

# Our Agency



The banner features the Australian Government coat of arms at the top center, with the text "Australian Government" and "Australian Radiation Protection and Nuclear Safety Agency" below it. A horizontal strip of images shows various radiation-related scenes: a person in a protective suit, a radiation detector, a person in a lab, and a person holding a radiation source. Below the images, the mission statement "PROTECTING THE PUBLIC AND ENVIRONMENT FROM THE HARMFUL EFFECTS OF RADIATION" is written in white capital letters. At the bottom, the website address "www.arpsa.gov.au" is displayed in white lowercase letters.

Australian Government  
Australian Radiation Protection  
and Nuclear Safety Agency

PROTECTING THE PUBLIC AND ENVIRONMENT FROM  
THE HARMFUL EFFECTS OF RADIATION

[www.arpsa.gov.au](http://www.arpsa.gov.au)

# Our agency

## Protecting people and the environment from the harmful effects of radiation

### Authority

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) operates under the *Australian Radiation Protection and Nuclear Safety Act 1998* (the ARPANSA Act). The ARPANSA Act allows the CEO to engage staff to assist in the performance of the Agency's statutory functions for the purposes of the *Public Service Act 1999*. ARPANSA is a prescribed Agency under the *Financial Management and Accountability Act 1997* within the Government's Health portfolio.

### Responsible ministers and portfolio

During this financial year, the Parliamentary Secretary to the Minister for Health and Ageing had ministerial responsibility for ARPANSA.

### Funding basis

ARPANSA is funded through appropriations received directly as part of the Federal Budget.

ARPANSA's own sourced income derives from: the sale of scientific services such as the Personal Radiation Monitoring Service; Comprehensive Nuclear-Test-Ban Treaty Organization contracts to build, operate and maintain monitoring stations; and licence application fees and annual charges associated with ARPANSA's regulatory activities.

### Our outcome

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

### Our people

As at 30 June 2013 ARPANSA employed a total of 138 ongoing and 11 non-ongoing staff. Our people are specialists in nuclear and medical physics, radiation sciences, chemistry, biological sciences, security and emergency preparedness as well as communications, government policy, law, finance and human resources.

*Protection of the public and environment from radiation requires a risk-informed approach which takes account of both safety and security. ARPANSA does this by providing appropriate and effective information on exposure to all sources of ionising and non-ionising radiation; interacting with and informing the Australian community about risks associated with exposure to radiation; and, promoting implementation of radiation safety measures that optimise protection of the public and the environment'*

### Where we work

ARPANSA's staff are spread across three sites: Miranda in New South Wales, Yallambie in Victoria and Barton in the Australian Capital Territory.

### Our mission

To assure the protection of people and the environment from the harmful effects of radiation.

### Our vision

In protecting people and the environment from the harmful effects of radiation, ARPANSA ensures that:

- radiation safety is appropriately considered in societal decision-making which rests on sound science, with radiation safety given appropriate weight, guiding the use of precaution as necessary.
- radiation safety is consistently applied, across jurisdictions and activities, in a manner that is commensurate with risk.
- radiation safety in Australia is current international best practice.
- the Agency takes a leading role in the enhancement of the international radiation safety framework, promoting and implementing best practice nationally, in the region and internationally.

### Key areas

ARPANSA delivers outcomes for Australian society in a set of Key Areas and each Key Area is informed by strategies and associated activities which are defined annually and form the basis for the Portfolio Budget Statement and ARPANSA's Business Plans.

### Performance reporting

ARPANSA's success in achieving its outcome is measured against specific deliverables and key performance indicators in the *Portfolio Budget Statements 2012-13* and performance is described in Part 3.

# Our history

## Protecting people and the environment from the harmful effects of radiation

*Prior to 1998 Commonwealth radiation sources and practices were not regulated at a Commonwealth level*

### 1929

The Australian Radiation Laboratory established as the Commonwealth Radium Laboratory, responsible for providing advice to Government and the community on health effects of radiation, and for undertaking research and providing services in this area.

### 1984-1985

The Australian Radiation Laboratory conducts preliminary studies on former British atomic test sites at Maralinga indicating significantly higher contamination levels than previously reported.

### 1986

The Australian Radiation Laboratory's findings convince the Australian Government to set up a technical assessment group to oversee further technical studies of Maralinga site and advise on rehabilitation options.

### 1992

The Nuclear Safety Bureau is established and operated under Part VIIA of the *Australian Nuclear Science and Technology Organisation (ANSTO) Act 1987* and given responsibility for regulating the HIFAR and Moata research reactors at Lucas Heights in Sydney.

### 1993

Australian Radiation Laboratory scientific experts commence work as part of the Maralinga Rehabilitation Technical Advisory Committee – a whole of Government initiative – to evaluate radiological risks and develop an effective clean-up and land remediation of contaminated sites to minimise risks to potential inhabitants from radiation exposure.

### 1994-2000

Work on the Maralinga Rehabilitation Technical Advisory Committee Project commences during which Australian Radiation Laboratory and later ARPANSA, takes comprehensive measurements of the site. Project teams remove large quantities of plutonium-contaminated soil from three sites for safe containment in purpose-built burial trenches. Completion of the Project results in much lower levels of radiation than was predicted in the original MARTAC report.

*'As the Commonwealth regulator, our mandate covers ionising and non-ionising radiation, safety and security of nuclear installations and radioactive sources, and preparedness and response to accidents or malicious acts involving radiological hazards.'*

### 1996

Responsibility for the Australian primary standard of absorbed dose in medical radiation exposures is transferred to the Australian Radiation Laboratory, as provided for by the *National Measurement Act 1960*.

### 1997

The Federal Government announces that it will combine the Australian Radiation Laboratory and the Nuclear Safety Bureau and establish ARPANSA as a new regulatory body with underpinning legislation - the *Australian Radiation Protection and Nuclear Safety Act 1998* (the ARPANS Act).

### 1998

ARPANS Bill passed by both houses on Thursday 10 December 1998 creating ARPANSA.

### 5 February 1999

ARPANS Act enters into force.

### 17 March 1999

ARPANS Regulations enter into force.

### 15 April 1999

Dr John Loy appointed as first CEO of ARPANSA.

### 22 April 1999

Australian Health Ministers' Advisory Council accepts proposals for the development of ARPANSA's *National Directory for Radiation Protection* which is a vehicle for delivery of national uniformity in radiation protection across all states and territories.

### 1999

National Competition Policy Review agrees on a policy review of radiation control frameworks across all states and territories.

National Health and Medical Research Council ceases publishing Radiation Health Series and hands responsibility for revision to ARPANSA to develop in its new Radiation Protection Series.

### 1 June 1999

ARPANSA sets up monitoring stations in Perth and Melbourne as part of the International Monitoring System global network required under the terms of the Comprehensive Nuclear-Test-Ban Treaty.

### 2000

ARPANSA authorises the Department of Resources, Energy and Tourism to operate Maralinga site as a controlled facility under the ARPANS Act.

### 5 April 2002

ARPANSA licenses ANSTO to construct a new research reactor, the Open Pool Australian Light-Water reactor (OPAL) to replace ANSTO's HIFAR reactor.

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### 14 July 2006

ARPANSA issues ANSTO's OPAL reactor with an operating licence.

### 12 August 2006

OPAL commences operations.

### 25 June to 6 July 2007

The International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) commences comprehensive peer review and appraisal service of ARPANSA's operations focusing upon the effectiveness of ARPANSA's regulatory infrastructure in nuclear, radiation, radioactive waste and transport safety.

### 2008

Dr John Loy retires as CEO of ARPANSA and is replaced by interim Acting CEO Mr Peter Burns, a senior health physicist and Branch Director, Environmental and Radiation Health Branch, ARPANSA.

### October 2008

ARPANSA installs an Elekta Synergy Platform medical radiotherapy treatment linac to develop absorbed dose standards at megavoltage energies and to provide direct calibration of reference ionisation chamber dosimeters.

### 18 December 2009

ARPANSA CEO and senior scientists attend formal handback ceremony of Maralinga lands to Traditional Owners, the Maralinga Tjarutja.

### 22 March 2010

Dr Carl-Magnus Larsson appointed as the CEO of ARPANSA.

### 1 July 2010

The Australian National Radiation Dose Register is established to collect, store, manage and disseminate records of radiation doses received by uranium miners in the course of their employment in a centralised database. The Dose Register is a system for uranium mining workers to be able to request their individual dose history record.

### 4 February 2011

The Australian Clinical Dosimetry Service (ACDS) officially launched to audit radiotherapy doses to provide an integrated national approach to promoting safety and quality in radiotherapy and lead to further improvements in patient treatment outcomes.

### 11 March 2011

Immediately following the Great East-Japan Earthquake and Tsunami, ARPANSA commences comprehensive assessment of the disaster to advise the Australian Government and public on the scope and likely effects of the event.

### May 2011

Formal organisational restructure of ARPANSA rolled out.

Decommissioning of ANSTO's Moata reactor - a first for Australia. ARPANSA is satisfied that radioactive waste from the decommissioning process had been appropriately transferred to an existing waste licence with no residual danger from radiation in the reactor building.

### December 2011

IAEA IRRS follow-up mission concludes that most recommendations and suggestions from the 2007 IRRS review have been addressed and that ARPANSA should be commended for this accomplishment.

### February 2012

Department of Health and Ageing commences a review of ARPANSA Act .

### June 2012

ARPANSA republishes Radiation Protection Series No 18 - *Safety Guide for the Use of Radiation in Schools* and RPS 18 now incorporates Part 1: Ionizing Radiation and Part 2 Lasers.

### August 2012

ARPANSA publishes 2013-16 Corporate Plan and 2012-13 Regulatory Plan.

### October 2012

ARPANSA assesses that the impact on health of people living in Australia from the Fukushima Dai-ichi nuclear power plant accident is negligible, based on measurements and studies undertaken by ARPANSA since March 2011.

ARPANSA receives licence applications from ANSTO to site and construct an interim waste store and to prepare a site for the proposed Nuclear Medicine Molybdenum-99 Facility.

### November 2012

ARPANSA publishes *Safety Guide for the Approval Processes for the Safe Transport of Radioactive Materials (2012)* – Radiation Protection Series No. 2.2.

ARPANSA releases documentation to support licence holders using a holistic approach to manage the safety of their operations.

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### December 2012

ARPANSA licenses ANSTO to operate the Australian Synchrotron from 1 January.

ARPANSA's CEO is appointed as Chair of United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR).

ARPANSA's CEO delivers Australia's Statement to the IAEA/Japan jointly-hosted Ministerial Conference on nuclear safety, held in Koriyama, Fukushima Prefecture, Japan.

### January 2013

ARPANSA updates its *Regulatory Guide: Plans and Arrangements for Managing Safety* which has enhanced arrangements for environmental protection based on current international best practice. Where relevant, radiation protection of wildlife in their natural habitats is to be considered in parallel with radiation protection of people, and the guide establishes a screening dose rate for wildlife assessments.

### February 2013

ARPANSA CEO chairs IAEA International Experts Meeting on Decommissioning and Remediation after a nuclear accident in Vienna, Austria .

### March 2013

*Regulatory Guide: Licensing of Radioactive Waste Storage and Disposal Facilities* released providing guidance in the future establishment of a national facility.

### May 2013

16 May – ARPANSA hosts community information session on ANSTO licence applications for proposed Nuclear medicine Molybdenum-99 Facility and Interim Waste Store.

27-31 May – ARPANSA CEO and staff attend and lead the 60<sup>th</sup> Session of United Nations Scientific Committee on the Effects of Atomic Radiation in Vienna, Austria to deliberate upon key scientific annexes on the health effects following the Great East Japan Earthquake and Tsunami and health effects of CT scans on children.

### June 2013

Staffing realignment of ARPANSA implemented.

ARPANSA invites public submissions on draft document *Fundamentals for Protection against Ionising Radiation*.

*Guide for Regulatory Officers on Risk Ranking Methodology* published.