/illness etc.). No employees suffered serious compensable injuries or illnesses.

Workers' compensation

One workers' compensation claim was made in FY22–23 for a manual handling / repetitive stress injury.

Our 2022–23 workers' compensation premium accounted for 0.13 % of our payroll.

Investigations or notices given

WHS investigations and notices under Part 10 of the *Work Health and Safety Act 2011*

Two notifications were made to Comcare in the 2022-2023 period: a long COVID claim that was transferred to the state regulator due to the contractor being employed by a Victorian contract hire company, and an historical discrimination allegation. Neither were accepted by Comcare.

External scrutiny

Judicial review

During 2022–23, the agency was not involved in any matters before the Federal Court, the Full Federal Court or the Administrative Appeals Tribunal.

Reports by the Auditor-General, Parliamentary Committees or Commonwealth Ombudsman

ARPANSA was not the subject of any audits undertaken by the Auditor-General during the year 2022–23. As at 30 June 2023, no reports were made by Parliamentary Committees regarding ARPANSA for the year 2022–23.

During 2022–23, there were no complaints made to the Commonwealth Ombudsman against the agency. There were no earlier complaints that remained open.

Appearances before Parliamentary committees and inquiries

During 2022-23, ARPANSA appeared before the following Parliamentary committees and inquiries:

• Supplementary Budget Estimates 2022-23–Community Affairs and Legislation Committee – 16 February 2023

• Inquiry into the Environment and Other Legislation Amendment (Removing Nuclear Energy Prohibitions) Bill 2022 – Environment and Communications Legislation Committee – 15 May 2023

Freedom of Information

Agencies subject to the *Freedom of Information Act 1982* (*FOI Act*) are required to publish information to the public as part of the Information Publication Scheme. Each agency must display on its website a plan showing what information it publishes, in accordance with the Information Publication Scheme requirements.

ARPANSA, as an Australian Government agency, is subject to the *FOI Act* and is required to comply with the Information Publication Scheme provisions. ARPANSA has developed an agency plan describing ARPANSA's compliance with Information Publication Scheme provisions as required by section 8(1) of the *FOI Act*. The plan is available on the ARPANSA website at: www.arpansa.gov.au/about-us/accessing-our-information/information-publication-scheme/arpansa-information-publication.

Feedback on this plan can be provided by contacting the FOI and Privacy Officer at:

The FOI and Privacy Officer ARPANSA

PO Box 655

MIRANDA NSW 1490

foi@arpansa.gov.au

03 9433 2211

Documents released by ARPANSA in response to FOI requests can be found on the disclosure log at: www.arpansa.gov.au/about-us/accessing-our-information/disclosure-log.

FOI statistics

FOI requests	**FY 2022-23**
Number of requests	16
Requests withdrawn	2
Requests transferred to another agency	2
Decisions	12

Decisions within allowable statutory timeframes	100%
Released in full	4
Released in part	8
Internal review of decision requests	Nil
External review of decision requests	Nil

Other management issues

Property management

ARPANSA's Facilities and Engineering (F&E) team are responsible for facilities maintenance of the building and external grounds of the owned premises at Yallambie, Victoria, in addition to the rented office premise in Miranda, New South Wales. The team provides a combination of facilities management, engineering services, stores/purchasing and administration services to the agency. F&E also provides ongoing facilities support across a range of projects where construction works form part of a broader technology project or building improvement implementation to ensure adherence to building compliance standards.

Environment and sustainability

- The F&E team continue to review environmental improvement initiatives, such as the ongoing replacement of fluorescent lighting with energy efficient LED lighting. Seventy per cent of the site lighting has now been replaced over the past 5 years, with the remainder to be undertaken as part of the Yallambie refurbishment project to be completed in the 2023-24 financial year.
- ARPANSA employees are authorised to travel only when there is a demonstrated business need and when alternative communication tools, such as teleconferencing and videoconferencing, are an ineffective option.

Environmental performance

Section 516A of the *Environment Protection and Biodiversity Conservation Act 1999* requires all Commonwealth agencies to report on certain aspects of ecologically sustainable development and environmental performance. The below table summarises our environmental performance in 2022–23.

Australian Public Service (APS) Net Zero 2030

The APS Net Zero 2030 policy is a government initiative designed for the Australian Public Service (APS) to effectively reduce its greenhouse gas emissions to net zero by the year 2030. ARPANSA is committed to supporting the APS achieve net zero greenhouse gas emissions to meet national requirements.

The initial phase of this reporting will primarily concentrate on Scope 1 and Scope 2 emissions. These pertain to the direct emissions originating from the facilities operated by ARPANSA and the indirect Scope 3 emissions resulting

from the consumption of purchased electricity, steam, heating and cooling. In subsequent reporting periods, it is anticipated the APS will extend the reporting to Scope 3 emissions.

The agency's recorded environmental emissions for the 2022-23 financial year are captured below:

TABLE 2 EMISSION REPORTING - LOCATION BASED APPROACH

Emission Source	Scope 1 kg CO2-e	Scope 2 kg CO2-e	Scope 3 kg CO2-e	Total kg CO2-e
Electricity (location-based approach)	N/A	864,065	71,152	935,217
Natural gas	197,271	N/A	15,313	212,584
Fleet vehicles	-	N/A	-	-
Domestic flights	N/A	N/A	151,842	151,842
Other energy	-	N/A	-	-
Total kg CO2-e	197,271	864,065	238,308	1,299,644

Using a location-based approach, in 2022-2023 the agency was accountable for total carbon emissions quantified at 1,299,644 kilograms of CO2 equivalent. An assessment of the emissions' provenance revealed that Scope 2 emissions represented approximately 69% of the comprehensive emissions across the agency. In comparison, Scope 3 and Scope 1 emissions had a relatively smaller contribution, representing 19% and 12% of the total emissions, respectively.

Utilising a market-based approach, in 2022-2023 ARPANSA was responsible for total carbon emissions amounting to 699,171 kilograms of CO2 equivalent. An analysis of the emission sources shows that Scope 2 emissions accounted for approximately 45% of the total emissions in our portfolio. In comparison, Scope 3 and Scope 1 emissions had a relatively smaller contribution, representing 31% and 24% of the total emissions, respectively.

TABLE 3 EMISSION REPORTING - MARKET BASED APPROACH

Emission Source	Scope 1 kg CO2-e	Scope 2 kg CO2-e	Scope 3 kg CO2-e	Total kg CO2-e
Electricity (market-based approach)	N/A	295,618	39,126	334,744
Natural gas	197,271	N/A	15,313	212,584
Fleet vehicles	-	N/A	-	-
Domestic flights	N/A	N/A	151,842	151,842
Other energy	-	N/A	-	-
Total kg CO2-e	197,271	295,618	206,281	699,171

Our investigation into Scope 2 emissions indicated that the key contributor is procurement of electricity for our leased sites. Similarly, our analysis of Scope 3 & Scope 1 emissions attributes the bulk of these to air travel and natural gas consumption respectively.

ARPANSA will consider eco-friendly alternatives and options that present a sustainable pathway to reduce our carbon emissions originating from electricity consumption. As renovations are undertaken, ARPANSA will investigate implementing energy-efficient measures to improve our energy rating and reduce our natural gas dependency.

In relation to Scope 3 emissions, ARPANSA has – and will continue – to consider alternative modes of travel or leveraging technology for virtual meetings, so as to significantly curb the carbon emissions affiliated with air and land travel. Where viable, ARPANSA will consider options during ticket procurement, to offset any residual emissions related to air travel.

The agency recognises that a combination of strategies may be required to decrease our environmental impact and steer us towards a more sustainable and greener business model.

Recycling awareness

Posters have been put up to encourage staff to recycle items such as mobile phones (both the home and in the office), through the provision of recycling options.

The agency also actively promotes recycling of batteries, small electronic devices and printer cartridge recycling at our Yallambie site.

Repurposing textiles

Steps have been taken to reduce waste from UVR testing fabric samples going to landfill by offering these materials for art and craft projects.

Human resources

ARPANSA staff have deep expertise across radiation protection, nuclear safety, and enabling services. They comprise predominately highly qualified, long-standing employees, with a deep commitment to our mission and objectives. Our culture and staff demonstrate strong levels of engagement in the work we do and opportunities to build expertise.

The APS Census 2022 revealed that, overall, staff were engaged in their work (77% positive). Specifically, staff were satisfied with their job (77%), proud to work at the agency (79%) and strongly believe in the purpose and objectives of the agency (84%).

ARPANSA's Workforce Strategy (2022-2025)

ARPANSA continues to be guided by a 3-year Workforce Strategy. The purpose of the strategy is to enable ARPANSA to carry out its functions and achieve its objective through its people. To this end, the strategy takes a whole-of-enterprise view of the resourcing and priorities needed to shape the agency's workforce and respond to immediate and emerging challenges. It sets out key activities that aim to address talent gaps, and enable the sustainable capability central to the effective delivery of our work. It outlines a workforce management capability that will support the execution of our medium and long-term organisational strategy.

The measurable outcomes the agency seeks to realise from implementation of the Workforce Strategy are:

- sustainable capability: the right people with the right capabilities, experience and knowledge in the right roles delivering continuity of service to internal and external stakeholders.
- employer of choice: an improved employee experience that attracts, retains and engages expert and high performing people.
- strategic alignment: clear line of sight between our roles and ARPANSA's purpose.

Attraction and recruitment

The ARPANSA attraction and recruitment process is based on the APS principles of merit, fairness and transparency.

During the 2022–23 reporting period, ARPANSA ran 36 external recruitment campaigns for 12 executive level (EL) positions, 24 APS positions and 0 SES position. The campaigns attracted 225 total applicants and resulted in 17 new starters, 2 internal transfers, 7 internal promotions and 12 roles with no suitable candidates. In FY21-22, the agency conducted 33 external campaigns, attracting 232 applicants and resulting in 30 new starters, 4 internal transfers and 5 internal promotions.

Employment arrangements

As of 30 June 2023, ARPANSA employed 143 ongoing and 12 non-ongoing employees, and one statutory office holder (1.0 FTE). ARPANSA also employs staff on an irregular or intermittent basis to support the delivery of our objectives. Our total number of employees remained within the average staffing level. All ARPANSA employees are engaged under the *Public Service Act 1999*.

The ARPANSA Enterprise Agreement 2017–2020 (the Agreement) remains in operation as part of a determination under section 24(1) of the *Public Service Act 1999*. The Agreement outlines the terms and conditions of employment for non-senior executive service (SES) staff. The Agreement contains an individual flexibility arrangement term, which enables the agency to vary the operation of specified terms and conditions, provided under the Agreement, for individual non-SES staff where necessary and appropriate. As of 30 June 2023, 21 individual flexibility arrangements were in place in the agency.

Non-salary benefits

Under its Enterprise Agreement and common law contracts, ARPANSA staff can seek access to a range of non-salary benefits including:

- flexible working arrangements, including flex time (APS levels 1 to 6 only), job-sharing, part-time, time-shifted and hybrid work arrangements
- generous parental/maternity leave provisions
- generous paid and unpaid leave options
- study assistance
- salary packaging for cars and superannuation, with fringe benefits tax (FBT) applicable

- free, confidential 24/7 counselling through an employee assistance program.

Executive remuneration

ARPANSA's CEO is responsible for determining the remuneration policy and the remuneration structure for senior executives.

As a non-corporate Commonwealth entity, ARPANSA has the following categories of officials covered by the executive remuneration disclosures:

- key management personnel – this includes the CEO
- senior executives – branch and office heads who are responsible for making decisions, or having substantial input into decisions, that affect the operations of the agency.

ARPANSA does not have any other officials who are key management personnel or senior executives or whose total remuneration exceeds the threshold amount ($240,000) for the reporting period.

Remuneration governance arrangements

ARPANSA's framework for determining remuneration is set out in the ARPANSA Enterprise Agreement 2017–2020 and the *Remuneration Tribunal Act 1973*. The employment instruments for determining remuneration for the different categories of ARPANSA officials include:

- That the CEO is remunerated under the Remuneration Tribunal (Remuneration and Allowances for Holders of Full-time Public Office) Determination 2022.
- That senior executives are remunerated through a common law contract of employment, or under Annex 1 of the ARPANSA Enterprise Agreement, where Clause 32 is applied to provide additional remuneration benefits under an individual flexibility arrangement.

ARPANSA's remuneration policy and practices are linked to the achievement of the agency's purpose and performance. Officials' salaries only increase, generally, on an annual basis as part of a performance review process.

Executive remuneration information for the 2022–23 reporting period

		Short-term benefits			Post-employment benefits	Other long-term benefits		Termination benefits	Total remuneration
Name	**Position title**	**Base salary**	**Bonuses**	**Other benefits and allowances**	**Superannuation contributions**	**Long service leave**	**Other long-term benefits**		
Gillian Hirth	Chief Executive Officer	$282,520	0	$63,362	$44,814	$7,275	0	0	$397,971
Rick Tinker	Chief Radiation Health Scientist	$217,280	0	$26,992	$36,371	$5,126	0	0	$285,769
Ivan Williams	Chief Medical Radiation Scientist	$203,493	0	$26,032	$30,655	$5,126	0	0	$265,306
Jim Scott	Chief Regulatory Officer	$177,250	0	$28,732	$36,797	$5,040	0	0	$247,819
Tone Doyle	Office Head and Chief of Staff	$106,376	0	$47,339	$17,898	$4,976	0	0	$176,589
Martin Reynolds	General Counsel	$169,184	0	$53,402	$30,277	$4,976	0	0	$257,839
Niraj Pau	Office Head and Chief Financial Officer	$161,459	0	$60,462	$30,844	$5,126	0	0	$257,891

Learning and knowledge sharing

ARPANSA staff have access to learning and development programs that support them in developing and refining skills critical to succeed in both their current and future roles within the agency. Learning activities set out to:

- enable the capability, productivity and performance required to achieve ARPANSA's strategic objectives
- enable high quality, purposeful and application-ready learning and knowledge sharing experiences
- leverage a wide range of leading practice learning and knowledge sharing methodologies.

ARPANSA's online learning management system, LearnHub, is a key learning resource for all staff and is supplemented by face-to-face and virtual training.

Development of expertise and capability is an identified priority in ARPANSA's Workforce Strategy 2022-25. The objective of this priority is to enable ARPANSA to build and share knowledge and skills to enable sustainable delivery and provide career and mobility opportunities. The work packages to be delivered include:

- the Graduate Program
- knowledge management approach and knowledge sharing initiatives
- manager development
- organisation-wide learning initiatives
- mentoring
- mobility initiatives.

Diversity and inclusion

ARPANSA is committed to providing staff with an increasingly diverse organisation – one where everyone can do their best work, and belong to a culture that enables them to bring their unique and best selves to work. ARPANSA recognises that a diverse and inclusive workforce improves the workplace experience of staff and enhances our interactions with clients and each other. It builds organisational capability by bringing a diversity of approaches to the way we collaborate, brought about by having a broader spectrum of perspectives, and greater empathy and connection with each other.

ARPANSA's Diversity, Equality and Inclusion Plan 2022-25 sets out 5 areas of focus and a range of initiatives, awareness raising events and networks to deliver on our commitment. Accountability is a sixth area of focus and enables us to track our progress and maintain our reputation as an inclusive employer. Each focus area has target outcomes that aim to achieve real change, and measures that quantify progress on change realisation. The 5 areas of focus are: First Nations peoples; gender equality; LGBTQIA+; cultural and linguistic diversity; and ability and neurodiversity.

Disability reporting mechanisms

ARPANSA's Workforce Strategy outlines objectives to review recruitment processes and remove barriers to hiring candidates with disability. In 2022–23, ARPANSA supported people to apply for jobs through use of an inclusive recruitment statement and the use of the RecruitAbility scheme.

Wellbeing

Like many other workplaces and sectors over the last few years, ARPANSA has experienced accelerated workplace change. Specifically, ARPANSA has effectively transitioned to a hybrid workplace, thereby enabling staff to work remotely and on site, as their work and personal commitments allow. This has generated better workplace wellbeing outcomes, but there is a need to continue to monitor this approach to ensure workload issues are still visible and managed.

To broadly support staff with challenging work and personal matters, APRANSA has an Employee Assistance Program that offers numerous proactive programs (financial planning, nutrition and career progression), in addition to traditional counselling and support programs.

Additionally, there are regular inclusive morning tea events that recognise specific diversity areas and enable staff to socialise and connect in the workplace.

ARPANSA's Workforce Strategy also includes a priority of change, health and wellbeing. The objective of this priority is to enable ARPANSA to involve staff in change processes and communications and support staff health and wellbeing.

APS census

The APS Employee Census (the Census) is an annual employee engagement survey of ARPANSA's workforce. ARPANSA's Census 2022 revealed that most staff are committed to APRANSA's goals and feel comfortable suggesting ideas for improvement. Furthermore, ARPANSA inspires staff to do their best work.

Key areas of focus to improve engagement levels and enable achievement of the ARPANSA's Workforce Strategy include leadership capability, change management, workforce planning and recognition of performance.

Performance and development

The ARPANSA Performance Development System (APDS) supports employees and supervisors to set actionable milestones and identify development areas to support staff in their roles. Conversations about goal setting and development are a vital ingredient in cultivating a high performing workplace culture. The APDS provides opportunities for employees to identify the performance level needed to meet ARPANSA's objectives and – in conjunction with their managers – develop the skills, knowledge and expertise needed to address those needs.

ARPANSA ensures that employees are supported to achieve effective performance by continuing to:

- build the capability necessary to achieve the outcomes expected by the Australian Government

- improve employees' understanding of their work responsibilities and the performance and ethical standards expected of them
- ensure that employees discuss and understand how their performance is measured against the agreed objectives
- improve communication and facilitate structured and constructive feedback mechanisms between managers and their employees
- offer fair and open performance management processes and practices that support a culture of high performance, and where all performance is effectively managed
- require employees to participate constructively in the APDS
- invest in building the capability of managers to manage performance effectively
- use its APDS processes to guide salary movement.

APDS payment

Clause 42.6 of ARPANSA's Enterprise Agreement states that employees will be entitled to an annual bonus of $300.00 in recognition of their participation in the APDS. Payment is conditional upon 90% of employees covered by the Enterprise Agreement having completed an APDS agreement, with the review finalised immediately after the financial year. This requirement was met for the reporting period.

Performance pay

There is no provision for the payment of performance pay in ARPANSA's Enterprise Agreement or common law contracts.

Staffing statistics

As at 30 June 2023, ARPANSA employed 155 ongoing and non-ongoing staff (not including the CEO or casual staff). No employee identified themselves as indigenous.

Table 3.1 sets out the salary ranges as at 30 June 2023.

Table 3.2 sets out employees by location, gender and APS classification. The table shows that 85% of staff are located in the Victorian office.

Table 3.3 shows that, of 155 employees (not including the CEO or casual staff), 143 are ongoing and 12 are non-ongoing. Part-time staff comprise 10 ongoing employees and 1 non-ongoing employee.

Table 3.4 shows that, as at 30 June 2023 Radiation Health Services is the largest branch with 56 staff, followed by the Office of Business Support (31), Medical Radiation Services (25), Regulatory Services (21), Office the CEO (20) and Office of the General Counsel (2).

Salary ranges by classification level as at 30 June 2023

SALARY RANGES BY CLASSIFICATION AS AT 30 JUNE 2023

APS Classification	Salary Range ($)
ARPANSA Graduate	66,560 - 86,687
APS Level 1	49,929 - 56,754
APS Level 2	58,456 - 64,172
APS Level 3	66,560 - 74,475
APS Level 4	76,711 - 80,160
APS Level 5	82,564 - 86,687
APS Level 6	89,288 - 102,130
Executive Level 1	110,305 - 126,917
Executive Level 2 lower	134,786 - 153,061
Executive Level 2 upper	159,182 - 170,972

Staff by location, gender and APS classification

Classification	SES		EL 2		EL 1		APS 6		APS 5		APS 4		APS 3		APS 2		APS 1		Graduate		Total	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
New South Wales																						
Female	0	0	0	1	4	3	0	3	0	0	3	3	0	0	0	0	0	0	0	0	7	10
Male	1	1	5	4	5	7	1	0	1	1	0	0	0	0	0	0	0	0	0	1	13	14
Non-binary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prefers not to answer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uses a different term	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	5	5	9	10	1	3	1	1	3	3	0	0	0	0	0	0	0	1	20	24
Victoria																						
Female	0	0	5	7	12	12	14	16	7	10	2	2	9	8	3	3	0	0	0	2	52	60
Male	2	2	10	10	22	22	18	27	4	7	0	0	2	3	0	0	0	0	0	0	58	71
Non-binary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prefers not to answer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uses a different term	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	2	15	17	34	34	32	43	11	17	2	2	11	11	3	3	0	0	0	2	110	131
Total																						
Female	0	0	5	8	16	15	14	19	7	10	5	5	9	8	3	3	0	0	0	2	59	70
Male	3	3	15	14	27	29	19	27	5	8	0	0	2	3	0	0	0	0	0	1	71	85
Non-binary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prefers not to answer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uses a different term	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	3	20	22	43	44	33	46	12	18	5	5	11	11	3	3	0	0	0	3	130	155

Distribution of staff by full or part-time status

	Full-time Ongoing		Full-time Non-ongoing		Part-time Ongoing		Part-time Non-ongoing		Total	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Female	50	56	4	5	5	8	1	1	60	70
Male	69	77	0	6	1	2	0	0	70	85
Non-binary	0	0	0	0	0	0	0	0	0	0
Prefers not to answer	0	0	0	0	0	0	0	0	0	0
Uses a different term	0	0	0	0	0	0	0	0	0	0
Total	119	133	4	11	6	10	1	1	130	155

Distribution of staff by branch/office

	Ongoing	Non-ongoing	Ongoing	Non-ongoing	Ongoing	Non-ongoing
Branch	**Female**		**Male**		**Total**	
Office of the CEO	7	2	10	1	17	3
Office of the General Counsel	2	0	0	0	2	0
Medical Radiation Services Branch	8	2	15	0	23	2
Radiation Health Services Branch	22	2	27	5	49	7
Regulatory Services Branch	8	0	13	0	21	0
Office of Business Support	19	0	12	0	31	0
Total	**66**	**6**	**77**	**6**	**143**	**12**

Part 5: Financial statements

Australian National Audit Office

INDEPENDENT AUDITOR'S REPORT

To the Assistant Minister for Health and Aged Care

Opinion

In my opinion, the financial statements of the Australian Radiation Protection and Nuclear Safety Agency (the Entity) for the year ended 30 June 2023:

(a) comply with Australian Accounting Standards – Simplified Disclosures and the *Public Governance, Performance and Accountability (Financial Reporting) Rule 2015*; and

(b) present fairly the financial position of the Entity as at 30 June 2023 and its financial performance and cash flows for the year then ended.

The financial statements of the Entity, which I have audited, comprise the following as at 30 June 2023 and for the year then ended:

- Statement by the Accountable Authority and Chief Financial Officer;
- Statement of Comprehensive Income;
- Statement of Financial Position;
- Statement of Changes in Equity;
- Cash Flow Statement; and
- Notes to the financial statements, comprising a summary of significant accounting policies and other explanatory information.

Basis for opinion

I conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Entity in accordance with the relevant ethical requirements for financial statement audits conducted by the Auditor-General and his delegates. These include the relevant independence requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) to the extent that they are not in conflict with the *Auditor-General Act 1997*. I have also fulfilled my other responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Accountable Authority's responsibility for the financial statements

As the Accountable Authority of the Entity, the Chief Executive Officer is responsible under the *Public Governance, Performance and Accountability Act 2013* (the Act) for the preparation and fair presentation of annual financial statements that comply with Australian Accounting Standards – Simplified Disclosures and the rules made under the Act. The Chief Executive Officer is also responsible for such internal control as the Chief Executive Officer determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Chief Executive Officer is responsible for assessing the ability of the Entity to continue as a going concern, taking into account whether the Entity's operations will cease as a result of an administrative restructure or for any other reason. The Chief Executive Officer is also responsible for

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disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless the assessment indicates that it is not appropriate.

Auditor's responsibilities for the audit of the financial statements

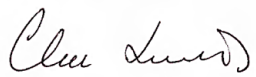
My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian National Audit Office Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with the Australian National Audit Office Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Accountable Authority;
- conclude on the appropriateness of the Accountable Authority's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Accountable Authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Australian National Audit Office



Clea Lewis

Executive Director

Delegate of the Auditor-General

Canberra

27 September 2023

Financial statements contents

Statement by the Accountable Authority and Chief Financial Officer

In our opinion, the attached financial statements for the year ended 30 June 2023 comply with subsection 42(2) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), and are based on properly maintained financial records as per subsection 41(2) of the PGPA Act.

In our opinion, at the date of this statement, there are reasonable grounds to believe that the Australian Radiation Protection and Nuclear Safety Agency will be able to pay its debts as and when they fall due.

Dr Gillian Hirth
Accountable Authority

15 September 2023

Niraj Pau
Chief Financial Officer

15 September 2023

Statement of comprehensive income

for the period ended 30 June 2023

				Budget October
		2023	**2022**	**2023**
NET COST OF SERVICES	Notes	**$**	$	$
Expenses				
Employee benefits	1.1A	**20,407,361**	18,118,981	19,832,000
Suppliers	1.1B	**10,494,653**	8,269,612	8,038,000
Depreciation and amortisation	2.2A	**3,512,814**	3,374,602	3,105,000
Finance costs	1.1C	**4,508**	3,297	17,000
Impairment loss on financial instruments	1.1D	**-**	20,756	-
Write-down and impairment of other assets	1.1E	**30,831**	117,004	-
Foreign exchange losses	1.1F	**4,502**	-	-
Total expenses		**34,454,669**	29,904,252	30,992,000
Own-source income				
Own-source revenue				
Revenue from contracts with customers	1.2A	**10,265,472**	7,980,081	7,550,000
Licence fees	1.2B	**5,751,489**	5,518,671	5,389,000
Other revenue	1.2C	**56,000**	56,000	-
Total own-source revenue		**16,072,961**	13,554,752	12,939,000
Gains				
Foreign exchange gains	1.2D	**-**	1,565	-
Total gains		**-**	1,565	-
Total own-source income		**16,072,961**	13,556,317	12,939,000
Net (cost of) contribution by services		**18,381,708**	16,347,935	18,053,000
Revenue from Government	1.2E	**15,190,000**	14,967,000	15,190,000

Surplus / (Deficit) on continuing operations	**(3,191,708)**	(1,380,935)	(2,863,000)
OTHER COMPREHENSIVE INCOME			
Items not subject to subsequent reclassification to net cost of services			
Changes in asset revaluation reserve	**22,776,711**	1,532,790	-
Total other comprehensive income	**22,776,711**	1,532,790	-
Total comprehensive loss	**19,585,003**	151,855	(2,863,000)

The above statement should be read in conjunction with the accompanying notes.

Statement of Comprehensive Income Budget variances

Explanations are only provided where the variance is greater than 10% of the original budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Suppliers

Increase in suppliers expenses, were directly related to the increase in own source revenue

Own source revenue

Revenue from contracts with customers increased from that estimated at budget and related to services provided to the Department of Defence / Royal Australian Navy

Asset revaluation reserve

The variance relates to the independent revaluation completed since the budget was prepared

Statement of financial position

as at 30 June 2023

				Budget October
		2023	2022	2023
	Notes	**$**	$	$
ASSETS				
Financial assets				
Cash and cash equivalents	2.1A	**1,357,275**	5,181,632	5,182,000
Trade and other receivables	2.1B	**6,898,663**	8,469,714	8,470,000
Other financial assets	2.1C	**616,917**	566,323	566,000
Total financial assets		**8,872,855**	14,217,669	14,218,000
Non-financial assets [1]				
Land	2.2A	**12,500,000**	12,010,000	12,010,000
Buildings	2.2A	**36,677,721**	17,019,776	16,215,000
Leasehold improvements	2.2A	**35,850**	-	-
Plant and equipment	2.2A	**14,112,748**	11,934,133	11,886,000
Intangibles	2.2A	**1,418,586**	916,393	716,000
Inventories	2.2B	**1,849,270**	1,750,046	1,750,000
Other non-financial assets	2.2C	**894,867**	782,185	783,000
Total non-financial assets		**67,489,041**	44,412,533	43,360,000
Total assets		**76,361,896**	58,630,202	57,578,000
LIABILITIES				
Payables				
Suppliers	2.3A	**1,035,837**	940,038	940,000
Other payables	2.3B	**641,952**	5,077,596	5,078,000
Total payables		**1,677,789**	6,017,634	6,018,000

Interest bearing liabilities				
Leases	2.4	**141,531**	361,349	119,000
Total interest-bearing liabilities		**141,531**	361,349	119,000
Provisions				
Employee provisions	4.1	**6,621,786**	5,967,432	5,967,000
Total provisions		**6,621,786**	5,967,432	5,967,000
Total liabilities		**8,441,106**	12,346,415	12,104,000
Net assets		**67,920,790**	46,283,787	45,474,000
EQUITY				
Contributed equity		**43,062,000**	41,010,000	43,062,000
Reserves		**45,885,215**	23,108,504	23,108,000
Accumulated deficit		**(21,026,425)**	(17,834,717)	(20,696,000)
Total equity		**67,920,790**	46,283,787	45,474,000

The above statement should be read in conjunction with the accompanying notes.

1. Right-of-use assets are included in the following line item; Buildings

Statement of Financial Position Budget variances

Explanations are only provided where the variance is greater than 10% of the original budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Cash, trade and other receivables

The cash, trade and other receivables budget variations relate to the timing of the issue and payment of annual licence charge invoices and an increase in appropriation receivables at year end. This is related to other payables variation.

Land / Building / Leasehold Improvements

These variances relate to the independent revaluation completed since the budget was prepared.

Plant and equipment

The variance relates to the independent revaluation completed since the budget was prepared.

Other payables

The other payable budget variation relates to an estimated increase in unearned income associated with the timing of the issue and payment of annual licence charge invoices. Related to cash, trade, and other receivables variations.

Statement of changes in equity

for the period ended 30 June 2023

				Budget October
	Notes	**2023**	2022	2023
CONTRIBUTED EQUITY		**$**	$	$
Opening balance				
Balance carried forward from previous period		**41,010,000**	36,477,000	41,010,000
Adjusted opening balance		**41,010,000**	36,477,000	41,010,000
Transactions with owners				
Contributions by owners				
Departmental capital budget	3.1A	**2,052,000**	4,533,000	2,052,000
Total transactions with owners		**2,052,000**	4,533,000	2,052,000
Closing balance as at 30 June		**43,062,000**	41,010,000	43,062,000
RETAINED EARNINGS				
Opening balance				
Balance carried forward from previous period		**(17,834,717)**	(16,453,782)	(17,833,000)
Adjusted opening balance		**(17,834,717)**	(16,453,782)	(17,833,000)
Comprehensive income				
Deficit for the period		**(3,191,708)**	(1,380,935)	(2,863,000)
Total comprehensive income		**(3,191,708)**	(1,380,935)	(2,863,000)
Closing balance as at 30 June		**(21,026,425)**	(17,834,717)	(20,696,000)

ASSET REVALUATION RESERVE			
Opening balance			
Balance carried forward from previous period	**23,108,504**	21,575,714	23,108,000
Adjusted opening balance	**23,108,504**	21,575,714	23,108,000
Comprehensive income			
Other comprehensive income	**22,776,711**	1,532,790	-
Total comprehensive income	**22,776,711**	1,532,790	-
Closing balance as at 30 June	**45,885,215**	23,108,504	23,108,000
TOTAL EQUITY			
Opening balance			
Balance carried forward from previous period	**46,283,787**	41,598,932	46,285,000
Adjusted opening balance	**46,283,787**	41,598,932	46,285,000
Comprehensive income			
Other comprehensive income	**22,776,711**	1,532,790	-
Surplus / (deficit) for the period	**(3,191,708)**	(1,380,935)	(2,863,000)
Total comprehensive income	**19,585,003**	151,855	(2,863,000)
Transactions with owners			
Contributions by owners			
Departmental capital budget	**2,052,000**	4,533,000	2,052,000
Total transactions with owners	**2,052,000**	4,533,000	2,052,000
Closing balance as at 30 June	**67,920,790**	46,283,787	45,474,000

The above statement should be read in conjunction with the accompanying notes.

Accounting policy

Equity injections

Amounts appropriated which are designated as ‘equity injections’ for a year (less any formal reductions) and Departmental Capital Budgets (DCBs) are recognised directly, in contributed equity, in that year.

Restructuring of administrative arrangements

Net assets received from or relinquished to another Government entity under a restructuring of administrative arrangements are adjusted at their book value directly against contributed equity.

Statement of Changes in Equity Budget variances commentary

Explanations are only provided where the variance is greater than 10% of the original budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Asset revaluation reserves

Increase relates to the independent revaluation of all property, plant and equipment completed since the budget was prepared.

Cash flow statement

for the period ended 30 June 2023

				Budget October
		2023	2022	2023
	Notes	**$**	$	$
OPERATING ACTIVITIES				
Cash received				
Appropriations		**14,111,000**	13,269,000	15,190,000
Sales of goods and rendering of services		**12,017,726**	11,835,916	7,973,000
Other cash received		**1,276,466**	5,518,671	5,389,000
GST received		**297,978**	254,441	490,000
Total cash received		**27,703,170**	30,878,028	29,042,000
Cash used				
Employees		**(19,616,333)**	(17,894,786)	(19,832,000)
Suppliers		**(11,628,329)**	(9,092,572)	(8,528,000)
Interest payments on lease liabilities		**(4,508)**	(3,297)	(17,000)
GST paid		**-**	-	(423,000)
Total cash used		**(31,249,170)**	(26,990,655)	(28,800,000)
Net cash from / (used by) operating activities		**(3,546,000)**	3,887,373	242,000
INVESTING ACTIVITIES				
Cash used				
Purchase of property, plant, equipment, and intangibles		**(3,630,291)**	(4,756,934)	(2,052,000)
Total cash used		**(3,630,291)**	(4,756,934)	(2,052,000)
Net cash from / (used by) investing activities		**(3,630,291)**	(4,756,934)	(2,052,000)

FINANCING ACTIVITIES				
Cash received				
Contributed equity - Departmental capital budget		**3,028,000**	3,640,000	2,052,000
Contributed equity - Equity injection		**545,000**	1,442,000	-
Total cash received		**3,573,000**	5,082,000	2,052,000
Cash used				
Principal payments of lease liabilities		**(221,066)**	(238,560)	(242,000)
Total cash used		**(221,066)**	(238,560)	(242,000)
Net cash from / (used by) financing activities		**3,351,934**	4,843,440	1,810,000
Net increase / (decrease) in cash held		**(3,824,357)**	3,973,879	-
Cash and cash equivalents at the beginning of the reporting period		**5,181,632**	1,207,753	5,182,000
Cash and cash equivalents at the end of the reporting period	2.1A	**1,357,275**	5,181,632	5,182,000

The above statement should be read in conjunction with the accompanying notes.

Cash Flow Statement Budget variances commentary

Explanations are only provided where the variance is greater than 10% of the original budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Variances relating to cash flows occur because of the factors detailed under expenses, own source income, assets, or liabilities.

Investing activities – cash used and financing activities – cash received

The variance relates to the drawdown of a prior year equity injection and capital expenditure of funds associated with the enhanced EME program, and the linear accelerator.

Overview

Objectives of the Australian Radiation Protection and Nuclear Safety Agency

ARPANSA is an Australian Government controlled not-for-profit entity. It is a non-corporate Commonwealth Entity under the *Public Governance Performance and Accountability Act 2013*. The objectives of ARPANSA are to protect people and the environment from the harmful effects of radiation.

ARPANSA is structured to meet one outcome:

'Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation.'

The continued existence of ARPANSA in its present form and with its present programs is dependent on Government policy and on continuing funding by Parliament for the entity's administration and programs.

ARPANSA's activities contributing toward the outcome are classified as departmental. Departmental activities involve the use of assets, liabilities, income, and expenses controlled or incurred by the entity in its own right.

Basis of preparation of the financial report

The financial statements are general purpose financial statements and are required by section 42 of the *Public Governance Performance and Accountability Act 2013*.

The financial statements and notes have been prepared in accordance with:

a) PGPA (Financial Reporting) Rule 2015 (FRR); and

b) Australian Accounting Standards and Interpretations - Reduced Disclosure Requirements issued by the Australian Accounting Standards Board (AASB) that apply for the reporting period.

The financial statements have been prepared on an accrual basis and are in accordance with historical cost convention, except for certain assets and liabilities at fair value. Except where stated, no allowance is made for the effect of changing prices on the results or the financial position. The financial statements are presented in Australian dollars.

Accounting judgements and estimates

In the process of applying the accounting policies listed in this note, ARPANSA has made the following judgements that have the most significant impact on the amounts recorded in the financial statements:

- The fair value of land and buildings is taken to be the market value and depreciated replacement cost respectively as determined by an independent valuer.
- The long service leave liability is calculated using the shorthand model developed by the Australian Government Actuary.

No accounting assumptions or estimates have been identified that have a significant risk of causing a material adjustment to carrying amounts of assets and liabilities within the next accounting period.

New Australian Accounting Standard

All new, revised, amending standards and interpretations that were issued prior to the sign-off date and are applicable to the current reporting period did not have a material effect on ARPANSA's financial statements.

Standard / Interpretation	Nature of change in accounting policy, transitional provisions, and adjustment to financial statements
AASB 2021-2 Amendments to Australian Accounting Standards – Disclosure of Accounting Policies and Definition of Accounting Estimates (AASB 2021-2) and AASB 2021-6 Amendments to Australian Accounting Standards - Disclosure of Accounting Policies: Tier 2 and Other Australian Accounting Standards (AASB 2021-6)	AASB 2021-2 amends AASB 7, AASB 101, AASB 108, AASB 134 and AASB Practice Statement 2. The amending standard requires the disclosure of material, rather than significant, accounting policies, and clarifies what is considered a change in accounting policy compared to a change in accounting estimate. AASB 2021-6 amends the Tier 2 reporting requirements set out in AASB 1049, AASB 1054 and AASB 1060 to reflect the changes made by AASB 2021-2. The details of the changes in accounting policies and adjustments are disclosed below and in the relevant notes to the financial statements. This amending standard is not expected to have a material impact on the ARPANSA's financial statements for the current reporting period or future reporting periods.

Taxation

ARPANSA is exempt from all forms of taxation, except Fringe Benefits Tax (FBT) and Goods and Services Tax (GST).

Revenues, expenses, and assets are recognised net of GST, except:

a) where the amount of GST incurred is not recoverable from the Australian Taxation Office

b) for receivables and payables.

Events after the reporting period

There have been no significant subsequent events after the reporting period that impact on the financial statement for the year ended 30 June 2023.

Notes to and forming part of the financial statements

Financial performance

This section analyses the financial performance of ARPANSA for the year ended 30 June 2023.

Note 1.1: Expenses

1.1A: Employee benefits

	2023	2022
	$	$
Wages and salaries	**14,630,462**	12,952,983
Superannuation - defined contribution	**1,952,784**	1,842,339
Superannuation - defined benefit	**815,642**	659,490
Leave and other entitlements	**2,954,080**	2,610,927
Separation and redundancies	**54,393**	53,242
Total employee benefits	**20,407,361**	18,118,981

ACCOUNTING POLICY

Accounting policies for employee related expenses are contained in the People and relationships section.

1.1B: Suppliers

	2023	2022
	$	$
Goods and services supplied or rendered		
Audit fees - ANAO	**56,000**	56,000
Audit fees - Outsourced	**27,509**	-
Advisory council and committees	**118,162**	99,068
Communications	**165,942**	302,260
Construction and maintenance - Comprehensive Nuclear-Test-Ban Treaty	**787,591**	854,296
Contractors/consultants	**2,113,627**	1,552,870
Information technology	**1,440,842**	1,332,955
Insurance	**110,502**	95,635
Laboratory and office supplies	**337,230**	300,919
Postage and freight	**222,550**	210,222
Reference material and subscriptions	**353,494**	331,309
Repair and maintenance	**596,079**	663,636
Research agreements	**752,338**	254,883
Training and conferences	**318,632**	225,908
Travel	**1,768,009**	914,989
Utilities	**529,568**	478,482
Other goods and services	**754,763**	566,365
Total goods and services supplied or rendered	**10,452,838**	8,239,797
Goods supplied	**2,131,158**	1,588,064
Services rendered	**8,321,680**	6,651,733
Total goods and services supplied or rendered	**10,452,838**	8,239,797
Other supplier expenses		
Low value leases	**-**	1,477
Workers' compensation premiums	**41,815**	28,338
Total other supplier expenses	**41,815**	29,815

Total supplier expenses	**10,494,653**	8,269,612

The above lease disclosures should be read in conjunction with the accompanying notes 2.2 and 2.4.

ACCOUNTING POLICY

Short-term leases and leases of low-value assets

ARPANSA has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (less than $10,000). ARPANSA recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Note 1.1C: Finance costs

	2023	2022
	$	$
Interest on lease liabilities	**4,508**	3,297

Note 1.1D: Implement loss of financial instruments

	2023	2022
	$	$
Impairment on trade and other receivables	**-**	20,756

Note 1.1E: Write-down and impairment of other assets

	2023	2022
	$	$
Property, plant, and equipment - write-off	**27,739**	107,299
Computer software - write-off	**3,092**	9,705
Total write-down and impairment of assets	**30,831**	117,004

Note 1.1F: Foreign exchange losses

	2023	2022
	$	$
Non-speculative	**4,502**	-
Total foreign exchange losses	**4,502**	-

ACCOUNTING POLICY

Gains and losses from foreign currency are recognised when incurred.

Note 1.2: Own-source revenue and gains

Own-source revenue

1.2A: Revenue from contracts with customers

	2023	2022
	$	$
Sale of goods and rendering of services	**10,265,472**	7,980,081
Total revenue from contracts with customers	**10,265,472**	7,980,081
Major product / service line:		
Scientific services - Personal Radiation Monitoring Service	**2,838,572**	2,554,097
Construction and maintenance - Comprehensive Nuclear-Test-Ban Treaty	**2,125,425**	2,062,746
Australian clinical dosimetry service	**2,103,810**	2,076,874
Other scientific services	**3,197,665**	1,286,364
	10,265,472	7,980,081
Type of customer:		
Australian Government entities (related parties)	**1,779,391**	108,755
State and territory governments	**1,306,773**	941,924
Non-government entities	**7,179,308**	6,929,402
	10,265,472	7,980,081
Timing of transfer of goods and services:		
Over time	**4,229,235**	4,139,620
Point in time	**6,036,237**	3,840,461
	10,265,472	7,980,081

ACCOUNTING POLICY

Revenue from the sale of goods is recognised when control has been transferred to the buyer.

ARPANSA's 'Sale of goods and services contract' falls within scope of AASB 15. Performance obligations are required by enforceable contracts and are sufficiently specific to enable ARPANSA to determine when they have been satisfied.

The following is a description of principal activities from which ARPANSA generates its revenue:

i. Personal Radiation Monitoring Service – monitors potential ionising radiation exposure to workers in fields such as medical, dental, chiropractic, industrial and mining.

ii. Comprehensive Nuclear-Test-Ban Treaty (CTBT) – ARPANSA is responsible for carrying out Australia's radionuclide monitoring obligations to the CTBT. In this capacity, ARPANSA has worked to establish the international monitoring systems required to monitor treaty compliance through the installation, implementation, and operation of 7 stations within Australia and its territories. The CTBT team within ARPANSA has also expanded to include operational responsibility for the radionuclide stations situated in Fiji and Kiribati.

iii. ACDS – ARPANSA's national independent dosimetry auditing program, providing quality assurance for radiation oncology facilities and patients. The ACDS has been operating since February 2011, covering 100% of Australian and selected New Zealand radiotherapy facilities.

iv. Other scientific services including testing and calibrations (ultraviolet and radio analytical services), training and hire of radiation meters.

Receivables for goods and services, which have 30-day terms, are recognised at the nominal amounts due, less any impairment allowance account. Collectability of debts are reviewed at end of the reporting period. Allowances are made when collectability of the debt is no longer probable.

Note 1.2B: Licence fees

	2023	2022
	$	$
Application fees	**12,691**	147,374
Annual charges	**5,738,798**	5,371,297
Total licence fees	**5,751,489**	5,518,671

ACCOUNTING POLICY

Under paragraph 34(b) of the *Australian Radiation Protection and Nuclear Safety Act 1998*, an application for a licence must be accompanied by a fee prescribed in the regulations. Revenue for licence applications is recognised when an application for a licence is received.

Note 1.2C: Other revenue

	2023	2022
	$	$
Resources received free of charge - ANAO	**56,000**	56,000
Total other revenue	**56,000**	56,000

ACCOUNTING POLICY

Resources received free of charge are recognised as revenue when, and only when a fair value can be reliably determined, and the services would have been purchased if they had not been donated. Use of those resources is recognised as an expense.

Resources received free of charge are recorded as either revenue or gains depending on their nature.

Gains

1.2D: Foreign exchange gains

	2023	2022
	$	$
Non-speculative	**-**	1,565
Total foreign exchange gains	**-**	1,565

ACCOUNTING POLICY

Gains and losses from foreign currency are recognised when incurred.

1.2E: Revenue from Government

	2023	2022
Appropriation:	**$**	$
Departmental appropriation	**15,190,000**	14,967,000
Total revenue from Government	**15,190,000**	14,967,000

ACCOUNTING POLICY

Amounts appropriated for departmental appropriations for the year (adjusted for any formal additions and reductions) are recognised as revenue from Government when the entity gains control of the appropriation, except for certain amounts that relate to activities that are reciprocal in nature, in which case revenue is recognised only when it has been earned.

Section 56 (3) of the *Australian Radiation Protection and Nuclear Safety Act 1998* requires that money appropriated by the Parliament be transferred to the Special Account (notes 2.1A and 3.2 refer).

Appropriations receivables are recognised at their nominal amounts.

Financial position

This section analyses ARPANSA's assets used to conduct its operations and the operating liabilities incurred as a result for the year ended 2023. Employee related information is disclosed in the People and relationships section.

Note 2.1: Financial assets

Note 2.1A: Cash and cash equivalents

	2023	2022
	$	$
Cash in Special Accounts	**1,317,930**	5,127,014
Cash on hand or on deposit	**39,345**	54,618
Total cash and cash equivalents	**1,357,275**	5,181,632

The closing balance of Cash in Special Accounts does not include any amounts held in trust: (nil in 2022).

ACCOUNTING POLICY

Cash is recognised at its nominal amount. Cash and cash equivalents include:

a) cash at bank

b) cash in Special Accounts.

Note 2.1B: Trade and other receivables

	2023	2022
	$	$
Goods and services receivables		
Goods and services	**822,764**	1,892,975
Total goods and services receivables	**822,764**	1,892,975
Appropriations receivable:		
For existing program	**4,446,000**	3,367,000
Undrawn equity injection	**-**	545,000
Departmental capital budget	**1,552,000**	2,528,000
Total appropriations receivable	**5,998,000**	6,440,000
Other receivables		
Statutory receivables – GST	**116,607**	179,751
Total other receivables	**116,607**	179,751
Total trade and other receivables (gross)	**6,937,371**	8,512,726
Less impairment loss allowance	**(38,708)**	(43,012)
Total trade and other receivables (net)	**6,898,663**	8,469,714

Goods and services receivable was with entities external to the Australian Government. Credit terms are net 30 days (2022: 30 days).

ACCOUNTING POLICY

Receivables

Trade receivables, and other receivables that are held for the purpose of collecting the contractual cash flows where the cash flows are solely payments of principal and interest, and that are not provided at below-market interest rates, are subsequently measured at amortised cost using the effective interest method adjusted for any loss allowance.

Reconciliation of impairment allowance

Goods and services	**2023**	2022
	$	$
Opening balance	**43,012**	27,136
Amounts recovered and reversed	**807**	43
Amounts written off	**(5,111)**	(4,923)
Increase/decrease recognised in net cost of services	**-**	20,756
Closing balance	**38,708**	43,012

Note 2.1C: Other financial assets

	2023	2022
	$	$
Accrued revenue	**616,917**	566,323
Total other financial assets	**616,917**	566,323

Total other financial assets are expected to be recovered in no more than 12 months.

ACCOUNTING POLICY

Financial assets are assessed for impairment at the end of each reporting period.

Note 2.2: Non-financial assets

Note 2.2A: Reconciliation of the opening and closing balances of property, plant and equipment and intangibles

	Land	Buildings	Leasehold improvements	Plant and equipment	Computer software [1]	Other intangibles - Trademarks	Total
	$	$	$	$	$	$	$
As at 1 July 2022							
Gross book value	12,010,000	17,019,776	256,275	18,851,371	4,199,743	3,200	52,340,365
Accumulated depreciation, amortisation, and impairment	-	-	(256,275)	(6,917,238)	(3,285,525)	(1,025)	(10,460,063)
Total as at 1 July 2022	**12,010,000**	**17,019,776**	**-**	**11,934,133**	**914,218**	**2,175**	**41,880,302**
Additions:							
Purchase		54,185	-	3,185,329	534,756	-	3,774,270
Revaluations and impairments recognised in other comprehensive income	490,000	21,006,928	35,850	1,243,933	-	-	22,776,711
Depreciation and amortisation	-	(1,188,971)	-	(1,841,077)	(267,001)	(320)	(3,297,369)
Depreciation on right-of-use assets	-	(215,445)	-	-		-	(215,445)
Other movements:							
Reclassification	-	-	-	(237,850)	237,850	-	-
WIP - expensed	-	-	-	(143,981)		-	(143,981)
Other movements of right-of-use assets	-	1,248	-	-	-	-	1,248
Disposals:							
Write-offs	-	-	-	(27,739)	(3,092)	-	(30,831)

Total as at 30 June 2023	**12,500,000**	**36,677,721**	**35,850**	**14,112,748**	**1,416,731**	**1,855**	**64,744,904**
Total as at 30 June 2023 represented by:							
Gross book value	12,500,000	36,677,721	35,850	14,112,748	4,933,512	3,200	68,263,030
Accumulated depreciation, amortisation, and impairment	-	-	-	-	(3,516,781)	(1,345)	(3,518,126)
Total as at 30 June 2023	**12,500,000**	**36,677,721**	**35,850**	**14,112,748**	**1,416,731**	**1,855**	**64,744,904**
Carrying amount of right-of-use assets	-	141,531	-	-	-	-	141,531

1. The carrying amount of computer software included $912,139 purchased software and $504,592 internally developed software.

There were no indicators of impairment found for property, plant, and equipment.

No property plant and equipment or intangibles are expected to be sold or disposed of within the next 12 months.

Revaluations of non-financial assets

All revaluations were conducted in accordance with the revaluation policy as stated in this note. On 30 June 2023, an independent valuer conducted revaluations of Land (increment $490,000), Buildings on freehold land (increment of $21,006,928), Leasehold improvements (increment of $35,850) and Plant and equipment (increment of $1,243,933).

Accounting policy

Assets are recorded at cost on acquisition, except as stated below. The cost of acquisition includes the fair value of assets transferred in exchange and liabilities undertaken.

Assets acquired at no cost, or for nominal consideration, are initially recognised as assets and income at their fair value at the date of acquisition, unless acquired as a consequence of restructuring of administrative arrangements. In the latter case, assets are initially recognised as contributions by owners at the amounts at which they were recognised in the transferor's accounts immediately prior to the restructuring.

Asset recognition threshold

Purchases of property, plant and equipment are recognised initially at cost in the Statement of Financial Position, except for purchases costing less than $2,000, which are expensed in the year of acquisition (other than where they form part of a group of similar items which are significant in total).

Leased Right of Use (ROU) assets

Leased ROU assets are capitalised at the commencement date of the lease and comprise the initial lease liability amount and initial direct costs incurred when entering into the lease, less any lease incentives received. These assets are accounted for by Commonwealth lessees as separate asset classes to corresponding assets owned outright but included in the same column, as where the corresponding underlying assets would be presented if they were owned.

On initial adoption of AASB 16, ARPANSA has adjusted the ROU assets at the date of initial application by the amount of any provision for onerous leases recognised immediately before the date of initial application. Following initial application, an impairment review is undertaken for any right of use lease asset that shows indicators of impairment, and an impairment loss is recognised against any right of use lease asset that is impaired. Lease ROU assets continue to be measured at cost after initial recognition in Commonwealth agency, GGS and Whole of Government financial statements.

Revaluations

Following initial recognition at cost, property plant and equipment (excluding ROU assets) are carried at fair value (or an amount not materially different from fair value), less subsequent accumulated depreciation and accumulated impairment losses. Valuations are conducted with sufficient frequency to ensure that the carrying amounts of assets do not differ materially from the assets' fair values as at the reporting date. The regularity of independent valuations depends upon the volatility of movements in market values for the relevant assets.

Revaluation adjustments are made on a class basis. Any revaluation increment is credited to equity under the heading of asset revaluation reserve, except to the extent that it reverses a previous revaluation decrement of the same asset class that was previously recognised in the surplus/deficit. Revaluation decrements for a class of assets are recognised directly in the surplus/deficit, except to the extent that they reverse a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the asset restated to the revalued amount.

Independent valuers from the Jones Lang LaSalle Advisory Services Pty Ltd conducted a desktop valuation of land and buildings on 30 June 2023.

Revaluation increments of $490,000 for land (increment 2022: $750,000), $21,006,928 for buildings on freehold land (2022: $782,790) $35,850 for leasehold improvements (2022: nil) and $1,243,933 for plant and equipment (2022: nil) were transferred to the asset revaluation reserve surplus by asset class and included in the equity section of the statement of financial position.

Depreciation

Depreciable property plant and equipment assets are written-off to their estimated residual values over their estimated useful lives to ARPANSA using, in all cases the straight-line method of depreciation.

Depreciation rates (useful lives), residual values and methods are reviewed at each reporting date and necessary adjustments are recognised in the current, or current and future reporting periods, as appropriate.

Depreciation rates applying to each class of depreciable asset are based on the following useful lives:

	2023	2022
Buildings on freehold land	23	14
Leasehold improvements	**Remaining Lease term - 8 months**	Lease term - 2 years
Plant and equipment	**1 to 38 years**	1 to 45 years

The depreciation rates for ROU assets are based on the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term.

Impairment

All assets were assessed for impairment as at 30 June 2023. Where indications of impairment exist, the asset's recoverable amount is estimated, and an impairment adjustment made, if the asset's recoverable amount is less than its carrying amount.

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset. Where the future economic benefit of an asset is not primarily dependent on the asset's ability to generate future cash flows, and the asset would be replaced if ARPANSA were deprived of the asset, its value in use is taken to be its depreciated replacement cost.

Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal.

Intangibles

ARPANSA's intangibles comprise purchased software, internally developed software for internal use and trademarks. These assets are carried at cost, less accumulated amortisation, and accumulated impairment losses.

Intangibles are amortised on a straight-line basis over their anticipated useful life. The useful lives of ARPANSA's intangibles are 1.7 to 12.6 years (2022: 1.7 to 12.6 years).

All intangibles' assets were assessed for indications of impairment as at 30 June 2023.

Note 2.2B Inventories

	2023	2022
	$	$
Inventories held for sale		
Finished goods	**31,949**	7,992
Total inventories held for sale	**31,949**	7,992
Inventories held for distribution	**1,817,321**	1,742,054
Total inventories	**1,849,270**	1,750,046

During 2022-23, $27,094 of inventory held for sale was recognised as an expense (2021-22: $29,329).

During 2022-23, $151,687 of inventory held for distribution was recognised as an expense (2021-22: $81,315).

All inventory is expected to be sold or distributed in the next 12 months.

ACCOUNTING POLICY

Inventories held for sale are valued at the lower of cost and net realisable value.

Inventories held for distribution are valued at cost, adjusted for any loss of service potential.

Note 2.2C: Other non-financial assets

	2023	2022
	$	$
Prepayments	**894,867**	782,185
Total other non-financial assets	**894,867**	782,185

No indicators of impairment were found for other non-financial assets.

Note 2.3: Payables

Note 2.3A: Suppliers

	2023	2022
	$	$
Trade creditors and accruals	**1,035,837**	940,038
Total suppliers	**1,035,837**	940,038

Settlement is usually made within 30 days.

Note 2.3B: Other payables

	2023	2022
	$	$
Salaries and wages	**438,629**	321,561
Superannuation	**79,188**	57,680
Unearned income	**84,790**	4,641,835
Other	**39,345**	56,520
Total other payables	**641,952**	5,077,596

Note 2.4: Interest bearing liabilities

	2023	2022
	$	$
Lease liabilities	**141,531**	361,349
Total leases	**141,531**	361,349

Maturity analysis - contractual undiscounted cash flows		
Within 1 year	**138,087**	220,000
Between 1 to 5 years	-	146,667
Total leases	**138,087**	366,667

Total cash outlay for leases for the year ended 30 June 2023 was $221,066 (2022: $238,560).

Accounting policy

Refer to the Overview section for accounting policy on leases.

Funding

This section identifies ARPANSA's funding structure.

Note 3.1: Appropriations

In accordance with section 56 of the *Australian Radiation Protection and Nuclear Safety Act 1998*, all monies received by ARPANSA are to be paid into the ARPANSA Special Account. Pursuant to this section, all monies paid into this account are automatically appropriated for the use of ARPANSA.

Note 3.1A: Annual appropriations ('recoverable GST exclusive')

Annual appropriations for 2023

	Annual appropriation [1]	Adjustments to appropriation [2]	Total appropriation	Appropriation applied in 2023 (current and prior years)	Variance [3]
	$	$	$	$	$
DEPARTMENTAL					
Ordinary annual services	15,465,000	-	15,465,000	14,111,000	1,354,000
Capital Budget[4]	2,052,000	-	2,052,000	3,028,000	(976,000)
Other services					
Equity injections	-	-	-	545,000	(545,000)
Total departmental	**17,517,000**	**-**	**17,517,000**	**17,684,000**	**(167,000)**

Notes:

1. Funds totalling $275,000 have been withheld (Section 51 of the PGPA Act) in accordance with government decisions.

2. No adjustments have been applied to Appropriations.

3. The variance of $167,000 reflects the movement in appropriation receivable amount at 30 June 2023 for ordinary annual services, capital budget and other services, offset by $275,000 funds withheld under section 51 of the PGPA Act.

4. Departmental Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services and are not separately identified in the Appropriation Acts.

Annual appropriations for 2022

	Annual appropriation [1]	Adjustments to appropriation [2]	Total appropriation	Appropriation applied in 2022 (current and prior years)	Variance [3]
	$	$	$	$	$
DEPARTMENTAL					
Ordinary annual services	14,967,000	-	14,967,000	13,269,000	1,698,000
Capital Budget[4]	4,533,000	-	4,533,000	3,640,000	893,000
Other services					
Equity injections	-	-	-	1,442,000	(1,442,000)
Total departmental	**19,500,000**	**-**	**19,500,000**	**18,351,000**	**1,149,000**

Notes:

1. No funds have been withheld (Section 51 of the PGPA Act) or quarantined for administrative purposes.

2. No adjustments have been applied to Appropriations.

3. The variance of $1,149,000 reflects the movement in appropriation receivable amount at 30 June 2022 for ordinary annual services, capital budget and other services.

4. Departmental Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services and are not separately identified in the Appropriation Acts.

Note 3.1B: Unspent annual appropriations ('recoverable GST exclusive')

	2023	2022
Authority	**$**	$
DEPARTMENTAL		
Appropriation Act (No. 1) 2022-23	**355,000**	-
Appropriation Act (No. 3) 2022-23	**5,918,000**	-
Appropriation Act (No. 1) 2022-23 - cash at bank	**39,345**	-
Appropriation Act (No. 1) 2021-22	-	3,792,000
Appropriation Act (No. 3) 2021-22	-	2,103,000
Appropriation Act (No. 1) 2021-22 - cash at bank	-	54,618
Supply Act (No. 2) - Equity Injections	-	545,000
Total Departmental	**6,312,345**	6,494,618

Note 3.2: Special accounts

ARPANSA Special Account (Departmental)

Establishing Instrument: *Australian Radiation Protection and Nuclear Safety Act 1998*; s56(4)

Appropriation: *PGPA Act 2013*; s80

Purpose: The purpose of the Special Account is set out in the *Australian Radiation Protection and Nuclear Safety Act 1998* at section 56(4):

'The purposes of the Special Account are to make payments:

a) to further the object of this Act (as set out in section 3); and

b) otherwise in connection with the performance of the CEO's functions under this Act or the Regulations.'

	2023	2022
	$	$
Balance brought forward from previous period	**5,181,632**	1,207,753
Increases		
Departmental	**31,271,662**	35,956,731
Total increase	**31,271,662**	35,956,731
Available for payments	**36,453,294**	37,164,484
Decreases		
Departmental	**(35,096,019)**	(31,982,852)
Total decrease	**(35,096,019)**	(31,982,852)
Total Balance carried to next period	**1,357,275**	5,181,632
Balance represented by:		
Cash held in entity bank accounts	**1,357,275**	5,181,632
Total Balance carried to next period	**1,357,275**	5,181,632

Note 3.3 Regulatory charging

	2023	2022
	$	$
Expenses		
Departmental	**255,703**	263,988
Total expenses	**255,703**	263,988
External Revenue		
Departmental	**255,703**	263,988
Total expenses	**255,703**	263,988
Amounts written off		
Departmental	**-**	-
Total amounts written off	**-**	-

Regulatory charging activity – Import/Export permits.

Documentation (Cost Recovery Implementation Statement) for the above activity is available at:

www.arpansa.gov.au/regulation-and-licensing/licensing/import-export-permits.

Note 3.4: Net cash appropriation arrangements

	2023	2022
	$	$
Total comprehensive income/(loss) - as per Statement of Comprehensive Income	**19,585,003**	**151,855**
Plus: depreciation/amortisation of assets funded through appropriations (departmental capital budget funding and/or equity injection)	**3,297,369**	**3,135,454**
Plus: depreciation right-of-use asset[1]	**215,445**	**239,148**
Less: principal repayment - leased asset[2]	**(221,066)**	**(238,560)**
Net Cash Operating Surplus/ (Deficit)	**22,876,751**	**3,287,897**

1. From 2010-11, the Government introduced net cash appropriation arrangements whereby revenue appropriations for depreciation/amortisation expenses of non-corporate Commonwealth entities and selected corporate Commonwealth entities were replaced with a separate capital budget provided through equity injections. Capital budgets are to be appropriated in the period when cash payment for capital expenditure is required.

2. The inclusion of depreciation/amortisation expenses related to ROU leased assets and the lease liability principal repayment amount reflects the impact of AASB 16 Leases, which does not directly reflect a change in appropriation arrangements.

People and relationships

This section identifies a range of employment and post-employment benefits provided to our people and our relationships with other key people.

Note 4.1: Employee provisions

	2023	2022
	$	$
Employee provisions		
Leave	**6,621,786**	5,967,432
Total employee provisions	**6,621,786**	5,967,432

Accounting policy

Liabilities for 'short-term employee benefits' and termination benefits expected to be settled within 12 months of the end of the reporting period are measured at their nominal amounts.

The nominal amount is calculated with regard to the rates expected to be paid on settlement of the liability.

Other long-term employee benefit liabilities are measured as net total of the present value of the defined benefit obligation at the end of the reporting period minus the fair value at the end of the reporting period of plan assets (if any), out of which the obligations are to be settled directly.

Leave

The liability for employee benefits includes provision for annual leave and long service leave. No provision has been made for sick leave, as all sick leave is non-vesting and the average sick leave taken in future years by employees of the entity is estimated to be less than the annual entitlement for sick leave.

The leave liabilities are calculated on the basis of employees' remuneration at the estimated salary rates that will be applied at the time the leave is taken, including the entity's employer superannuation contribution rates, to the extent that the leave is likely to be taken during service rather than paid out on termination.

The liability for long service leave is recognised and measured at the present value of the estimated future cash flows to be made in respect of employees as at 30 June 2023. The estimate of the present value of the liability takes into account attrition rates and pay increases through promotion and inflation.

Separation and redundancy

Provision is made for separation and redundancy benefit payments. The entity recognises a provision for termination when it has developed a detailed plan for terminations and has informed those employees affected that it will carry out the terminations.

Superannuation

The majority of staff of ARPANSA are members of the Commonwealth Superannuation Scheme (CSS), the Public Sector Superannuation Scheme (PSS) or the PSS accumulation plan (PSSap), and the Australian Government Employee Superannuation Trust (AGEST). There are a small number of staff covered under various other superannuation schemes.

The CSS and PSS are defined benefit schemes for the Australian Government. The PSSap is a defined contribution scheme. The AGEST Superannuation Trust is an industry fund which was previously the Australian Government default superannuation fund for non-ongoing employees.

The liability for defined benefits is recognised in the financial statements of the Australian Government and is settled by the Australian Government in due course. This liability is reported in the Department of Finance's administered schedules and notes.

ARPANSA makes employer contributions to the employees' superannuation scheme at rates determined by an actuary to be sufficient to meet the current cost to the Government. ARPANSA accounts for the contributions as if they were contributions to defined contribution plans.

The liability for superannuation recognised as at 30 June represents outstanding contributions for the final fortnight of the year.

Note 4.2: Key management personnel remuneration

Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity. ARPANSA has determined the key management personnel to be the Chief Executive and 6 Branch and Office Heads. Key management personnel remuneration is reported in the table below:

	2023	2022
	$	$
Short-term employee benefits	**1,623,883**	1,581,987
Post-employment benefits	**227,655**	234,726
Other long-term employee benefits	**37,645**	36,582
Total key management personnel remuneration expenses[1]	**1,889,183**	1,853,295

1. The above key management personnel remuneration excludes the remuneration and other benefits of the Portfolio Minister. The Portfolio Minister's remuneration and other benefits are set by the Remuneration Tribunal and are not paid by the entity.

The total number of key management personnel included in the above table are 7 individuals (2022: 8). In 2023, there were no individuals were employed in key management personnel roles for part of the year only (2022: 2).

Note 4.3: Related party disclosures

Related party relationships

The entity is an Australian Government controlled entity. Related parties to this entity are key management personnel, including the Portfolio Minister and Executive, and other Australian Government entities.

Transactions with related parties

Given the breadth of Government activities, related parties may transact with the government sector in the same capacity as ordinary citizens. Such transactions include the payment or refund of taxes, receipt of a Medicare rebate or higher education loans. These transactions have not been separately disclosed in this note.

Giving consideration to relationships with related entities, and transactions entered into during the reporting period by the entity, it has been determined that there are no related party transactions to be separately disclosed.

Managing uncertainties

This section analyses how ARPANSA manages financial risks within its operating environment.

Note 5.1: Contingent liabilities and assets

As at 30 June 2023, ARPANSA had no quantifiable or unquantifiable contingencies. (2022: Nil).

Accounting policy

Contingent liabilities and contingent assets are not recognised in the Statement of Financial Position but are reported in the notes. They may arise from uncertainty as to the existence of a liability or asset or represent an asset or liability in respect of which the amount cannot be reliably measured. Contingent assets are disclosed when settlement is probable but not virtually certain and contingent liabilities are disclosed when settlement is greater than remote.

Note 5.2: Financial instruments

Note 5.2A: Categories of financial instruments

	2023	2022
	$	$
Financial assets at amortised cost		
Cash and cash equivalents	**1,357,275**	5,181,632
Trade and other receivables	**784,056**	1,849,963
Other financials assets	**616,917**	566,323
Total financial assets at amortised cost	**2,758,248**	7,597,918
Financial liabilities measured at amortised cost		
Trade creditors	**1,035,837**	940,038
Total financial liabilities measured at amortised cost	**1,035,837**	940,038

Accounting policy

Financial assets

ARPANSA classifies its financial assets in the following category:

a) financial assets measured at amortised cost.

The classification depends on both ARPANSA's business model for managing the financial assets and contractual cash flow characteristics at the time of initial recognition. Financial assets are recognised when ARPANSA becomes a party to the contract and, as a consequence, has a legal right to receive or a legal obligation to pay cash, and derecognised when the contractual rights to the cash flows from the financial asset expire or are transferred upon trade date.

Financial assets at amortised cost

Financial assets included in this category need to meet two criteria:
1. the financial asset is held in order to collect the contractual cash flows
2. the cash flows are solely payments of principal and interest (SPPI) on the principal outstanding amount.

Amortised cost is determined using the effective interest method.

Effective interest method

Income is recognised on an effective interest rate basis for financial assets that are recognised at amortised cost.

Impairment of financial assets

Financial assets are assessed for impairment at the end of each reporting period based on Expected Credit Losses, using the general approach (which measures the loss allowance based on an amount equal to lifetime expected credit losses where risk has significantly increased, or an amount equal to 12-month expected credit losses if risk has not increased).

The simplified approach for trade receivables is used. This approach always measures the loss allowance as the amount equal to the lifetime expected credit losses.

A write-off constitutes a derecognition event, where the write-off directly reduces the gross carrying amount of the financial asset.

Financial liabilities

Financial liabilities are classified as other liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

Other financial liabilities

Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).

Note 5.3: Fair value measurements

The following table provides an analysis of assets and liabilities that are measured at fair value.

Accounting policy

When an asset or liability, financial or non-financial, is measured at fair value for recognition or disclosure purposes, the fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date; and assumes that the transaction will take place either in the principle market or – in the absence of a principal market – in the most advantageous market.

Fair value is measured using the assumptions that market participants would use when pricing the asset or liability, assuming they act in their economic best interest. For non-financial assets, the fair value measurement is based on its highest and best use. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value are used, maximising the use of relevant observable inputs, and minimising the use of unobservable inputs.

For recurring and non-recurring fair value measurements, external valuers may be used when internal expertise is either not available or when the valuation is deemed to be significant. External valuers are selected based on market knowledge and reputation. Where there is a significant change in fair value of an asset or liability from one period to another, an analysis is undertaken, which includes a verification of the major inputs applied in the latest valuation and a comparison, where applicable, with external sources of data.

Note 5.3A: Fair value measurements

	Fair value measurements at the end of the reporting period	
	2023	2022
	$	$
Non-financial assets		
Land	**12,500,000**	12,010,000
Buildings on freehold land	**36,536,190**	16,659,500
Leasehold improvements	**35,850**	-
Plant and equipment	**14,112,748**	11,934,133
Total non-financial assets	**63,184,788**	40,603,633

No change in valuation technique occurred during the period.

Other information

Note 6.1: Current/non-current distinction for assets and liabilities

	2023	2022
	$	$
Assets expected to be recovered in:		
No more than 12 months		
Cash and cash equivalents	**1,357,275**	5,181,632
Trade and other receivables	**6,898,663**	8,469,714
Other financial assets	**616,917**	566,323
Other non-financial assets	**894,867**	782,185
Inventory	**1,849,270**	1,750,046
Total no more than 12 months	**11,616,991**	16,749,900
More than 12 months		
Land and buildings	**49,213,571**	29,029,776
Plant and equipment	**14,112,748**	11,934,133
Computer software	**1,416,731**	914,218
Other intangibles	**1,855**	2,175
Total more than 12 months	**64,744,905**	41,880,302
Total assets	**76,361,896**	58,630,202
Liabilities expected to be settled in:		
No more than 12 months		
Suppliers	**1,035,837**	940,038
Other payables	**641,952**	5,077,596
Leases	**138,087**	216,809
Employee provisions	**1,843,131**	1,615,821
Total no more than 12 months	**3,659,007**	7,850,264
More than 12 months		
Leases	**-**	144,540
Employee provisions	**4,667,721**	4,351,611

Total no more than 12 months	**4,667,721**	4,496,151
Total liabilities	**8,326,728**	12,346,415

Part 6: Appendices

Appendix 1

ARPANSA licencing activities

ARPANSA strives to support high levels of licence holder compliance with the Act and Regulations. It does so by actively engaging with Licensees, providing regulatory guidance and through a risk-informed program of regulatory oversight that includes self-reporting and inspection.

Details of licence breaches in the financial year

ARPANSA categorises breaches of licence conditions based on whether the potential risks to safety were either minor or significant. Breaches with minor implications for safety are typically administrative failures to meet regulatory requirements. Examples include poor safety signage, not keeping records or inventories up to date, not reviewing or updating plans and not submitting reports to ARPANSA on time.

Breaches with significant implications for safety typically occur where there is an actual exposure or a risk of significant exposure to people or the environment.

Breaches with significant implications for safety

There was one breach with significant implications for safety:

- ANSTO self-reported a failure to comply with the licence conditions of the ANSTO Centre for Accelerator Science under section 57A and section 60 of the ARPANS Regulations, 2018. The breach related to an incident that occurred in November 2022 and had the potential to cause a significant radiation exposure to workers. It was associated with shortfalls in managing safety and preventing human error and organisational failures.

Breaches with no, or minor, safety implications during the year

There were 3 breaches with minor safety implications or administrative failures to meet regulatory requirements:

- ANSTO failed to seek approval to dispose of controlled material outside of the Commonwealth. Section 65 of the Australian Radiation Protection and Nuclear Safety Regulations 2018 (the Regulations) requires the Licence Holder to seek approval to dispose of controlled material. This breach was self-reported.
- ANSTO self-reported a failure to comply with a licence condition relating to the Operating Limits and Conditions (OLC), which require maintenance checks for buildings within the facility. Conformance to OLCs ensures that the operations are conducted in accordance with the facility safety case. The maintenance

checks were reported to be outside of the required weekly period. The omission was immediately rectified and was therefore considered a minor breach.

- The Department of Home Affairs was found to be in breach of the Act for failing to adhere to the document review period for plans and arrangements, as required by subsection 61(1) of the Regulations and the safety standard, 'Radiation Safety for Personnel Security Screening Systems Using X-rays or Gamma Radiation'. The Department of Home Affairs has reviewed the Body Scanner (BSCAN) standard operating procedure and is in the process of developing an updated radiation survey and compliance inspection schedule for BSCANs.

Details of any improvement notices or directions issued during the year

No improvement notices were issued by ARPANSA under section 80A of the *ARPANS Act*.

Other significant activities

ARPANSA's Medical Radiation Services was granted an exemption from a siting and construction licence to install a new, replacement clinical linear accelerator. In line with standard practice to manage any potential conflicts of interest, an independent assessment by the Tasmanian radiation regulator was undertaken regarding the requested exemption.

ARPANSA issued a facility licence to ARPANSA Medical Radiation Services (MRSB) to authorise operation of the Elekta Versa HD linear accelerator, subject to the conditions stated in the licence limiting operations to hot commissioning. The recently decommissioned Elekta Synergy linear accelerator was removed and replaced by the new accelerator, which will allow MRSB to continue to perform their work as part of the Australian Clinical Dosimetry Service.

In addition to the specific activities mentioned, ARPANSA's regulatory service approved 17 requests to make changes significant to safety, and ARPANSA also conducted 39 compliance inspections of licenced facilities or radiation sources.

Facility licences as at 30 June 2023

Commonwealth entity	Licences held
Australian National University	3
Australian Nuclear Science and Technology Organisation	19
Australian Radiation Protection and Nuclear Safety Agency	2
Department of Climate Change, Energy, the Environment and Water	1
Department of Defence/Australian Defence Forces	4
Department of Home Affairs	4
Total	33

Source licences as at 30 June 2023

Commonwealth entity	Licences held
ASC Pty Ltd	1
Attorney-General's Department	2
Australian Criminal Intelligence Commission	1
Australian Federal Police	1
Australian Institute of Marine Science	1
Australian National Maritime Museum	1
Australian National University	1
Australian Nuclear Science and Technology Organisation	3
Australian Postal Corporation	1
Australian Radiation Protection and Nuclear Safety Agency	2
Australian Securities and Investments Commission	1
Australian Signals Directorate	1
Australian Sports Commission	1
Australian Trade and Investment Commission	1
Australian Transaction Reports and Analysis Centre	1
Australian War Memorial	1
Commonwealth Bureau of Meteorology	1
Commonwealth Scientific and Industrial Research Organisation	9
Decipha Pty Ltd	1
Department of Agriculture, Fisheries and Forestry	3
Department of Climate Change, Energy the Environment and Water	3
Department of Defence/Australian Defence Forces	1
Department of Foreign Affairs and Trade	1
Department of Home Affairs	3
Department of Industry, Science and Resources	3
Department of Infrastructure, Transport, Regional Development, Communications and the Arts	1
Department of Parliamentary Services	1
Department of the Prime Minister and Cabinet	1

Commonwealth entity	Licences held
Federal Court of Australia	1
High Court of Australia	1
Indian Ocean Territories Health Service	1
Law Courts Limited	1
National Gallery of Australia	1
National Museum of Australia	1
Norfolk Island Health and Residential Aged Care Service	1
Note Printing Australia	1
Reserve Bank of Australia	1
Royal Australian Mint	1
Silex Systems Limited	1
Total	59

Appendix 2

Operations of the Radiation Health and Safety Advisory Council and Committees

Operations of the Radiation Health and Safety Advisory Council

During the 2022–23 financial year, the Council met virtually or in-person on 3 occasions: 18 August 2022, 24-25 November 2022, and 30 March 2023.

Meeting summaries can be found at: www.arpansa.gov.au/about-us/advisory-council-and-committees/radiation-health-and-safety-advisory-council/minutes.

The membership on 30 June 2023 was:

Chair

- Dr Jane Canestra, an emergency care physician with expertise in health aspects of and planning for radiological incident

CEO of ARPANSA

- Dr Gillian Hirth (Commonwealth)

Radiation Control Officers

- Mr Keith Baldry (South Australia), Director, Science and Systems, South Australian Environment Protection Authority
- Mr John Piispanen (Queensland), Executive Director, Health Protection Branch, Queensland Health

Nominee of the Chief Minister of the Northern Territory

- Dr Christine Connors, Chief Health Officer, Department of Health of the Northern Territory

Person to represent the interests of the general public

- Mr Christopher Donovan, National Work Health and Safety Director, Australian Workers Union

Other members

- Ms Melissa Holzberger, Director and Principal, Sloan Holzberger Lawyers
- Professor Pamela Sykes, Emeritus Professor, Preventive Cancer Biology, Flinders University
- Associate Professor Melanie Taylor, Geography and Planning, School of Social Sciences, Macquarie University
- Mr Jim Hondros, Consultant, JRHC Enterprises
- Mr Chris Perry, Director of Operations for Radiology and Nuclear Medicine, Alfred Hospital, Melbourne
- Associate Professor Catherine Olsen, Senior Research Officer, Division of Population and Clinical Sciences, Queensland Institute of Medical Research, Berghofer

- Mr Stuart Parr, Radiation Safety Officer for multiple companies and current member of the ARPANSA Nuclear Safety Committee

During 2022–23, the Council considered and discussed:

- Emergency preparedness and response, including lessons learned from the lost-source incident which occurred in Western Australia in January 2023.
- Theranostics in nuclear medicine.
- ARPANSA's work in science communication and tackling misinformation.
- Reconciliation Action Plan (RAP) development and ARPANSA.
- Radiation protection and regulatory workforce challenges.
- Regulatory principles for Nuclear Powered Submarines.
- The ongoing review of the International Commission on Radiological Protection (ICRP) system for radiological protection and the Linear No-Threshold (LNT) model for the impact of radiation exposure.
- UV radiation and the incidence of skin cancer in Australia.
- Lasers and the possible safety issues of high-powered laser products being available for purchase online.
- The ongoing engagement between ARPANSA and the Australian Radioactive Waste Agency (ARWA).
- Progress made by ARPANSA to prepare for the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) Follow Up Mission to occur in October 2023.

Written advice from the Council to the CEO of ARPANSA is available at: www.arpansa.gov.au/about-us/advisory-council-and-committees/radiation-health-and-safety-advisory-council/statements. During 2022–23, the Council provided written advice to the CEO on:

- Regulatory principles for nuclear powered submarines.

Operations of the Radiation Health Committee

During the 2022-23 financial year, the RHC met on 3 occasions: 25 August 2022, 23 November 2022, and 5 April 2023.The meeting minutes are available at:

www.arpansa.gov.au/about-us/advisory-council-and-committees/radiation-health-committee/minutes.

The membership of the Radiation Health Committee on 30 June 2023 was:

Chair

- Dr Roslyn Drummond (Victoria), Radiation Oncologist, Radiation Oncology and Cancer Imaging, Peter MacCallum Cancer Centre

CEO of ARPANSA

- Dr Gillian Hirth (Commonwealth)

Radiation Control Officers (each state and territory):

- Mr Bradley Feldtman (Northern Territory), Manager Radiation Protection, Department of Health
- Mr Daniel Bellifemine (South Australia), Acting Manager, Mining and Radiation Branch, Environment Protection Authority
- Ms Penny Hill (Australian Capital Territory), Assistant Director, Health Protection Service, ACT Health
- Mr Glenn Riley (Victoria), Senior Project Officer, Radiation Team, Health Protection Branch, Department of Health and Human Services
- Mr Simon Critchley (Queensland), Director, Radiation Health, Queensland Health
- Ms Hazel Upton (Western Australia), Managing Health Physicist, Radiation Health Branch, Department of Health
- Dr Stephen Newbery (Tasmania), Principal Health Physicist, Population Health Services, Department of Health
- Mr Mark Carey (New South Wales), Principal Policy Officer, New South Wales Environment Protection Authority

Nuclear Safety Committee representative

- Dr Joanna Wriedt (Victoria), Member of Victorian Government's Radiation Advisory Committee.

Person to represent the interests of the general public

- Ms Fay Bellis (Victoria), Quality Management System Consultant

During 2022–23, the RHC considered and discussed the following:

- Lessons learned from the lost source incident which occurred in Western Australia in January 2023, including gauge design, certification, transport, and emergency preparedness and response.
- Progress made by states and territories to prepare for the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) Follow Up mission occurring in October 2023.
- Radiation protection and regulatory workforce challenges.
- A service standard for dosimetry service providers.
- A statement on compensatory arrangements for radiation workers to highlight that health and safety may not be replaced by compensation arrangements (aimed at international reviewers).
- A statement to align the definitions of Radiation Safety Officer (RSO) and Radiation Protection Officer (RPO) in different jurisdictions.
- Advice and draft statement on occupational exposure dose limits.
- Mobile CT systems that may cross jurisdictional borders.
- A draft statement on radon safety guidance.
- Working groups for the revision of:
    a. The Code of Practice and Safety Guide for Radiation Protection in Dentistry (2005)

b. The Code for Radiation Protection in Medical Exposure (2019)

c. Codes and standards in relation to radiation gauges and well-logging

d. Codes and standards in relation to X-ray equipment.

- Regulatory knowledge exchange to develop cross-jurisdictional learning, including:

a. The use of body scanners at correctional facilities

b. Regulatory advice for portable density and moisture gauges, including transport safety and transport safety

c. Emergency preparedness and response

d. Regulatory issues arising from warning lighting on computed tomography (CT) equipment.

Written statements from the Radiation Health Committee are available at: www.arpansa.gov.au/about-us/advisory-council-and-committees/radiation-health-committee/statements.

During 2022-23, the RHC did not issue any new statements.

Operations of the Nuclear Safety Committee

During 2022–23, the NSC met in-person on 2 occasions: 28 October 2022 and 9 February 2023.

Summaries of the meetings can be found at: www.arpansa.gov.au/nsc-minutes. The members of the committee were appointed on a 3-year term for 2021–2023, which commenced on 1 January 2021. The membership as at 30 June 2023 was:

Chair:

- Dr Tamie Weaver, Technical Director – Hydrogeology (an environmental resources management consultancy)

CEO of ARPANSA:

- Dr Gillian Hirth

Radiation Health Committee representative:

- Ms Fay Bellis, member of the Radiation Health Committee

Local Government representative:

- Mr Ian Drinnan, Principal Environmental Scientist, Sutherland Shire Council

Person to represent the interests of the general public:

- Dr Joanna Wriedt, experience in commercial law, government, and medical research

Other members:

- Ms Jasmin Diab, nuclear engineer with experience in the Australian Defence Force
- Mr Tony Irwin, engineer with experience in nuclear power and research reactor operations, commissioning, training and regulatory interaction
- Dr John Loy, radiation protection and nuclear safety regulatory expert, with extensive experience internationally and in Australia
- Mr Cameron MacPhail, engineer with experience of process engineering and safety assurance within the defence, pharmaceutical, nuclear power, and water treatment industry
- Dr Peta Miller, consultant in safety management, ergonomics, and human factors, and an academic at UNSW
- Mr Stuart Parr, radiation protection advisor with experience in safety engineering and management, including advice on nuclear regulatory compliance internationally
- Mr Peter Wilkinson, consultant in safety management and safety culture in hazardous industries

During 2022–23, the committee considered and discussed matters including:

- The optimisation of the Australian regulatory framework in terms of radiation protection and nuclear safety to account for the proposed introduction of naval nuclear propulsion.
- ARPANSA's future workforce needs, including how to find talent in a tight workforce market.
- ARPANSA's preparations for the 2023 Integrated Regulatory Review Service missions of the IAEA planned for October 2023.

Review of regulatory documentation

The NSC reviewed and provided comment on a number of key topics including:

- A proposed new regulatory guide for waste storage and disposal facilities. The committee made suggestions relating to improved delineation of the scope of the guide and clear and concise language.

Update on controlled facilities

- Ongoing monitoring and improvement proposals to address defects in an ANSTO OPAL reactor in-pool structure known as the 'riser'. The discussions included the redesign and replacement of valves within the pool to reduce a pressure-pulse, which was considered to be the cause of the defects.
- Updates on the progress of an implementation plan developed to address the findings of a 2018 independent review of safety at ANSTO Health Products.

Appendix 3

Workforce Statistics

A3.1 All ongoing employees current report period (2022-23)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			*Total*
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	
NSW	14	0	14	9	0	9	0	0	0	0	0	0	0	0	0	23
Vic	63	2	65	47	8	55	0	0	0	0	0	0	0	0	0	120
Total	77	2	79	56	8	64	0	0	0	0	0	0	0	0	0	143

A3.2 All non-ongoing employees current report period (2022-23)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			*Total*
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	
NSW	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
Vic	6	0	6	4	1	5	0	0	0	0	0	0	0	0	0	11
Total	6	0	6	5	1	6	0	0	0	0	0	0	0	0	0	12

A3.3 All ongoing employees previous report period (2021-22)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			*Total*
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-ime**	*Total*	
NSW	13	0	13	7	0	7	0	0	0	0	0	0	0	0	0	20
Vic	57	1	58	46	6	52	0	0	0	0	0	0	0	0	0	110
Total	70	1	71	53	6	59	0	0	0	0	0	0	0	0	0	130

A3.4 All non-ongoing employees previous report period (2021-22)

	Man/Male			**Woman/Female**			**Non-binary**			**Prefers not to answer**			**Uses a different term**			*Total*
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	
NSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*0*
Vic	1	0	1	3	1	4	0	0	0	0	0	0	0	0	0	*5*
Total	1	0	1	3	1	4	0	0	0	0	0	0	0	0	0	*5*

A3.5 APS Act ongoing employees current report period (2022-23)

	Man/Male			**Woman/Female**			**Non-binary**			**Prefers not to answer**			**Uses a different term**			**Total**
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
EL 2	14	0	14	7	1	8	0	0	0	0	0	0	0	0	0	22
EL 1	29	0	29	13	2	15	0	0	0	0	0	0	0	0	0	44
APS 6	21	2	23	14	2	16	0	0	0	0	0	0	0	0	0	39
APS 5	6	0	6	8	0	8	0	0	0	0	0	0	0	0	0	14
APS 4	1	0	1	7	0	7	0	0	0	0	0	0	0	0	0	8
APS 3	3	0	3	4	3	7	0	0	0	0	0	0	0	0	0	10
APS 2	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	3
APS 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	77	2	79	56	8	64	0	0	0	0	0	0	0	0	0	143

A3.6 APS Act non-ongoing employees current report period (2022-23)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EL 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EL 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APS 6	4	0	4	3	0	3	0	0	0	0	0	0	0	0	0	7
APS 5	2	0	2	2	0	2	0	0	0	0	0	0	0	0	0	4
APS 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APS 3	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1
APS 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APS 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	0	6	5	1	6	0	0	0	0	0	0	0	0	0	12

A3.7 APS Act ongoing employees previous report period (2021-22)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full-time	Part-time	*Total*	Full-time	Part-time	*Total*	Full-time	Part-time	*Total*	Full-time	Part-time	*Total*	Full-time	Part-time	*Total*	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
EL 2	15	0	15	4	1	5	0	0	0	0	0	0	0	0	0	20
EL 1	26	1	27	16	0	16	0	0	0	0	0	0	0	0	0	43
APS 6	18	0	18	12	1	13	0	0	0	0	0	0	0	0	0	31
APS 5	5	0	5	0	5	5	0	0	0	0	0	0	0	0	0	10
APS 4	2	0	2	0	5	5	0	0	0	0	0	0	0	0	0	7
APS 3	0	0	0	5	3	8	0	0	0	0	0	0	0	0	0	8
APS 2	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3
APS 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	69	1	70	37	18	55	0	0	0	0	0	0	0	0	0	125

A3.8 APS Act non-ongoing employees previous report period (2021-22)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full-time	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	**Full-time**	**Part-time**	*Total*	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SES 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EL 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EL 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APS 6	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
APS 5	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
APS 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APS 3	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1
APS 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APS 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	1	3	1	4	0	0	0	0	0	0	0	0	0	5

A3.9 APS Act employees by full-time and part-time status current report period (2022-23)

	Ongoing			Non-ongoing			Total
	Full-time	**Part-time**	*Total ongoing*	**Full-time**	**Part-time**	*Total non-ongoing*	
SES 3	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0
SES 1	3	0	3	0	0	0	3
EL 2	21	1	22	0	0	0	22
EL 1	42	2	44	0	0	0	44
APS 6	35	4	39	7	0	7	46
APS 5	14	0	14	4	0	4	18
APS 4	8	0	8	0	0	0	8
APS 3	7	3	10	0	1	1	11
APS 2	3	0	3	0	0	0	3
APS 1	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	133	10	143	11	1	12	155

A3.10 APS Act employees by full-time and part-time status previous report period (2021-22)

	Ongoing			Non-ongoing			
	Full-time	**Part-time**	*Total ongoing*	**Full-time**	**Part-time**	*Total non-ongoing*	*Total*
SES3	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0
SES1	3	0	3	0	0	0	3
EL2	19	1	20	0	0	0	20
EL1	42	1	43	0	0	0	43
APS6	30	1	31	2	0	2	33
APS5	10	0	10	2	0	2	12
APS4	5	0	5	0	0	0	5
APS3	7	3	10	0	1	1	11
APS2	3	0	3	0	0	0	3
APS1	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	119	6	125	4	1	5	130

A3.11 APS Act employment type by location current report period (2022-23)

	Ongoing	**Non-ongoing**	*Total*
NSW	23	1	*24*
Vic	120	11	*131*
Total	143	12	155

A3.12 APS Act employment type by location previous report period (2021-22)

	Ongoing	**Non-ongoing**	*Total*
NSW	20	0	20
Vic	105	5	110
Total	125	5	130

A3.13 APS Act Indigenous employment current report period (2022-23)

	Total
Ongoing	*0*
Non-Ongoing	*0*
Total	*0*

A3.14 APS Act Indigenous employment previous report period (2021-22)

	Total
Ongoing	*0*
Non-Ongoing	*0*
Total	*0*

A3.15 APS Act employment arrangements current report period (2022-23)

	SES	**Non-SES**	*Total*
Enterprise Agreement	0	148	*148*
Individual Flexibility Arrangement	0	20	*20*
Common Law Contract	3	4	*7*
Total	3	172	175

A3.16 APS Act employment salary ranges by classification level (min/max) current report period (2022-23)

	Minimum Salary ($)	Maximum Salary ($)
SES 3	0	0
SES 2	0	0
SES 1	225,114	231,087
EL 2	134,786	170,972
EL 1	110,305	126,917
APS 6	89,288	102,130
APS 5	82,564	86,687
APS 4	76,711	80,160
APS 3	66,560	74,475
APS 2	58,456	64,172
APS 1	49,929	56,754
Other	0	0
Minimum/Maximum range	49,929-225,114	56,754-231,087

Part 7: Reference material

Abbreviations

ASG	Agency Security Group
ARC	Audit and Risk Committee
AASB	Australian Accounting Standards Board
ACDS	Australian Clinical Dosimetry Service
ANAO	Australian National Audit Office
ANRDR	Australian National Radiation Dose Register
AGEST	Australian Government Employee Superannuation Trust
AIIMS	Australasian Inter-service Incident Management System
ANSTO	Australian Nuclear Science and Technology Organisation
APS	Australian Public Service
ARIR	Australian Radiation Incident Register
ARMS	Australian Radiation Monitoring System
ARWA	Australian Radioactive Waste Agency
APDS	ARPANSA Performance Development System
AMS	ARPANSA Management System
ARPANS Act	*Australian Radiation Protection and Nuclear Safety Act*
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
AUKUS	Australia, the United Kingdom and the United States
CEO	Chief Executive Officer
CNS	Convention on Nuclear Safety
COVID-19	Coronavirus disease
CRPG	Commonwealth Regulator Performance Guide
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSS	Commonwealth Superannuation Scheme
CT	Computed tomography
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization

DRLs	Diagnostic reference levels
EAP	Employee Assistance Program
EG	Executive Group
EL	Executive level
EME	Electromagnetic energy
enHealth	Environmental Health Standing Committee
EPR	Emergency preparedness and response
F&E	Facilities and engineering
FRR	Financial Reporting Rule 2015
FY	Financial year
FOI	Freedom of Information
FOI Act	*Freedom of Information Act 1982*
FBT	Fringe benefits tax
GSG	General Safety Guide
GST	Goods and Services Tax
IAEA	International Atomic Energy Agency
IMS	International Monitoring System
IRRS	Integrated Regulatory Review Service
KA	Key activity
MRI	Magnetic resonance imaging
NATA	National Association of Testing Authorities
NDRLS	National Diagnostic Reference Level Service
NRWMF	National Radioactive Waste Management Facility
NIR	Non-ionising radiation
NPW	Nuclear Powered Warships
NSC	Nuclear Safety Committee
OBS	Office for Business Support
OCEO	Office of the Chief Executive Officer
OPAL	Open Pool Australian Lightwater
PBS	Portfolio Budget Statement
PGPA Act	*Public Governance, Performance and Accountability Act 2013*
PGPA Rule	Public Governance, Performance and Accountability Rule 2014

PMAG	Project Management Advisory Group
PRMS	Personal Radiation Monitoring Service
PSDL	Primary Standards Dosimetry Laboratory
PSS	Public Sector Superannuation Scheme
RF	Radiofrequency
RHC	Radiation Health Committee
ROU	Right of Use
RPOP	Radiation Protection of Patients
RPS	Radiation Protection Series
SES	Senior Executive Service
SMC	Strategic Management Committee
SCF	Staff Consultative Forum
UVR	Ultraviolet radiation
VSP(N)	Visiting Ships Panel (Nuclear)
VEEC	Victorian Energy Efficiency Certificates
WHS	Work Health and Safety
WHS Act	*Work Health and Safety Act 2011*

Glossary

5G	5G is the fifth generation of mobile telecommunications. It provides improved connectivity over a wide range of frequencies to mobile phones and other devices on the wireless network. In Australia, 5G will initially use the same radio waves as the fourth generation (4G). In the future, 5G will use radio waves called 'millimetre waves', which have a shorter range than the microwaves used in 4G. 5G infrastructure and devices like mobile phones emit radiofrequency and electromagnetic energy, also known as radio waves. ARPANSA sets the safety standards for exposure to radio waves.
anechoic chamber	A specialised room that absorbs electromagnetic waves designed to perform EME measurements, calibrations, and research.
Australian Clinical Dosimetry Service (ACDS)	The ACDS is a national independent dosimetry auditing program, provided by ARPANSA, offering quality assurance for radiation oncology facilities and patients.
Australian National Radiation Dose Register (ANRDR)	A centralised repository for the radiation dose records of workers as supplied by the employers, maintained by ARPANSA. It is currently limited to those engaged in the uranium mining and milling industry in Australia.
Australian Radiation Incident Register (ARIR)	A national database of incidents and events related to radiation of radioactivity. The purpose of the database is to raise awareness on where, how, and why incidents and events occur, and how they can be best prevented.
Comprehensive Nuclear-Test-Ban Treaty (CTBT)	The Treaty aims to eliminate nuclear weapons by restricting the development and qualitative improvement of new types of nuclear weapons. ARPANSA is responsible for carrying out Australia's radionuclide monitoring obligations under the treaty. Our radionuclide laboratory is used to run daily tests to detect the presence of radioactive particles that are characteristic of a nuclear explosion.
diagnostic reference level (DRL)	An indicative measure used to assess whether, in routine conditions, the amount of radiation used is unusually high (or low) for a specified procedure, such as a CT scan. A DRL is not a regulatory limit, it is a benchmark that provides a simple method of identifying situations where an imaging facility is delivering an unusually high patient dose.
dose	A generic term that may mean absorbed dose, equivalent dose or effective dose – depending on context.
electromagnetic energy	Energy that can travel through space in the form of electromagnetic waves. There are many forms of electromagnetic energy, including gamma rays, X-rays, ultraviolet radiation, visible light, infrared radiation, microwaves and radiofrequency radiation.
Integrated Regulatory Review Service (IRRS)	A peer-review service offered by the IAEA to strengthen and enhance the effectiveness of a national regulatory system in nuclear, radiation, radioactive waste, transport safety and nuclear security.
International Atomic Energy Agency (IAEA)	The IAEA is the international centre for cooperation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.
ionising radiation	Radiation that is capable of causing ionisation – the process by which an electron is given enough energy to break away from an atom. Ionising radiation has enough energy to cause chemical changes by breaking chemical bonds. This effect can cause

	damage to living tissue. Examples of ionising radiation include X-rays, electrons (beta radiation) and particles (e.g., alpha radiation).
licence	A written authorisation issued to an operator that allows the operator to carry out an operation legally.
linear accelerator	Linear accelerators (linacs) are medical devices used to deliver radiation therapy in highly targeted doses by generating directed radiation beams. These machines are used in hospitals and medical facilities to treat cancers.
National Radioactive Waste Management Facility (NRMWF)	The proposed NRWMF will manage waste generated in Australia. It will be designed to permanently dispose of low-level waste and potentially store intermediate-level waste on a temporary basis. The facility will only manage immobilised solid waste. More information can be found at: www.arpansa.gov.au/NRWMF-radioactive-waste.
non-ionising radiation (NIR)	Radiation that does not produce ionisation – the process by which an electron is given enough energy to break away from an atom. When these radiations pass through the tissues of the body, they do not have sufficient energy to damage DNA directly. Examples of NIR include static and low frequency electric and magnetic fields, radio waves, visible light, and ultraviolet radiation.
Personal Radiation Monitoring Service (PRMS)	The Personal Radiation Monitoring Service (PRMS) monitors potential ionising radiation exposure to workers in fields such as medical, dental, chiropractic, industrial and mining. PRMS provides and assesses monitors that measure Australian workers' occupational exposure to radiation to ensure that the recommended dose limit is not exceeded.
Primary standard	Primary standards are instruments or artefacts that allow for the determination of a quantity with the highest possible accuracy. ARPANSA maintains four primary standards for the dosimetry of ionising radiation for Australia.
radiation	Electromagnetic waves or quanta, and atomic or sub-atomic particles, propagated through space or through a material medium.
radiofrequency	Part of the electromagnetic spectrum with frequencies in the range 3 khz to 300 ghz.
radiofrequency radiation	Electromagnetic energy in the radiofrequency range.
Talk to a Scientist	ARPANSA's phone and email service that allows members of the public to talk directly to ARPANSA scientists about questions or concerns relating to radiation exposure and protection and nuclear issues.

PGPA Reporting requirements

PGPA Rule Reference	Part of report	Description	Requirement	Page
17AD(g)	Letter of transmittal			
17AI	Letter of transmittal	A copy of the letter of transmittal signed and dated by accountable authority on date final text approved, with statement that the report has been prepared in accordance with section 46 of the Act and any enabling legislation that specifies additional requirements in relation to the annual report.	Mandatory	4
17AD(h)	Aids to access			
17AJ(a)	Table of contents	Table of contents.	Mandatory	1
17AJ(b)	Alphabetical index	Alphabetical index.	Mandatory	161
17AJ(c)	Glossary	Glossary of abbreviations and acronyms.	Mandatory	148
17AJ(d)	Reporting requirements	List of requirements.	Mandatory	153
17AJ(e)	Publication Details	Details of contact officer.	Mandatory	2
17AJ(f)	Publication Details	Entity's website address.	Mandatory	2
17AJ(g)	Publication Details	Electronic address of report.	Mandatory	2
17AD(a)	Review by accountable authority			
17AD(a)	CEO Foreword	A review by the accountable authority of the entity.	Mandatory	6
17AD(b)	Overview of the entity			
17AE(1)(a)(i)	Role of ARPANSA	A description of the role and functions of the entity.	Mandatory	10
17AE(1)(a)(ii)	Organisational structure	A description of the organisational structure of the entity.	Mandatory	11
17AE(1)(a)(iii)	Our outcome and programmes	A description of the outcomes and programmes administered by the entity.	Mandatory	9
17AE(1)(a)(iv)	Purposes	A description of the purposes of the entity as included in corporate plan.	Mandatory	9
17AE(1)(aa)(i)	Responsible ministers and portfolio	Name of the accountable authority or each member of the accountable authority.	Mandatory	10
17AE(1)(aa)(ii)	Responsible ministers and portfolio	Position of the accountable authority or each member of the accountable authority.	Mandatory	10

17AE(1)(aa)(iii)	Chief Executive Officer	Period as the accountable authority or member of the accountable authority within the reporting period.	Mandatory	10
17AE(1)(b)	N/A	An outline of the structure of the portfolio of the entity.	Portfolio departments – mandatory	N/A
17AE(2)	N/A	Where the outcomes and programs administered by the entity differ from any Portfolio Budget Statement, Portfolio Additional Estimates Statement or other portfolio estimates statement that was prepared for the entity for the period, include details of variation and reasons for change.	If applicable, Mandatory	N/A
17AD(c)	Report on the performance of the entity			15
Annual performance statements				
17AD(c)(i); 16F	Annual performance statement	Annual performance statement in accordance with paragraph 39(1)(b) of the Act and section 16F of the Rule.	Mandatory	15 - 44
17AD(c)(ii)	Report on financial performance			
17AF(1)(a)	Financial performance	A discussion and analysis of the entity's financial performance.	Mandatory	57
17AF(1)(b)	Annual resource statement	A table summarising the total resources and total payments of the entity.	Mandatory	60
17AF(2)	N/A	If there may be significant changes in the financial results during or after the previous or current reporting period, information on those changes, including: the cause of any operating loss of the entity; how the entity has responded to the loss and the actions that have been taken in relation to the loss; and any matter or circumstances that it can reasonably be anticipated will have a significant impact on the entity's future operation or financial results.	If applicable, Mandatory.	N/A
17AD(d)	Management and accountability			
Corporate governance				
17AG(2)(a)	Audit and fraud control	Information on compliance with section 10 (fraud systems).	Mandatory	68
17AG(2)(b)(i)	Letter of transmittal	A certification by accountable authority that fraud risk assessments and fraud control plans have been prepared.	Mandatory	4
17AG(2)(b)(ii)	Letter of transmittal	A certification by accountable authority that appropriate mechanisms for preventing,	Mandatory	4

		detecting incidents of, investigating or otherwise dealing with, and recording or reporting fraud that meet the specific needs of the entity are in place.		
17AG(2)(b)(iii)	Letter of transmittal	A certification by accountable authority that all reasonable measures have been taken to deal appropriately with fraud relating to the entity.	Mandatory	4
17AG(2)(c)	Corporate governance	An outline of structures and processes in place for the entity to implement principles and objectives of corporate governance.	Mandatory	62
17AG(2)(d) – (e)	N/A	A statement of significant issues reported to Minister under paragraph 19(1)(e) of the Act that relates to non-compliance with Finance law and action taken to remedy non-compliance.	If applicable, Mandatory	N/A
	Audit Committee			
17AG(2A) (a)	Audit and Risk Committee	A direct electronic address of the charter determining the functions of the entity's audit committee.	Mandatory	63
17AG(2A) (b)	Audit committee members	The name of each member of the entity's audit committee.	Mandatory	64
17AG(2A) (c)	Audit committee members	The qualifications, knowledge, skills or experience of each member of the entity's audit committee.	Mandatory	64
17AG(2A) (d)	Audit committee members	Information about the attendance of each member of the entity's audit committee at committee meetings.	Mandatory	64
17AG(2A) (e)	Audit committee members	The remuneration of each member of the entity's audit committee.	Mandatory	64
External Scrutiny				
17AG(3)	External Scrutiny	Information on the most significant developments in external scrutiny and the entity's response to the scrutiny.	Mandatory	70
17AG(3)(a)	N/A	Information on judicial decisions and decisions of administrative tribunals and by the Australian Information Commissioner that may have a significant effect on the operations of the entity.	If applicable, Mandatory	N/A
17AG(3)(b)	Reports by the Auditor-General, Parliamentary Committee, or the Commonwealth Ombudsman.	Information on any reports on operations of the entity by the Auditor-General (other than report under section 43 of the Act), a Parliamentary Committee, or the Commonwealth Ombudsman.	If applicable, Mandatory	N/A

17AG(3)(c)	N/A	Information on any capability reviews on the entity that were released during the period.	If applicable, Mandatory	N/A
Management of Human Resources				
17AG(4)(a)	Human resources	An assessment of the entity's effectiveness in managing and developing employees to achieve entity objectives.	Mandatory	74
17AG(4)(aa)	Workforce statistics	Statistics on the entity's employees on an ongoing and non-ongoing basis, including the following: (a) statistics on full-time employees; (b) statistics on part-time employees; (c) statistics on gender; (d) statistics on staff location.	Mandatory	140
17AG(4)(b)	Workforce statistics	Statistics on the entity's APS employees on an ongoing and non-ongoing basis; including the following: • Statistics on staffing classification level; • Statistics on full-time employees; • Statistics on part-time employees; • Statistics on gender; • Statistics on staff location; • Statistics on employees who identify as Indigenous.	Mandatory	140 -147
17AG(4)(c)	Employment arrangements	Information on any enterprise agreements, individual flexibility arrangements, Australian workplace agreements, common law contracts and determinations under subsection 24(1) of the *Public Service Act 1999.*	Mandatory	75
17AG(4)(c)(i)	Employee arrangements	Information on the number of SES and non-SES employees covered by agreements etc identified in paragraph 17AG(4)(c).	Mandatory	76
17AG(4)(c)(ii)	Salary ranges by classification	The salary ranges available for APS employees by classification level.	Mandatory	81
17AG(4)(c)(iii)	Non-salary benefits	A description of non-salary benefits provided to employees.	Mandatory	75
17AG(4)(d)(i)	N/A	Information on the number of employees at each classification level who received performance pay.	If applicable, Mandatory	N/A
17AG(4)(d)(ii)	N/A	Information on aggregate amounts of performance pay at each classification level.	If applicable, Mandatory	N/A

17AG(4)(d)(iii)	N/A	Information on the average amount of performance payment, and range of such payments, at each classification level.	If applicable, Mandatory	N/A
17AG(4)(d)(iv)	N/A	Information on aggregate amount of performance payments.	If applicable, Mandatory	N/A
Assets Management				
17AG(5)	N/A	An assessment of effectiveness of assets management where asset management is a significant part of the entity's activities.	If applicable, Mandatory	57
Purchasing				
17AG(6)	Purchasing	An assessment of entity performance against the *Commonwealth Procurement Rules*	Mandatory	58 – 59
Reportable consultancy contracts				
17AG(7)(a)	Consultants	A summary statement detailing the number of new contracts engaging consultants entered into during the period; the total actual expenditure on all new consultancy contracts entered into during the period (inclusive of GST); the number of ongoing consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting year on the ongoing consultancy contracts (inclusive of GST).	Mandatory	58
17AG(7)(b)	Consultants	A statement that: *'During [reporting period], [specified number] new reportable consultancy contracts were entered into involving total actual expenditure of $[specified million]. In addition, [specified number] ongoing reportable consultancy contracts were active during the period, involving total actual expenditure of $[specified million]'.*	Mandatory	58
17AG(7)(c)	Consultants	A summary of the policies and procedures for selecting and engaging consultants and the main categories of purposes for which consultants were selected and engaged.	Mandatory	59
17AG(7)(d)	Consultants	A statement that: *'Annual reports contain information about actual expenditure on reportable consultancy contracts. Information on the value of reportable consultancy contracts is available on the AusTender website.'*	Mandatory	59
Reportable non-consultancy contracts				

17AG(7A)(a)	Consultants	A summary statement detailing the number of new reportable non-consultancy contracts entered into during the period; the total actual expenditure on such contracts (inclusive of GST); the number of ongoing reportable non-consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting period on those ongoing contracts (inclusive of GST).	Mandatory	59
17AG(7A)(b)	Consultants	A statement that: *'Annual reports contain information about actual expenditure on reportable non-consultancy contracts. Information on the value of reportable non-consultancy contracts is available on the AusTender website.'*	Mandatory	59
17AD(daa)	**Additional information about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts**			
17AGA	Expenditure on reportable non-consultancy contracts	Additional information, in accordance with section 17AGA, about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts.	Mandatory	58 -59
Australian National Audit Office Access Clauses				
17AG(8)	N/A	If an entity entered into a contract with a value of more than $100 000 (inclusive of GST) and the contract did not provide the Auditor-General with access to the contractor's premises, the report must include the name of the contractor, purpose and value of the contract, and the reason why a clause allowing access was not included in the contract.	If applicable, Mandatory	N/A
Exempt contracts				
17AG(9)	N/A	If an entity entered into a contract or there is a standing offer with a value greater than $10 000 (inclusive of GST) which has been exempted from being published in AusTender because it would disclose exempt matters under the FOI Act, the annual report must include a statement that the contract or standing offer has been exempted, and the value of the contract or standing offer, to the extent that doing so does not disclose the exempt matters.	If applicable, Mandatory	N/A
Small business				

17AG(10)(a)	Procurement initiatives to support small business	A statement that: *'[Name of entity] supports small business participation in the Commonwealth Government procurement market. Small and Medium Enterprises (SME) and Small Enterprise participation statistics are available on the Department of Finance's website.'*	Mandatory	59
17AG(10)(b)	Procurement initiatives to support small business	An outline of the ways in which the procurement practices of the entity support small and medium enterprises.	Mandatory	59
17AG(10)(c)	Procurement initiatives to support small business	If the entity is considered by the Department administered by the Finance Minister as material in nature – a statement that: *'[Name of entity] recognises the importance of ensuring that small businesses are paid on time. The results of the Survey of Australian Government Payments to Small Business are available on the Treasury's website.'*	If applicable, Mandatory	N/A
Financial statements				
17AD(e)	Financial statements	Inclusion of the annual financial statements in accordance with subsection 43(4) of the Act.	Mandatory	85
17AD(da)	Executive remuneration	Information about executive remuneration in accordance with Subdivision C of Division 3A of Part 2-3 of the Rule.	Mandatory	77
17AD(f) **Other mandatory information**				
17AH(1)(a)(i)	N/A	If the entity conducted advertising campaigns, a statement that: *'During [reporting period], the [name of entity] conducted the following advertising campaigns: [name of advertising campaigns undertaken]. Further information on those advertising campaigns is available at [address of entity's website] and in the reports on Australian Government advertising prepared by the Department of Finance. Those reports are available on the Department of Finance's website.'*	If applicable, Mandatory	N/A
17AH(1)(a)(ii)	Advertising and marketing research	If the entity did not conduct advertising campaigns, a statement to that effect.	If applicable, Mandatory	59

17AH(1)(b)	N/A	A statement that: *'Information on grants awarded by [name of entity] during [reporting period] is available at [address of entity's website].'*	If applicable, Mandatory	N/A
17AH(1)(c)	Disability reporting mechanisms	Outline of mechanisms of disability reporting, including reference to website for further information.	Mandatory	79
17AH(1)(d)	Freedom of information	Website reference to where the entity's Information Publication Scheme statement pursuant to Part II of FOI Act can be found.	Mandatory	71
17AH(1)(e)	N/A	Correction of material errors in previous annual report.	If applicable, mandatory	N/A
17AH(2)	Environmental performance Work health and safety	Information required by other legislation.	Mandatory	72 69

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