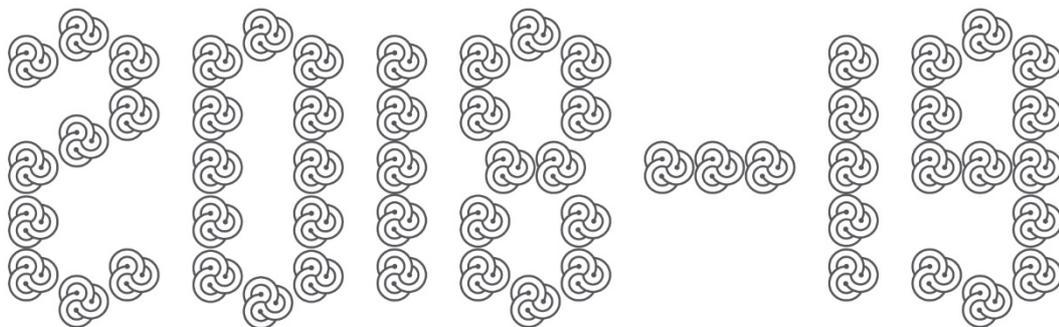


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## Acknowledgement of Country

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.



# Contents

Reader's guide .....	vi
Letter of transmittal .....	vii
ARPANSA snapshot.....	viii
<b>Part 1: CEO foreword.....</b>	<b>1</b>
<b>Part 2: Agency overview .....</b>	<b>3</b>
ARPANSA at a glance .....	3
Role of ARPANSA.....	4
What we deliver .....	5
Organisational structure .....	6
Organisational chart.....	8
<b>Part 3: Report on performance.....</b>	<b>9</b>
Annual performance statement.....	9
Financial performance .....	26
Case study 1: Integrated Regulatory Review Service mission to Australia.....	30
Case study 2: ARPANSA's new linear accelerator .....	31
Case study 3: mobile phone use and brain cancer study.....	32
Case study 4: stereotactic ablative radiation therapy project.....	33
<b>Part 4: Management and accountability.....</b>	<b>34</b>
Accountability.....	41
Human resources .....	42
Performance and rewards.....	46
Staffing statistics .....	47
<b>Part 5: Financial statements .....</b>	<b>50</b>
Statement by the Accountable Authority and Chief Financial Officer.....	53
Statement of comprehensive income .....	54
Statement of financial position .....	56
Statement of changes in equity .....	58
Cash flow statement.....	61
Overview .....	63
Notes to and forming part of the financial statements.....	65
<b>Part 6: Appendices .....</b>	<b>86</b>
Appendix 1: ARPANSA licensing activities.....	86
Appendix 2: Operations of the Radiation Health and Safety Advisory Council and Committees .....	91
Appendix 3: Reporting requirements.....	97
<b>Part 7: Index .....</b>	<b>104</b>
Abbreviations.....	104
Glossary .....	106
Reporting requirements.....	109
Index .....	115

## Reader's guide

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Annual Report 2018–19 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 2019. This year's annual report has been prepared to inform Parliament about ARPANSA's performance and activities in 2018–19.

The report is available online at [arpansa.gov.au/annual-reports](http://arpansa.gov.au/annual-reports).

The report is divided into seven parts:

### **PART 1: CEO foreword**

CEO Carl-Magnus Larsson'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 staffing statistics. 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* annual report requirements including details of advisory bodies.

### **PART 7: Index**

Comprises of an abbreviations list, glossary, list of requirements and alphabetical index.



Australian Government  
 Australian Radiation Protection  
 and Nuclear Safety Agency



17 September 2019

Senator the Hon Richard Colbeck  
 Minister for Aged Care and Senior Australians  
 Minister for Youth and Sport  
 Senate Parliament House  
 CANBERRA ACT 2600

**Re: 2018-19 Annual Report of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)**

Dear Minister Colbeck

I am pleased to present to you the 2018-19 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, ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Nuclear Safety Committee (NSC), and the Radiation Health Committee
- 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, and
- 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 prepared fraud risk assessments and 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

Carl-Magnus Larsson  
 CEO of ARPANSA

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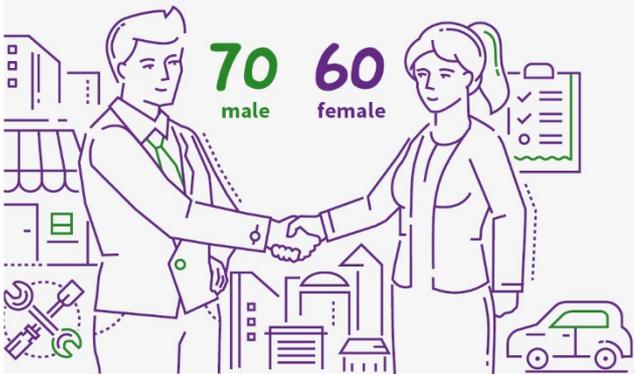


**33**  
facility  
licences

**58**  
source  
licences

**42**  
regulatory  
inspections  
conducted

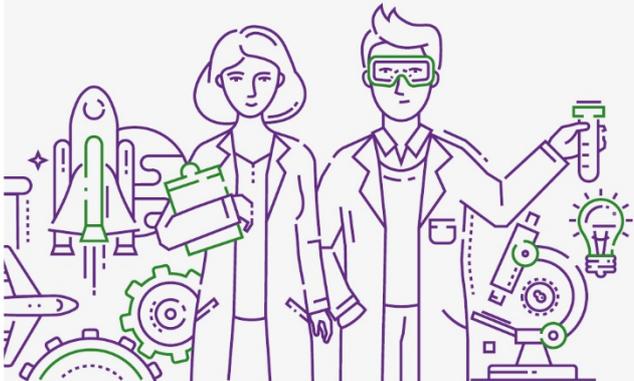
## Our workforce



**70** male  
**60** female



## Talk to a Scientist program



**496**  
emails

**583**  
telephone  
calls

## By the numbers



**2.3m**  
ultraviolet  
radiation swing  
tags issued



**683**  
radiofrequency  
calibration test  
reports



**46 000+**  
workers in the  
ANRDR<sup>1</sup>



**116**  
ACDS<sup>2</sup> audits  
conducted

<sup>1</sup> Australian National Radiation Dose Register

<sup>2</sup> Australian Clinical Dosimetry Service

# PART 1: CEO FOREWORD



I am pleased to present to you the 2018–19 Annual Report of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

During this reporting period ARPANSA celebrated 20 years of excellence. In 1998 the Australian Radiation Laboratory and the Nuclear Safety Bureau were integrated and today's ARPANSA, with expanded and national responsibilities, was born. ARPANSA was established as the radiation protection and nuclear safety regulator for Commonwealth entities using radiation, and a national resource of expertise in radiation protection and nuclear safety.

Today, although only 20 years old, ARPANSA builds on the successes of its predecessors from the previous 90 years. ARPANSA plays many roles nationally and internationally and contributes to ensuring that people in Australia and our environment stay healthy and safe. This report demonstrates how ARPANSA continues to deliver high quality services and advice to the Australian Government and community on radiation protection and nuclear safety. Our services include holding the Australian primary standard for absorbed dose, monitoring solar ultraviolet radiation in real time, auditing radiotherapy equipment used in cancer treatment, and offering radiation monitoring services to Australians who work with radiation. We regulate radiation facilities and nuclear installations operated by the Commonwealth, maintain a national register of radiation doses for well over 40 000 workers, and we evaluate and report on radiation incidents through the national incident register, which we maintain on behalf of all Australian jurisdictions.

During the year, ARPANSA installed a new, state-of-the-art medical linear accelerator (linac). This will ensure that ARPANSA is well placed to respond to changes in the medical oncology environment, and continue to develop and deliver clinically relevant dose calibration and audit services, benefiting the more than 60 000 cancer patients who undergo radiation therapy using linacs in Australia every year.

In November 2018, ARPANSA received an international team of experts to perform a peer review of Australia's regulatory framework for nuclear and radiation safety, known as an Integrated Regulatory Review Service (IRRS) Mission. The IRRS was a culmination of many years of work by the Commonwealth and state and territory governments to benchmark ourselves against international best practice. The review covered a wide range of areas including regulation of waste facilities, transport of radioactive materials, occupational radiation protection, nuclear safety, emergency preparedness and response, and medical radiation. The IRRS gave us an opportunity to see what we do well and understand opportunities for improvement, ensuring that Australia remains at the international forefront in this complex area of regulation. The Mission report, delivered in February 2019, included four points of good practice, and 23 recommendations and 12 suggestions for improvement for ARPANSA, Australian governments, and jurisdictional regulators.

On 24 May 2019, I authorised the Australian Nuclear Science and Technology Organisation (ANSTO) to produce molybdenum-99 (Mo-99) for the domestic and international nuclear medicine markets in the new ANSTO Nuclear Medicine (ANM) Facility. This authorisation came after ANSTO had, over a period of a year, implemented safety-related measures requested by ARPANSA as a condition for transitioning from commissioning to routine operations. Despite this, an overexposure of two workers took place in the new facility in June 2019. As a consequence, I have until further notice capped production at the facility at a level that can sustain the Australian demand only in order to free up resources for safety-related work at the facility.

We undertake significant international engagement, including with international organisations that carry out risk assessments and set standards. This year, ARPANSA continued to drive and influence international safety standards in radiation protection and nuclear safety. In October 2018, I was elected vice-president of the Convention on Nuclear Safety (CNS) and ARPANSA compiled the Australian National Report to the Eighth Review Meeting of the CNS, to be held in 2020. Another significant appointment was that of Dr Gillian Hirth, Deputy CEO of ARPANSA and Chief Radiation Health Scientist, as Chair of the United Nations Scientific Committee on the Effects of Atomic Radiation. During the final quarter, ARPANSA was also awarded a contract by the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) to operate stations located in Fiji and Kiribati for monitoring radioactivity in the Earth's atmosphere. These stations form part of the International Monitoring System for detection of clandestine nuclear weapons testing and have now been added to the stations already operated by ARPANSA in seven locations in mainland Australia, Macquarie Island, Cocos Islands and Antarctica.

Toward the end of the reporting period, ARPANSA experienced an increased volume of enquiries about the new generation of the mobile phone network known as 5G. Mobile phone networks and other wireless telecommunications sources emit low-level radiofrequency (RF) electromagnetic energy (EME) and some members of the public are concerned this might have adverse health effects. ARPANSA sets the safety limits for exposure to RF EME. ARPANSA's assessment of existing scientific evidence is that there are no established health effects from exposures below these limits. Considerable ARPANSA resources have been devoted to providing information on the science of RF EME, addressing misinformation, and responding to the high level of interest in 5G mobile telecommunications.

As we move in to 2019–2020, we will work with the Australian Government to ensure that the public has access to independent and trusted advice in the area of 5G. We will continue our collaboration with Commonwealth and state and territory governments to address the recommendations and suggestions outlined in the IRRS report.

We also look forward to co-hosting the International Commission on Radiation Protection's (ICRP) 5th International Symposium in Adelaide, November 2019. The ICRP is an independent, international organisation that advances the science of radiological protection for the public benefit. We will continue to develop and enhance our systems, capabilities and assets to sustain and improve our services, and leverage our scientific and stakeholder networks to deliver radiation protection and nuclear safety to the Australian community. I also anticipate safety of nuclear medicine production at ANSTO to be a major focus of ARPANSA's regulatory work in the 2019–2020 financial year.

Finally, during this reporting period I was honoured and humbled to be reappointed by the government as the CEO of ARPANSA for a term of three years, commencing 22 March 2019. I look forward to continuing to ensure Australians are protected from the harmful effects of radiation—by maintaining the delivery of our high quality services, providing Australians with health advice and independently regulating Commonwealth entities that use or produce radiation. I am convinced ARPANSA's dedicated and highly capable staff will continue to demonstrate that ARPANSA is Australia's leading authority on radiation protection and nuclear safety.

**Carl-Magnus Larsson**  
**CEO of ARPANSA**

# PART 2: AGENCY OVERVIEW

## ARPANSA at a glance

### Our vision

A safe radiation environment for the Australian community.

### Our purpose

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. Our purpose is to protect the Australian people and the environment from the harmful effects of radiation, through understanding risks, best practice regulation, research, policy, services, partnerships and engaging with the community.

### Authority

Established by the *Australian Radiation Protection and Nuclear Safety Act 1998* (ARPANS Act), ARPANSA commenced operations on 5 February 1999. ARPANSA replaced the Nuclear Safety Bureau and Australian Radiation Laboratory.

### Responsible ministers and portfolio

ARPANSA sits within the Department of Health portfolio. The CEO, Dr Carl-Magnus Larsson, is the accountable authority of ARPANSA.

As at 30 June 2019, Dr Larsson reported to the Minister for Aged Care and Senior Australians, and Minister for Youth and Sport.

### Our outcome

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

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

### Our staff

As at 30 June 2019, ARPANSA had 119 ongoing staff, 11 non-ongoing staff and one statutory appointment.

### Location

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

## Role of ARPANSA

ARPANSA, on behalf of the Australian Government, aims to protect the Australian people and environment from the harmful effects of radiation.

The ARPANSA program of work entails six key strategic objectives that guide our priorities and contribute to delivering radiation protection and nuclear safety outcomes to the Australian community:

1. Protect the public, workers and the environment from the harmful effects of radiation
2. Promote radiological and nuclear safety and security, and emergency preparedness
3. Promote the safe and effective use of ionising radiation in medicine
4. Ensure risk-informed and effective regulation
5. Enhance engagement with community, industry and government
6. Enhance organisational innovation, capability and resilience.

## What we deliver

ARPANSA is the Australian Government's primary authority on radiation protection and nuclear safety.

We are an:

### Independent regulator

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:

- deliver regulatory services
- administer and maintain the Australian Radiation Incident Register
- assess and issue import and export permits and licensing
- provide approval and advice on the transport of radioactive material
- promote national uniformity in radiation protection policies and practices
- work to achieve the security of radioactive material.

### Health advisor

We build and maintain expertise in the measurement of radiation and assessment of health impacts, including the assessment of risk and response to radiation incidents. We provide high-quality advice to the government and the community. We:

- provide radiation health advice
- deliver the Talk to a Scientist program
- provide advice on emergency preparedness and response in the event of a radiological emergency
- administer and maintain an ultraviolet radiation monitoring network
- maintain and monitor seven Australian stations according to the Comprehensive Nuclear-Test-Ban Treaty
- administer the Australian primary standard for absorbed dose.

### Service provider

We offer high-quality services for the purpose of protection against the harmful effects of radiation. These include:

- ultraviolet radiation services
- radioanalytical services
- the Radiofrequency Calibration Service
- the Australian Clinical Dosimetry Service
- the National Diagnostic Reference Level Service
- the Personal Radiation Monitoring Service.

We also administer and maintain the Australian National Radiation Dose Register, and operate one of only four radon chambers in Australia.

## Organisational structure

### Chief Executive Officer

Dr Carl-Magnus Larsson has held the position of Chief Executive Officer (CEO) since 2010. On 24 February 2019, the Governor-General re-appointed Dr Larsson as CEO for a term of three years, commencing on 22 March 2019.

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 in relation to radiation protection, nuclear safety and medical exposures to radiation
- providing services relating 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, which is comprised of three branch heads, three office heads and the Chief Financial Officer. 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 Executive Group form the leadership team responsible for the day-to-day management of ARPANSA.

During 2018–19, the role of Head of Corporate Office and Chief Financial Officer was split into two separate roles following the departure of Mr George Savvides. Ms Kathryn Green was appointed acting Head of Corporate Office on 22 October 2018. Mr Niraj Pau was appointed Chief Financial Officer on 17 December 2018.

### ARPANSA business groups

ARPANSA has six business groups that deliver components of the agency's strategies and services. Figure 1 shows ARPANSA's organisational structure at 30 June 2019.

#### Office of the CEO

The Office of the CEO (OCEO) facilitates, coordinates and supports the activities of the CEO. The OCEO comprises two sections: Communications, and Government and International Relations. The office leads collaboration and communication with the public and government, coordinates international engagement and provides advice to the agency and government on emerging and strategic issues.

#### Corporate Office

The Corporate Office comprises four sections: Finance, People and Culture, Digital Technology, and Performance and Governance. The office develops, builds and maintains the internal systems essential for the provision of an effective public service that meets the needs and expectations of the community. The office supports a competent and motivated workforce, and provides effective governance arrangements, agile systems and reliable infrastructure.

## Office of the General Counsel

The Office of the General Counsel provides legal advice and strategic support to the agency with regard to all aspects of the agency's operations and assists the CEO to achieve his statutory mandate. The Office of the General Counsel also provides legal advice and support to all ARPANSA staff to assist them in performing their functions and to ensure that in doing so they are compliant with relevant government policy and legislation.

## Radiation Health Services Branch

The Radiation Health Services Branch comprises three sections: Monitoring and Emergency Response, Assessment and Advice, and Radiation Protection Services. The branch conducts hazard identification and exposure analysis of ionising and non-ionising radiation sources, evaluates the health risk to the public, workers and the environment and mitigates health and environmental risks through provision of advice, assessments and services.

Its services operate on a fee-for-service basis including the Personal Radiation Monitoring Service, the ultraviolet radiation services and the radiofrequency electromagnetic radiation calibration service. The branch undertakes a number of national initiatives including our ultraviolet radiation monitoring network, the Australian National Radiation Dose Register and the radiation monitoring network established under the terms of the Comprehensive Nuclear-Test-Ban Treaty. Emergency preparedness and response systems for field, network and laboratory measurements, and information management and decision support systems are maintained and aligned with national planning.

## Medical Radiation Services Branch

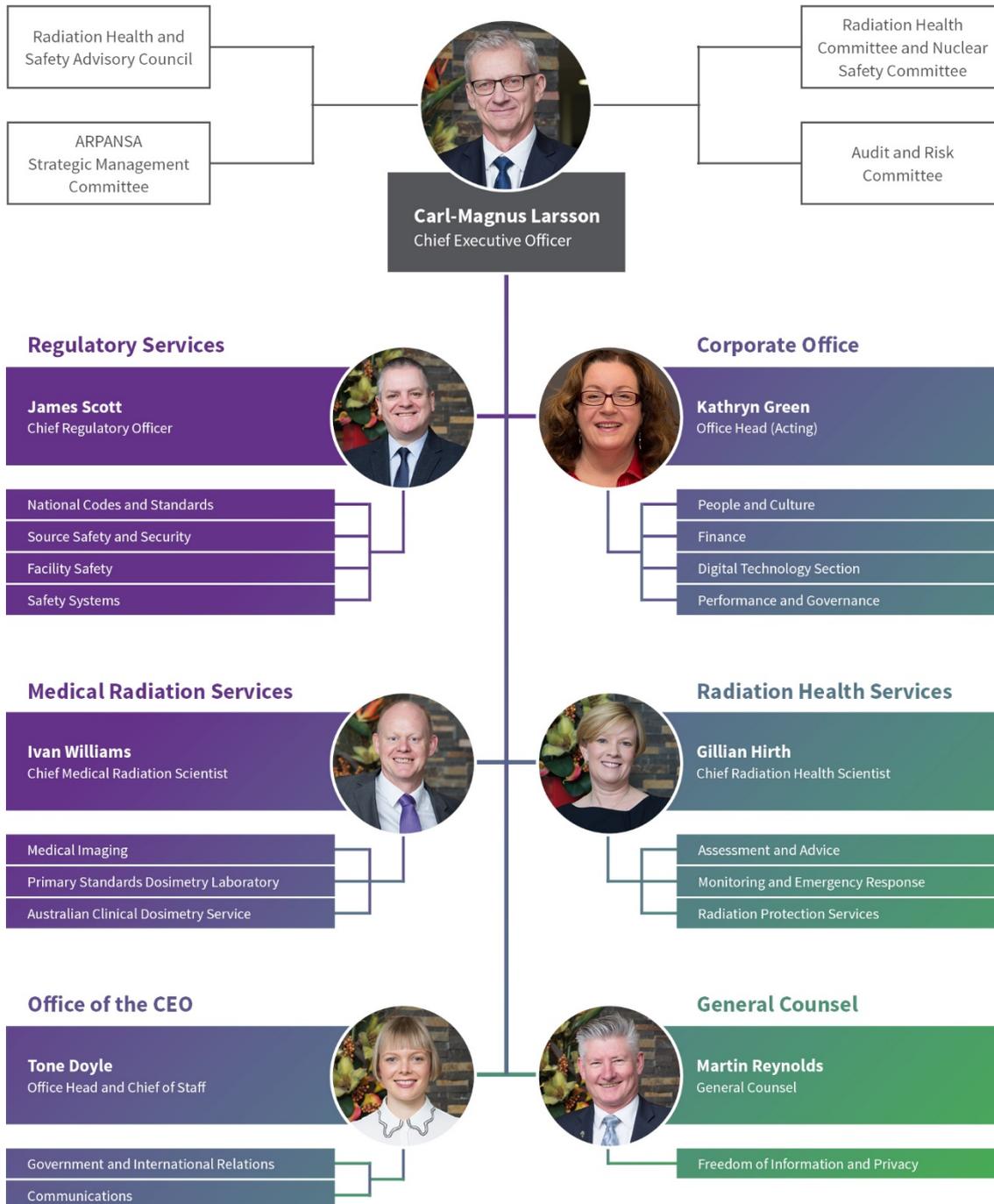
The Medical Radiation Services Branch provides safety and quality advice on the use of radiation in medicine to all Australians. The branch has three sections: Medical Imaging, Primary Standards Dosimetry Laboratory, and the Australian Clinical Dosimetry Service. The Medical Imaging section is responsible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

## Regulatory Services Branch

Regulatory Services Branch has main carriage of regulation of the safety and security of Commonwealth radiation sources and facilities.

The Branch has four sections: Facility Safety, Source Safety and Security, Safety Systems, and National Codes and Standards. The Branch is ARPANSA's principal driver for promoting a uniform regulatory framework across all jurisdictions. The costs for direct regulatory activities are recovered from annual licence charges and application fees.

# Organisational chart

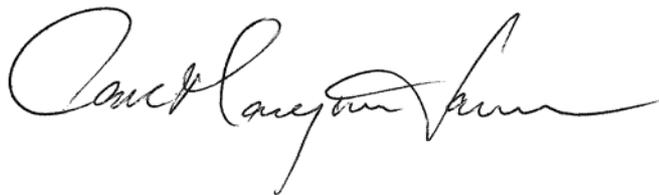


# PART 3: REPORT ON PERFORMANCE

## Annual performance statement

### Introductory statement

I, as the accountable authority of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), present the 2018–19 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.



Carl-Magnus Larsson

Accountable Authority

11 September 2019

## Purpose

ARPANSA's vision and purpose are supported by a commitment to achieving six strategic objectives. ARPANSA's vision, purpose and strategic objectives can be found in ARPANSA at a glance.

## Overarching analysis of performance against ARPANSA's purpose

ARPANSA's *Corporate Plan 2018–22* provides the underlying framework for this annual performance statement. The corporate plan brings together the measures and projects that support the achievement of ARPANSA's purpose and strategic objectives.

Over the course of the 2018–19 reporting period, ARPANSA achieved or partially achieved 30 measures and completed two projects. We made many steps forward to contribute to delivering enhanced radiation protection and nuclear safety outcomes to the Australian community and environment. Highlights include:

- publishing a range of codes and guides to ensure the adoption of international best practice
- accepting and commissioning a new linear accelerator to ensure continued dosimetric certainty for patients undergoing advanced radiation therapies
- receiving the Integrated Regulatory Review Service (IRRS) mission in November 2018, which reviewed the regulatory framework for radiation protection and nuclear safety of the Commonwealth of Australia and corresponding arrangements in states and territories
- visiting Kimba, Quorn and Hawker in South Australia for engagement activities with local community members and government as part of stakeholder engagement work for the proposed National Radioactive Waste Management Facility
- implementing the recommendations from the internal review into ARPANSA's sustainability and funding environment to maintain our financial position for the purposes of continuously improving delivery against statutory obligations.

## Summary of results

A summary snapshot of ARPANSA's non-financial performance results against performance measures and initiatives are provided in the table below. Detailed performance measures, results and analysis of performance are presented on the following pages of this annual performance statement.

No.	Measure	Result	Page
1.1	Percentage of time that UV monitoring network data is available to the public	Target achieved or exceeded	13
1.2	Monitor radiation doses to occupationally exposed workers	Target achieved or exceeded	13
1.3	Number of jurisdictional regulators committed to the mandatory submission of dose records to the Australian National Radiation Dose Register (ANRDR) by their licensees	Target achieved or exceeded	13
1.4	Publish radiation risk management report	Target partially achieved	13
1.5	Publish national radon action plan	Target partially achieved	13
1.6	ANRDR redevelopment	Target achieved or exceeded	13
2.1	ARPANSA is prepared for a radiological or nuclear incident or emergency	Target achieved or exceeded	15
2.2	Data availability of ARPANSA-operated CTBTO International Monitoring System radionuclide stations <sup>1</sup>	Target achieved or exceeded	15
2.3	CTBTO International Monitoring System upgrades	Target achieved or exceeded	15
2.4	ARGOS server upgrade <sup>2</sup>	Target partially achieved	15
2.5	Publication of the <i>Emergency Exposure Guide</i>	Project complete	15
3.1	Number of Diagnostic Reference Level surveys per annual survey period	Target achieved or exceeded	17
3.2	Percentage of Australian radiotherapy providers subscribing to the national dosimetric auditing program provided by the Australian Clinical Dosimetry Service	Target achieved or exceeded	17
3.3	Number of hospital radiotherapy local dosimetry standards calibrated by ARPANSA against the national primary standard	Target achieved or exceeded	17
3.4	New linear accelerator	Project complete	17
3.5	Publication of medical code	Target partially achieved	17
4.1	Percentage of inspections conducted in accordance with established inspection schedule	Target partially achieved	19
4.2	Regulator Performance Framework (RPF) annual self-assessment	Target achieved or exceeded	19

No.	Measure	Result	Page
4.3	Monitor doses to radiation workers at licensed Commonwealth facilities and influence doses in a downward manner	Target achieved or exceeded	19
4.4	Integrated Regulatory Review Service (IRRS) Mission	Target partially achieved	19
4.5	National uniformity program	Target partially achieved	19
5.1	Compliance with international agreements and treaties	Target achieved or exceeded	21
5.2	Facilitate stakeholder engagement in decision-making processes for major licence applications such as arranging public forums and community consultation meetings	Target achieved or exceeded	21
5.3	National Radioactive Waste Management Facility (NRWMF) stakeholder engagement	Target partially achieved	21
6.1	Employee engagement score achieved in annual APS employee census	Target achieved or exceeded	23
6.2	Number of ARPANSA breaches identified in radiation safety and security compliance assessments	Target partially achieved	23
6.3	Workforce Plan	Target partially achieved	23
6.4	Integrated Management System	Target achieved or exceeded	23
6.5	Digital Strategy	Target partially achieved	23
6.6	Research and innovation strategy	Target achieved or exceeded	24
6.7	Sustainability and funding review	Target partially achieved	24
6.8	Energy efficiency initiatives	Target partially achieved	24

1. The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) monitors for nuclear explosions on the Earth's surface, in the atmosphere, underwater and underground through a network of waveform stations (seismic, hydroacoustic and infrasound) and radionuclide (particulate and noble gas) stations that form part of the CTBTO international monitoring system. ARPANSA operates seven particulate radionuclide and two noble gas stations that are part of the CTBTO international monitoring system.
2. ARGOS is the primary modelling tool used within ARPANSA for response to radiological incidents. It was extensively used during the Fukushima emergency response and is used in an ongoing capacity during events such as nuclear warship visits.

## 1. Protect the public, workers and the environment from the harmful effects of radiation

No.	Measure	Target or estimated completion	Source	Annual result
1.1	Percentage of time that UV monitoring network data is available to the public	>95%	Portfolio Budget Statements (PBS) 2018–19, page 242. ARPANSA Corporate Plan 2018–22, page 13	Target achieved or exceeded, on track
1.2	Monitor radiation doses to occupationally exposed workers	Annual reporting of trend in radiation doses received by workers, determined from quantitative dose measurement, provides evidence of optimisation of radiation protection	PBS 2018–19, page 242 ARPANSA Corporate Plan 2018–22, page 13	Target achieved or exceeded, on track
1.3	Number of jurisdictional regulators committed to the mandatory submission of dose records to the Australian National Radiation Dose Register (ANRDR) by their licensees	1	ARPANSA Corporate Plan 2018–22, page 13	Target achieved or exceeded, on track
1.4	Radiation risk management	Publish a report outlining ARPANSA's philosophy and approach to the assessment, characterisation and treatment of radiation risk to the public, patients, workers and the environment. <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 13	Target partially achieved Significant progress has been made on this project, however, due to resource constraints it is currently on hold. This project remains a priority for ARPANSA going forward.
1.5	National radon action plan	The national radon action plan developed and implemented, outlining the framework for hazard identification and risk mitigation to reduce radon-induced lung cancer in Australia. <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 13	Target partially achieved Draft action plan has been completed. This measure has been carried over to the new reporting period.
1.6	ANRDR redevelopment	Redevelopment of ANRDR to upgrade and improve the functionality of the existing worker portal. <b>June 2020</b>	ARPANSA Corporate Plan 2018–22, page 13	Target achieved or exceeded, on track

## Analysis of performance against purpose and program objectives

In 2018–19, ARPANSA continued to provide advice, specialised resources, and services to support the protection of the public, workers and the environment from the harmful effects of ionising and non-ionising radiation.

ARPANSA achieved this by:

- publishing the *Australian National Radiation Dose Register (ANRDR) in Review*, the annual report of the ANRDR in July 2018. The ANRDR holds dose records for approximately 44 000 radiation workers. This currently includes full coverage of workers from all state and territory-licensed uranium mining and milling operations, and partial coverage of workers from Commonwealth licence holders, state and territory regulatory bodies, and the mineral sands mining and processing industry. The ultimate goal is for the ANRDR to cover all occupationally exposed workers in Australia
- publishing the *Code for Disposal of Radioactive Waste by the User (RPS C-6)* in September 2018. This code sets out the levels for disposal to landfill, and discharge to sewer and the atmosphere below which no authorisation is required from the relevant regulatory authority. The code was approved by the Radiation Health Committee prior to publication
- publishing the *Code for Disposal Facilities for Solid Radioactive Waste (RPS C-3)* in October 2018. This code describes the objectives for protection of human health and of the environment, drawing upon international best practice in relation to radiation protection and radioactive waste safety. An applicant is required to demonstrate through a safety case that the proposed disposal facility will achieve the level of protection anticipated by this Code. A 'safety case' draws upon the organisational and technical arrangements put in place, the nature of the waste to be accepted, the characteristics of the site, the design of the facility including engineered barriers, and the arrangements for its construction, operation, closure and post-closure stages
- publishing the *Analysis of Electromagnetic Radiation (EMR) Health Complaints Register Data 2017–2018* in July 2018. This register, first published in 2003, collects reports of health concerns related to possible electromagnetic radiation field exposures in the range of 0–300 GHz. Members of the public who believe they have suffered ill-effects as a result of exposure to electromagnetic radiation can lodge a written complaint to the register
- uploading historical ultraviolet radiation (UVR) index data covering the period 2007 to 2016 onto the [data.gov.au](http://data.gov.au) website in October 2018. ARPANSA measures solar UVR at 12 sites around Australia and four sites in the Australian Antarctic territories. The UVR index data generated by the network is used to raise awareness in Australia of the levels of UVR exposure in conjunction with messaging on the health risks associated with excessive sun exposure
- publishing the *Code of Radiation Protection Requirements for Industrial Radiography (RPS C-4)* in October 2018. Industrial radiography is widely carried out across Australia, involving many practitioners who work in more than one jurisdiction. This code sets the specific radiation protection requirements in Australia for the protection of occupationally exposed persons and the public in planned exposure situations involving industrial radiography
- determining a population weighted dose to the Australian public due to cosmic radiation, both ground-level exposure and exposure due to air travel. This will inform evidence-based advice produced by ARPANSA
- revising the *Code of the Safe Transport of Radioactive Material (RPS C-2, Rev 1)* in March 2019. The objective of the code is to uniform requirements for the transport of radioactive material in Australia by road, rail and those waterways not covered by maritime legislation.

## 2. Promote radiological and nuclear safety and security, and emergency preparedness

No.	Measure	Target or estimated completion	Source	Annual result
2.1	ARPANSA is prepared for a radiological or nuclear incident or emergency	Emergency preparedness and response systems for field, network and laboratory measurements, and information management and decision support systems are available, calibrated, tested and aligned with national planning.	PBS 2018–19, page 242 ARPANSA Corporate Plan 2018–22, page 15	Target achieved or exceeded, on track
2.2	Data availability of ARPANSA-operated CTBTO International Monitoring System radionuclide stations	>95%	ARPANSA Corporate Plan 2018–22, page 15	Target achieved or exceeded, on track
2.3	CTBTO International Monitoring System upgrades	Deliver, in cooperation with the CTBTO, upgrades to the Macquarie Island and Darwin radionuclide monitoring station. <b>June 2021</b>	ARPANSA Corporate Plan 2018–22, page 15	Target achieved or exceeded, on track
2.4	ARGOS server upgrade	ARGOS server upgrades will increase ARPANSA's capacity to respond during a nuclear or radiological incident. <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 15	Target partially achieved Project has been delayed due to issues with procurement and implementation. It is anticipated that this project will be completed in August 2019.
2.5	Emergency exposure guide	Emergency exposure guide published and implementation strategy developed. <b>November 2018</b>	ARPANSA Corporate Plan 2018–22, page 15	Project complete

## Analysis of performance against purpose and program objectives

ARPANSA's commitment to test the adequacy of emergency preparedness arrangements and capability by participating in exercises both internally and with other agencies has remained strong in the 2018–19 reporting period.

This was demonstrated through participation in a number of exercises and proficiency tests, including:

- International Atomic Energy Agency (IAEA) emergency preparedness convention exercises from 16–18 October 2018 and again on 12 June 2019. Exercises are held to test the operational arrangements of the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency
- the emergency exercise 'Hail Caesium' which was jointly held with the Department of Health on 25 October 2018, with participation from the Department of Home Affairs, Department of Foreign Affairs and Trade, Australian Maritime and Safety Authority, Department of Defence and others. Arrangements were tested for various emergency scenarios involving radiological accidents.

The Australian Comprehensive Nuclear-Test-Ban Treaty (CTBT) radionuclide laboratory was in service for the entire reporting period, and 26 atmospheric monitoring samples were received from overseas monitoring stations and independently analysed. Analysis verified the measurements obtained from those stations, and adds to the credibility of the international monitoring system. Other ARPANSA activities that promoted radiological and nuclear safety and security, and emergency preparedness included:

- operating and maintaining the Australian CTBT radionuclide laboratory in Melbourne and seven radionuclide air particulate monitoring stations that are part of the CTBTO International Monitoring System. Australia's stations are located in Melbourne, Perth, Townsville, Darwin, the Cocos Islands, Macquarie Island, and Mawson Base (Antarctica). Two noble gas monitoring facilities are co-located with the air particulate monitoring stations in Melbourne and Darwin. During the reporting period, ARPANSA provided data to the CTBTO more than 95% of the time. Such a high level of data availability means that Australia is providing a highly reliable component of the verification regime. During the final quarter ARPANSA was also awarded a contract by the CTBTO to take over the operation of two additional particulate monitoring stations, RN26 at Nadi, Fiji and RN39 at Kiritimati, Kiribati. This followed an internationally competitive open-tender process conducted by the CTBTO. The operation of these stations will transition from the current operators to ARPANSA early in the 2019–2020 financial year
- attending a multi-agency chemical, biological, radiological, nuclear and high-yield explosives (CBRNe) responder education workshop on 17 April 2019. This was coordinated by Victoria Police and the Metropolitan Fire Brigade aimed to define individual agency CBRNe responder standards to operate in a potentially contaminated environment. The workshop was attended by the Country Fire Authority, Department of Health and Human Services Victoria, Ambulance Victoria, ARPANSA and the Australian Defence Forces
- jointly hosting the radiological assessors regional training course with the IAEA and the United States of America Department of Energy in Melbourne on 20–24 August 2018. The course content included field monitoring and assessment techniques for use during a nuclear or radiological emergency. Twenty participants from nine countries in the Australasian region included representatives from Cambodia, Indonesia, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, and Vietnam. There were also participants from all Australian jurisdictions
- publishing the *Guide for Radiation Protection in Emergency Exposure Situations* (RPS G-3) in May 2019. This guide describes the actions needed to reduce any adverse health effects to both members of the public and workers in emergency exposure situations.

### 3. Promote the safe and effective use of ionising radiation in medicine

No.	Measure	Target or estimated completion	Source	Annual result
3.1	Number of Diagnostic Reference Level surveys per annual survey period.	1400	PBS 2018–19, page 243 ARPANSA Corporate Plan 2018–22, page 17	Target achieved or exceeded, on track
3.2	Percentage of Australian radiotherapy providers subscribing to the national dosimetric auditing program provided by the Australian Clinical Dosimetry Service.	80%	PBS 2018–19, page 243 ARPANSA Corporate Plan 2018–22, page 17	Target achieved or exceeded, on track
3.3	Number of hospital radiotherapy local dosimetry standards calibrated by ARPANSA against the national primary standard.	15	PBS 2018–19, page 243 ARPANSA Corporate Plan 2018–22, page 17	Target achieved or exceeded, on track
3.4	New linear accelerator	Acceptance and commissioning of the newly installed linear accelerator. This will ensure that ARPANSA and Australia have the tools required to continue to ensure the safe delivery of radiation therapy to the Australian population.  <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 17	Project complete (See Case study 2: ARPANSA's new linear accelerator)
3.5	Medical code	Publication of a national uniform medical code for acceptance by the Radiation Health Committee (RHC).  <b>December 2018</b>	ARPANSA Corporate Plan 2018–22, page 17	Target partially achieved  The medical code was endorsed by the RHC in March. The code was in the final production stage in June 2019.

## Analysis of performance against purpose and program objectives

In 2018–19, ARPANSA promoted the safe and effective use of ionising radiation in medicine. The main work programs, diagnostic reference level (DRL) surveys, dosimetry auditing by the Australian Clinical Dosimetry Service (ACDS) and the maintenance and dissemination of the primary standard for ionising radiation are all designed to proactively mitigate patient risk.

All programs have been developed with and operate successfully through ongoing interaction and engagement with the medical professionals and clinical staff who perform and supervise the treatment and imaging procedures. ARPANSA promoted the safe and effective use of ionising radiation in medicine by:

- completing 3853 DRL surveys, an increase of 40% from 2017–18 and exceeding the 2018–19 target by a considerable margin. The high number of surveys submitted is an indicator of a strong engagement with the DRL program for computed tomography (CT). We estimate that at least one in every three computed tomography scanners across Australia contributed data for this program. As a result our data are likely to be a good representation of practice across the country, ensuring that published DRLs appropriately reflect current practice
- servicing 100% of Australian radiotherapy providers under the ACDS national dosimetric auditing program. The ACDS is a national independent dosimetry auditing program, providing quality assurance for radiation oncology facilities and patients
- maintaining authorisation from the National Measurement Institute to maintain the primary standards of absorbed dose and air kerma for ionising radiation
- calibrating 28 dosimeters for radiotherapy providers against the primary standard. A properly calibrated dosimeter is critical in ensuring that a linear accelerator delivers the correct amount of radiation for each radiotherapy treatment it provides. This ensures that the patient receives the safest and most effective radiation treatment possible
- accepting and collecting commissioning data for the new linear accelerator. The new linear accelerator allows ARPANSA to provide auditing and calibration services that are relevant for current radiotherapy providers. This ensures best practice is maintained for radiotherapy delivery, supporting safe and effective radiotherapy in Australia
- presenting the revised Medical Code to the RHC in March 2019 for endorsement. The *Code for Radiation Protection in Medical Exposure* (RPS C-5)
- developing dosimetric audit processes for the stereotactic ablative radiotherapy (SABR) technique. SABR delivers highly focused doses of radiation to very small areas of the body. SABR is a very precise treatment suited to small tumours such as those in lung, spine, liver and lymph nodes. SABR treatments typically involve one to five treatment sessions, in contrast to a standard course of typically 30 sessions, meaning fewer trips to the hospital for the patient. (See Case study 4: stereotactic ablative radiation therapy project)
- developing occupational radiation safety educational material for medical personnel in facilities of all sizes. The draft *Radiation Protection of Medical Personnel* package has been revised and is now being reviewed by key stakeholders. The package will support appropriate training in radiation protection for staff in medical facilities and will be a resource for the community to use into the future. Development of the package has involved wide engagement with the medical radiation community, which is important in continuing to raise awareness of radiation protection and supporting the safe and effective use of ionising radiation in medicine.

#### 4. Ensure risk informed and effective regulation

No.	Measure	Target or estimated completion	Source	Annual result
4.1	Percentage of inspections conducted in accordance with establish inspection schedule <sup>3</sup>	>85%	PBS 2018–19, page 244 ARPANSA Corporate Plan 2018–22, page 19	Target partially achieved 79% 31 of 39 scheduled inspections were conducted in accordance with the inspection schedule.
4.2	Regulatory Performance Framework (RPF) annual self-assessment	Meet or exceed 75% of ARPANSA's RPF performance measures	ARPANSA Corporate Plan 2018–22, page 19	Target achieved or exceeded, on track
4.3	Monitor doses to radiation workers at licensed Commonwealth facilities and influence doses in a downward manner	The radiation doses of the 100 most exposed workers at licensed Commonwealth facilities trend downwards over time	PBS 2018–19, page 244 ARPANSA Corporate Plan 2018–22, page 19	Target achieved or exceeded, on track
4.4	Integrated Regulatory Review Service (IRRS) Mission	Benchmark Australia's radiation and nuclear safety framework against the International Atomic Energy Agency (IAEA) safety requirements, by participating in an Integrated Regulatory Review Service (IRRS) mission to Australia. Receive IRRS mission coordinated by IAEA, finalise action plan and commence implementation. <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 19	Target partially achieved The IRRS was successfully received in November 2018. The action plan to address recommendations and suggestions made by the review team was in draft at the end of the reporting period. (See Case study 1: Integrated Regulatory Review Service mission to Australia.)
4.5	National uniformity program	Develop and implement a one year national uniformity program. <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 19	Target partially achieved National uniformity program in draft.

3. This measure is one of ARPANSA's 12 measures reported under the Regulator Performance Framework.

## Analysis of performance against purpose and program objectives

ARPANSA is committed to the effective regulation of radiation sources, radiation facilities and nuclear installations across the full life cycle, as well as national uniformity and compliance with the Regulator Performance Framework (RPF).

ARPANSA has undertaken a number of activities to support effective regulation in Australia including:

- hosting an IAEA IRRS Mission to Australia from 4 to 16 November 2018, based out of the agency's Melbourne office in Yallambie, with significant input from ARPANSA's Sydney-based regulatory staff. The mission reviewed Australia's federal system of radiation and nuclear safety regulation, with active participation from regulatory bodies in all Australian jurisdictions, making it the largest multi-jurisdictional mission undertaken. This international peer review of Australia's nuclear and radiological regulatory framework provided international feedback to strengthen and enhance the effectiveness of this framework for nuclear, radiation, radioactive waste and transport safety, and emergency preparedness and response activities
- publishing its annual self-assessment of regulatory performance in December 2018. This assessment found a high level of commitment to the RPF and identified improvements from the previous reporting period
- holding the annual Licence Holder Forum in Canberra at the Department of Agriculture and Water Resources on 29 September 2018 with the highest attendance to date. The feature topic of the forum was 'risk' in response to ARPANSA inspection findings that suggested that risk management, and the effectiveness of risk communication to workers, deserved more attention
- issuing permits for the importation and exportation of radioactive material to and from Australia under Regulation 4R of the Customs (Prohibited Imports) Regulations 1956 and Regulation 9AD the Customs (Prohibited Exports) Regulations 1958. Under these regulations, the Minister for Health has authorised ARPANSA officers to issue import and export permits. During the reporting period ARPANSA approved 236 urgent permits, 806 standard permits, 41 export permits, and 48 twelve-month permits for radioisotopes during the reporting period
- undertaking a comprehensive review of ARPANSA's regulatory guides to ensure up-to-date guidance is available to licence holders. ARPANSA's regulatory guides can be accessed via the ARPANSA website at [www.arpansa.gov.au/regulation/guides](http://www.arpansa.gov.au/regulation/guides).

## 5. Enhance engagement with community, industry and government

No.	Measure	Target or estimated completion	Source	Annual result
5.1	Compliance with international agreements and treaties	Compliance with international conventions and codes through submitting national reports to review meetings as per schedule.	ARPANSA Corporate Plan 2018–22, page 21	Target achieved or exceeded, on track
5.2	Facilitate stakeholder engagement in decision making processes for major licence applications such as arranging public forums and community consultation meetings	Stakeholders are consulted when license applications are received.	ARPANSA Corporate Plan 2018–22, page 21	Target achieved or exceeded, on track
5.3	NRWMF stakeholder engagement <sup>4</sup>	Undertake stakeholder engagement activities for the proposed NRWMF prior to the receipt of a potential licence application. This will include at least two community visits per year and ongoing communication with interested parties via written correspondence and telephone. Additional activities may include the provision of new fact sheets and guidance material.  <b>If, and when, a licence application to site a NRWMF is received.</b>	ARPANSA Corporate Plan 2018–22, page 21	Target partially achieved  One visit undertaken to each community during the reporting period.

4. The NRWMF refers to the Department of Industry, Innovation and Science (DIIS) proposed establishment of a National Radioactive Waste Management Facility. ARPANSA is responsible for the licencing of any future NRWMF.

## Analysis of performance against purpose and program objectives

ARPANSA has strengthened engagement with community, industry and government during the reporting period through a number of activities and initiatives, including:

- visiting Kimba, Quorn and Hawker communities in South Australia for a series of NRWMF engagement activities and responding to questions throughout the year from interested community members and government. Due to the number of visits undertaken over the past three years, ARPANSA has been able to establish effective relationships with community members that enable contact outside of face-to-face visits. Based on these contact channels and noting a delay in the Department of Industry, Innovation and Science-led site voting process, ARPANSA made the decision to visit each community only once during the reporting period
- continuing to drive and influence international safety standards in radiation protection and nuclear safety, and engaging internationally through active participation in various committees:
  - Dr Carl-Magnus Larsson, the CEO of ARPANSA, was elected vice president of the Eighth Review Meeting of the Convention on Nuclear Safety (CNS). Australia is a contracting party to the CNS, and submits national reports on nuclear safety. The Eighth Review Meeting is scheduled to be held in 2020. During the reporting period, ARPANSA compiled the Australian national report to CNS. ARPANSA, working in consultation with the Australian Nuclear Science Technology Organisation, completed the report, and will submit it to the IAEA by the 15 August 2019 deadline.
  - Dr Gillian Hirth, Deputy CEO and Chief Radiation Health Scientist, was appointed as Chair of the United Nations Scientific Committee on the Effects of Atomic Radiation for the 66th and 67th sessions. This is a position Dr Hirth will hold until the next election at the commencement of the 68th session in 2021. Dr Hirth has been involved with the work of the Committee since 2012 and has been a member of the Committee's Bureau since December 2016 as the Committee's Rapporteur, a position undertaken during the 64th and 65th sessions.
  - ARPANSA staff members attended all safety standards committee meetings during 2018–19 with the exception of one meeting of the Transport Safety Standards Committee.
- increasing public engagement and broadening audience reach through communication activities including:
  - responding to 75 media enquiries in 2018–19, an increase from 36 in 2017–18. It is estimated that a significant proportion of this increase can be attributed to ARPANSA's proactive communication including advice on 5G, laser-based cosmetic treatments, the brain cancer study and installation of UV sensors. In addition, enquiries have been driven by external factors such as a safety incident at ANSTO and public interest in the TV series *Chernobyl*
  - updating ARPANSA's social media strategy to better target the public audience and ensure information and advice is consistent and accessible. Through this approach, we have increased social media engagement. Compared to 2017–18, Facebook followers have increased by 163% and Twitter followers have increased by 34%.

## 6. Enhance organisational innovation, capability and resilience

No.	Measure	Target or estimated completion	Source	Annual result
6.1	Employee engagement score achieved in annual APS employee census <sup>5</sup>	>APS average	ARPANSA Corporate Plan 2018–22, page 23	Target achieved or exceeded, on track
6.2	Number of ARPANSA breaches identified in radiation safety and security compliance assessments <sup>6</sup>	0	ARPANSA Corporate Plan 2018–22, page 23	Target partially achieved One minor administrative breach. <sup>7</sup>
6.3	Workforce Plan	Implementation of the Workforce Plan year two roadmap including further progress on activities associated with the learning strategy, diversity and inclusion strategy, communications and employee value framework, and governance and benefits measurement framework.  <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 23	Target partially achieved Several activities in the year two roadmap implemented with the remainder continuing in 2019–2020.
6.4	Integrated Management System	Design and implement a framework to establish an Integrated Management System (IMS). The IMS project will support ARPANSA to deliver products and services to the Australian community and government in the most effective and efficient way.  <b>October 2018</b>	ARPANSA Corporate Plan 2018–22, page 23	Target achieved or exceeded, on track
6.5	Digital Strategy	Undertake a comprehensive review of the first two years of the Digital Strategy. Gather feedback from internal and external stakeholders, include advice from government and industry leaders, assess governance practices and achievements and incorporate insights into an updated version of the Digital Strategy.  <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 23	Target partially achieved Digital Strategy partially reviewed during this period and will be completed in 2019–2020.

No.	Measure	Target or estimated completion	Source	Annual result
6.6	Research and innovation strategy	During 2017–18, the Research and Innovation Strategy 2017–2021 was released. Over the next three reporting periods, this strategy will be implemented to ensure high-quality research and innovation within ARPANSA, to support its radiation protection and nuclear safety program as well as its regulatory activities.  <b>June 2021</b>	ARPANSA Corporate Plan 2018–22, page 23	Target achieved or exceeded, on track  (See Case study 4: stereotactic ablative radiation therapy project.)
6.7	Sustainability and funding review	During 2017–18 ARPANSA undertook a review of its sustainability and funding environment across the forward estimates period. In 2018–19, ARPANSA will implement the approved recommendations from this review and embed them into its business practices.  <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 23	Target partially achieved  Three sub-projects of this work were delivered as planned. Two sub-projects have been delayed due to resource constraints and competing operational priorities. It is anticipated that these remaining two sub-projects will be completed in September and December 2019.
6.8	Energy efficiency initiatives	In line with the Energy Efficiency in Government Operations policy, ARPANSA will implement recommendations identified in the 2017–18 energy audit at the Yallambie site.  <b>June 2019</b>	ARPANSA Corporate Plan 2018–22, page 23	Target partially achieved.  Final stages will be completed by September 2019.

5. Employee engagement is measured by the Australian Public Service Commission (APSC) using the APS Employee Engagement Model. This model measures the relationship employees have with four dimensions of their work: the job they do each day, the team they work with, their immediate supervisor, and the agency they work for. For the 2018 census the ARPANSA employee engagement score was 73%, compared with the APS overall average of 71%.

6. Breaches identified under the ARPANS Act and Protective Security Policy Framework (PSPF).

7. A radiation safety inspection found ARPANSA to be in breach of subsection 30(2) of the *Australian Radiation Protection and Nuclear Safety Act 1998*—failure to comply with Regulation 54 of the Australian Radiation Protection and Nuclear Safety Regulations 1999. The breach was considered to be administrative in nature as there were no significant safety or security implications. The breach was satisfactorily rectified.

## Analysis of performance against purpose and program objectives

ARPANSA's supporting functions provide insight and expertise to the agency on a daily basis. By integrating this expertise with developing practices and approaches, and aligning these with the

strategic objectives of the agency, we provide the internal capability needed to successfully build and deliver innovative and streamlined programs and services.

During the reporting period ARPANSA has enhanced organisational innovation, capability and resilience through a number of activities and initiatives.

- ARPANSA achieved an employee engagement score of 73% in the 2019 APS employee census, in comparison to the APS average of 71%.
- ARPANSA's *Workforce Plan 2017–21* sets out how best to place people's capability, performance and productivity to enable achievement of strategic objectives. In this second year of operation ARPANSA has continued to implement a variety of programs and initiatives in line with key people management strategies that support the workforce plan, including the:
  - Learning strategy
  - Diversity and Inclusion strategy
  - Health and Wellbeing strategy.

The positive impact that the activities undertaken as part of the *Workforce Plan* has had is evidenced by key results in the three employee engagement indices that are assessed by the APS employee census: engagement index, employee wellbeing index and innovation index. All categories were on par with, or higher than, results from last year, and all were higher than the average across the APS.

- During the reporting period ARPANSA focused on developing cooperative relationships with key universities and other partner organisations to support the research and innovation program. This has resulted in placements for summer school, third-year and honours students at ARPANSA to support key research projects.
- ARPANSA successfully implemented the first phase of the IMS project in October 2018, which involved integrating elements such as quality, safety, security, risk compliance and corporate governance. ARPANSA's regulatory processes will be integrated during the second phase of the IMS project. ARPANSA commenced a project to design and implement an integrated management system in October 2016. The objective of the IMS is to connect all of ARPANSA's systems and processes into one complete framework to support the achievement of strategic objectives.
- A review of the *Digital Strategy* commenced in 2018–19 with the objective to align ARPANSA's strategy with the Digital Transformation Agency's *Vision 2025* which was released in November 2018. The review was partially completed in this reporting period and will be finalised in 2019–2020.
- Several recommendations from the sustainability and funding review were implemented during the reporting period including the delivery of the following initiatives:
  - completion of pricing reviews for several services including UV and radiofrequency calibrations
  - development of a robust overhead allocation methodology to understand and apply corporate overheads to various business segments
  - revision of fees and charges for regulatory services have been approved by the Government. The revised fees and charges will be operational from 2019–2020
  - delivery of a service model highlighting the current and future state of ARPANSA's Radiation Protection Services with a detailed plan of action to strengthen financial sustainability, digital technologies and customer-centric approach
  - implementation of an online payment portal for customers to digitally pay the invoices via credit card
  - development and approval of a detailed plan to further enhance ARPANSA's systems and platforms to achieve greater efficiencies and automation.

## Financial performance

For the financial year ending 30 June 2019, ARPANSA reported an operating deficit of \$2.499m. This deficit relates to depreciation and amortisation expenses not requiring appropriation.

Total operating revenue for the year was \$24.829m and consisted of:

- government appropriation of \$12.758m
- regulatory licence fees and charges of \$4.388m
- sale of goods and provision of services and other revenue of \$7.683m.

ARPANSA's total operating expenses were \$27.328m and consisted of:

- employee benefits of \$17.254m
- Supplier and other expenses of \$7.123m
- Depreciation and amortisation expenses of \$2.915m.

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 \$41.393 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 2018–19, ARPANSA procurement activities complied with the CPRs.

## Consultants

During 2018–19, eight new consultancy contracts were entered into involving total actual expenditure of \$215 854. In addition, seven ongoing consultancy contracts were active during the 2018–19 period, involving total actual expenditure of \$94 444.

The agency policy on selection and engaging consultants is in accordance with the CPRs, based on the core rule of value for money and underpinned by:

- encouraging competitive and non-discriminatory processes
- using Commonwealth resources in an efficient, effective, economical and ethical manner that is not inconsistent with the policies of the Commonwealth
- making decisions in an accountable and transparent manner
- considering risks
- conducting a process commensurate with the scale and scope of the procurement.

ARPANSA engaged consultants where there was a requirement for specialist expertise that was not available within the Agency, or where an independent assessment was required. The selection process included selection from a panel or direct engagement of a recognised or pre-eminent expert.

The annual report contains information about actual expenditure on contracts for consultancies. Information on the value of contracts and consultancies is available on the AusTender website [www.tenders.gov.au](http://www.tenders.gov.au).

## 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: [finance.gov.au/procurement/statistics-on-commonwealth-purchasing-contracts/](http://finance.gov.au/procurement/statistics-on-commonwealth-purchasing-contracts/).

ARPANSA's engagement with SMEs is predicated on communicating in clear, simple language and presenting information in an accessible format. Additionally, ARPANSA has adopted the use of the Commonwealth Contracting Suite for low risk procurements valued under \$200 000 to reduce the burden on SMEs entering into contractual relations with the Commonwealth.

## Advertising and market research

Under section 311A of the *Commonwealth Electoral Act 1918* ARPANSA is required to disclose details of payments of \$13 800 or more (inclusive of GST) relating to advertising and market research.

During 2018–19, expenditure on media advertising and public notices was below the threshold. ARPANSA did not undertake market research, conduct any advertising campaigns nor purchase any services from creative advertising agencies, polling or direct mail organisations.

## ARPANSA resource statement 2018–19

	Actual available appropriation for 2018–19 \$'000	Payment made \$'000	Balance remaining \$'000
	(a)	(b)	(a-b)
<b>Ordinary annual services<sup>1</sup></b>			
<b>Departmental appropriation</b>			
Prior year departmental appropriation <sup>2</sup>	1,474	1,474	-
Departmental appropriation <sup>3</sup>	14,703	13,400	1,303
<b>Total</b>	<b>16,177</b>	<b>14,874</b>	<b>1,303</b>
<b>Total ordinary annual services</b>	<b>16,177</b>	<b>14,874</b>	
<b>Other services</b>			
<b>Departmental non-operating</b>			
Equity injections <sup>4</sup>	3,800	3,800	-
<b>Total</b>	<b>3,800</b>	<b>3,800</b>	<b>-</b>
<b>Total other services</b>	<b>3,800</b>	<b>3,800</b>	
<b>Special accounts<sup>5</sup></b>			
Opening balance	1,100		
Appropriation receipts <sup>6</sup>	18,674		
Non-appropriation receipts to			
Special accounts	13,196		
Payments made		31,624	
<b>Total Special account</b>	<b>32,970</b>	<b>31,624</b>	<b>1,346</b>
<b>Total resourcing</b>	<b>52,947</b>	<b>50,298</b>	
Less departmental appropriations and equity injections drawn from the above and credited to special accounts	(18,674)	(18,674)	
<b>Total net resourcing for ARPANSA</b>	<b>34,273</b>	<b>31,624</b>	

<sup>1</sup> Appropriation Bill (No.1) 2018–19.

<sup>2</sup> Balance carried forward from previous year for annual appropriations.

<sup>3</sup> Includes an amount of \$1.945 million in 2018–19 for Departmental Capital Budget. For accounting purposes this amount has been designated as 'contributions by owners'.

<sup>4</sup> Appropriation Bill (No.2) 2017–18.

<sup>5</sup> 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).

<sup>6</sup> Appropriation receipts from ARPANSA's annual and special appropriations for 2018–19 included above.

## 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*	Actual expenses	Variation
	2018–19	2018–19	2018–19
	\$'000	\$'000	\$'000
	(a)	(b)	(a)-(b)
<b>Program 1.1: (Radiation protection and nuclear safety)</b>			
Departmental expense			
Ordinary annual services (Appropriation Bill No. 1) <sup>1</sup>	12,758	12,125	633
Special Accounts	10,871	12,288	(1,417)
Expenses not requiring appropriation in the budget year	2,570	2,915	(345)
<b>Subtotal for Program 1.1</b>	<b>26,199</b>	<b>27,328</b>	<b>(1,129)</b>
<b>Total for outcome</b>	<b>26,199</b>	<b>27,328</b>	<b>(1,129)</b>
	2017–18	2018–19	
<b>Average staffing level (number)</b>	<b>128</b>	<b>133</b>	

\* Full year budget including any subsequent adjustment made to the 2018–19 budget.

<sup>1</sup> Appropriation Bill (No.1) 2018–19.

## Case study 1: Integrated Regulatory Review Service mission to Australia

Between 5 to 16 November 2018, Australia received an international team of experts to perform a peer review of Australia's regulatory frameworks for nuclear and radiation safety. This mission, the Integrated Regulatory Review Service (IRRS), was conducted at ARPANSA's premises in Yallambie (Melbourne, Victoria) and involved staff from across the agency.

The review considered the regulatory framework for radiation protection and nuclear safety of the Commonwealth of Australia, and corresponding arrangements in the States and Territories. ARPANSA undertook a full scope mission, and completed all IRRS modules, including information that relates to the safety of nuclear installations. State and territory regulators completed specific modules on authorisation, inspection, review and assessment, enforcement, regulation of sources, regulation of medical radiation, and transport.

The review compared the Australian regulatory framework for safety against International Atomic Energy Agency (IAEA) safety standards as the international benchmark for safety. This was the first IRRS mission to undertake a comprehensive multi-jurisdictional review of a federated country in which all of the jurisdictions are self-governing.

The IRRS team consisted of 15 senior regulatory experts from 13 IAEA Member States, three IAEA staff members and two observers from Singapore's National Environment Agency.

The IRRS mission praised Australia for involving all nine radiation protection regulators, and identified this as a good practice by the team and a model that other federal countries may want to consider when planning for future IRRS missions. The IRRS team observed a high level of engagement by participants from the Commonwealth, states and territories, demonstrating a strong commitment to continuous improvement in nuclear and radiation safety.

The IRRS mission Final Report was published on 13 February 2019. It contains 23 recommendations and 12 suggestions for improvement.

In the report, good practices identified by the IRRS team included:

- the availability of comprehensive guidance for radiation protection in existing exposure situations
- ARPANSA's succession planning for all positions
- ARPANSA's holistic integration of risks in the management processes.

The IRRS team made recommendations and suggestions that indicate where improvements are necessary or desirable to continue enhancing the effectiveness of regulatory functions in line with IAEA safety standards. Recommendations included asking the Australian Government to address the decommissioning of facilities and radioactive waste management, and ARPANSA to establish criteria to evaluate the effectiveness of licensee's emergency exercises.

The IRRS report stated that the most significant challenge to Australia is establishing a national framework for radiation safety that assures a consistent level of safety and protection of people and the environment across all jurisdictions, in principle and in practice. Many of the recommendations and suggestions were addressed to all nine jurisdictions to assist in improving uniformity in radiation protection.

Australia is developing a comprehensive action plan to track progress of implementation of the recommendations and suggestions. An IRRS follow-up mission is scheduled for 2021–22.

## Case study 2: ARPANSA's new linear accelerator

In March 2019, ARPANSA installed a new, state-of-the-art linear accelerator (linac).

Over 60 000 Australians underwent radiation therapy as part of their cancer treatment in 2018–19. Linacs deliver this therapy in highly targeted dosages.

The new linac will support ARPANSA's medical radiation services to continue in ensuring any Australians undergoing medical procedures receive the correct amount of radiation. The importance of these services was recognised by the Commonwealth government's decision to provide \$5 million in funding to purchase and install the new linac within ARPANSA.

The linac sits within a research and education centre, the Roger Allison Radiotherapy Quality Centre, and will also be used for a variety of partnership projects to facilitate both national and international research in therapy and imaging.

ARPANSA provides calibration services, through the Primary Standard Dosimetry Laboratory (PSDL), to every Australian radiotherapy provider. The calibration provides a surety that the correct amount of radiation, or dose, is being delivered to every patients' tumour site. ARPANSA performs these critical services by calibrating hospitals' measurement equipment against the National Primary Standard for ionising radiation. ARPANSA's linac ensures the highest possible precision for the calibration.

The new linac will also support ARPANSA's audit services provided through the Australian Clinical Dosimetry Service (ACDS). The new linac enables ACDS staff to develop and test new audit services, keeping pace with developments in techniques for delivering advanced radiation therapy in a clinical environment. With the new linac in place, tests and calibrations undertaken at ARPANSA will continue to closely mimic the actual processes that take place in clinical settings. This will ensure a high level of accuracy in ACDS audit services and PSDL calibration services.

ARPANSA managed the entirety of the tender, evaluation, build and installation program for the new linac. Additional expertise was engaged as required ensuring that the entire build and installation program stayed within budget and schedule.

The Roger Allison Radiotherapy Quality Centre, named after Dr Roger Allison of the Royal Brisbane and Women's Hospital in recognition of his outstanding services to ARPANSA, was opened by the CEO of ARPANSA on the 6 March 2019. The opening took place in the presence of Dr Allison and representatives of government, the medical profession and industry. The Centre is now in use in advanced audit development and training for both ARPANSA and external staff.

## Case study 3: mobile phone use and brain cancer study

In January 2019, the *British Medical Journal Open* published a study by ARPANSA which investigated mobile phone use and the incidence of brain cancer.

The study, conducted in conjunction with The University of Wollongong, Monash University and the University of Auckland, looked at the incidence rates of different types of brain tumours in adults including glioma, glioblastoma and meningioma diagnosed between 1982 and 2013. The brain cancer diagnoses of 16 825 cases was compared with the uptake of mobile phone subscriptions in Australia.

The study found:

- The overall brain tumour rates remained stable throughout this period and showed no increase when compared with the increase of mobile phone use in Australia
- There was an increase of glioblastoma during the period between 1993 and 2002 which was attributed to better diagnostic techniques with advances made in magnetic resonance imaging (MRI) technology
- Although mobile phone use has risen rapidly since 2003 there has been no increase in brain tumours of any type during the ten year period 2003–2013
- In particular since 2003 there has been no increase in brain tumours of the temporal lobe, which is the location most exposed when using a mobile phone
- If the association between mobile phone use and brain cancer that has been reported in some studies was correct, then we would expect that the brain tumour rates would be higher than those that are observed.

Mobile phone handsets use low-powered radio transmitters that emit radiofrequency (RF) electromagnetic energy (EME) in order to communicate. Concerns have been raised about the potential health consequences, particularly brain cancer, from the level of RF emissions the brain is being exposed to when using a mobile phone. Some previous studies that have compared mobile phone use between brain cancer cases and healthy controls have shown a weak association between heavy mobile phone use and brain cancer. Based largely on this limited evidence the International Agency for Research on Cancer has classified RF fields as possibly carcinogenic to humans.

The results of this recent study are in line with ARPANSA's current advice that there is no established evidence that the use of mobile phones causes brain cancer.

## Case study 4: stereotactic ablative radiation therapy project

The Australian Clinical Dosimetry Service (ACDS) is an independent radiotherapy dosimetry auditing program, providing quality assurance for radiation oncology facilities across Australia and New Zealand. Recognising the rapid development of Australian clinical practice, the ACDS began development of an end-to-end stereotactic ablative radiotherapy (SABR) dosimetry audit in 2018.

SABR is a relatively new technique used to deliver highly-focused and comparatively large doses of radiation to very small areas of the body. SABR is a very precise treatment which makes it suited to treating small tumours such as those in lung, spine, liver and lymph nodes. In SABR treatment, the highly-focused doses make it particularly important to verify that the dose delivered to the patient is correct, and that the dose was delivered accurately to the location of the tumour.

ARPANSA's ACDS staff specifically designed a humanoid phantom (manikin) to simulate a patient's treatment and enable the ACDS to measure SABR dose. The phantom includes special plastics which realistically simulate human lung, spine and soft tissue tumours. During the ACDS audits, the radiotherapy facility plan the SABR treatment as they would for a real patient. ACDS staff attend on-site and measure the dose delivered to the phantom to confirm that the planned dose delivered by the facility is the dose received by the phantom.

In 2018, the ACDS performed SABR dosimetry trial audits in 21 radiotherapy facilities across Australia. The audit was performed for a range of lung, spine and soft tissue SABR treatments, with results reported to the facilities. Performance of the SABR dosimetry audit provides assurance to radiotherapy facilities, giving them confidence in the accurate delivery of radiation dose to their patients. The ACDS SABR audit is also used in clinical trial quality assurance, which is important for improving the way SABR treatments are delivered to patients.

Development and delivery of the SABR audit program is making a vital contribution to the safety of advanced radiotherapy techniques and improvement of outcomes for cancer patients around Australia. This innovation also cements ARPANSA's position in the international forefront of radiation therapy dosimetry.

# PART 4: MANAGEMENT AND ACCOUNTABILITY

## Enabling legislation

The *Australian Radiation Protection and Nuclear Safety Act 1998* (the ARPANS Act) establishes the Office of the Chief Executive Officer (CEO) of ARPANSA. The Act also establishes ARPANSA, which is a non-corporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act).

## Corporate governance

The ARPANS Act and the PGPA Act are the foundation of ARPANSA's governance practices.

Our corporate governance framework enables effective strategic planning, risk management and performance monitoring to support achievement of our strategic objectives. Our core governance structure includes three statutory advisory bodies and two senior committees that are supported by a number of management committees.

### Advisory bodies

The ARPANS Act establishes the Radiation Health and Safety Advisory Council (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 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; advise and report to the CEO, at the CEO's request or as Council considers appropriate, on the above and any other matters. During 2018–19, the Council met on two occasions: 11 October 2018, and 6–7 March 2019. A summary of the issues considered and discussed at Council during 2018–19 can be found in Appendix 2.

#### Radiation Health Committee

The role of RHC in relation to radiation protection is to advise the CEO and the Council; develop policies and to prepare draft publications for the promotion of uniform national standards; formulate draft national policies, codes and standards for consideration by the Commonwealth, the states and the 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. During 2018–19, the RHC met on three occasions: 17–18 July 2018, 9–10 October 2018 and 12–13 March 2019. A summary of the issues considered and discussed at RHC during 2018–19 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 advise the CEO and the Council; review and assess the effectiveness of standards, codes, practices and procedures;

develop detailed policies and prepare draft publications to promote uniform national standards. During 2018–19, the NSC met on three occasions: 2 November 2018, 15 March 2019 and 21 June 2019. A summary of the issues considered and discussed at NSC during 2018–19 can be found in Appendix 2.

## Senior committees

At the strategic level, the CEO is advised by two key committees:

### Audit and Risk Committee

The PGPA Act requires Commonwealth entities to establish an audit committee. ARPANSA's Audit and Risk Committee 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.

The Audit and Risk Committee comprises four members, three of whom are independent external members (including the Chair) and one ARPANSA staff member. Representatives from the Australian National Audit Office (ANAO) also attend meetings. The CEO is an observer on the committee and other senior managers may attend meetings as observers when required to report on particular matters. The Audit and Risk Committee met five times in 2018–19.

### 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 four times in 2018–19 and comprises the CEO (Chair), branch and office heads, the Chief Financial Officer, and two external members appointed by the CEO.

## Management committees

ARPANSA has in place a number of management committees to ensure effective decision-making, management and oversight of the agency's operations and performance.

### Executive Group

The Executive Group (EG) is ARPANSA's operational management forum. The EG is responsible for monitoring the key tactics and activities used to implement agency business plans. The EG met nine times in 2018–19 and comprises the CEO, branch and office heads and the Chief Financial Officer.

### Work Health and Safety Committee

The Work Health and Safety (WHS) Committee provides the agency with a consultative mechanism to enable management and worker contributions to WHS improvements across all operations. The WHS Committee comprises the CEO (Chair), 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 four times in 2018–19.

### The Radiation Safety Committee

The Radiation Safety Committee monitors, reviews and improves radiation safety practices within ARPANSA. It is chaired by the Radiation Safety Officer and comprises of Radiation Protection Advisors from across the agency. It works closely with the WHS Advisor, Quality Manager and the WHS Committee. The Radiation Safety Committee met five times in 2018–19. Key activities for the Radiation Safety Committee included a comprehensive review of ARPANSA's radiation safety management system and oversight of the installation and commissioning of ARPANSA's new linear accelerator (see Case study 2: ARPANSA's new linear accelerator.)

## Agency Security Group

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

The ASG met six times in 2018–19, and comprises the Chief Security Officer (Chair), the Chief Information Security Officer, the Agency Security Adviser, the Chief Information Officer, the Information Technology Security Adviser, agency security officers and the Facilities Manager. Other subject matter experts may participate in meetings as required.

## International Coordination Group

The International Coordination Group (ICG) leads the implementation of ARPANSA's international engagement strategy, which aims to align the agency's international engagement priorities with whole-of-government priorities, sharpening our capacity to shape the broader radiation protection and nuclear security and safety environment in which we operate. The ICG met four times in 2018–19.

## Project Management Advisory Group

The Project Management Advisory Group (PMAG) provides a centralised coordination and support function to agency projects to achieve alignment of projects with ARPANSA's strategic objectives and ensure consistent application of project management practices across the agency. The PMAG comprises the Director of Performance and Governance (Chair), the Chief Financial Officer, Chief Information Officer and four staff with project management expertise. The PMAG met ten times in 2018–19.

## Staff Consultative Forum

ARPANSA's enterprise agreement continues to provide for a Staff Consultative Forum (SCF) as the key employee consultative body. The SCF comprises the CEO, nine employees elected by staff and a representative from each of the unions supporting ARPANSA staff. The SCF met on six occasions in 2018–19 to discuss a range of issues relating to management of the agency.

## Digital Transformation Advisory Group

The Digital Transformation Advisory Group (DTAG) is responsible for leading the investigation of digital transformation at ARPANSA by encouraging and supporting the piloting and implementation of innovative digital solutions.

The DTAG comprises the Branch Head of Medical Radiation Services (Chair), Branch Head of Radiation Health Services, Chief of Staff, Head of Corporate Office and the Chief Information Officer. The DTAG met twice in 2018–19.

## Digital Information Advisory Group

In May 2019 the Digital Information Advisory Group (DIAG) was established to achieve agency-wide information and technology governance. It is responsible for the management of agency information, technology and data, and coordination of agency information and data management frameworks, strategies and policies. The DIAG comprises the Chief Information Officer (Chair) and six staff with digital information and technology expertise. The DIAG met twice in 2018–19.

## Accountability and risk management

### Accountable authority

Under the PGPA Act the CEO of ARPANSA is the accountable authority. 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 is informed by risk. The integrated annual planning cycle ensures alignment of our strategic priorities, operational activities, resource allocation and performance measures. This results in clear linkages between key planning documents, including the corporate plan, portfolio budget statement and agency business plans.

The SMC oversees the planning process and preparation of the corporate plan. Progress against the measures and other commitments outlined in key planning documents is monitored and reported to management and the Audit and Risk Committee.

### Performance reporting

ARPANSA's non-financial performance measures are detailed in both the corporate plan and portfolio budget statement. They include several measures that meet performance reporting obligations under the Regulator Performance Framework. ARPANSA produces quarterly internal reports on non-financial performance. These reports are presented to management and the Audit and Risk Committee at the end of each quarter.

Financial performance is reported separately through monthly internal financial reports to management, and to the Audit and Risk Committee at the end of each quarter. Performance reporting culminates in the publication of this annual report, inclusive of the annual performance statement (at Part 3), financial statements (at Part 5), and the Regulator Performance Framework externally-validated self-assessment report available on the ARPANSA website.

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

- The Audit and Risk Committee requires management to regularly provide evidence of performance against the mandatory elements of the PGPA Act and other relevant legislation.
- ARPANSA's internal audit program, informed by risk and overseen by the Audit and Risk Committee, is focused on compliance performance and systems of internal control.
- ARPANSA's quality audit program, a crucial part of maintaining ISO/IEC 17025 certification for our laboratories, monitors operational performance against the requirements of the relevant standards captured in the documented management system.

### Risk management

ARPANSA has a comprehensive Risk Management Framework 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 Risk Management Framework aligns with broader requirements such as the *Commonwealth Risk Management Policy 2014* and the international standard on risk management (AS/NZS ISO 31000), and meets the requirements of section 16 of the PGPA Act.

During this reporting period, ARPANSA's risk management framework was reviewed as part of the Integrated Regulatory Review Service (IRRS) Mission that occurred in November 2018. The IRRS team of international experts assessed ARPANSA's risk management approach as a 'good practice' example

of Australia's national regulatory framework for nuclear and radiation safety. In 2018–19 ARPANSA achieved an 'advanced' level of maturity in the Comcover Risk Management Benchmarking Survey. This result is greater than the average risk maturity state achieved by participating Commonwealth entities.

## Audit and fraud control

### *Audit program*

ARPANSA's audit program is informed by risk and directed by the Audit and Risk Committee. ARPANSA has a robust governance and control framework to establish and maintain appropriate systems and internal controls for the oversight and management of risk. The internal audit program examines and evaluates the appropriateness and effectiveness of the agency's management system to ensure the agency meets its external and internal obligations and risk control mechanisms. ARPANSA's management system audits are a crucial part of maintaining ISO 17025 certification for our scientific laboratories, and monitoring performance against the requirements of the relevant standards captured in the documented management system.

ARPANSA is also subject to audits conducted by external organisations, such as the Australian National Audit Office (ANAO) and the National Association of Testing Authorities (NATA), which assess compliance and conformance with relevant legislation, regulations, rules, standards, etc. During this reporting period, ARPANSA's seven accredited laboratories were assessed by NATA and certified as compliant against the new ISO 17025 standard that was released in 2017.

In 2018–19 the ANAO conducted an audit of ARPANSA and five other agencies' performance on *Mitigating Insider Threats through Personnel Security*. During this reporting period ARPANSA established a process, in accordance with the Protective Security Policy Framework requirements, to undertake an annual health check for clearance holders and their managers. Implementation of this process will address the final ANAO audit recommendation.

### *Significant non-compliance issues*

ARPANSA management acknowledges their responsibility for ensuring compliance with the provisions of the PGPA Act and requirements related to finance law.

ARPANSA has complied with the provisions and requirements of the:

- PGPA Act 2013
- *Public Governance, Performance and Accountability Rule 2014* (PGPA Rule)
- Appropriation Acts
- other instruments defined as finance law including relevant ministerial directions.

ARPANSA did not identify any significant non-compliances with finance law during the reporting period.

All instances of non-compliance are reported to the Audit and Risk Committee. Where insignificant non-compliances were identified, they were managed in accordance with our policies and procedures.

### *Fraud minimisation strategies*

During 2018–19, the agency maintained a rolling program embedded within ARPANSA's overarching risk management framework to assess fraud risks. Treatment strategies are 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 2018–19.

## Disability reporting mechanisms

Since 1994, non-corporate Commonwealth entities have reported on their performance as policy adviser, purchaser, employer, regulator and provider under the Commonwealth Disability Strategy. In 2007–08, reporting on the employer role was transferred to the Australian Public Service Commission's *State of the Service* reports and the *APS Statistical Bulletin*. These reports are available at [apsc.gov.au](http://apsc.gov.au). From 2010–11, entities have no longer been required to report on these functions.

The *Commonwealth Disability Strategy* has been overtaken by the *National Disability Strategy 2010–2020*, which sets out a 10-year national policy framework to improve the lives of people with disability, promote participation and create a more inclusive society. A high-level, two-yearly report will track progress against each of the six outcome areas of the strategy and present a picture of how people with disability are faring. The first of these progress reports was published in 2014, and can be found at [dss.gov.au](http://dss.gov.au).

ARPANSA's Diversity and Inclusion Strategy outlines objectives to review recruitment processes, engage in the Stepping Into internship program by 2020, and remove barriers to hiring candidates with disability. In 2018–19, ARPANSA has supported people to apply for jobs through the development of an inclusive recruitment statement and use of the RecruitAbility scheme.

## Work health and safety

ARPANSA's commitment to safety through protecting the Australian people and the environment from the harmful effect of radiation, is second to none and we are equally committed to utilising our expertise to develop a leading work health and safety (WHS) framework within the agency.

During 2018–19, ARPANSA conducted a safety culture self-assessment of its regulatory activities using a custom-built safety culture maturity model. The self-assessment characterised the culture within regulatory services branch, assisted in forming a vision of how our culture should look and has enabled a number of improvement actions to be identified. The assessment was a pilot study which will now be applied to a whole-of-agency safety culture assessment during 2019–2020.

During the reporting period, ARPANSA established a health and wellbeing working group to help guide the implementation of ARPANSA's *Health and Wellbeing Strategy*. The working group has contributed to the development of an action plan and the development of initiatives that will benefit the health and wellbeing of ARPANSA staff.

Throughout 2018–19 ARPANSA continued its program of regular WHS inspections and resulting improvements. During the reporting period the agency completed all planned WHS inspections in accordance with the environmental and holistic safety inspection program.

## Hazard and incident reporting

ARPANSA has a strong commitment to preventing work health and safety incidents from occurring, understanding the importance of preventive measures, and applying timely and appropriate corrective actions when incidents or hazards do arise.

During 2018–19 the agency continued to build a positive safety reporting culture, which again saw a number of hazards and good practices reported. In 2018–19 there was a total of 13 incidents reported, which included six hazards, six minor incidents and one serious incident. None of the incidents were notifiable to Comcare with respect to the agency's statutory obligation under section 35 of the *Work Health and Safety Act 2011*.

## Workers compensation

One workers compensation claim was made during the 2018–19 year.

## Investigations or notices given

There were no investigations initiated or notices given in 2018-19.

## Accountability

### External scrutiny

#### Judicial review

During 2018–19, 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

As at 30 June 2019, no reports were made by Parliamentary Committees regarding ARPANSA for the year 2018–19.

During 2018–19, there were no complaints made to the Commonwealth Ombudsman against the agency. There were no earlier complaints that remained open.

#### 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. This requirement is in Part II of the FOI Act and has replaced the former requirement to publish a section 8 statement in an annual report. 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.

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](mailto:foi@arpansa.gov.au)  
03 9433 2211

Documents released by ARPANSA in response to FOI requests can be found on the disclosure log at [arpansa.gov.au/disclosure](http://arpansa.gov.au/disclosure).

#### Statistics

ARPANSA received twenty FOI requests during the reporting period.

## Human resources

ARPANSA's People and Culture section is responsible for driving the development and delivery of a wide range of strategic and operational human resource management functions. Working in partnership with ARPANSA's Executive, branches and offices, the People and Culture section provides services and advice on the agency's employment framework, including workforce planning, recruitment, pay and conditions, performance management, workplace diversity, and learning and development.

### ARPANSA's Workforce Plan

ARPANSA's *Workforce Plan 2017–2021* (the Plan) was developed to enable ARPANSA to achieve its objectives through its people. The objectives of the Plan are based around:

- **people:** a workforce of high-performing professionals
- **managers:** leaders of engaged and agile teams
- **employee experience:** a collaborative and innovative culture
- **strategic alignment:** leading practice services that deliver on ARPANSA's purpose.

### Workforce and succession planning

ARPANSA has developed a strategic and future-focused workforce planning and succession strategy. The Integrated Regulatory Review Service (IRRS) identified that ARPANSA has a well-developed strategy to compensate for the departure of qualified staff. The strategy systematically assesses succession risks for every position in the organisation and prioritises the development of competencies that are found to be vulnerabilities to the long-term capability of the organisation. ARPANSA has committed to undertake a workforce planning and succession process on an annual basis.

### Attraction and recruitment

The attraction and recruitment processes undertaken by ARPANSA are continually revised to ensure they allow for a standardised, effective and objective approach to all recruitment activities. During the year, 14 external recruitment campaigns were undertaken. These campaigns resulted in the engagement of nine new starters.

### Learning strategy

ARPANSA's vision is for employees to have access to capability development programs that clearly link to ARPANSA's strategic objectives, represent good investment, and are leveraged through pre- and post-training workplace activities. The objectives of the learning strategy are to:

- enable the capability, productivity and performance required to achieve ARPANSA 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 resource for all staff and is supplemented by on-site face-to-face or external conferences. A high-level evaluation of the agency's capability requirements undertaken in 2019 will drive the learning programs delivered in 2019–2020.

## Diversity and inclusion

ARPANSA is a culturally, linguistically and generationally diverse organisation. In 2017, ARPANSA implemented a *Diversity and Inclusion Plan* which set out initiatives across six key areas of inclusion: gender equity, flexibility, LGBTIQ+, people with a disability, and Aboriginal and Torres Strait Islander Peoples. Branch and office heads have taken up the opportunity to be a champion of each initiative, undertaking and promoting a range of initiatives within ARPANSA. This has included International Women's Day; International Day of People with Disability; Flexible Working Day; International Day Against Homophobia, Transphobia and Biphobia; NAIDOC Week; National Reconciliation Week and 'Bright Sparks'—an initiative which aims to improve science communication by presenting technical scientific information in a way that is suitable for a general audience.

## Health and wellbeing

Throughout the year, ARPANSA undertakes a number of activities that aim to support the wellbeing of its staff. These activities cover aspects of psychosocial health, relationships, finance and physical protection and include on-site Employee Assistance Program sessions. Promotion of activities in support of key awareness campaigns are also an important part of the wellbeing program which this reporting period included World Mental Health Day, Men's Health Week, Women's Health Week, Skin Cancer Action Week and R U OK? Day.

## APS census

The APS employee census is an annual employee perception survey of the APS workforce, with over 130 000 employees invited to participate. At ARPANSA, 83% of employee's participated in the survey. ARPANSA has continued to strive to create an engaging, supportive and innovative environment through various activities and strategies. The results demonstrate the agency's continued improvement in employee engagement, with ARPANSA having achieved positive outcomes above the APS average on all three indices measured: employee engagement, wellbeing, and innovation.

These results demonstrate that ARPANSA is increasingly committed to driving improved performance, productivity and work outcomes through innovation, and is focused on enabling the practical and cultural elements that allow for a sustainable and healthy working environment.

## Employment arrangements

As at 30 June 2019, ARPANSA employed 130 ongoing and non-ongoing employees, and one statutory office holder. ARPANSA also employees staff on an irregular or intermittent basis to support the delivery of our objectives. All ARPANSA employees are engaged under the *Public Service Act 1999*.

The *ARPANSA Enterprise Agreement 2017–2020* (the Agreement) came into effect on 31 August 2017. 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 at 30 June 2019, nine such arrangements were in place. ARPANSA also utilises common law contracts to support the employment arrangements.

## Non-salary benefits

Under its enterprise agreement and common law contracts, ARPANSA staff are able to seek access to a range of non-salary benefits including:

- flexible working arrangements, including flextime (Australia Public Service (APS) levels 1 to 6 only), job-sharing, and part-time and home-based work
- generous parental/maternity leave provisions
- generous range of paid and unpaid leave options
- study assistance
- salary packaging for cars (novated lease), with fringe benefits tax (FBT) applicable
- employee assistance program.

## Executive remuneration

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 Chief Executive Officer
- Senior executives—Branch and Office Heads and Chief Financial Officer 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 neither key management personnel nor senior executives and whose total remuneration exceeds the threshold amount (\$220 000) for the reporting period.

## Remuneration policies and practices

ARPANSA's CEO is responsible for determining the remuneration policy and the remuneration structure for senior executives. In practice the CEO is supported by ARPANSA's Executive Group to make remuneration recommendations.

## 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:

- The CEO is remunerated under the Remuneration Tribunal (Remuneration and Allowances for Holders of Full-time Public Office) Determination 2018.
- 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 objectives and performance. Officials' salaries only increase, generally, on an annual basis as part of a performance review process.

## Executive remuneration information

		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		
Carl-Magnus Larsson	Chief Executive Officer	276,769	-	61,558	41,953	7,219	-	-	387,499
Gillian Hirth	Chief Radiation Health Scientist	181,392	-	37,543	35,965	5,216	-	-	260,117
Ivan Williams	Chief Medical Radiation Scientist	186,704	-	25,169	28,223	4,941	-	-	245,037
Jim Scott	Chief Regulatory Officer	183,169	-	25,576	33,224	4,941	-	-	246,910
Tone Doyle	Office Head and Chief of Staff	157,323	-	44,600	25,511	4,656	-	-	232,089
Martin Reynolds	General Counsel	157,323	-	43,116	25,537	4,656	-	-	230,632
Niraj Pau*	Chief Financial Officer	80,691	-	11,573	12,635	2,258	-	-	107,157
Kathryn Green*	Head of Corporate Office (Acting)	100,579	-	22,303	19,335	3,224	-	-	145,440
George Sawvides*	Office Head and Chief Financial Officer	76,597	-	35,279	17,104	2,928	-	-	131,908

\*part-year only

## Performance and rewards

ARPANSA's approach to performance and reward is to create a culture of ongoing feedback to support continuous development. This enables the agency to perform even more effectively in the future, focus on those activities most critical to realising ARPANSA's strategic objectives, and provide recognition of achievements, innovative approaches and enterprise contributions.

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

### ARPANSA Award

The ARPANSA Award was first established in 2001 to recognise and celebrate significant contributions to the work of ARPANSA by an individual or team, across the following criteria:

- outstanding service to internal or external stakeholders
- an outstanding initiative that has been implemented
- significant improvements to work procedures or operations systems
- exceptional initiative/achievement involving cross-unit cooperation
- outstanding contributions to enhancing the client experience
- exemplar of the APS Code of Conduct and values, and upholds professionalism in all capacities when interacting with clients and stakeholders.

The 2018 ARPANSA Award was presented to the coordination team for the Integrated Regulatory Review Service mission undertaken in November 2018.

High achievement certificates were also awarded to:

- Australian Clinical Dosimetry Service's Clinical Operations Lead for her work in leading the stereotactic ablative radiation therapy (SABR) project. This project designed the humanoid phantom, including a realistic spine and spinal cord, and developed the treatment plans to test the SABR delivery. (See Case study 4: stereotactic ablative radiation therapy project.)
- the team who undertook the health study of mobile phone use and incidence of brain tumour. (See Case study 3: mobile phone use and brain cancer study.)

### The ARPANSA Social Club

The ARPANSA Social Club creates a healthy workplace and provides a range of opportunities for staff to be involved in social functions throughout the year.

Social Club hosts a range of events, including morning teas, lunches and fundraising activities. The events are an opportunity for staff from different sections to engage and socialise in a less formal environment. None of the events would happen without the hard work of those staff who volunteer their time and effort to participate in the social club committee to benefit all staff.

## Staffing statistics

As at 30 June 2019 ARPANSA employed 130 ongoing and non-ongoing staff (not including the CEO or casual staff).

No employees identified themselves as indigenous.

Table 1.1 sets out the salary ranges as at 30 June 2019.

Table 1.2 sets out employees by location, gender and APS classification. The table shows that 84% of staff are located in the Victorian office.

Table 1.3 shows that of the 130 employees (not including the CEO or casual staff), 119 are ongoing and 11 are non-ongoing. Thirteen ongoing staff are part-time and three non-ongoing employees are part time.

Table 1.4 shows that as at 30 June 2019 Radiation Health Services is the largest branch with 40 staff, followed by the Corporate Office (35), Medical Radiation Services (24), Regulatory Services (21), Office of the CEO (8) and Legal Office (2).

**Table 1.1 Salary ranges as at 30 June 2019**

Classification	Minimum salary	Maximum salary
SES 3	0	0
SES 2	0	0
SES 1	215 275	225 875
EL 2 upper	148 516	159 515
EL 2 lower	125 754	142 805
EL 1	102 914	118 412
APS 6	83 305	95 287
APS 5	77 032	80 879
APS 4	71 570	74 788
APS 3	62 100	69 485
APS 2	54 539	59 872
APS 1	46 584	52 951
Other (Graduate)	62 100	69 485

**Table 1.2 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	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
<b>New South Wales</b>																						
<b>Female</b>	0	0	0	1	3	3	0	0	0	0	4	3	0	0	0	0	0	0	0	0	7	7
<b>Male</b>	1	1	3	3	7	7	2	2	1	1	0	0	0	0	0	0	0	0	0	0	14	14
<b>Total</b>	1	1	3	4	10	10	2	2	1	1	4	3	0	0	0	0	0	0	0	0	21	21
<b>Victoria</b>																						
<b>Female</b>	1	1	4	5	8	11	13	10	8	10	5	4	8	9	3	3	0	0	0	0	50	53
<b>Male</b>	1	1	8	9	19	21	18	15	10	8	0	0	2	2	0	0	0	0	0	0	58	56
<b>Total</b>	2	2	12	14	27	32	31	25	18	18	5	4	10	11	3	3	0	0	0	0	108	109
<b>Total</b>																						
<b>Female</b>	1	1	4	6	11	14	13	10	8	10	9	7	8	9	3	3	0	0	0	0	57	60
<b>Male</b>	2	2	11	12	26	28	20	17	11	9	0	0	2	2	0	0	0	0	0	0	72	70
<b>Total</b>	<b>3</b>	<b>3</b>	<b>15</b>	<b>18</b>	<b>37</b>	<b>42</b>	<b>33</b>	<b>27</b>	<b>19</b>	<b>19</b>	<b>9</b>	<b>7</b>	<b>10</b>	<b>11</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>130</b>

**Table 1.3 Distribution of staff by full or part-time status**

	Full-time ongoing		Full-time non-ongoing		Part-time ongoing		Part-time non-ongoing		Total	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Female	41	46	3	3	10	9	3	2	57	60
Male	66	60	3	5	2	4	1	1	72	70
<b>Total</b>	<b>107</b>	<b>106</b>	<b>6</b>	<b>8</b>	<b>12</b>	<b>13</b>	<b>4</b>	<b>3</b>	<b>129</b>	<b>130</b>

**Table 1.4 Distribution of staff by branch/office**

	Ongoing		Non-ongoing		Ongoing		Non-ongoing		Ongoing		Non-ongoing	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
<b>Branch</b>	Female				Male				Total			
Office of the CEO	3	3	0	1	5	4	0	0	8	7	0	1
Corporate Office	23	25	0	0	9	9	0	1	32	34	0	1
Office of the General Counsel	0	1	0	0	1	1	0	0	1	2	0	0
Medical Radiation Services Branch	5	6	4	2	11	12	3	4	16	18	7	6
Radiation Health Services Branch	13	14	2	2	27	23	1	1	40	37	3	3
Regulatory Services Branch	7	6	0	0	15	15	0	0	22	21	0	0
<b>Total</b>	<b>51</b>	<b>55</b>	<b>6</b>	<b>5</b>	<b>68</b>	<b>64</b>	<b>4</b>	<b>6</b>	<b>119</b>	<b>119</b>	<b>10</b>	<b>11</b>

# PART 5: FINANCIAL STATEMENTS



## INDEPENDENT AUDITOR'S REPORT

To the Minister for Health

### Opinion

In my opinion, the financial statements of the Australian Radiation Protection and Nuclear Safety Agency ('the Entity') for the year ended 30 June 2019:

- (a) comply with Australian Accounting Standards – Reduced Disclosure Requirements 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 2019 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 statements as at 30 June 2019 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* (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 – Reduced Disclosure Requirements 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 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



Josephine Bushell  
Senior Director  
Delegate of the Auditor-General  
Canberra  
13 September 2019

## Contents

<b>Statement by the Accountable Authority and Chief Financial Officer .....</b>	<b>53</b>
<b>Primary financial statements</b>	
Statement of comprehensive income .....	54
Statement of financial position .....	56
Statement of changes in equity .....	58
Cash flow statement .....	61
<b>Overview .....</b>	<b>63</b>
<b>Notes to and forming part of the financial statements .....</b>	<b>65</b>
<i>1: Financial performance .....</i>	<i>65</i>
Note 1.1: Expenses .....	65
Note 1.2: Own-source revenue and gains .....	68
<i>2: Financial position .....</i>	<i>70</i>
Note 2.1: Financial assets .....	70
Note 2.2: Non-financial assets .....	72
Note 2.3: Payables .....	76
<i>3: Funding .....</i>	<i>77</i>
Note 3.1: Appropriations .....	77
Note 3.2: Special Accounts .....	79
Note 3.3: Net cash appropriation arrangements .....	79
<i>4: People and relationships .....</i>	<i>80</i>
Note 4.1: Employee provisions .....	80
Note 4.2: Key management personnel remuneration .....	81
Note 4.3: Related party disclosures .....	81
<i>5: Managing uncertainties .....</i>	<i>82</i>
Note 5.1: Contingent liabilities and assets .....	82
Note 5.2: Financial instruments .....	82
Note 5.3: Fair value measurements .....	84
<i>6: Other information .....</i>	<i>85</i>
Note 6.1: Aggregate assets and liabilities .....	85

## Statement by the Accountable Authority and Chief Financial Officer

### STATEMENT BY THE ACCOUNTABLE AUTHORITY AND CHIEF FINANCIAL OFFICER

In our opinion, the attached financial statements for the year ended 30 June 2019 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.



Carl-Magnus Larsson  
Accountable Authority

12 September 2019



Niraj Pau  
Chief Financial Officer

12 September 2019

## Statement of comprehensive income

for the period ended 30 June 2019

	Notes	2019	2018	Original budget
		\$	\$	2019
				\$
<b>NET COST OF SERVICES</b>				
<b>Expenses</b>				
Employee benefits	1.1A	17,254,317	16,454,029	16,494,000
Suppliers	1.1B	7,122,586	7,171,373	7,135,000
Depreciation and amortisation	2.2A	2,915,497	2,907,501	2,570,000
Impairment loss allowance on financial instruments	1.1C	1,741	10,429	-
Write-down and impairment of other assets	1.1D	33,612	166,123	-
Foreign exchange losses	1.1E	-	844	-
Losses from asset sales	1.1F	75	-	-
<b>Total expenses</b>		<b>27,327,828</b>	26,710,299	26,199,000
<b>Own-source income</b>				
<b>Own-source revenue</b>				
Sale of goods and rendering of services	1.2A	7,628,374	7,109,324	6,475,000
Licence fees	1.2B	4,387,920	4,300,519	4,396,000
Other revenue	1.2C	54,000	54,000	-
<b>Total own-source revenue</b>		<b>12,070,294</b>	11,463,843	10,871,000
<b>Gains</b>				
Foreign exchange gains	1.2D	278	-	-
Reversal of write-downs and impairment	1.2E	491	-	-
<b>Total gains</b>		<b>769</b>	-	-
<b>Total own-source income</b>		<b>12,071,063</b>	11,463,843	10,871,000
<b>Net (cost of) contribution by services</b>		<b>15,256,765</b>	15,246,456	15,328,000
Revenue from Government	1.2F	12,758,000	12,839,000	12,758,000
<b>Surplus / (deficit) on continuing operations</b>		<b>(2,498,765)</b>	(2,407,456)	(2,570,000)
<b>OTHER COMPREHENSIVE INCOME</b>				
<b>Items not subject to subsequent reclassification to net cost of services</b>				
Changes in asset revaluation surplus		37,100	2,291,410	-
<b>Total other comprehensive income</b>		<b>37,100</b>	2,291,410	-
<b>Total comprehensive income / (loss)</b>		<b>(2,461,665)</b>	(116,046)	(2,570,000)

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

## Budget variances commentary

### Statement of comprehensive income

The above table provides a comparison between the 2018–19 Portfolio Budget Statements (PBS) budget and the final financial outcome in the 2018–19 financial statements. The Budget is not audited and does not reflect additional budget estimates provided in the 2018–19 Portfolio Additional Estimates Statements (PAES) or the revised budget provided as part of the 2019–2020 Portfolio Budget Statements (PBS). However major changes in budget have been explained as part of the variance analysis where relevant.

The actuals are prepared in accordance with Australian Accounting Standards.

Explanations have been provided where movements are greater than 10% of the line item and/or 2% of total income or expense unless the movement is clearly trivial.

### Departmental major budget variances for 2019

<b>Explanations of major variances</b>	<b>Affected line items (and statement)</b>
<b>Employee benefits</b>	
Increase in employee benefits expense mainly relates to the recalculation of long service leave provisions at balance date due to a change in Government bond rate.	<i>Employee benefits expense (statement of comprehensive income) and employee provisions (statement of financial position).</i>
<b>Depreciation</b>	
Increase in building depreciation expense is a result of an increase in building valuation, not estimated at budget.	<i>Depreciation expense (statement of comprehensive income), land and building (statement of financial position).</i>
<b>Own source revenue</b>	
<b>Sale of good and services and licence fees.</b>	
Overall, the increase in sale of goods and rendering of services revenue relates to the Australian Clinical Dosimetry Service.	<i>Total own source revenue (statement of comprehensive income), operating cash received - sale of goods and rendering of services (cash flow statement).</i>

## Statement of financial position

as at 30 June 2019

				Original budget
		2019	2018	2019
	Notes	\$	\$	\$
<b>ASSETS</b>				
<b>Financial assets</b>				
Cash and cash equivalents	2.1A	1,346,091	1,100,443	1,143,000
Trade and other receivables	2.1B	2,263,434	6,639,882	1,925,000
Other financial assets	2.1C	559,134	130,686	83,000
<b>Total financial assets</b>		<b>4,168,659</b>	<b>7,871,011</b>	<b>3,151,000</b>
<b>Non-financial assets</b>				
Land	2.2A	9,750,000	10,500,000	9,000,000
Buildings	2.2A	18,349,717	17,794,740	17,558,000
Leasehold improvements	2.2A	74,442	152,936	-
Plant and equipment	2.2A	10,343,582	6,870,375	10,215,000
Intangibles	2.2A	959,616	1,011,347	1,821,000
Inventories	2.2B	1,488,404	1,389,190	1,480,000
Other non-financial assets	2.2C	427,606	586,169	578,000
<b>Total non-financial assets</b>		<b>41,393,367</b>	<b>38,304,757</b>	<b>40,652,000</b>
<b>Total assets</b>		<b>45,562,026</b>	<b>46,175,768</b>	<b>43,803,000</b>
<b>LIABILITIES</b>				
<b>Payables</b>				
Suppliers	2.3A	756,002	878,827	1,307,000
Other payables	2.3B	1,302,834	1,577,193	1,961,000
<b>Total payables</b>		<b>2,058,836</b>	<b>2,456,020</b>	<b>3,268,000</b>
<b>Provisions</b>				
Employee provisions	4.1	4,864,862	4,564,755	4,750,000
<b>Total provisions</b>		<b>4,864,862</b>	<b>4,564,755</b>	<b>4,750,000</b>
<b>Total liabilities</b>		<b>6,923,698</b>	<b>7,020,775</b>	<b>8,018,000</b>
<b>Net assets</b>		<b>38,638,328</b>	<b>39,154,993</b>	<b>35,785,000</b>
<b>EQUITY</b>				
Contributed equity		30,506,000	28,561,000	30,506,000
Reserves		19,514,793	19,477,693	17,186,000
Retained surplus / (accumulated deficit)		(11,382,465)	(8,883,700)	(11,907,000)
<b>Total equity</b>		<b>38,638,328</b>	<b>39,154,993</b>	<b>35,785,000</b>

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

## Budget variances commentary

### Statement of financial position

The above table provides a comparison between the 2018–19 Portfolio Budget Statements (PBS) budget and the final financial outcome in the 2018–19 financial statements. The Budget is not audited and does not reflect additional budget estimates provided in the 2018–19 Portfolio Additional Estimates Statements (PAES) or the revised budget provided as part of the 2019–2020 Portfolio Budget Statements (PBS). However major changes in budget have been explained as part of the variance analysis where relevant.

The actuals are prepared in accordance with Australian Accounting Standards.

Explanations have been provided where movements are greater than 10% of the line item and/or 2% of total assets or liabilities unless the movement is clearly trivial.

### Departmental major budget variances for 2019

Explanations of major variances	Affected line items (and statement)
<b>Financial assets</b>	
<b>Trade and other receivables</b>	
The variance relates to appropriation receivable, as actual appropriation drawdowns were lower than budgeted.	<i>Trade and other receivables (statement of financial position) and operating cash received - appropriations (cash flow statement).</i>
<b>Other financial assets</b>	
Actual accrued revenue was higher than forecast, and relates predominately to the Comprehensive-Nuclear-Test Ban Treaty quarterly operation and maintenance contract invoice.	<i>Other financial assets (statement of financial position) and total own source revenue (statement of comprehensive income).</i>
<b>Non-financial assets</b>	
<b>Land and buildings</b>	
The variance relates to the independent revaluation of land and buildings in 2019 and 2018, since the budget was prepared.	<i>Land and buildings and reserves (statement of financial position).</i>
<b>Leasehold improvements</b>	
Leasehold improvement are not separately identified in the budget	<i>Leasehold improvements and reserves (statement of financial position).</i>
<b>Intangibles</b>	
The variance relates to a reprioritisation of digital investment away from software toward refreshing the core infrastructure.	<i>Intangibles and trade and other receivables (statement of financial position) and investing cash used - purchase of property plant and equipment (cash flow statement).</i>
<b>Other non-financial assets</b>	
Actual prepaid expenses were lower than those forecast, and specifically relate to software support.	<i>Non-financial assets (statement of financial position).</i>
<b>Payables</b>	
<b>Suppliers and other payables</b>	
Actual trade creditors and unearned revenue associated with the Australian Clinical Dosimetry Service were lower than that budgeted.	<i>Payables (statement of financial position). Suppliers expense and total own source revenue (statement of comprehensive income)</i>

## Statement of changes in equity

for the period ended 30 June 2019

	Notes	2019	2018	Original budget
		\$	\$	2019
				\$
<b>CONTRIBUTED EQUITY</b>				
<b>Opening balance</b>				
Balance carried forward from previous period		28,561,000	21,606,000	28,561,000
<b>Adjusted opening balance</b>		<b>28,561,000</b>	21,606,000	28,561,000
<b>Transactions with owners</b>				
<b>Contributions by owners</b>				
Departmental capital budget	3.1A	1,945,000	1,955,000	1,945,000
Equity injection - appropriation		-	5,000,000	-
<b>Total transactions with owners</b>		<b>1,945,000</b>	6,955,000	1,945,000
<b>Closing balance as at 30 June</b>		<b>30,506,000</b>	28,561,000	30,506,000
<b>RETAINED EARNINGS</b>				
<b>Opening balance</b>				
Balance carried forward from previous period		(8,883,700)	(6,476,244)	(9,337,000)
<b>Adjusted opening balance</b>		<b>(8,883,700)</b>	(6,476,244)	(9,337,000)
<b>Comprehensive income</b>				
Deficit for the period		(2,498,765)	(2,407,456)	(2,570,000)
<b>Total comprehensive income</b>		<b>(2,498,765)</b>	(2,407,456)	(2,570,000)
<b>Closing balance as at 30 June</b>		<b>(11,382,465)</b>	(8,883,700)	(11,907,000)
<b>ASSET REVALUATION RESERVE</b>				
<b>Opening balance</b>				
Balance carried forward from previous period		19,477,693	17,186,283	17,186,000
<b>Adjusted opening balance</b>		<b>19,477,693</b>	17,186,283	17,186,000
<b>Comprehensive income</b>				
Other comprehensive income		37,100	2,291,410	-
<b>Total comprehensive income</b>		<b>37,100</b>	2,291,410	-
<b>Closing balance as at 30 June</b>		<b>19,514,793</b>	19,477,693	17,186,000

	Notes	Original budget		
		2019	2018	2019
		\$	\$	\$
<b>TOTAL EQUITY</b>				
<b>Opening balance</b>				
Balance carried forward from previous period		<b>39,154,993</b>	32,316,039	36,410,000
<b>Adjusted opening balance</b>		<b>39,154,993</b>	32,316,039	36,410,000
<b>Comprehensive income</b>				
Other comprehensive income		<b>37,100</b>	2,291,410	-
Surplus / (deficit) for the period		<b>(2,498,765)</b>	(2,407,456)	(2,570,000)
<b>Total comprehensive income</b>		<b>(2,461,665)</b>	(116,046)	(2,570,000)
<b>Transactions with owners</b>				
<b>Contributions by owners</b>				
Departmental capital budget		<b>1,945,000</b>	1,955,000	1,945,000
Equity injection - appropriation		-	5,000,000	-
<b>Total transactions with owners</b>		<b>1,945,000</b>	6,955,000	1,945,000
<b>Closing balance as at 30 June</b>		<b>38,638,328</b>	39,154,993	35,785,000

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.

## Budget variances commentary

### Statement of changes in equity

The above table provides a comparison between the *2018–19 Portfolio Budget Statements* (PBS) budget and the final financial outcome in the 2018–19 financial statements. The Budget is not audited and does not reflect additional budget estimates provided in the *2018–19 Portfolio Additional Estimates Statements* (PAES) or the revised budget provided as part of the *2019–2020 Portfolio Budget Statements* (PBS). However major changes in budget have been explained as part of the variance analysis where relevant.

The actuals are prepared in accordance with Australian Accounting Standards.

### Departmental major budget variances for 2019

Explanations of major variances	Affected line items (and statement)
<b>Asset revaluation reserves</b>	
Increase relates to the actual independent revaluation of land and buildings in 2019 and 2018, since the budget was prepared.	Land and buildings, leasehold improvements and plant and equipment and reserves (Statement of financial position).

## Cash flow statement

for the period ended 30 June 2019

		2019	2018	Original budget
	Notes	\$	\$	2019
				\$
<b>OPERATING ACTIVITIES</b>				
<b>Cash received</b>				
Appropriations		12,544,000	12,420,000	12,758,000
Sales of goods and rendering of services		8,260,087	7,901,916	6,898,000
Other cash received		4,387,920	4,300,519	4,396,000
GST received		548,069	191,132	456,000
<b>Total cash received</b>		<b>25,740,076</b>	<b>24,813,567</b>	<b>24,508,000</b>
<b>Cash used</b>				
Employees		(16,944,928)	(17,049,713)	(16,494,000)
Suppliers		(8,692,624)	(8,403,685)	(7,591,000)
GST paid		-	-	(423,000)
<b>Total cash used</b>		<b>(25,637,552)</b>	<b>(25,453,398)</b>	<b>(24,508,000)</b>
<b>Net cash (used by) / from operating activities</b>		<b>102,524</b>	<b>(639,831)</b>	<b>-</b>
<b>INVESTING ACTIVITIES</b>				
<b>Cash used</b>				
Purchase of property, plant, equipment and intangibles		(5,986,876)	(2,253,353)	(1,945,000)
<b>Total cash used</b>		<b>(5,986,876)</b>	<b>(2,253,353)</b>	<b>(1,945,000)</b>
<b>Net cash (used by) investing activities</b>		<b>(5,986,876)</b>	<b>(2,253,353)</b>	<b>(1,945,000)</b>
<b>FINANCING ACTIVITIES</b>				
<b>Cash received</b>				
Contributed equity - Departmental capital budget		2,330,000	1,651,000	1,945,000
Contributed equity - Equity injection		3,800,000	1,200,000	-
<b>Total cash received</b>		<b>6,130,000</b>	<b>2,851,000</b>	<b>1,945,000</b>
<b>Net cash from financing activities</b>		<b>6,130,000</b>	<b>2,851,000</b>	<b>1,945,000</b>
<b>Net (decrease) / increase in cash held</b>		<b>245,648</b>	<b>(42,184)</b>	<b>-</b>
Cash and cash equivalents at the beginning of the reporting period		1,100,443	1,142,627	1,143,000
<b>Cash and cash equivalents at the end of the reporting period</b>	2.1A	<b>1,346,091</b>	<b>1,100,443</b>	<b>1,143,000</b>

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

## Budget variances commentary

### Cash flow statement

The above table provides a comparison between the *2018–19 Portfolio Budget Statements* (PBS) budget and the final financial outcome in the 2018–19 financial statements. The Budget is not audited and does not reflect additional budget estimates provided in the *2018–19 Portfolio Additional Estimates Statements* (PAES) or the revised budget provided as part of the *2019–2020 Portfolio Budget Statements* (PBS). However major changes in budget have been explained as part of the variance analysis where relevant.

The actuals are prepared in accordance with Australian Accounting Standards.

Explanations have been provided where movements are greater than 10% of the line item and/or 2% of total cash received or used unless the movement is clearly trivial.

### *Departmental major budget variances for 2019*

<b>Explanations of major variances</b>	<b>Affected line items (and statement)</b>
Variations relating to cash flows occur because of the factors detailed under expenses, own source income, assets or liabilities.	<i>Operating, investing, financing activities (cash flow statement)</i>
<b>Investing activities - cash used</b>	
The increase in expenditure related to the medical linear accelerator project, completed during the year.	<i>Investing, financing activities (cash flow statement)</i>
<b>Contributed equity</b>	
Variance of \$4,185,000 for the current year relates to the drawdown of prior year appropriation, mainly associated with the medical linear accelerator project	<i>Financing activities (cash flow statement), trade and other receivables (statement of financial position)</i>

## Overview

### Objectives of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

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.*

The entity 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 the entity 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) *Public Governance, Performance and Accountability (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 have 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 method developed by the Australian Government Actuary. This method is impacted by fluctuations in the Commonwealth Government 10 year Treasury bond rate and the Entity's estimated salary growth rates.

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/or 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.

## **Taxation**

The entity is exempt from all forms of taxation except Fringe Benefits Tax (FBT) and the 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 2019.

## Notes to and forming part of the financial statements

This section analyses the financial performance of ARPANSA for the year ended 2019.

### Financial performance

This section analyses the financial performance of ARPANSA for the year ended 2019.

#### Note 1.1: Expenses

##### 1.1A: Employee benefits

	2019	2018
	\$	\$
Wages and salaries	<b>12,201,502</b>	11,788,021
Superannuation - defined contribution	<b>1,816,550</b>	1,809,559
Superannuation - defined benefit	<b>525,762</b>	484,235
Leave and other entitlements	<b>2,632,275</b>	2,207,378
Separation and redundancies	<b>78,228</b>	164,836
<b>Total employee benefits</b>	<b>17,254,317</b>	16,454,029

##### Accounting policy

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

## 1.1B: Suppliers

	2019		2018
	\$		\$
<b>Goods and services supplied or rendered</b>			
Audit fees - ANAO	54,000		54,000
Audit fees - outsourced	14,657		93,196
Advisory council and committees	114,396		118,960
Communications	265,805		320,964
Construction and maintenance - Comprehensive Nuclear-Test-Ban Treaty	621,172		655,133
Contractors/Consultants	987,146		780,817
Demolition and remediation	-		153,433
Information technology	946,366		861,259
Postage and freight	194,082		212,277
Reference material & subscriptions	302,238		353,875
Repair and maintenance	613,197		578,315
Training and conferences	199,521		219,188
Travel	1,148,884		1,070,486
Utilities	488,416		544,539
Other goods and services	892,439		862,770
<b>Total goods and services supplied or rendered</b>	<b>6,842,319</b>		6,879,212
Goods supplied	1,266,240		1,394,857
Services rendered	5,576,079		5,484,356
<b>Total goods and services supplied or rendered</b>	<b>6,842,319</b>		6,879,213
<b>Other supplier expenses</b>			
Operating lease rentals	252,974		250,721
Workers compensation premiums	27,293		41,439
<b>Total other supplier expenses</b>	<b>280,267</b>		292,160
<b>Total supplier expenses</b>	<b>7,122,586</b>		7,171,373
<b>Leasing commitments</b>			
ARPANSA in its capacity as lessee:			
<b>Lease for office accommodation.</b>			
<ul style="list-style-type: none"> <li>Four year office accommodation lease with two further extension options of two years each. Lease payments are subject to an annual CPI increase.</li> </ul>			
<b>Agreement for the provision of motor vehicle to senior executive officers.</b>			
<ul style="list-style-type: none"> <li>No contingent rentals exist. There are no renewal or purchase options available to the Agency.</li> </ul>			
<b>Commitments for minimum lease payments in relation to non-cancellable operating leases are payable as follows:</b>			
Within 1 year	172,082		249,374
Between 1 to 5 years	-		168,898
<b>Total operating lease commitments</b>	<b>172,082</b>		418,272

### Accounting policy

A distinction is made between finance leases and operating leases. Finance leases effectively transfer from the lessor to the lessee substantially all the risks and rewards incidental to ownership of leased assets. An operating lease is a lease that is not a finance lease. In operating leases, the lessor effectively retains substantially all such risks and benefits.

Operating lease payments are expensed on a straight-line basis which is representative of the pattern of benefits derived from the leased assets.

#### 1.1C: Impairment Loss allowance on financial instruments

	2019	2018
	\$	\$
Impairment on trade and other receivables	<b>1,741</b>	10,429

#### 1.1D: Write-down and impairment of other assets

	2019	2018
	\$	\$
Property, plant and equipment - write-off	<b>31,949</b>	30,710
Computer software - write-off	<b>1,663</b>	112,472
Inventories - write-off	-	22,941
<b>Total write-down and impairment of assets</b>	<b>33,612</b>	166,123

#### 1.1E: Foreign exchange losses

	2019	2018
	\$	\$
Non-speculative	-	844
<b>Total foreign exchange losses</b>	-	844

### Accounting policy

Gains and losses from foreign currency are recognised when incurred.

#### 1.1F: Losses from asset sales

	2019	2018
	\$	\$
Property, plant and equipment	75	-
<b>Total losses from asset sales</b>	75	-

## Note 1.2: Own-source revenue and gains

### Own-source revenue

#### 1.2A: Sale of goods and rendering of services

	2019	2018
	\$	\$
Scientific services - Personal Radiation Monitoring Service	<b>2,550,653</b>	2,428,366
Construction and maintenance - Comprehensive Nuclear-Test-Ban Treaty	<b>1,779,730</b>	1,848,859
Australian Clinical Dosimetry Service	<b>1,895,632</b>	1,290,003
Other scientific services	<b>1,402,359</b>	1,542,096
<b>Total sale of goods and rendering of services</b>	<b>7,628,374</b>	7,109,324

#### Accounting policy

Revenue from the sale of goods is recognised when:

- a) The risks and rewards of ownership have been transferred to the buyer
- b) The entity retains no managerial involvement or effective control over the goods.

Revenue from rendering of services is recognised by reference to the stage of completion of contracts at the reporting date, and is determined by reference to:

- a) the proportion that costs incurred to date bear to the estimated total costs of the transaction.

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 is reviewed at end of reporting period.

Allowances are made when collectability of the debt is no longer probable.

#### 1.2B: Licence fees

	2019	2018
	\$	\$
Application fees	<b>17,051</b>	12,677
Annual charges	<b>4,370,869</b>	4,287,842
<b>Total licence fees</b>	<b>4,387,920</b>	4,300,519

#### 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.

#### 1.2C: Other revenue

	2019	2018
	\$	\$
Resources received free of charge - ANAO	<b>54,000</b>	54,000
<b>Total other revenue</b>	<b>54,000</b>	54,000

### 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

	2019		2018
	\$		\$
Non-speculative	278		-
<b>Total foreign exchange gains</b>	<b>278</b>		<b>-</b>

### Accounting policy

Gains and losses from foreign currency are recognised when incurred.

#### 1.2E: Reversal of write-downs and impairment

	2019		2018
	\$		\$
Inventories - reversal write-off	491		-
<b>Total reversals of previous asset write-down and impairments</b>	<b>491</b>		<b>-</b>

#### 1.2F: Revenue from Government

	2019		2018
	\$		\$
<b>Appropriation:</b>			
Departmental appropriation	12,758,000		12,839,000
<b>Total revenue from Government</b>	<b>12,758,000</b>		<b>12,839,000</b>

### 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 receivable 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 2019. Employee-related information is disclosed in the people and relationships section.

### Note 2.1: Financial assets

#### 2.1A: Cash and cash equivalents

	2019	2018
	\$	\$
Cash in special accounts	1,314,930	1,094,061
Cash on hand or on deposit	31,161	6,382
<b>Total cash and cash equivalents</b>	<b>1,346,091</b>	<b>1,100,443</b>
The closing balance of cash in special accounts does not include any amounts held in trust: (nil in 2018)		

#### 2.1B: Trade and other receivables

	2019	2018
	\$	\$
Goods and services receivables		
Goods and services	953,949	1,332,951
<b>Total goods and services receivables</b>	<b>953,949</b>	<b>1,332,951</b>
<b>Appropriations receivable:</b>		
For existing program	633,000	419,000
Undrawn equity injection	-	3,800,000
Departmental capital budget	670,000	1,055,000
<b>Total appropriations receivable</b>	<b>1,303,000</b>	<b>5,274,000</b>
<b>Other receivables</b>		
Statutory receivables - GST	20,794	52,925
<b>Total other receivables</b>	<b>20,794</b>	<b>52,925</b>
<b>Total trade and other receivables (gross)</b>	<b>2,277,743</b>	<b>6,659,876</b>
<b>Less impairment allowance account</b>	<b>(14,309)</b>	<b>(19,994)</b>
<b>Total trade and other receivables (net)</b>	<b>2,263,434</b>	<b>6,639,882</b>

Goods and services receivable was with entities external to the Australian Government. Credit terms are net 30 days (2018: 30 days)

### Accounting policy

#### Receivables

Trade receivables, and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as ‘receivables’. Receivables are measured at amortised cost using the effective interest method less impairment. Interest is recognised by applying the effective interest rate.

	2019		2018
	\$		\$
Reconciliation of impairment allowance			
<b>Goods and services</b>			
<b>Opening balance</b>	<b>19,994</b>		14,460
Amounts recovered and reversed	<b>761</b>		974
Amounts written off	<b>(8,188)</b>		(5,869)
Increase/decrease recognised in net cost of services	<b>1,741</b>		10,429
<b>Closing Balance</b>	<b>14,309</b>		19,994

### 2.1C: Other financial assets

	2019		2018
	\$		\$
Accrued revenue	<b>559,134</b>		130,686
<b>Total other financial assets</b>	<b>559,134</b>		130,686

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	PP & E	Computer software <sup>1</sup>	Other intangibles-trademarks	Total
	\$	\$	\$	\$	\$	\$	\$
<b>As at 1 July 2018</b>							
Gross book value	10,500,000	17,794,740	240,455	8,383,573	3,804,154	4,620	40,727,542
Accumulated depreciation, amortisation and impairment	-	-	(87,519)	(1,513,198)	(2,792,807)	(4,620)	(4,398,144)
<b>Net book value 1 July 2018</b>	<b>10,500,000</b>	<b>17,794,740</b>	<b>152,936</b>	<b>6,870,375</b>	<b>1,011,347</b>	<b>-</b>	<b>36,329,398</b>
Additions:							
Purchase	-	837,079	15,820	4,888,938	241,839	3,200	5,986,876
Revaluations and impairments recognised in other comprehensive income	(750,000)	787,100	-	-	-	-	37,100
Depreciation and amortisation	-	(1,069,202)	(94,314)	(1,432,069)	(319,847)	(65)	(2,915,497)
Other movements							
Initial recognition	-	-	-	48,362	24,805	-	73,167
Disposals:							
Write-offs	-	-	-	(31,949)	(1,663)	-	(33,612)
Other	-	-	-	(75)	-	-	(75)
<b>Net book value 30 June 2019</b>	<b>9,750,000</b>	<b>18,349,717</b>	<b>74,442</b>	<b>10,343,582</b>	<b>956,481</b>	<b>3,135</b>	<b>39,477,357</b>
<b>Net book value as of 30 June 2019 represented by:</b>							
Gross book value	9,750,000	18,349,717	256,275	13,192,263	4,045,525	3,200	45,596,980
Accumulated depreciation, amortisation and impairment	-	-	(181,833)	(2,848,681)	(3,089,044)	(65)	(6,119,623)
<b>Net book value 30 June 2019</b>	<b>9,750,000</b>	<b>18,349,717</b>	<b>74,442</b>	<b>10,343,582</b>	<b>956,481</b>	<b>3,135</b>	<b>39,477,357</b>

1. The carrying amount of computer software included \$446,033 purchased software and \$510,447 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 revaluation were conducted in accordance with the revaluation policy as stated in this note. On 30 June 2019, an independent valuer conducted revaluations of land and buildings.

### Note 2.2 Non-financial assets policy

#### *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).

#### **Revaluations**

Following initial recognition at cost, property plant and equipment is carried at 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.

Fair values for each class of asset are determined as shown below:

<b>Asset class</b>	<b>Fair value measures as:</b>
Land	Market value
Buildings exc. leasehold improvement	Depreciated replacement cost
Leasehold improvements	Depreciated replacement cost
Plant and equipment	Market value

Independent valuers from the Jones Lang LaSalle Advisory Services Pty Ltd conducted a valuation of land and buildings on 30 June 2019.

Revaluation decrement of \$750,000 for land (increment 2018: \$1,500,000) and increment of \$787,100 for buildings on freehold land (2018: \$791,410) 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 the straight-line method of depreciation. Leasehold improvements are depreciated using the straight line method over the lesser of the estimated useful life of the leasehold improvements or the unexpired period of the lease.

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:

	<b>2019</b>	2018
Buildings on freehold land	<b>17 years</b>	17 years
Leasehold improvements	<b>Lease term - 4 years</b>	Lease term - 4 years
Plant and equipment	<b>1 to 45 years</b>	1 to 45 years

## Impairment

All assets were assessed for impairment at 30 June 2019. 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 (2018: 5 to 15.5 years).

All intangibles assets were assessed for indications of impairment as at 30 June 2019.

## Note 2.2B: Inventories

	2019	2018
	\$	\$
<b>Inventories held for sale</b>		
Finished goods	10,248	4,358
<b>Total Inventories held for sale</b>	<b>10,248</b>	4,358
Inventories held for distribution	1,478,156	1,384,832
<b>Total inventories</b>	<b>1,488,404</b>	1,389,190

During 2018–19, \$43,658 of inventory held for sale was recognised as an expense (2017–18: \$16,439)

During 2018–19, \$42,105 of inventory held for distribution was recognised as an expense (2017–18: \$55,743).

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

	2019	2018
	\$	\$
Prepayments	427,606	586,169
<b>Total other non-financial assets</b>	<b>427,606</b>	586,169

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

## Note 2.3: Payables

### 2.3A: Suppliers

	2019	2018
	\$	\$
Trade creditors and accruals	<b>756,002</b>	878,827
<b>Total suppliers</b>	<b>756,002</b>	878,827

Settlement is usually made within 30 days.

### 2.3B: Other payables

	2019	2018
	\$	\$
Salaries and wages	<b>156,300</b>	147,329
Superannuation	<b>18,130</b>	17,819
Unearned income	<b>806,421</b>	788,763
Demolition and remediation	<b>288,461</b>	618,461
Other	<b>33,522</b>	4,821
<b>Total other payables</b>	<b>1,302,834</b>	<b>1,577,193</b>

## 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.

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

<b>Annual appropriations for 2019</b>					
	<b>Annual appropriation</b> <sup>1</sup>	<b>Adjustments to appropriation</b> <sup>2</sup>	<b>Total appropriation</b>	<b>Appropriation applied in 2019 (current and prior years)</b>	<b>Variance</b> <sup>3</sup>
	\$	\$	\$	\$	\$
<b>DEPARTMENTAL</b>					
Ordinary annual services	<b>12,758,000</b>	-	<b>12,758,000</b>	<b>12,544,000</b>	<b>214,000</b>
Capital budget <sup>4</sup>	<b>1,945,000</b>	-	<b>1,945,000</b>	<b>2,330,000</b>	<b>(385,000)</b>
Other services					
Equity injections	-	-	-	<b>3,800,000</b>	<b>(3,800,000)</b>
<b>Total departmental</b>	<b>14,703,000</b>	-	<b>14,703,000</b>	<b>18,674,000</b>	<b>(3,971,000)</b>

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 \$3,971,000 reflects the movement in appropriation receivable amount at 30 June 2019 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.

<b>Annual appropriations for 2018</b>					
	<b>Annual appropriation<sup>1</sup></b>	<b>Adjustments to appropriation<sup>2</sup></b>	<b>Total appropriation</b>	<b>Appropriation applied in 2018 (current and prior years)</b>	<b>Variance<sup>3</sup></b>
	\$	\$	\$	\$	\$
<b>DEPARTMENTAL</b>					
Ordinary annual services	12,839,000	-	12,839,000	12,420,000	419,000
Capital budget <sup>4</sup>	1,955,000		1,955,000	1,651,000	304,000
Other services					
Equity injections	5,000,000	-	5,000,000	1,200,000	3,800,000
<b>Total departmental</b>	<b>19,794,000</b>	<b>-</b>	<b>19,794,000</b>	<b>15,271,000</b>	<b>4,523,000</b>

## 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 \$4,523,000 reflects the appropriation receivable amount at 30 June 2018 for ordinary annual and other services, and the movement in appropriation receivable for capital budget.
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.

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

<b>Authority</b>	<b>2019</b>	2018
	\$	\$
<b>DEPARTMENTAL</b>		
Appropriation Act (No. 1) 2018–19	<b>1,303,000</b>	-
Appropriation Act (No. 1) 2018–19 - cash at bank	<b>31,161</b>	-
Appropriation Act (No. 1) 2017–18	-	1,474,000
Appropriation Act (No. 1) 2017–18 - cash at bank	-	6,382
Appropriation Act (No. 2) 2017–18	-	3,800,000
<b>Total departmental</b>	<b>1,334,161</b>	5,280,382

## Note 3.2: Special Accounts

	2019	2018
	\$	\$
<b>ARPANSA Special Account (Departmental)</b>		
<i>Establishing Instrument: Australian Radiation Protection and Nuclear Safety Act 1998; s56(4)</i>		
<i>Appropriation: Public Governance, Performance and Accountability Act 2013; s80</i>		
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.”		
Balance brought forward from previous period	<b>1,100,443</b>	1,142,627
<b>Increases</b>		
Departmental	<b>31,870,076</b>	27,664,567
<b>Total increase</b>	<b>31,870,076</b>	27,664,567
<b>Available for payments</b>	<b>32,970,519</b>	28,807,194
<b>Decreases</b>		
Departmental	<b>(31,624,428)</b>	(27,706,751)
<b>Total decrease</b>	<b>(31,624,428)</b>	(27,706,751)
<b>Total balance carried to next period</b>	<b>1,346,091</b>	1,100,443
<b>Balance represented by:</b>		
Cash held in entity bank accounts	<b>1,346,091</b>	1,100,443
<b>Total balance carried to next period</b>	<b>1,346,091</b>	1,100,443

## Note 3.3: Net cash appropriation arrangements

	2019	2018
	\$	\$
<b>Total comprehensive income (loss) less depreciation/amortisation expenses previously funded through revenue appropriations</b>	<b>453,832</b>	2,791,455
Plus: depreciation/amortisation expenses previously funded through revenue appropriations	<b>(2,915,497)</b>	(2,907,501)
<b>Total comprehensive income (loss) as per the statement of comprehensive income</b>	<b>(2,461,665)</b>	<b>(116,046)</b>

## 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

	2019	2018
	\$	\$
Leave	4,864,862	4,564,755
<b>Total employee provisions</b>	<b>4,864,862</b>	<b>4,564,755</b>

### Accounting policy

Liabilities for 'short-term employee benefits' and termination benefits expected to be settled within twelve 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 2019. 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 six branch and office heads and Chief Financial Officer. Key management personnel remuneration is reported in the table below:

	2019	2018
	\$	\$
Short-term employee benefits	1,707,650	1,325,376
Post-employment benefits	239,485	186,158
Other long-term employee benefits	41,353	31,999
<b>Total key management personnel remuneration expenses<sup>1</sup></b>	<b>1,988,488</b>	<b>1,543,533</b>

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 that are included in the above table are nine individuals (2018: 6). In 2019, three individuals were employed for part of the year only.

## 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 2019 ARPANSA had no quantifiable or unquantifiable contingencies. (2018: 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

#### 5.2A: Categories of financial instruments

	2019	2018
	\$	\$
<b>Financial assets under AASB 139</b>		
Receivables		
Cash and cash equivalents		1,100,443
Trade and other receivables		1,312,957
Other financial assets		130,686
<b>Total receivables</b>		2,544,086
<b>Total financial assets</b>		2,544,086
<b>Financial assets under AASB 9</b>		
<b>Financial assets at amortised cost</b>		
Cash and cash equivalents	1,346,091	
Trade and other receivables	939,640	
Other financials assets	559,134	
<b>Total financial assets at amortised cost</b>	2,844,865	
<b>Financial liabilities</b>		
<b>Financial liabilities measured at amortised cost</b>		
Trade creditors	756,002	878,827
<b>Total financial liabilities measured at amortised cost</b>	756,002	878,827
<b>Total financial liabilities</b>	756,002	878,827

Classification of financial assets on the date of initial application of AASB 9.					
		AASB 139 original classification	AASB 9 new classification	AASB 139 carrying amount at 1 July 2018	AASB 9 carrying amount at 1 July 2018
Financial assets class	Note			\$	\$
Cash and cash equivalents	2.1A	Receivables	Amortised Cost	1,100,443	1,100,443
Trade receivables	2.1B	Receivables	Amortised Cost	1,312,957	1,312,957
Other financial assets	2.1C	Receivables	Amortised Cost	130,686	130,686
<b>Total financial assets</b>				<b>2,544,086</b>	<b>2,544,086</b>

## Accounting policy

### Financial assets

With the implementation of AASB 9 *Financial Instruments* for the first time in 2019, 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.

Comparatives have not been restated on initial application

#### *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; and
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 tables provide 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.

### 5.3A: Fair value measurements

	Fair value measurements at the end of the reporting period	
	2019	2018
	\$	\$
<b>Non-financial assets</b>		
Land	9,750,000	10,500,000
Buildings on freehold land	18,349,717	17,794,740
Leasehold Improvements	74,442	152,936
Plant and equipment	10,343,582	6,870,375
<b>Total non-financial assets</b>	<b>38,517,741</b>	<b>35,318,051</b>

No change in valuation technique occurred during the period.

## Other information

### Note 6.1: Aggregate assets and liabilities

#### 6.1A: Aggregate assets and liabilities

	2019	2018
	\$	\$
Assets expected to be recovered in:		
No more than 12 months	<b>6,084,670</b>	9,846,371
More than 12 months	<b>39,477,357</b>	36,329,397
<b>Total assets</b>	<b>45,562,027</b>	46,175,768
Liabilities expected to be settled in:		
No more than 12 months	<b>3,201,778</b>	3,552,309
More than 12 months	<b>3,721,920</b>	3,468,466
<b>Total liabilities</b>	<b>6,923,698</b>	7,020,775

# PART 6: APPENDICES

## Appendix 1

### ARPANSA licensing activities

#### Details of any licensee breaches in the financial year

The CEO was made aware of four breaches with significant safety implications:

- The Australian Nuclear Science and Technology Organisation (ANSTO) was found in breach of subsection 30(2) of the ARPANS Act by failing to comply with licence conditions under section 60 of the regulations. This was a result of ineffective safety management at ANSTO Health of the process involving transport of a molybdenum-99 quality control sample within the facility resulting in a spill and minor personal contamination.
- ANSTO was found in breach of subsection 30(2) of the ARPANS Act by failing to comply with licence conditions under section 63 of the regulations. This occurred as a result of failing to seek approval to conduct helicopter training exercises adjacent to, and within, the Little Forest Legacy Site.
- ANSTO was found in breach of subsection 30(2) of the ARPANS Act by failing to comply with licence conditions under section 59 of the regulations. This occurred at the Camperdown facility as a result of failing to meet transport requirements on two occasions as required by ANSTO's own procedures and the Transport Code.
- ANSTO was found in breach of subsection 30(2) of the ARPANS Act by failing to comply with licence conditions under section 63 of the regulations. This occurred at the Camperdown facility as a result of failing to identify an inherent risk of radiation exposure in excess of the statutory dose limit.

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

The CEO was made aware of 21 breaches with no, or minor, safety implications:

- A licence holder did not comply with the requirement to seek prior approval to implement a significant change under section 63 of the regulations.
- A licence holder disposed of controlled material without prior approval under section 65(1) of the regulations—this breach was self-reported.
- Two licence holders did not take reasonably practicable steps to ensure their plans and arrangements for managing safety were implemented under section 60 of the regulations.
- A licence holder did not comply with their annual surveillance requirements in accordance with their operating limits and conditions.
- Two licence holders did not review or update their plans and arrangements for managing the safety of their facility under section 61 of the regulations.
- A licence holder failed to inform the CEO of a relevant change under section 64(1) of the regulations.
- Two licence holders did not comply with a requirement to review and update plans and arrangements in accordance with section 61 of the regulations—one of these breaches was self-reported.

- A licence holder failed to comply with their plans and arrangements in that there was no evidence of assessing and recording average and maximum radiation dose rates around a facility.
- A licence holder did not comply with a requirement to construct an item important to safety without prior approval under section 66 of the regulations—this breach was self-reported.
- Two licence holders disposed of an apparatus without prior approval under section 65(1) of the regulations—one of these breaches was self-reported.
- Two licence holders failed to maintain an accurate source inventory in accordance with licence conditions.
- A licence holder did not comply with a requirement to maintain calibrated equipment in accordance with a code or standard that was a condition of licence.
- A licence holder had unauthorised dealings with a source under section 31(1) of the Act on two separate occasions.
- A licence holder failed to notify the CEO within seven days of transferring a source under section 65(3) of the regulations—this breach was self-reported.
- A licence holder did not comply with a requirement to label equipment in accordance with a code or standard that was a condition of licence.

In all cases appropriate corrective actions were undertaken by the licence holder.

### Details of any improvement notices or directions issued during the year

There were no improvement notices issued under section 80A of the ARPANS Act.

There were no directions issued under section 41 of the ARPANS Act.

### Other significant activities

#### *Cost recovery*

During the financial year 2018–19, ARPANSA moved to the final stages of its cost recovery plan, which aims to fully recover the costs of its regulatory activities. Following consultation with its licence holders, amended licence charges regulations will be introduced effective 1 July 2019, including a revised source charging model.

#### *Independent safety review of ANSTO Health*

Following an accident at ANSTO Health in August 2017 and a series of safety incidents in the following months, the CEO of ARPANSA issued a direction to ANSTO in June 2018. The direction was issued to initiate an independent review of safety practices at ANSTO, particularly in relation to ANSTO Health's activities in Building 23 of the Lucas Heights Science and Technology Centre. On 5 October 2018, ANSTO submitted the report from the independent review team to ARPANSA. Then on 4 December 2018 ANSTO submitted an action plan for ARPANSA's approval outlining how ANSTO will address the issues identified in the independent review team report submitted in October 2018.

While a significant number of actions were proposed in the action plan, with several actions already being undertaken, the plan did not provide enough evidence that ANSTO was appropriately addressing the contributing factors to the safety incidents as identified in the report and its recommendations. ARPANSA has subsequently been working with ANSTO to ensure clear expectations for the plan, and agreement on the outcomes of the actions and how this outcome can be demonstrated and sustained. As at 30 June 2019 the action plan had not been approved by ARPANSA.

More information can be found at:

[arpansa.gov.au/news/arpansa-receives-action-plan-ansto-following-safety-review](https://www.arpansa.gov.au/news/arpansa-receives-action-plan-ansto-following-safety-review)

[arpansa.gov.au/news/arpansa-receives-report-independent-review-team-ansto-approach-safety](https://www.arpansa.gov.au/news/arpansa-receives-report-independent-review-team-ansto-approach-safety)

[arpansa.gov.au/news/arpansa-issues-direction-ansto](https://www.arpansa.gov.au/news/arpansa-issues-direction-ansto)

### *Amended licence for the ANSTO Nuclear Medicine Facility*

On 24 May 2019, the CEO of ARPANSA amended the licence for the ANSTO Nuclear Medicine (ANM) molybdenum-99 (Mo-99) facility authorising ANSTO to commence routine operations of the facility. This followed a period of assessment by ARPANSA in response to a request from ANSTO to remove licence condition 8, which specified the minimum requirements that would need to be fulfilled before routine operations could commence. These conditions were met and were replaced by a new licence condition which requires ANSTO to update its risk assessment for the ANM facility by April 2020.

A detailed Statement of Reasons by the CEO on the issue of the licence can be found on the ARPANSA website at <https://www.arpansa.gov.au/anm#SoR>

### *Accident at ANSTO Nuclear Medicine Facility*

On Friday 21 June 2019, ARPANSA was notified of a radiation contamination event at the ANM production facility in Lucas Heights in which the hands of three workers were exposed to radiation. This event was later determined to be an accident under section 58 of the regulations. ARPANSA inspectors conducted a site visit to ANSTO on the same day, and further site visits and an inspection in the following weeks. Production of nuclear medicine at ANM was halted.

On receipt of ANSTO's investigation report detailing how and why the accident occurred, and new controls to prevent recurrence, and following ARPANSA assessment, the CEO of ARPANSA restricted production in the ANM Facility on Friday 5 July to a level that can satisfy the domestic demand for nuclear medicine only. ANSTO was authorised to recommence production with this restriction from 6 July.

More information can be found at:

[arpansa.gov.au/news/contamination-event-ansto-nuclear-medicine-facility](https://www.arpansa.gov.au/news/contamination-event-ansto-nuclear-medicine-facility)

[arpansa.gov.au/news/ceo-arpansa-restricts-production-ansto-nuclear-medicine-facility-after-accident](https://www.arpansa.gov.au/news/ceo-arpansa-restricts-production-ansto-nuclear-medicine-facility-after-accident)

## Facility licences as at 30 June 2019

Commonwealth entity	Licences held
Australian National University	3
Australian Nuclear Science and Technology Organisation	20
Australian Radiation Protection and Nuclear Safety Agency	1
Department of Defence/Australian Defence Forces	4
Department of Home Affairs	4
Department of the Environment and Energy	1
<b>Total</b>	<b>33</b>

## Source licences as at 30 June 2019

Commonwealth entity	Licences held
ASC Pty Ltd and ASC AWD Shipbuilder Pty Ltd	1
Attorney-General's Department	2
Australian Trade and Investment Commission	1
Australian Transaction Reports and Analysis Centre	1
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 Sports Commission	1
Australian War Memorial	1
Commonwealth Bureau of Meteorology	1
Commonwealth Scientific and Industrial Research Organisation	9
Decipha Pty Ltd	1
Department of Agriculture and Water Resources	1
Department of Defence/Australian Defence Forces	1
Department of Foreign Affairs and Trade	1
Department of Home Affairs	3
Department of Industry, Innovation and Science	3
Department of Infrastructure, Regional Development and Cities	1
Department of Parliamentary Services	1
Department of the Environment and Energy	4
Department of the Prime Minister and Cabinet	1
Federal Court of Australia	1
High Court of Australia	1
Indian Ocean Territories Health Service	1
Law Courts Limited	1
National Archives of Australia	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
<b>Total</b>	<b>58</b>

## Appendix 2

### Operations of the Radiation Health and Safety Advisory Council and Committees

#### Operations of the Radiation Health and Safety Advisory Council

During 2018–19, the Radiation Health and Safety Advisory Council (the Council) met on two occasions. Summaries of the meetings can be found at [arpansa.gov.au/rhsac-minutes](http://arpansa.gov.au/rhsac-minutes).

The membership as at 30 June 2019 was:

#### **Chair**

Dr Roger Allison\* (Queensland), Radiation Oncologist (former Executive Director Cancer Care Services), Royal Brisbane and Women's Hospital

#### **CEO of ARPANSA**

Dr Carl-Magnus Larsson (Commonwealth)

#### **Radiation Control Officers:**

- Mr Keith Baldry (South Australia), Director, Regulation and Compliance, South Australian Environment Protection Authority
- Dr Stephen Newbery (Tasmania), Principal Health Physicist, Tasmanian Department of Health and Human Services

#### **Nominee of the Chief Minister of the Northern Territory**

Dr Hugh Heggie, Chief Health Officer, Department of Health of the Northern Territory

#### **Person to represent the interests of the general public**

Dr Peter Karamoskos\*, consultant radiologist at Epworth Medical Imaging

#### **Other members:**

- Dr Jane Canestra\* (Victoria), Medical practitioner and emergency physician with expertise in the health aspects of radiological emergencies
- Professor Adele Green\* (Queensland), Head, Cancer and Population Studies Group, Queensland Institute of Medical Research
- Mr Frank Harris (Queensland), Chief Adviser Radiation Governance and Product Stewardship, Rio Tinto Uranium
- Ms Melissa Holzberger (Queensland), Director and Principal, Sloan Holzberger Lawyers
- Professor Pamela Sykes\* (South Australia), Professor Preventive Cancer Biology, Flinders University
- Dr Melanie Taylor\* (New South Wales), Senior Lecturer Organisational Psychology, Macquarie University.

\* *reappointed for a 12-month term ending 31 March 2020*

During 2018–19, Council considered and discussed:

- Issues associated with the identification of naturally occurring radioactive material including a graded approach to regulation of such material, and the overlap between regulatory approvals by ARPANSA and the Department of Environment.
- The coordination of ARPANSA and Department of Environment regulatory processes, particularly with regard to the Department of Industry, Innovation and Science’s proposed National Radioactive Waste Management Facility.
- The regulatory Direction to ANSTO following recent safety-related events, and the subsequent report on safety practices at ANSTO from an independent expert review team, including some recommendations directly about ARPANSA’s role as the regulator.
- A model for measuring the maturity of an organisation’s internal safety culture based on international best practice, which the agency would first trial internally and publish results for transparency, before offering as a tool for regulated entities.
- The International Atomic Energy Agency Integrated Regulatory Review Service Mission to Australia, held in November 2018, that provided a peer review of Australia’s federal system of regulation for radiation protection and nuclear safety.
- An ARPANSA-developed training package for the radiation protection of medical personnel.
- A new draft *Medical Exposure Code* (RPS C-5), and a revised *Code for the Safe Transport of Radioactive Material* (RPS C-2), both of which Council recommended are adopted.
- An ARPANSA-led Australian study on mobile phone use and incidence of brain cancer, published in December 2018 with the *British Medical Journal Open*, along with associated emerging public concern around the deployment of 5G technology.

Council members also attended the opening and naming of ARPANSA’s new medical linear accelerator (linac) and associated training centre, which was named the ‘Roger Allison Radiotherapy Quality Centre’ in order to recognise the substantial contribution to radiation therapy and to ARPANSA over many years by the Chair of Council, Dr Roger Allison. The commitment, time and efforts of Dr Allison have benefited ARPANSA and the Australian public in radiation protection, particularly in radiotherapy for cancer treatment, in a manner that cannot be overestimated.

## Operations of the Radiation Health Committee

During 2018–19, the Radiation Health Committee (RHC) met on three occasions. The meeting minutes are available at [arpansa.gov.au/rhc-minutes](http://arpansa.gov.au/rhc-minutes).

The RHC is appointed on a three-year term, which commenced on 1 January 2018. The membership as at 30 June 2019 was:

### Chair

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

### CEO of ARPANSA

Dr Carl-Magnus Larsson (Commonwealth)

### Radiation Control Officers (each state and territory):

- Mr Bradley Feldtman (Northern Territory), Manager Radiation Protection, Department of Health
- Ms Amanda Fortanier (South Australia), Team Leader, Radiation Health, Radiation Protection Branch, SA Environment Protection Authority
- Ms Penny Hill (Australian Capital Territory), Senior Radiation Safety Officer, Health Protection Service, ACT Health
- Mr Noel Cleaves (Victoria), Manager, Environmental Health Regulation & Compliance, Health Protection Branch, Department of Health and Human Services
- Mr Simon Critchley (Queensland), Director, Radiation Health, Queensland Health
- Ms Hazel Upton (Western Australia), Radiation Control Officer, Radiation Health Unit, Department of Health
- Dr Stephen Newbery (Tasmania), Principal Health Physicist, Department of Health and Human Services
- Mr Mark Carey (New South Wales), Principal Policy Officer, New South Wales Environment Protection Authority

### Nuclear Safety Committee representative

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

### Person to represent the interests of the general public

Ms Fay Bellis (Victoria), Quality Management System Consultant

### Other members

Dr Bruce Hocking, consulting specialist in occupational medicine.

During 2018–19, the committee considered and discussed:

### *Safety in lasers, intense pulse height sources and light-emitting diode phototherapy on the cosmetic and beauty therapy industry*

The RHC noted the publication of an advisory note on lasers, intense pulsed light (IPL) sources and light-emitting diode (LED) phototherapy in the cosmetic and beauty therapy industry. The advice is in the form of questions and answers related to the safe delivery of light-based cosmetic treatments. The information presented a focus on the radiation protection aspects of using lasers, IPLs and LED phototherapy to deliver cosmetic outcomes. The advice is provided for the protection of the client undergoing treatment; however, there is also information available for the safety of treatment providers and other potentially exposed individuals.

The advice consists of two parts: advice for consumers seeking cosmetic treatments and advice for treatment providers delivering these services.

### *Dose and risk criteria for protection of people following the closure of a disposal facility for radioactive waste*

The RHC endorsed an advisory note to provide clarification and further information on the application of dose and risk criteria for protection of people following the closure of a disposal facility for radioactive waste. The ARPANSA advisory note will be published online as additional material for stakeholders to support implementation of the *Code for Disposal Facilities for Solid Radioactive Waste* (RPS C-3).

### *International Atomic Energy Commission (IAEA) Integrated Regulatory Review Service (IRRS) Mission*

Members noted the recommendations and suggestions resulting from the IAEA IRRS mission to Australia in November 2018. In order to address these recommendations and suggestions, suitable measures were considered and agreed to.

### *Development of regulatory codes and standards*

During the year the 2nd edition of the *National Directory for Radiation Protection* (NDRP) was further revised incorporating the IRRS recommendations.

During the year ARPANSA published the following documents:

- *Code for the Safe Transport of Radioactive Material* (RPS C-2, Rev 1) incorporating the 2018 edition of *IAEA Regulations for Safe Transport of Radioactive Material*
- *Code for Disposal facilities for Solid Radioactive Waste* (RPS C-3)
- *Code of Radiation Protection Requirements for Industrial Radiography* (RPS C-4)
- *Code for Disposal of Radioactive Waste by the User* (RPS C-6)
- *Guide for Radiation Protection in Emergency Exposure Situations* (RPS G-3)

Comments received from the stakeholder consultation on the draft *Medical Exposure Code* were resolved. During the year the RHC approved the publication of the *Code for Radiation Protection in Medical Exposure* (RPS C-5).

The Committee agreed to revise the *Safety Guide for Classification of Radioactive Waste* (RPS 20).

The revision of this Guide is in the process of finalisation.

At the end of the financial year the Committee was working on the following documents:

- *Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz* (RPS 3)
- A guidance document for the users on compliance with the *Code for Radiation Protection in Medical Exposure* (RPS C-5)

### *Matters of public interest*

The following items of public interest have been discussed at the RHC:

- the process related to siting of the proposed National Radioactive Waste Management Facility (NRWMF); the Minister's decision making process; the Senate Inquiry related to the selection process for the NRWMF; whether the RHC public representative would be visiting any of the South Australia sites with ARPANSA.

## Operations of the Nuclear Safety Committee

During 2018–19, the Nuclear Safety Committee (NSC) met on three occasions. Summaries of the meetings can be found on the ARPANSA website at [arpansa.gov.au/nsc-minutes](http://arpansa.gov.au/nsc-minutes).

Following a public call for nominations, one additional NSC member was appointed for the current term ending December 2020.

The membership as at 30 June 2019 was:

### **Chair**

Dr Tamie Weaver, Technical Director, Hydrogeology, environmental resources management consultancy (re-appointed)

### **CEO of ARPANSA**

Dr Carl-Magnus Larsson

### **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 (member since January 2018)

### **Other members:**

- Ms Kerrie Christian, metallurgist with background in governance, safety and reliability
- 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 Don Macnab, former Director, Regulatory and Policy Branch, ARPANSA
- Dr Peta Miller, Senior Lecturer and Researcher, Work Health and Safety practices, University of New South Wales, and consultant in safety management, ergonomics and human factors (member since 1 February 2019)
- 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 2018–19, the committee considered and discussed:

### *Regulator Performance Framework self-assessment*

ARPANSA conducted an annual self-assessment of its regulatory effectiveness against six Regulatory Performance Framework (RPF) key performance indicators in July 2018. This self-assessment is a requirement of the RPF. The NSC was tasked to review and validate the self-assessment report. The NSC was satisfied with the approach and methodology, and considered the use of stakeholders as part of the review team as a positive initiative. The NSC provided valuable feedback on the report that was incorporated into the final version. This report is published on both the ARPANSA and Department of Health websites.

### *Review of regulatory documentation*

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

- The ANSTO draft action plan associated with the independent safety review of the ANSTO Health approach to occupational radiation safety and operational procedures
- The safety culture assessment report for the Regulatory Services Branch of ARPANSA, and the associated ARPANSA action plan
- proposed enforcement approaches.

### *Update on controlled facilities*

ARPANSA kept the NSC informed on developments associated with controlled facilities. This included the operation of the ANSTO Open Pool Australian Lightwater reactor, ANSTO Health, and the ANM facility.

## Appendix 3

### Reporting requirement tables

#### A3.1 All ongoing employees current report period (2018–19)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total Female	Full-time	Part-time	Total indeterminate	
NSW	14	0	14	6	1	7	0	0	0	21
QLD	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0
TAS	0	0	0	0	0	0	0	0	0	0
VIC	46	4	50	40	8	48	0	0	0	98
WA	0	0	0	0	0	0	0	0	0	0
ACT	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0
External territories	0	0	0	0	0	0	0	0	0	0
Overseas	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>60</b>	<b>4</b>	<b>64</b>	<b>46</b>	<b>9</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119</b>

#### A3.2 All non-ongoing employees current report period (2018–19)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
NSW	0	0	0	0	0	0	0	0	0	0
QLD	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0
TAS	0	0	0	0	0	0	0	0	0	0
VIC	5	1	6	3	2	5	0	0	0	11
WA	0	0	0	0	0	0	0	0	0	0
ACT	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0
External territories	0	0	0	0	0	0	0	0	0	0
Overseas	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## A3.3 All ongoing employees previous report period (2017-18)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
NSW	14	0	14	7	0	7	0	0	0	21
QLD	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0
TAS	0	0	0	0	0	0	0	0	0	0
VIC	52	2	54	34	10	44	0	0	0	98
WA	0	0	0	0	0	0	0	0	0	0
ACT	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0
External territories	0	0	0	0	0	0	0	0	0	0
Overseas	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>66</b>	<b>2</b>	<b>68</b>	<b>41</b>	<b>10</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119</b>

## A3.4 All non-ongoing employees previous report period (2017-18)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
NSW	0	0	0	0	0	0	0	0	0	0
QLD	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0
TAS	0	0	0	0	0	0	0	0	0	0
VIC	3	1	4	3	3	6	0	0	0	10
WA	0	0	0	0	0	0	0	0	0	0
ACT	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0
External territories	0	0	0	0	0	0	0	0	0	0
Overseas	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>

### A3.5 Australian Public Service Act ongoing employees current report period (2018–19)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
SES 3	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0
SES 1	2	0	2	1	0	1	0	0	0	3
EL 2	12	0	12	5	1	6	0	0	0	18
EL 1	25	2	27	12	1	13	0	0	0	40
APS 6	14	1	15	5	4	9	0	0	0	24
APS 5	5	1	6	7	1	8	0	0	0	14
APS 4	0	0	0	6	0	6	0	0	0	6
APS 3	2	0	2	7	2	9	0	0	0	11
APS 2	0	0	0	3	0	3	0	0	0	3
APS 1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>60</b>	<b>4</b>	<b>64</b>	<b>46</b>	<b>9</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119</b>

### A3.6 Australian Public Service Act non-ongoing employees current report period (2018–19)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
SES 3	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0
SES 1	0	0	0	0	0	0	0	0	0	0
EL 2	0	0	0	0	0	0	0	0	0	0
EL 1	1	0	1	1	0	1	0	0	0	2
APS 6	1	1	2	1	0	1	0	0	0	3
APS 5	3	0	3	1	1	2	0	0	0	5
APS 4	0	0	0	0	1	1	0	0	0	1
APS 3	0	0	0	0	0	0	0	0	0	0
APS 2	0	0	0	0	0	0	0	0	0	0
APS 1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>

### A3.7 Australian Public Service Act ongoing employees previous report period (2017–18)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
SES 3	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0
SES 1	2	0	2	1	0	1	0	0	0	3
EL 2	12	0	12	7	1	8	0	0	0	20
EL 1	28	0	28	6	2	8	0	0	0	36
APS 6	15	1	16	6	4	10	0	0	0	26
APS 5	7	1	8	6	1	7	0	0	0	15
APS 4	0	0	0	7	0	7	0	0	0	7
APS 3	2	0	2	5	2	7	0	0	0	9
APS 2	0	0	0	3	0	3	0	0	0	3
APS 1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>66</b>	<b>2</b>	<b>68</b>	<b>41</b>	<b>10</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119</b>

### A3.8 Australian Public Service Act non-ongoing employees previous report period (2017–18)

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total male	Full-time	Part-time	Total female	Full-time	Part-time	Total indeterminate	
SES 3	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0
SES 1	0	0	0	0	0	0	0	0	0	0
EL 2	0	0	0	0	0	0	0	0	0	0
EL 1	0	0	0	1	0	1	0	0	0	1
APS 6	1	1	2	1	1	2	0	0	0	4
APS 5	2	0	2	0	1	1	0	0	0	3
APS 4	0	0	0	0	1	1	0	0	0	1
APS 3	0	0	0	1	0	1	0	0	0	1
APS 2	0	0	0	0	0	0	0	0	0	0
APS 1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>

### A3.9 Australian Public Service Act employees by full time and part time status current report period (2018–19)

	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	17	1	18	0	0	0	18
EL 1	37	3	40	2	0	2	42
APS 6	19	5	24	2	1	3	27
APS 5	12	2	14	4	1	5	19
APS 4	6	0	6	0	1	1	7
APS 3	9	2	11	0	0	0	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
<b>TOTAL</b>	<b>106</b>	<b>13</b>	<b>119</b>	<b>8</b>	<b>3</b>	<b>11</b>	<b>130</b>

### A3.10 Australian Public Service Act employees by full time and part time status previous report period (2017–18)

	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	19	1	20	0	0	0	20
EL 1	34	2	36	1	0	1	37
APS 6	21	5	26	2	2	4	30
APS 5	13	2	15	2	1	3	18
APS 4	7	0	7	0	1	1	8
APS 3	7	2	9	1	0	1	10
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
<b>TOTAL</b>	<b>107</b>	<b>12</b>	<b>119</b>	<b>6</b>	<b>4</b>	<b>10</b>	<b>129</b>

### A3.11 Australian Public Service Act employment type by location current report period (2018–19)

	Ongoing	Non-ongoing	Total
NSW	21	0	21
QLD	0	0	0
SA	0	0	0
TAS	0	0	0
VIC	98	11	109
WA	0	0	0
ACT	0	0	0
NT	0	0	0
External territories	0	0	0
Overseas	0	0	0
<b>TOTAL</b>	<b>119</b>	<b>11</b>	<b>130</b>

### A3.12 Australian Public Service Act employment type by location previous report period (2017–18)

	Ongoing	Non-ongoing	Total
NSW	21	0	21
QLD	0	0	0
SA	0	0	0
TAS	0	0	0
VIC	98	10	108
WA	0	0	0
ACT	0	0	0
NT	0	0	0
External territories	0	0	0
Overseas	0	0	0
<b>TOTAL</b>	<b>119</b>	<b>10</b>	<b>129</b>

### A3.13 Australian Public Service Act Indigenous employment current report period (2018–19)

	Total
Ongoing	0
Non-ongoing	0
<b>Total</b>	<b>0</b>

### A3.14 Australian Public Service Act Indigenous employment previous report period (2017–18)

	Total
Ongoing	0
Non-ongoing	0
<b>Total</b>	<b>0</b>

### A3.15 Australian Public Service Act employment arrangements current report period (2018–19)

	SES	Non-SES	Total
<b>Enterprise agreement</b>	0	123	<b>123</b>
<b>Individual flexibility arrangement</b>	0	9	<b>9</b>
<b>Common law contract</b>	3	4	<b>7</b>
<b>Australian workplace agreement</b>	0	0	<b>0</b>

### A3.16 Australian Public Service Act employment performance pay by classification level current report period (2018–19)

	Number of employees receiving performance pay	Aggregated (sum total) of all payments made	Average of all payments made	Minimum payment made	Maximum payment made
<b>SES 3</b>	0	0	0	0	0
<b>SES 2</b>	0	0	0	0	0
<b>SES 1</b>	0	0	0	0	0
<b>EL 2</b>	0	0	0	0	0
<b>EL 1</b>	0	0	0	0	0
<b>APS 6</b>	0	0	0	0	0
<b>APS 5</b>	0	0	0	0	0
<b>APS 4</b>	0	0	0	0	0
<b>APS 3</b>	0	0	0	0	0
<b>APS 2</b>	0	0	0	0	0
<b>APS 1</b>	0	0	0	0	0
<b>Other</b>	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# PART 7: INDEX

## Abbreviations

ACDS	Australian Clinical Dosimetry Service
ANAO	Australian National Audit Office
ANM	ANSTO Nuclear Medicine (Facility)
ANRDR	Australian National Radiation Dose Register
ANSTO	Australian Nuclear Science and Technology Organisation
APS	Australian Public Service
APSC	Australian Public Service Commission
ARPANS Act	<i>Australian Radiation Protection and Nuclear Safety Act 1998</i>
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
CEO	Chief Executive Officer
CNS	Convention on Nuclear Safety
CPRs	Commonwealth Procurement Rules
CBRNe	chemical, biological, radiological, nuclear and high-yield explosives
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organisation
DTAG	Digital Transformation Advisory Group
EG	Executive Group
EME	electromagnetic energy
FOI	Freedom of Information
FOI Act	<i>Freedom of Information Act 1982</i>
IAEA	International Atomic Energy Commission
IMS	Integrated Management System
IPL	intense pulsed light
IRRS	Integrated Regulatory Review Service
LED	light-emitting diode
MRI	magnetic resonance imaging

NDRP	National Directory for Radiation Protection
NRWMF	National Radioactive Waste Management Facility
NSC	Nuclear Safety Committee
OCEO	Office of the Chief Executive Officer
PBS	Portfolio Budget Statements
PSDL	Primary Standards Dosimetry Laboratory
PGPA Act	<i>Public Governance, Performance and Accountability Act 2013</i>
PGPA Rule	<i>Public Governance, Performance and Accountability Rule 2014</i>
PMAG	Project Management Advisory Group
RF	radiofrequency
RHC	Radiation Health Committee
RPF	Regulator Performance Framework
SABR	Stereotactic ablative radiation therapy
SCF	Staff Consultative Forum
SES	senior executive service
SMC	Strategic Management Committee
UVR	Ultraviolet radiation
WHS	Work Health and Safety
WHS Act	<i>Work Health and Safety Act 2011</i>

## Glossary

### **5G**

5G is the new 5th 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 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 (RF) electromagnetic energy (EME). ARPANSA regulates the safety standards for exposure to RF EME.

### ***absorbed dose***

The quantity of energy imparted by ionising radiation to matter such as living tissue. The unit used for absorbed dose is joule per kilo; its special name is gray (Gy).

### ***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 Radiation Incident Register (ARIR)***

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.

### ***calibration***

Calibration is the process of configuring an instrument to provide a result for a sample within an acceptable range.

### ***dose***

A generic term which may mean absorbed dose, equivalent dose or effective dose depending on context.

### ***dosemeter***

Equipment used to measure dose. For example, an ionisation chamber and electrometer may be used together as a dosimeter for ionising radiation.

### ***dosimetry***

The theory and application of the principles and techniques involved in the measurement, calculation and recording of radiation doses.

### ***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.

***incident***

An event which causes, or has the potential to cause, abnormal exposure of employees or of members of the public and which requires investigation of its causes and consequences and may require corrective action within the program for control of radiation, but which is not of such scale as to be classified as an accident.

***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 which is capable of causing ionisation - the process in 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 which allows the operator to carry out an operation legally.

***linear accelerator***

Linear accelerators (linacs) are the medical devices used to deliver radiation therapy in highly targeted doses by generating directed radiation beams. These machines are used in hospitals across Australia to treat cancers.

***Molybdenum-99***

Molybdenum-99 is the precursor of technetium-99m which is used for diagnostic imaging in medicine.

***National Radioactive Waste Management Facility (NRMWF)***

The proposed NRMWF 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. Find out more at [arpansa.gov.au/NRMWF-radioactive-waste](http://arpansa.gov.au/NRMWF-radioactive-waste).

***non-ionising radiation***

Ranges from static and extremely low frequency electric and magnetic fields, through the radiofrequency range, and visible portions of the spectrum into parts of the ultraviolet range.

***Personal Radiation Monitoring Service***

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 access monitors that measure Australian worker's occupational exposure to radiation to ensure that the recommended dose limit is not exceeded.

***phantom***

A radiologically equivalent synthetic human substitute for radiotherapy testing and quality control.

***primary standards***

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 ionisation radiation for Australia.

***Primary Standards Dosimetry Laboratory (PSDL)***

The Primary Standards Dosimetry Laboratory provides calibration and irradiations services for radiotherapy doseimeters which are used by radiotherapy providers to calibrate radiation devices for patient treatment.

***radiation***

Electromagnetic waves or quanta, and atomic or sub-atomic particles, propagated through space or through a material medium.

***radioactive waste***

In Australia, radioactive waste is left after the production of nuclear medicine, research at universities, mining and milling, advanced industrial manufacturing and testing. Other low and intermediate waste types include soil, fire, alarms, exit signs, paper, plastic, glassware and pieces of equipment from radioisotope-producing operations. This waste emits radiation as it decays.

***radiofrequency***

Part of the electromagnetic spectrum with frequencies in the range 3 kHz to 300 GHz.

***radiofrequency radiation***

Electromagnetic energy in the radiofrequency range.

***solar ultraviolet radiation (UVR)***

Solar UVR is invisible energy produced by the sun. It's made up of three wavelengths, UVA, UVB and UVC. Both UVA and UVB can reach the earth's surface and are classified as human carcinogens. This means they cause cancer.

***stereotactic ablative radiation therapy***

A radiation treatment method that delivers highly-focused doses of radiation to very small areas of the body making it well suited to targeting small tumours such as those in lung, spine, liver and lymph nodes.

## Reporting requirements

PGPA Rule reference	Part of report	Description	Requirement	Page
<b>17AD(g)</b>	<b>Letter of transmittal</b>			
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	vii
<b>17AD(h)</b>	<b>Aids to access</b>			
17AJ(a)	Contents	Table of contents.	Mandatory	v
17AJ(b)	Index	Alphabetical index.	Mandatory	115
17AJ(c)	Abbreviations	Glossary of abbreviations and acronyms.	Mandatory	104
17AJ(d)	Reporting requirements	List of requirements.	Mandatory	109
17AJ(e)	Publication details	Details of contact officer.	Mandatory	ii
17AJ(f)	Publication details	Entity's website address.	Mandatory	ii
17AJ(g)	Publication details	Electronic address of report.	Mandatory	ii
<b>17AD(a)</b>	<b>Review by accountable authority</b>			
17AD(a)	CEO foreword	A review by the accountable authority of the entity.	Mandatory	1
<b>17AD(b)</b>	<b>Overview of the entity</b>			
17AE(1)(a)(i)	Role of ARPANSA	A description of the role and functions of the entity.	Mandatory	4
17AE(1)(a)(ii)	Organisational structure	A description of the organisational structure of the entity.	Mandatory	6–8
17AE(1)(a)(iii)	Annual performance statement	A description of the outcomes and programmes administered by the entity.	Mandatory	9–25
17AE(1)(a)(iv)	Our purpose	A description of the purposes of the entity as included in corporate plan.	Mandatory	3
17AE(1)(aa)(i)	Responsible ministers and portfolio	Name of the accountable authority or each member of the accountable authority	Mandatory	3
17AE(1)(aa)(ii)	Responsible ministers and portfolio	Position title of the accountable authority or each member of the accountable authority	Mandatory	3
17AE(1)(aa)(iii)	Chief Executive Officer	Period as the accountable authority or member of the accountable authority within the reporting period	Mandatory	6
17AE(1)(b)	Responsible ministers and portfolio	An outline of the structure of the portfolio of the entity.	Portfolio departments – mandatory	3
17AE(2)		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	If applicable, mandatory	N/A

		entity for the period, include details of variation and reasons for change.		
<b>17AD(c)</b>	<b>Report on the Performance of the Entity</b>			
	<b>Annual performance statements</b>			
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	9–25
<b>17AD(c)(ii)</b>	<b>Report on Financial Performance</b>			
17AF(1)(a)	Financial performance	A discussion and analysis of the entity's financial performance.	Mandatory	26–29
17AF(1)(b)	ARPANSA resource statement 2018–19	A table summarising the total resources and total payments of the entity.	Mandatory	28
17AF(2)		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
<b>17AD(d)</b>	<b>Management and Accountability</b>			
	<b>Corporate Governance</b>			
17AG(2)(a)	Fraud minimisation strategies	Information on compliance with section 10 (fraud systems)	Mandatory	38
17AG(2)(b)(i)	Letter of transmittal	A certification by accountable authority that fraud risk assessments and fraud control plans have been prepared.	Mandatory	vii
17AG(2)(b)(ii)	Letter of transmittal	A certification by accountable authority that appropriate mechanisms for preventing, detecting incidents of, investigating or otherwise dealing with, and recording or reporting fraud that meet the specific needs of the entity are in place.	Mandatory	vii
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	vii
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	34
17AG(2)(d) – (e)		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

<b>External Scrutiny</b>				
17AG(3)	External scrutiny	Information on the most significant developments in external scrutiny and the entity's response to the scrutiny.	Mandatory	41
17AG(3)(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 Committees or 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	41
17AG(3)(c)		Information on any capability reviews on the entity that were released during the period.	If applicable, mandatory	N/A
<b>Management of Human Resources</b>				
17AG(4)(a)	Human resources	An assessment of the entity's effectiveness in managing and developing employees to achieve entity objectives.	Mandatory	42–49
17AG(4)(aa)	Appendix 3	Statistics on the entity's employees on an ongoing and non-ongoing basis, including the following: <ul style="list-style-type: none"> <li>a) statistics on fulltime employees</li> <li>b) statistics on part-time employees</li> <li>c) statistics on gender</li> <li>d) statistics on staff location.</li> </ul>	Mandatory	97–103
17AG(4)(b)	Appendix 3	Statistics on the entity's APS employees on an ongoing and non-ongoing basis; including the following: <ul style="list-style-type: none"> <li>• Statistics on staffing classification level</li> <li>• Statistics on fulltime employees</li> <li>• Statistics on part-time employees</li> <li>• Statistics on gender</li> <li>• Statistics on staff location</li> <li>• Statistics on employees who identify as Indigenous.</li> </ul>	Mandatory	97–103
17AG(4)(c)	A3.15 Australian Public Service Act employment arrangements current report period (2018–19)	Information on any enterprise agreements, individual flexibility arrangements, Australian workplace agreements, common law contracts and determinations under subsection 24(1) of the <i>Public Service Act 1999</i> .	Mandatory	103
17AG(4)(c)(i)	A3.15 Australian Public Service Act employment	Information on the number of SES and non-SES employees covered by	Mandatory	103

	arrangements current report period (2018–19)	agreements etc identified in paragraph 17AG(4)(c).		
17AG(4)(c)(ii)	Table 1.1 Salary ranges as at 30 June 2019	The salary ranges available for APS employees by classification level.	Mandatory	47
17AG(4)(c)(iii)	Non-salary benefits	A description of non-salary benefits provided to employees.	Mandatory	44
17AG(4)(d)(i)	A3.16 Australian Public Service Act employment performance pay by classification level current report period (2018–19)	Information on the number of employees at each classification level who received performance pay.	If applicable, mandatory	103
17AG(4)(d)(ii)	A3.16 Australian Public Service Act employment performance pay by classification level current report period (2018–19)	Information on aggregate amounts of performance pay at each classification level.	If applicable, mandatory	103
17AG(4)(d)(iii)	A3.16 Australian Public Service Act employment performance pay by classification level current report period (2018–19)	Information on the average amount of performance payment, and range of such payments, at each classification level.	If applicable, mandatory	103
17AG(4)(d)(iv)	A3.16 Australian Public Service Act employment performance pay by classification level current report period (2018–19)	Information on aggregate amount of performance payments.	If applicable, mandatory	103
<b>Assets Management</b>				
17AG(5)	Assets management	An assessment of effectiveness of assets management where asset management is a significant part of the entity's activities	If applicable, mandatory	26
<b>Purchasing</b>				
17AG(6)	Purchasing	An assessment of entity performance against the <i>Commonwealth Procurement Rules</i> .	Mandatory	26
<b>Consultants</b>				
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	26
17AG(7)(b)	Consultants	A statement that 'During [reporting period], [specified number] new consultancy contracts were entered into involving total actual expenditure of \$[specified million]. In addition, [specified number] ongoing consultancy	Mandatory	26

		<i>contracts were active during the period, involving total actual expenditure of \$[specified million]</i> ’.		
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	26
17AG(7)(d)	Consultants	A statement that ‘ <i>Annual reports contain information about actual expenditure on contracts for consultancies. Information on the value of contracts and consultancies is available on the AusTender website.</i> ’	Mandatory	27
<b>Australian National Audit Office Access Clauses</b>				
17AG(8)		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
<b>Exempt contracts</b>				
17AG(9)		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
<b>Small business</b>				
17AG(10)(a)	Procurement initiatives to support small business	A statement that ‘ <i>[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.</i> ’	Mandatory	27
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	27
17AG(10)(c)		If the entity is considered by the Department administered by the Finance Minister as material in nature—a statement that ‘ <i>[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.</i> ’	If applicable, mandatory	N/A

<b>Financial Statements</b>				
17AD(e)	Financial statements	Inclusion of the annual financial statements in accordance with subsection 43(4) of the Act.	Mandatory	50–85
<b>Executive Remuneration</b>				
17AD(da)	Executive remuneration	Information about executive remuneration in accordance with Subdivision C of Division 3A of Part 2-3 of the Rule.	Mandatory	44–45
<b>17AD(f) Other Mandatory Information</b>				
17AH(1)(a)(i)		If the entity conducted advertising campaigns, a statement that <i>'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.'</i>	If applicable, mandatory	N/A
17AH(1)(a)(ii)	Advertising and market research	If the entity did not conduct advertising campaigns, a statement to that effect.	If applicable, mandatory	27
17AH(1)(b)		A statement that <i>'Information on grants awarded by [name of entity] during [reporting period] is available at [address of entity's website].'</i>	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	39
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	41
17AH(1)(e)		Correction of material errors in previous annual report	If applicable, mandatory	N/A
17AH(2)	Appendix 1; Appendix 2	Information required by other legislation	Mandatory	86–90, 91–96

## Index

### A

absorbed dose	1, 5, 7, 18, 106
advertising and market research	27, 114
advisory bodies	vi, 34
advisory note	93–94
air kerma	18
Annual Performance Statement	vi, 9–11, 37, 109–110
APS census	12, 23–25, 43
ARPANSA Award	46
asset management	26, 112
audit	
clinical	1, 7, 18, 31, 33
energy	24
quality	37–38
audit and fraud control	38
Audit and Risk Committee	35, 37–38
Australian Clinical Dosimetry Service (ACDS)	5, 7, 11, 17–18, 31, 33, 46, 55, 57, 68, 106
Australian National Audit Office (ANAO)	35, 38, 66, 68, 113
Australian National Radiation Dose Register (ANRDR)	5, 7, 11, 13–14, 106
Australian Nuclear Science and Technology Organisation (ANSTO)	2, 22, 86–88, 92, 96
Australian Radiation Incident Register	5, 106
Australian radiotherapy providers	11, 17–18

### C

calibration services	18, 31
cancer	
brain cancer	22, 32, 46, 92
lung cancer	13
skin cancer	43
Chief Executive Officer (CEO)	vi, 1–3, 6–7, 22, 31, 34–37, 44, 47, 49, 79, 86–88, 91, 93, 95, 109
Code of Conduct	46
codes and standards	7, 34, 94
Comcare	39
common law contracts	43–44, 46, 103, 112
complaints	14, 41
Comprehensive Nuclear-Test-Ban Treaty (CTBT)	5, 7, 16, 57, 66, 68
Organization (CTBTO)	2, 11, 16
consultants	26, 66, 112–113
continuous improvement	30

corporate governance	25, 34, 110
corporate plan	10, 13, 15, 17, 19, 21, 23–25, 37, 109
cost recovery	87

## D

diagnostic imaging	7, 107
diagnostic reference level (DRL)	5, 11, 17–18
directions ( <i>see improvement notices or directions</i> )	
disability reporting	39, 114
dose register ( <i>see Australian National Radiation Dose Register</i> )	
dosimetry ( <i>see Australian Clinical Dosimetry Service</i> )	

## E

emergency exposure situations	16, 94
emergency preparedness and response	1, 5, 7, 15, 20
employee assistance program	43–44
enforcement	30, 96
Enterprise Agreement	36, 43–44, 46, 103, 112
Executive Group	6, 35, 44
expertise	1, 5, 24, 26, 31, 36, 39, 84, 91
executive remuneration	44–45, 114
external scrutiny	vi, 41, 111

## F

fifth generation (5G)	2, 22, 92, 106
financial performance	vi, 11, 26, 37, 65, 110
financial statements	vi, 37, 50, 55, 57, 60, 62–65, 81, 114
fraud control	vii, 38, 110
freedom of information	vi, 41, 114

## G

governance	vi-vii, 6–7, 9, 23, 25, 34, 36, 38, 44, 63, 79, 91, 95, 110
------------	---

## H

hazard and incident reporting	39
Health, Department of	3, 16, 91, 93, 96
human resources	42, 111

## I

improvement notices or directions	87
improvements	20, 30, 35, 39, 46, 56, 57, 60, 73–74, 84
Integrated Management System (IMS)	12–13, 23, 25
incident reporting	vii, 1, 39, 110
Individual flexibility arrangements	43–44, 103, 112

information management	7, 15
Information Publication Scheme	41, 114
Inspections	11, 19, 39
Integrated Regulatory Review Service (IRRS)	1–12, 19–20, 30, 37, 42, 46, 92, 94, 107
intense pulsed light (IPLs)	93
internal audit	37–38
internal control	35, 37–38
International Atomic Energy Agency (IAEA)	16, 19–20, 22, 30, 92, 94, 107
Convention exercises	16
international best practice	1, 10, 14, 92
International Commission on Radiological Protection (ICRP)	2
International Coordination Group (ICG)	36
international engagement	2, 6, 36
international standard	37
investigations	40
<b>J</b>	
Judicial review	41
<b>K</b>	
Key management personnel	44, 52, 81
Key Performance Indicators (KPIs)	96
<b>L</b>	
laser	22, 93
linac ( <i>see linear accelerator</i> )	
LearnHub	42
learning and development	42
learning strategy	23, 25, 42
Letter of transmittal	vii, 109–110
licence	107
applications	12, 21, 68
breaches	24, 86–88
facility	89
fees	7, 26, 54–55, 68, 87
source	90
linear accelerator (linac)	1, 7, 10–11, 17–18, 31, 35, 62, 92, 107
<b>M</b>	
management and accountability	vi, 34, 110
management committees	34
market research	27
Minister	vi, 3, 20, 81, 90–91, 94, 109–110, 114
mobile (phone devices)	2, 32, 46, 92, 106

molybdenum-99	2, 86, 88, 107
monitoring services ( <i>see Personal Radiation Monitoring Services</i> )	
monitoring stations	16
<b>N</b>	
National Association of Testing Authorities (NATA)	38
National Directory for Radiation Protection (NDRP)	94
National Radioactive Waste Management Facility (NRWMF)	10, 12, 21–22, 92, 94, 107
National Radon Action Plan	11, 13
national uniformity	5, 12, 19–20
notices	27, 40, 87
Nuclear Safety Committee (NSC)	6, 34, 95–96
<b>O</b>	
occupational dosimetry system ( <i>see Personal Radiation Monitoring Service</i> )	
OPAL (Open Pool Australian Lightwater) Reactor	96
optimisation	13
organisational structure	vi, 6–8, 109
<b>P</b>	
performance against Portfolio Budget Statement targets	14, 16, 18, 20
Personal Radiation Monitoring Service (PRMS)	5, 7, 68, 107
portfolio budget statement	3, 37, 55, 57, 60, 62, 110
primary standards	1, 5, 7, 17–18, 31, 108
protective security policy framework (PSPF)	24, 36, 38
public consultation	21
purchasing	26–27, 112
<b>R</b>	
Radiation Health and Safety Advisory Council (the Council)	34, 91
Radiation Health Committee (RHC)	6, 14, 17, 34, 93
radioactive waste	10, 14, 20, 30, 92, 94, 107–108
radiofrequency electromagnetic energy (RF EME)	2, 7, 33, 106
radiotherapy	31, 92, 108
auditing	1, 7, 11, 17–18, 33
radon	
chamber	5
National radon action plan	11, 13
Regulator Performance Framework (RPF)	11, 19–20, 37, 96
Research and Innovation Strategy 2017–2021	12, 24–25
risk management	vi, 11, 13, 20, 34, 37–38
role and functions	4
reports	
by the Auditor-General, Parliamentary Committees or Commonwealth Ombudsman	41

**S**

stereotactic ablative radiation therapy (SABR)	18, 24, 33, 46, 108
salary ranges	47
self-assessment	11, 19, 20, 37, 39, 96
Senior Executive Service (SES)	47–48, 68, 103, 99–101, 112
senior committees	34
social club	46
Staff Consultative Forum	36
staffing statistics	vi, 3, 47
stakeholder engagement	10, 12, 21
Strategic Management Committee (SMC)	35, 37

**T**

‘Talk to a Scientist’ Program	5
-------------------------------	---

**U**

ultraviolet radiation (UVR)	106–108
services	5, 7
UVR monitoring network	1, 5, 7, 14
uranium	
mining	14, 106–108

**W**

work health and safety (WHS)	39
Work Health and Safety (WHS) Committee	35
workers compensation	39, 66
Workforce Plan	vi, 12, 23, 25, 42
workforce planning	42

