



# Regulator Performance Framework Self-Assessment Report 2016-17



## **Contents**

Exec	utive Summary	3
Sumi	mary of assessment	3
Perfo	ormance Improvement Actions Identified	4
1	Introduction	6
1.1	The Agency	6
1.2	The Report	7
1.3	Methodology	8
2	Performance Assessment	9
2.1	KPI 1 – Regulators do not unnecessarily impede the efficient operation of regulated entities	9
2.2	KPI 2 – Communication with regulated entities is clear, targeted and effective	14
2.3	KPI 3 – Actions undertaken by regulators are proportionate to the regulatory risk being managed	18
2.4	KPI 4 – Compliance and monitoring approaches are streamlined and co-ordinated	22
2.5	KPI 5 – Regulators are open and transparent in their dealings with regulated entities	25
2.6	KPI 6 – Regulators actively contribute to the continuous improvement of regulatory frameworks	29
3	Overall Assessment	32
3.1	Analysis of evidence	32
3.2	Overall self-assessed rating of performance – 2016-17	33
3.3	Performance improvement actions identified	33
4	Concluding remarks	34
Appe	endix A ARPANSA Licenced Entities as at 30 June 2017	36
Facili	ty licence holders:	36
Sour	ce licence holders:	36
Арре	endix B Information sources and documents provided to the assessment team	38

## **Executive Summary**

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. We 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.

We regulate safety and security of radiation sources and facilities, and nuclear installations; owned or operated by Commonwealth entities.

#### **Summary of the Second Assessment under the Regulator Performance Framework**

This review was the second formal assessment of ARPANSA against the Key Performance Indicators (KPIs) outlined in the Government Regulator Performance Framework (RPF).

The assessment found a high level of commitment to the values of the RPF. The assessment also indicated a number of improvements since the 2015 – 2016 financial year. Overall, ARPANSA's performance as summarised in the table below can be rated as 'very good'.

КРІ	Previous Rating of Performance 2015-16	Summary of analysis	Rating of Performance 2016-17
Overall assessment	Good	Performance against a majority of the KPIs rates as 'very good' or higher.	Very good
KPI 1 – Regulators do not unnecessarily impede the efficient operation of regulated entities	Good	Inspections are scheduled and licence holders are notified in advance. Timelines are typically set and adhered to. ARPANSA consults with licence holders to avoid unnecessarily impeding their operation.	Very good
KPI 2 – Communication with regulated entities is clear, targeted and effective	Very good	A number of positive communication initiatives are in place. Further improvements in specific areas can be achieved, especially around feedback on applications and internal information sharing.	Very good
KPI 3 – Actions undertaken by regulators are proportionate to the regulatory risk being managed	Good	ARPANSA has a risk informed inspection schedule. ARPANSA endeavours to provide information that enables licence holders to fix their own problems and thus avoid unnecessary regulatory intervention.	Very good
KPI 4 – Compliance and monitoring approaches are streamlined and co- ordinated	Good	ARPANSA has implemented a graded approach focusing best practice as well as compliance. Inspections are planned and implemented according to standardised processes using	Good

КРІ	Previous Rating of Performance 2015-16	Summary of analysis	Rating of Performance 2016-17
	published performance objectives and criteria (PO&C).		
KPI 5 – Regulators are open and transparent in their dealings with regulated entities	Good	A significant number of ARPANSA documents including inspection reports and common inspection findings are available online.	Very good
KPI 6 – Regulators actively contribute to the continuous improvement of regulatory frameworks	Very good	ARPANSA has a dedicated continuous improvement team that analyses performance regularly and rigorously. A number of improvement initiatives have been implemented during the year.	Very good

#### **Areas for Improvement**

A number of Areas for Improvement (AFI) were identified that may help to improve the efficient and effective regulation of Commonwealth entities dealing with radiation. In some cases it was found that the metrics did not closely align with the intention of the KPI and that the use of additional evidence is important to gauge ARPANSA's overall performance against the Framework. The first self-assessment identified this problem and ARPANSA has worked during the year to develop an approved revision to its metrics that took effect on 1 July 2017. Broadly, the AFIs cover:

#### Feedback Systems

The effectiveness of internal communication and transfer of information, particularly with regard to inspection findings, may be improved through more regular meetings of the whole inspection teams.

#### Consistency

There were at times some inconsistencies in processes and outcomes. Some notable inconsistencies were:

- The equivalency of risk between source and facility licences is not demonstrated Therefore it is not clear if the same amount regulatory resources applied to a particular source or facility are protecting against the same level of overall risk.
- Variability in scope and depth of similar inspections reasons for this are not apparent to licence holders
- The use of Performance Objectives and Criteria (PO&C) in planning and implementing inspections has been successful. However, while they are important for all inspections, their use is not apparent in some source inspections. The applicability of the current set for low hazard sources should be reviewed.

#### • Information Management

The RSB had a range of information management needs that are currently being met through a patchwork of, at times, overlapping tools. ARPANSA and its licence holders may benefit from a holistic review of its information management needs leading to an integrated and improved system that reduces duplication and 'red-tape'.

#### • Planning

A review of tasks and how they are allocated may be useful to assist in setting appropriate performance targets and priorities. Improved workforce planning including succession planning at a strategic level may also assist in balancing the workload pressures on staff.

Actions associated with all AFIs will be recorded and managed through the ARPANSA Issue Management Register

#### 1 Introduction

#### 1.1 The Agency

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. We 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.

ARPANSA is a portfolio agency of the Department of Health, and is prescribed as a non-corporate Commonwealth entity under the *Public Governance*, *Performance and Accountability Act 2013*.

The Australian Radiation Protection and Nuclear Safety Act 1998 (the Act) establishes the CEO of ARPANSA as the safety regulator of Commonwealth entities engaged in nuclear or radiation activities. The object of the Act is to protect people and the environment from the harmful effects of radiation.

The last amendments to the Act took effect in October 2015 and were designed to improve the clarity of regulatory requirements related to legacy sites and for contractors working with Commonwealth agencies. It also updated the language to be more consistent with nationally and internationally accepted terms, to make minor changes to enhance regulatory administration, and provide additional options to enhance the graded approach to non-compliance including increased powers of the CEO to compel information and take action in the interest of safety. On 1 July 2016, certain changes to the Australian Radiation Protection and Nuclear Safety Regulations 1999 (the Regulations) and Licence Charges Regulations took effect. These included the annual indexation of the fees and charges and consequential amendments flowing from the amendments to the Act.

The CEO has through delegations authorised staff of the Regulatory Services Branch (RSB) to take regulatory decisions for and on behalf of the CEO. The CEO and the RSB draws on expertise from other functional units of ARPANSA as required and where appropriate. The RSB staff and all other ARPANSA staff that carry out activities supporting such decisions, are ultimately accountable to the CEO; the CEO retains responsibility for all decisions at all times.

In addition to licensing, compliance monitoring and enforcement, the RSB also investigates accidents and incidents, and prepares regulatory guidance, among other things. Regulatory activities also include the assessment and issuing of new licences, amendment of licences, assessment of changes significant to safety, and monitoring compliance with the Act, Regulations and licence conditions.

ARPANSA strives to continuously improve the quality and consistency of its regulatory services and implementation of the graded approach to risk. The structure of the RSB is arranged around functional areas. One section is dedicated to internal performance monitoring and continuous improvement. Another focuses on assuring that regulatory services meet international excellence, including by the promotion and use of international standards and risk assessments in regulatory decision making<sup>1</sup>

The CEO and all ARPANSA staff carrying out activities that support the regulatory function should take reasonable steps to avoid conflict of interest between the regulatory and other functions; disclose any potential,

<sup>&</sup>lt;sup>1</sup> International standards are used by ARPANSA after being assessed to be appropriate and relevant in the Australian context (see ARPANSA's website, <a href="https://www.arpansa.gov.au/regulation-and-licensing/regulation/international-best-practice">https://www.arpansa.gov.au/regulation-and-licensing/regulation/international-best-practice</a>).

perceived or real interests; and manage any such situations carefully. The approach to managing the regulatory intersection with other activities is outlined on ARPANSA's website (<a href="https://www.arpansa.gov.au/regulation-and-licensing/regulation/our-regulatory-services/regulatory-intersection-other-functions">https://www.arpansa.gov.au/regulation-and-licensing/regulation/our-regulatory-services/regulatory-intersection-other-functions</a>). ARPANSA was also developing its *Policy for ARPANSA's Regulatory Activities* that was expected to be published in the following quarter<sup>2</sup>.

To meet the object of the Act, ARPANSA regulates nuclear and radiation facilities under 35 facility licences and approximately 70,000 radiation sources under 56 source licences. The complexity of these licensed activities range from the 20 megawatt (thermal) OPAL reactor and associated medical radioisotope production to the use of low risk equipment such as X-ray baggage scanners, handheld radiofrequency and ultraviolet sources. A full list of the 49 Commonwealth entities that held licences as at 30 June 2017 is provided in Appendix A.

Resources for compliance monitoring and inspection are allocated using a risk-based, graded approach. This includes leveraging short-term contractual arrangements, where appropriate, to ensure the availability of specialist skills and knowledge. Costs of ARPANSA's regulatory operations are recovered through licence application fees and annual licence charges.

#### 1.2 The Report

In October 2014, the Australian Government released the Regulator Performance Framework (RPF), ISBN 978-925237-08, as part of the commitment to reduce unnecessary or inefficient regulation imposed on individuals, business and community organisations. In December 2014, ARPANSA aligned its Regulatory Delivery Model with the RPF to emphasise openness, clarity, reliability, efficiency and effectiveness.

The framework established by the RPF includes a common set of six Key Performance Indicators (KPIs) to allow for a comprehensive assessment of regulator performance and engagement with stakeholders. In 2015, ARPANSA obtained ministerial approval for a set of 12 quantitative Performance Indicators (PIs) that relate to the six RPF KPIs. Data collection began in March 2015 and this report details the second year of assessment against these measures. A list of data and documents provided to the assessment team is in Appendix B.

The 12 ARPANSA PIs were developed in parallel with the Regulatory Delivery Model and had not been tested before they were implemented. The 2015-16 self-assessment, undertaken in July 2016, found that some PIs were not adequately aligned with the RPF KPIs and some individual targets had been set at inappropriate levels. Some adjusted targets were implemented for the 2016-17 financial year but more extensive improvements to the PIs, following ministerial approval, were implemented on 1 July 2017 and will be assessed in future reviews. The PIs forming the basis of this report were insufficient to properly assess regulatory performance against the RPF KPIs, therefore additional evidence was used to provide a more informed assessment. Where feasible, this report takes account of performance against the new indicators.

This assessment sets out to support a continuous improvement cycle by the critical analysis of regulatory performance and identification of good practices and areas for improvement. This report outlines the

<sup>&</sup>lt;sup>2</sup> This policy has subsequently been published; <a href="https://www.arpansa.gov.au/regulation-and-licensing/regulation/regulatory-integrity/policy-arpansas-regulatory-activities">https://www.arpansa.gov.au/regulation-and-licensing/regulation/regulatory-integrity/policy-arpansas-regulatory-activities</a>

implementation of the ARPANSA Self-Assessment Plan 2017 and provides details of the assessment and its outcomes.

#### 1.3 Methodology

The report is based on the outcomes of a self-assessment undertaken from 23 July to 28 July 2017, and that included fieldwork as well as consideration of the previous assessment from 2016. It considered all ARPANSA regulatory activities undertaken in the period from 1 July 2016 to 30 June 2017.

Performance against the framework was assessed by a five-person team that included two members external to ARPANSA and one ARPANSA staff member external to RSB.

#### Team Leader

John Ward – Director, Continuous Improvement, Regulatory Services Branch, ARPANSA

#### Team Members

- Dr Joe Smith Consultant ROJO Advisory Former Gene Technology Regulator and former CEO of the Australian Pesticides and Veterinary Medicines Authority (APVMA)
- Kaylene Pickering Corporate HSE Manager, Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- Don Wijayasinghe Technical Specialist, Radiation Health Services, ARPANSA
- Julie Murray Agency Security Adviser, Regulatory Services Branch, ARPANSA

The assessment focussed on a review of performance against the 12 PIs to ensure that the intent of the six RPF KPIs are met and to verify that quantitative data was accurately recorded. Additional data has been taken into account to provide a balanced and objective assessment of performance.

The team set out to identify AFIs to assist ARPANSA improve the accuracy of the PIs as well as regulatory outcomes including good practices.

To provide qualitative information on performance, the assessment team also examined underlying data and information by:

- reviewing various data sources (e.g. inspection data and findings, surveys, records)
- reviewing the inspection processes and procedures
- interviewing 12 ARPANSA staff including management
- observing two regulatory inspections
- interviewing five staff of licence holders.

A list of data and documents provided to the assessment team is at Appendix B.

#### 2 Performance Assessment

# 2.1 KPI 1 – Regulators do not unnecessarily impede the efficient operation of regulated entities

#### 2.1.1 Overview of KPI 1

ARPANSA follows the internationally agreed principle that the prime responsibility for protecting people and the environment, i.e. for carrying out activities safely and securely, rests with the licence holder. To achieve this ARPANSA has sought to improve communication and consultation that supports and encourages licence holders to be effective in managing nuclear safety and radiation protection. ARPANSA has developed, and regularly updates, guidelines that assist licence holders to develop their own plans and arrangements to fulfil their responsibilities and to demonstrate compliance with the Act and Regulations.

ARPANSA strives to create a regulatory environment that is risk-informed, proportionate and effective. Regulatory guidance has expanded and been improved in scope and depth using the ARPANSA website, and through meetings, forums and workshops. ARPANSA has also streamlined its risk-based approach to regulation, especially for low hazard activities.

ARPANSA receives various types of applications for nuclear and radiation facilities and sources, including licences for new activities, requests for approval to construct items important to safety, requests for safety-significant changes to activities, transfer or disposal of sources, and transport of radioactive material. The scope and detail of documentation needed to demonstrate safety depends on the risk of the proposed activity. ARPANSA strives to assess applications in a timely manner and within a timeframe agreed with the applicant. The timeframe depends on the nature and complexity of the application and takes account of the licence holder's programs and priorities.

ARPANSA maintains a risk-based inspection program. Inspections of licensed activities follow a three-year schedule for facilities and a six-year schedule for sources. The schedule identifies the scope of each inspection in terms of <a href="Performance Objectives and Criteria">Performance Objectives and Criteria</a> (PO&C) made available to licence holders via the ARPANSA website. These were developed based on international best practice to inform licence holders and the public of ARPANSA's safety and security expectations. They provide a comprehensive list of features, controls and behaviours that contribute to safety, arranged into eight baseline modules and three cross cutting modules.

Publishing the PO&C increased ARPANSA's transparency and, together with an inspection schedule that identifies PO&C areas to be inspected, allows the licence holder to prepare for an inspection. The specific date and a schedule of activities for inspections is then agreed with the licence holder well in advance of the two-week formal notification period. Conformance to the inspection schedule is monitored.

Fees and charges are set in legislation. To ensure that any financial impact to a licence holder is fair and appropriate, ARPANSA is undertaking a cost recovery project to ensure that financial burden on licence holders is proportionate to the cost of regulation and that regulatory services are streamlined, efficient and effective. The project aims to improve implementation of, and meet the goals of, the Australian Government Charging Framework, that establishes that those who create the need for regulation should incur the costs. The project has identified areas for improvement to the business and costing models of ARPANSA's regulatory functions. The new cost recovery model will improve the transparency of ARPANSA's charging regime and make annual charges more reliable and predictable for small and large licence holders.

#### 2.1.2 Approved evidence metrics for KPI 1

Indicator	Evidence	Comment
PI 1.1 Percentage of inspections conducted in accordance with established inspection schedule (schedule adherence).	86% of inspections in accordance with schedule – significant progress towards target (90%).	<ul> <li>All deviations from the inspection schedule were measured regardless of whether responsibility laid with ARPANSA or the licence holder.</li> <li>A value of 92% is recorded when factors outside of ARPANSA's control are taken into account.</li> </ul>
PI 1.2 Percentage of applications assessed within agreed licence holder expectations.	79% of assessments within agreed timeframes – significant progress towards target (90%).	<ul> <li>Agreed timeframes were considered important, as they provide certainty to licence holders.</li> <li>There has been a general improvement in the recording of performance data relating to applications since the 2015-16 report.</li> <li>The 90% target was too demanding due to uncertainties in the quality of proponent's application that makes the assessment process more time consuming. A target of 75% will be applied in the future.</li> </ul>

#### 2.1.3 Other evidence to indicate compliance with KPI 1

ARPANSA, through alignment with international standards, ensures that best practice regulation informs decision-making and promotes regulatory certainty. The use of international standards is important in meeting community expectations for nuclear and radiation safety and provides confidence in ARPANSA's regulatory processes and outcomes. It allows a licence holder to adopt emerging technologies and facilitates the movement of knowledge and expertise internationally. To achieve this alignment, ARPANSA works closely with international organisations such as the International Atomic Energy Agency (IAEA) and regulatory agencies in comparable OECD countries. ARPANSA staff are directly involved in the development of international safety and security requirements and guidance documents.

Using this approach, ARPANSA published additional guidance in 2016-17 such as a regulatory guide on licensing a facility for the disposal or storage of radioactive waste and an accompanying stakeholder information publication. ARPANSA also published a major update on its guide for licence holder plans and arrangements for managing safety, based on international standards.

ARPANSA has a consultative approach to the development of regulatory guides. This is subject to PI 5.2 (See section 2.5). ARPANSA has published a wide range of <u>information for licence holders</u> that is publicly available on its website.

Through the IAEA Integrated Regulatory Review Service (IRRS), ARPANSA's regulatory processes were subject to an international peer review in 2007 (with follow-up in 2011) that set out to determine how closely ARPANSA's regulatory service meets international standards. Following established international practice that IRRS reviews (or similar peer reviews) should be conducted at approximately ten-year intervals, a second review is scheduled for 2018. ARPANSA staff are currently undertaking a self-assessment of processes and practices against IRRS guidance. ARPANSA staff also participate in the IRRS review of other

nuclear and radiation regulatory bodies. This international cooperation helps to inform and streamline ARPANSA's approach to regulation and embed good regulatory practices.

ARPANSA undertakes regular meetings, forums and site visits to explain regulatory requirements to licence holder representatives and to gain understanding of operational needs. This informs the licence holder how ARPANSA conducts its regulatory business. During the reporting period, 32 information-sharing meetings and 60 site visits to facilities were undertaken. Ninety licence holder staff attended ARPANSA's annual licence holder forum that took place in June 2017 at the Australian National University in Canberra.

#### 2.1.4 Analysis of evidence presented

These two PIs only partially capture the potential impact of regulation on the efficient operation of regulated entities.

**PI 1.1** measures adherence to inspection schedules. The target of 90% is associated with, and locked into Parliamentary Budget Statement (PBS) reporting, and was known to be highly demanding. From 1 July 2017 this target was reduced to 85%. An 86% result reflects well on ARPANSA's performance in this area. Twelve of 85 inspections were not conducted in accordance with the schedule. When the number of inspections cancelled or postponed for justifiable reasons (such as at the request of the operator) is taken into account, the actual schedule adherence by ARPANSA is 92%. Deviations from the schedule were communicated to the licence holder in advance with explanations. This is good practice and demonstrates a commitment to the intent of the RPF, in terms of predictability and transparency of regulatory services.

From 1 July 2017, this PI was formally updated to include source licences rather than just facility licences. In practice, ARPANSA always included source inspections in this measure that, unlike the three-year facility schedule, operate over a six-year inspection cycle. Inspection frequencies range from three per year for the most hazardous facilities to once every six years for very low hazard sources.

Following a finding from the 2015-16 self-assessment, RSB has standardised the review of risk ranking and corresponding adjustment of the inspection schedule. This risk ranking review is now conducted at the end of each calendar year. This has corrected a concern of some licence holders that they were not being consistently informed of changes to the schedule. Sources are now graded by source categorisation with augmented inspections undertaken over and above the schedule where warranted by poor licence holder safety performance. The assessment team found that despite being previously identified, there is still no mechanism to reflect compliance maturity and reward good performance with reduced regulatory oversight in the source inspection program.

Feedback from post-inspection surveys, and interviews between the assessment team and licence holders, showed that licence holders greatly value being advised of the inspection schedule and associated PO&C in advance. This allows the licence holder to plan its resources and the availability of staff, documentation and inspector access to premises in order to minimise disruptions to operations. The assessment team was told that licence holders appreciated an improved consistency in inspections practices and the prompt issuance of inspection reports compared to previous years. However, the assessment team also heard that in some cases, the expectations of an inspection that are laid out in the inspection notification letter, were not met and that the expenditure of licence holder resources has not been properly utilised. The team learned that the transparency in the conduct of some inspections to the PO&Cs was not apparent, especially during the source inspections where the linkage between the PO&Cs and the inspection undertaken was not always evident. The assessment team recommended that a review of the PO&C should be undertaken to determine if the current source licence PO&Cs could be better aligned with the requirements of low hazard

sources. The assessment team agreed that the general principle of PO&Cs should be retained for all licences, however acknowledged the need to review the level of detail required for low hazard sources.

The assessment team also examined the workload planning arrangements. In general, the RSB was seen to be working under demanding work programs that reduced its ability to undertake, and potentially caused delay, to some important tasks including the follow-up of some inspection findings, performance reporting and some record keeping. There was a lack of redundancy in some specialist skills areas that placed additional demands on workforce planning and on some individual staff. Adherence to the inspection schedule, and to a lesser extent meeting targets for assessments were seen as non-negotiable by regulatory staff whereas other tasks including data recording, some record keeping, and many administrative requirements, were sometimes sacrificed. RSB is organised around functional sections that lead and co-ordinate activities shared throughout the entire branch. This is an intentional strategy that takes account of individual's specialisation and helps to build a resilient team. However RSB as a whole has often struggled to provide timely resourcing for important non-direct regulatory functions such as codes and standards development and tasks required for quality assurance. Some improvements had been made in bringing together a number of record systems and databases and there are plans to bring these together more fully through a holistic licence administration system. The current information and record systems remain fragmented and inefficient. It is understood that this project will be implemented by the Corporate Office of ARPANSA, however there are currently no project dates available as to when this will happen. The assessment team put high importance on this development as a way of reducing work pressures and freeing up more time to work on core regulatory business. It was recommended that this project be given high priority.

**PI 1.2** seeks to avoid unnecessary impact on the efficient operation of licensed entities by providing timely decisions, be they positive or negative. The current process is for inspectors to discuss the urgency of an application with the applicant and take into account ARPANSA workloads to agree on a decision date. This process of consultation is important to set realistic expectations and ensure sufficient time for a thorough analysis of the application. The PI measures whether the agreed date was met. As with PI 1.1 this target had been set and locked into PBS reporting before the target value was tested. It is now widely considered to be over demanding and not recognising the wide variability and unpredictability of data presented in an application. From 1 July 2017, the target was reduced from 90% to 75% that is regarded to be a more realistic yet demanding target. While not fully meeting the 90% target, results have been consistently high, suggesting that ARPANSA performs well in this area.

The 2016 self-assessment found that this measure had not been applied to a consistent range of application types. The Assessment Team found that problems with applications have been corrected and it is now used consistently across a range of licence applications, change requests and other special approvals. Performance against this measure was considered to be good even though the 90% target was not met. Failure to meet target dates occurs for a variety of reasons such as incomplete information in an application, technical complexity, the unavailability of specialist expertise to review an application, and/or ARPANSA staff not following procedures. Conflicts of regulatory resources, especially in the inspection program, may also cause delay.

ARPANSA is currently implementing a project to bring its inspection service into conformance with ISO17020 that specifies requirements for the competence of bodies performing inspections. As part of the project ARPANSA will map workforce needs and implement strategic recruitment, training and education to improve resource depth and flexibility.

The assessment of various applications, alongside inspections, is the most important direct regulatory service provided to licence holders. Unlike the inspection survey, there is no equivalent for assessment of applications. The team considered that a survey sent to licence holders after an application is finalised could provide useful information to drive further improvements in this area.

The evidence presented above demonstrates that ARPANSA is striving for best practice regulation while being mindful of the impact that this has on licensed entities. A good deal of effort is being invested in transparency of the regulatory approach and communication with licence holders. This communication is two-way and appears to be building mutual respect. Without exception, Licence holder representatives confirmed that ARPANSA's regulatory processes had improved in recent years. Some reported a reduction in "red tape" to a clearer and consistent approach in the use of best practices described in codes, standards and guides.

#### 2.1.5 Self-assessed rating of performance against KPI 1 – 2016-17

Excellent	Very Good	Good	Fair	Poor
Strong	Strong performance against	Average	Poor	Poor
performance	majority of the measures	performance	performance	performance
against all the	under the KPI and no	against the	against some	against most of
measures	evidence of negative/poor	measures under	measures under	the measures
under the KPI	performance against any	the KPI	the KPI	under the KPI
	measure			

This rating compares with 'good' in the 2015-16 self-assessment report. Improvements made during this year include improved delivery of the inspection programme including risk informed scheduling, improved consistency and a clearer and consistent approach to regulatory standards. There has also been improved communication regarding the licence assessment process and on agreeing target dates for decisions. Internal improvements on performance tracking and record keeping have improved efficiency.

#### 2.1.6 Actions for improving performance against KPI 1

The team identified the following AFI related to PI 1.1:

- No mechanism to reward good regulatory performance has been implemented for source licences.
- Expectations of an inspection, as described in the inspection notification letter, are not always met.
- Source licence PO&Cs should be reviewed and updated. Consider if PO&Cs in their current form are suitable for the range of radiation sources (particularly low hazard sources) for which they are used.
- Data management tools are fragmented and inefficient and a review of potential actions to resolve the issues (including consolidation or replacement) should be conducted as soon as possible.

The team identified the following AFI related to PI 1.2:

- Workforce planning (ISO 17020 project currently in progress to address this).
- Client survey needed to provide useful information to drive improvements relating to the licence assessment process (shared AFI with KPI 2).

#### 2.2 KPI 2 - Communication with regulated entities is clear, targeted and effective

#### 2.2.1 Overview of KPI 2

A licence holder has primary responsibility for safety of its activities. Good communication is essential to inform regulated entities how to meet their responsibilities under the Act and Regulations. It is also important to educate regulatory staff of the operating environment, priorities and needs of regulated entities.

ARPANSA's methods of communication include written communication, meetings, site visits and inspections, workshops and licence holder forums. In addition, a licence holder may approach ARPANSA at any management level, at any time, to seek clarification and to provide feedback. Surveys are used to obtain feedback on specific regulatory services.

ARPANSA prepares <u>regulatory guidance</u> that describes how ARPANSA goes about its regulatory business and what it expects from a licence holder. Development of these guides includes consultation with stakeholders (See section 2.5). This reduces the risk of a licence holder undertaking unfocussed or unnecessary work in order to address regulatory requirements. Regulatory guidance is published on the ARPANSA website and is kept up-to-date and relevant.

As previously discussed, communication with a licence holder well in advance of an inspection advises when an inspection will take place and the PO&C that are to be used. A condition of all licences allows ARPANSA to undertake an inspection at any time, however in practice, each inspection is to a mutually agreed timetable that details when specific inspection activities will take place, who is involved, what documentation and evidence is needed, and the premises to be visited. A formal entrance meeting is held to ensure that the licence holder understands the purpose, scope and method of the inspection.

Meetings are held at the end of each day and a final exit meeting is held to agree the facts on which the inspection findings will be based. The exit meeting provides an opportunity for feedback on how the inspection had been received by the licence holder.

After the inspection report is issued, the Office of the CEO (OCEO) sends a survey to the licence holder seeking feedback on how effectively and efficiently the inspection was planned and executed and its impact on operations. Currently to assure the integrity of the process, this process is independent of RSB. The response options range from 'strongly agree' to 'strongly disagree'. Negative feedback is seen as an opportunity for improvement. If the average response is neutral or better, then the feedback is taken to be favourable. This serves as an indicator of how effective inspectors are at implementing the six KPIs while maintaining positive stakeholder relations.

As discussed in section 2.1 above, in addition to scheduled inspections, inspectors make regular site visits to facilitate two-way communication on regulatory matters. These visits provide opportunities for inspectors to understand the ongoing operational environment of the licence holder and to share wider regulatory experience. Unlike an inspection, site visits are not planned weeks in advance and no formal report is issued to the licence holder. Instead, observations are discussed with the licence holder before departure, and recorded in our Licence Administration Database (LAD).

In addition to site visits regular meetings are held with many licence holders to exchange information on regulatory matters such as upcoming legislative changes, licence applications or licensing and safety compliance issues. Examples of such established forums are the Defence-ARPANSA Liaison Forum (DALF),

the CSIRO Liaison Forum, ANSTO OPAL Reactor quarterly meetings and the annual licence holder forums.

Communication is a two-way process so these meetings are effective in helping ARPANSA understand regulatory impacts on a licence holder and provides a forum for discussion of the benefits of regulatory action to the licence holder itself and to community safety more broadly. The number and quality of meetings in a year and the feedback from these meetings indicates if communication has been effective.

#### 2.2.2 Approved evidence metrics for KPI 2

Indicator	Evidence	Comment
PI 2.1 – Percentage of stakeholder inspection feedback in which the positive outweighs the negative (customer satisfaction).	88% of surveys positive – near target (90%).	<ul> <li>All feedback received from the post-inspection survey was overall positive. The lower performance was due to feedback from other sources.</li> <li>A PI based on a feedback score has been introduced from 1 July 2017 (see section 2.2.3).</li> <li>Following the 2015-16 self-assessment the survey was amended at the beginning of the 2016/17 year to allow anonymity. This self-assessment did not find any need for the survey to be administered by the OCEO.</li> <li>Survey responses numbers have declined.</li> </ul>
PI 2.2 – Number of information sharing meetings with facility licence holders (effective communication).	32 information sharing meetings held – exceeds target (20).	<ul> <li>Licence holder response indicates a good satisfaction with the communication with ARPANSA.</li> <li>60 site visits to facilities and 16 site visits to sources were also an important tool for communication but are not included in this measure.</li> </ul>

#### 2.2.3 Other evidence to indicate compliance with KPI 2

The 'no surprises' policy, as defined in the <u>Regulatory Delivery Model</u>, ensures that open and transparent communication takes place in a timely manner, For example, most inspection reports are issues within 10 working days (unless there is an associated potential non-compliance) and licensing decisions are delivered by a time determined in consultation with the licence holder (See PI 1.2).

ARPANSA updates and communicates its inspection schedules to licence holders. Dates for inspections are agreed with a licence holder well in advance. A formal notification is sent to the licence holder at least two weeks before the start of an inspection. The notification includes details such as when, who, and what will be inspected, including the <u>PO&C</u> to be used.

Each inspection includes an entrance and exit meeting involving appropriate staff from the licensed entity. There should be no surprises at the exit meeting as any significant findings should be discussed with staff during the inspection. An effective exit meeting will result in agreement on the facts of any potential non-compliance and performance deficiencies, identification of good practices, and clear expectations for both the licence holder and the regulator. During the self-assessment, the team observed two inspections and

spoke with licence holder staff who confirmed that communication during and at the close of inspections was effective. ARPANSA inspectors were reported as well regarded and seen as professional in their work. Teamwork between inspectors during inspections was sometimes described as impressive. The assessment team heard from inspectors that they were both supported by management and had ample opportunity for professional development although operational matters can get in the way of this.

In addition to the inspection environment, without exception, licence holder representatives reported effective communication and services from ARPANSA have improved since the introduction of the new Regulatory Delivery Model in December 2014.

Following the 2015-16 self-assessment, the inspection survey was revised to make it simpler to complete, allow for anonymity and to provide a 'score' that may be trended. Officially coming onto effect from 1 July 2017, quarterly results from the survey would have an average score of 84% within a range from 80% to 87% for 2016/17 year. The results of inspection surveys and feedback provided to the ARPANSA self-assessment team indicated general satisfaction with the inspection process although the team noted that survey responses had declined significantly for unknown reasons.

Following the 2015-16 self-assessment RSB now reviews, analyses and compiles survey data, along with other performance metrics, into an internal quarterly report for staff. This highlights where RSB is doing well and where improvements can be made. It also provides information on licence holder performance that can inform inspection planning and improve communications during inspections, site visits and other meetings or correspondence. On a similar theme RSB also publishes and updates half-yearly, on its website, information on inspection outcomes. This can assist licence holders to understand the common safety issues that inspectors encounter.

Licence holder representatives continue to be positive towards the PO&C however, the assessment team found that their use was not visible to licence holders in all source licence inspections (see section 2.1).

In June 2017 ARPANSA held its annual licence holder forum at the Australian National University in Canberra. This was structured taking account of previous feedback to maximise the opportunities for sharing knowledge between licence holders and with ARPANSA. The forum was attended by a record 90 participants from a range of licence holder organisations. Responses to the survey following the licence holder forum showed that licence holders appreciated the communication opportunities this had provided, both with ARPANSA and between licence holders.

As demonstrated by PI 5.2, 100% of codes and standards developed in this financial year included consultation with licence holders.

#### 2.2.4 Analysis of evidence presented

Overall, performance against this KPI was assessed as very good. This is based on both PI results and other licence holder feedback.

PI 2.1 focuses on licence holder feedback received from post inspection surveys, with the indicator being that positive outweighs negative. Overall 88% of survey responses were overall positive and performance fell just short of the target due to feedback from the licence holder forum, which was sought and received in the first quarter. The team found that recommendations for the survey from the previous self-assessment had been implemented. The changes provide functional improvements, the opportunity for anonymity, a score that may be tracked more easily and improved feedback of survey results to the wider inspection team. At the previous self-assessment, some licence holder representatives reported that they

have not seen benefits coming from the survey. This assessment team were told that some licence holder staff found it more useful to give feedback personally in discussions with inspectors, rather than by the survey. This self-assessment found that the numbers of respondents had continued to decline despite the improvements made to the survey. The team thought that an ongoing focus should be to improve the incoming communication of feedback from exit meetings to the RSB Continuous Improvement Section, and outward information on improvements arising from the survey to licence holders.

The team observed that RSB's two single largest services are its inspection program and the assessment of applications. The team considered that a feedback survey for applications would assist ARPANSA to identify service improvements and understand client needs.

**PI 2.2** focuses on the number of information sharing meetings held with licence holders. The number of meetings recorded has been consistently above the target and indicates that performance in this area is strong.

A number of issues were highlighted where internal communications should be improved to drive a culture of openness in safety matters throughout ARPANSA and beyond to licence holders. There is no mechanism at present to feed information back to the Continuous Improvement Section from information sharing meetings. The Continuous Improvement Section has a focus on internal communications and improvement and may miss opportunities to publicise safety vulnerabilities or good practices among licence holders. There was also little opportunity to share information between source and facility inspection areas. It was thought to be a good idea if more regular meetings were set up for this between the general regulatory team as this may lead to improved communication of safety and security issues within the branch that would then flow through to licence holders, particularly in relation to greater consistency of approach by different inspectors.

Other Evidence: The effectiveness of ARPANSA's communication was reported as acceptable although, as with the 2015-16 assessment, the team noted that information-sharing meetings are predominantly undertaken with large licence holders. While 16 site visits to source licences had taken place the team observed that no progress had been made towards implementing other 'site visit' methods such as video or telephone conferences that had been a finding of the 2015-16 report. Regulatory staff reported that this is unlikely to be beneficial for many operators of low hazard sources. The team considered that the licence holder forum may be sufficient opportunity for small licence holders to liaise with ARPANSA.

#### 2.2.5 Self-assessed rating of performance against KPI 2 – 2016-17

Excellent	Very Good	Good	Fair	Poor
Strong	Strong performance against	Average	Poor	Poor
performance	majority of the measures under	performance	performance	performance
against all the	the KPI and no evidence of	against the	against some	against most of
measures	negative/poor performance	measures under	measures under	the measures
under the KPI	against any measure	the KPI	the KPI	under the KPI

This rating is the same as that given in the 2015-17 self-assessment. The team found that a number of improvements had occurred over the year but that the very good rating remained appropriate.

#### 2.2.6 Actions for improving performance against KPI 2

The team identified the following AFI related to PI 2.1:

- Licence holders did not always see the value in completing the inspection surveys. Improved communication of improvements implemented based on survey results may assist in achieving this.
- Feedback may be provided in regulatory meetings between inspectors and licence holders and during inspections. There is currently no mechanism for capturing this feedback to continuous improvement team unless the licence holder also provides the feedback via the inspection survey.
- Client survey would provide useful information to drive improvements relating to the licence assessment process (shared AFI with KPI 1).

The team identified the following AFI related to PI 2.2:

• Internal communications and information sharing should be improved to enhance understanding of issues and sharing knowledge across the branch.

# 2.3 KPI 3 – Actions undertaken by regulators are proportionate to the regulatory risk being managed

#### 2.3.1 Overview of KPI 3

ARPANSA's regulatory oversight program is proportionate to the radiation risk<sup>3</sup> the controlled activity poses to people and the environment. It includes licence holder reporting, inspections, site visits and other meetings or forums. An inspection may identify potential non-compliance, performance deficiencies or good practices.

"Areas for Improvement" may occur when a licence holder does not follow accepted best practice or does not meet self-imposed standards. These represent an area where the licence holder could improve their safety and security systems and practices and are typically actioned voluntarily without regulatory intervention.

Potential non-compliances may arise when inspectors consider that a licence holder does not meet the legislative requirements of the Act and Regulations or specific licence conditions. A formal determination of whether a potential non-compliance is a breach of the Act is made by the CEO of ARPANSA (or his delegate), based on the evidence presented by inspectors and the licence holder.

The CEO has a range of regulatory responses to non-compliance available to him. The level of response is proportionate to the particular circumstance. ARPANSA provides guidance on how the response is determined in the Regulatory Guide <u>Graded Response to Dealing with Licence Holder Non-compliance</u>. In most cases, ARPANSA's initial response will be to encourage a return to compliance. If this is unsuccessful, the regulatory response may be escalated to more formal action such as an improvement notice or

Detrimental health effects of exposure to ionising radiation including the likelihood of such effects occurring, and other risks including environmental risks, that might arise from exposure to ionising radiation; the presence of radioactive material (including radioactive waste) or its release to the environment; or a loss of control over a nuclear reactor core, nuclear chain reaction, radioactive source or any other source of radiation; alone or in combination.

Health effects and health risks associated with acute or prolonged exposure to non-ionising radiation such as ultraviolet radiation, radiofrequency radiation, optical radiation and other types of non-ionising radiation; either in occupational settings or as members of the public.

<sup>&</sup>lt;sup>3</sup> The *Policy for ARPANSA's Regulatory Activities* (ARPANSA-POL-002) defines radiation risk as follows:

direction through to suspension or cancellation of licence, or court action. Most of these enforcement actions, that are similar to those of other regulatory bodies, have never been needed, but are nonetheless necessary tools to ensure compliance with the Act in cases of acute risks to the safety of people and the environment; and to provide confidence to stakeholders, including the public, in ARPANSA's ability to protect the people and environment from the harmful effects of radiation. In practice, ARPANSA strives to use the lowest level of regulatory response possible, while being as firm as necessary, to assure protection, safety and security.

The Act requires that a licence only be issued to an applicant who is able to demonstrate a capacity to comply with the Act, the Regulations and any licence conditions. Consequently, a finding of non-compliance (breach) almost always results in corrective actions by the licence holder without the need for formal enforcement action.

As discussed under KPI 1, ARPANSA schedules the frequency and intensity of inspections commensurate to be with risk. Different systems are in place for facility and source licences. In the case of facilities, the risk is determined on the basis of the inherent hazard, the effectiveness of critical safety and security controls, and performance history. Where the risk is altered, the inspection schedule is adjusted accordingly. Two identical facilities may therefore have a different inspection frequency if the safety and security practices of one are better than the other.

In the case of sources, the method for determining the inspection schedule recognises the generally less complex nature of sources compared to facilities. The baseline inspection program is based on the hazard category of the source with additional (augmented) inspections undertaken where a performance issue is identified. For very low risk sources, a remote inspection process (known as an e-Inspection) is used that does not require inspectors to physically attend the site. This is particularly useful for sources in remote locations or overseas.

The inspection schedules are recorded in the records management system and are updated annually or as required by changes in licence holder performance.

Inspectors monitor licence holder performance on a regular basis outside the inspection process through site visits, licence holder reporting and meetings. Frequent site visits are undertaken to meet with licence holder staff and observe their operations. Unlike inspections, no detailed advance planning is required and observations are shared verbally with the licence holder at the time of the site visit. Frequent site visits improve regulatory understanding and oversight and increase the visibility of the regulator. They also contribute to minimising the incidence of potential non-compliances through enhanced communication of regulatory requirements and experience.

#### 2.3.2 Approved evidence metrics for KPI 3

Indicator	Evidence	Comment
PI 3.1 – Ratio of areas for improvement to non-compliances during inspections (graded approach).	16 areas for improvement to each potential non-compliance – target (25:1) not met.	<ul> <li>162 Areas for Improvement (AFIs) &amp; 10 potential non-compliances (NCs).</li> <li>From 1 July 2017, this indicator is replaced with a metric to assess that the inspection schedule is risk informed and reviewed annually.</li> </ul>
PI 3.2 – Ratio of site visits (monitoring) to inspections at licensed facilities (performance monitoring).	3 site visits per inspections at licensed facilities – target (4:1) not met.	<ul> <li>60 site visits &amp; 20 inspections of licensed facilities.</li> <li>From 1 July 2017, this indicator is replaced with a metric to assess that the regulatory response is graded and proportionate.</li> </ul>

#### 2.3.3 Other evidence to indicate compliance with KPI 3

ARPANSA's application process requires an applicant to demonstrate their capacity to meet regulatory requirements under the Act and Regulations. ARPANSA strives to avoid direct regulatory intervention wherever it is not necessary. Its policies have effectively emphasised that the prime responsibility to identify and rectify safety or security issues rests with the licence holder.

ARPANSA promotes a holistic approach to safety that encourages licence holders to consider any human and organisational factors affecting safety of controlled activities that are underlying causes of accidents. A licence holder is expected to improve systems and processes beyond an immediate problem, and carefully consider wide ranging issues of safety and security culture, human performance and performance improvement.

The risk-informed inspection program is designed to direct regulatory resources to licences presenting the highest risk. Inspections are undertaken using PO&Cs as described under KPI 1. The PO&Cs provide a structure for inspections, with a scope and depth proportionate to the risk of the controlled activity, and at an appropriate frequency. The <u>risk ranking methodology</u> used to allocate regulatory resources is available to stakeholders on the ARPANSA website. Facility risk ranking is reviewed annually and after any significant change or inspection finding such as non-compliance. During the reporting period, time logged against specific licence holders showed that 78% of time was used on licence holders with a medium to high risk. Policies and guidance on assessing regulatory risks and the effects on inspection schedules are clearly documented and published where appropriate.

#### 2.3.4 Analysis of evidence presented

Overall performance against this KPI was assessed as very good. This is based on evidence that a range of enforcement options are available, and risk assessment and management policies and procedures are in

place and available to stakeholders. Licence holders expressed the view that ARPANSA programs are aligned to risk. Performance against the PIs was reasonable, but they are not closely aligned with KPI 3. Replacement PIs took effect from 1 July 2017.

**PI 3.1** shows that ARPANSA applies a graded approach to regulatory intervention. Formal enforcement action will only be initiated where there is, or is likely to be, a non-compliance of a high safety significance or the licence holder fails to solve its own problems. This is an effective approach that helps to avoid direct interference in the operations of a licence holder. It indicates that ARPANSA is mindful of the need to be proportionate and predictable in their regulatory response. The measured value for this PI was 16:1 against a target of 25:1. The assessment team noted that this was significantly lower than the 2015-16 reporting period and that this appeared to be due to related AFI's being combined under a single issue. This was seen as a positive improvement in the way that the Regulatory Delivery Model is being implemented as the system matures.

The assessment team noted that the PI was replaced from 1 July 2017 in line with the findings of the 2015-16 self-assessment.

**PI 3.2** measures the ratio of site visits to inspections at facilities. This measure indicates the level of involvement, oversight and presence of ARPANSA outside of scheduled inspections.

The 2016/17 data shows that the target of four site visits to each inspection was not met for many facilities despite the target reduction from 5:1 the previous year. The team heard that there was continued mixed feedback from regulatory staff and licence holders as to the value of site visits at the target rate. The assessment team noted that the PI was replaced from 1 July 2017.

Other Evidence supporting KPI 3 indicates that the Act and supporting policies and procedures have been effective in emphasising the responsibility of licence holders to rectify their own problems without the need for regulatory intervention. ARPANSA's approach to holistic safety emphasises the importance of safety culture, human performance and performance improvement. Applying this approach may result in improvements made by licence holders having a wider effect than may otherwise be the case. ARPANSA has published information about its inspection process on the website to inform licence holders of their regulatory responsibilities and assist and encourage them to identify and rectify their own problems.

A potential area of uncertainty is the comparative safety risk between sources and facilities, i.e. does a source having an inspection frequency of once a year present the same risk as a facility having an inspection frequency of once a year? It was suggested that this should be an area of research.

#### 2.3.5 Self-assessed rating of performance against KPI 3 – 2016-17

Excellent	Very Good	Good	Fair	Poor
Strong	Strong performance against	Average	Poor performance	Poor performance
performance	majority of the measures under	performance	against some	against most of
against all the	the KPI and no evidence of	against the	measures under	the measures
measures under	negative/poor performance	measures under	the KPI	under the KPI
the KPI	against any measure	the KPI		

This rating compares with 'good' in the 2015-16 self-assessment report. The team found that there was an effective range of regulatory actions available which are appropriately graded to risk. Whilst performance against the measures was a little below the target, these alone do not properly measure performance to the KPI and other evidence indicated that a very good rating was warranted.

#### 2.3.6 Actions for improving performance against KPI 3

The team identified the following AFI related to KPI 3:

 Comparative safety risks between source and facilities licences is not adequately characterised or moderated and needs to be an area of research with a view to providing consistently proportionate levels of resources aligned to risk across both areas.

#### 2.4 KPI 4 – Compliance and monitoring approaches are streamlined and co-ordinated

#### 2.4.1 Overview of KPI 4

ARPANSA's compliance monitoring program comprises performance reporting by the licence holder, regulatory inspections and a range of communication practices that collectively provide effective regulatory oversight of licence holder compliance. Together, these approaches also enable ARPANSA to assess licence holder performance against international best practice and to justify the need for any safety and security improvements identified. ARPANSA strives to be non-intrusive in its regulation wherever possible.

Each licence holder must report on its operations to ARPANSA. These reports keep ARPANSA informed of any significant operational matters. The usual interval for reporting is quarterly however this was streamlined in 2013 to annual reporting for low hazard activities. Reports include any self-identified potential non-compliance; acquisition, transfer or disposal of radiation sources; occurrence of any incidents; any changes that affect the basis on which the licence was issued; and updates on actions associated with inspection outcomes. Reporting is via a simple, standardised form and is a non-intrusive approach to regulatory oversight.

ARPANSA's inspection program is described under KPI 1 and KPI 3. Facilities and sources are inspected against published <u>PO&C</u> that are designed to deliver a consistent, predicable and transparent inspection service across the entire range of licence holders. PO&Cs are available to licence holders on the ARPANSA website. Each PO&C is examined at least every three years in the case of facilities and six years for sources. Higher risk facilities and sources are inspected more frequently. The frequency and depth of each inspection is determined by risk. For example, a typical particle accelerator is inspected once a year across all PO&C whereas the more complex OPAL reactor is inspected three times a year on a single baseline module. All inspections examine performance in three cross cutting areas: safety culture, human performance and performance improvement. These modules are consistent with ARPANSA's promotion of holistic safety that recognises the importance of human and organisational factors to safety and security.

Inspectors monitor licence holder performance on a regular basis outside the formal compliance reporting and inspection processes through site visits, meetings and forums. Frequent site visits are undertaken to enhance communication.

As described in KPI 3, ARPANSA streamlines its compliance activities by basing inspection frequency on risk. The <u>risk ranking methodology</u> is published online. Establishing a transparent and planned inspection program based on risk allows ARPANSA to streamline its compliance monitoring program as necessary and reduce regulatory burden where appropriate.

ARPANSA encourages licence holders to proactively manage safety by identifying AFIs and potential non-compliance. Commencing 1 July 2017, ARPANSA introduced an internal target to strive towards more self-reported non-compliance compared with those reported during inspections. The purpose of this target is to

reinforce ARPANSA's ambition to make the licence holders accountable for the management of their own safety.

In the case of identified AFIs, there is an expectation that the licence holder will take corrective action in a timely fashion. ARPANSA anticipates that the licence holder correct or initiate corrective actions within 3 months. The objective of identifying AFIs is to encourage the improvement of safety and security and the adoption of best practice. The time taken for a licence holder to address corrective actions following the finding of an AFI is an indicator of the influence, transparency and effectiveness of ARPANSA's inspection/compliance monitoring program. It may also be an indicator of the safety culture of a licensee.

A periodic analysis of AFIs, potential non-compliances, and good practices is performed to ensure that resources are appropriately allocated and to monitor trends or emerging issues. Outcomes of analysis are made available to licence holders through the ARPANSA website.

ARPANSA is seeking ways to share information and participate in joint activities with other Commonwealth regulators; namely the Australian Safeguards and Non-Proliferation Office (ASNO) and Comcare.

#### 2.4.2 Approved evidence metrics for KPI 4

Indicator	Evidence	Comment
PI 4.1 – Percentage of inspections on licence holders with a medium to high risk ranking (risk informed regulation).	56% of inspections conducted on medium to high risk licence holders – target (70%) not met.	<ul> <li>The number of inspections does not properly represent the object of this measure as low risk inspections take less time than those at a higher risk licence.</li> <li>Data shows that 78% of time on specific licences was expended on medium and high-risk licences.</li> </ul>
PI 4.2 – Percentage of time that actions are initiated within three months of the issuance of a performance deficiency (light touch regulation).	Action is initiated within 3 months for 59% of the AFIs – target (50%) met.	<ul> <li>This performance result was improved from the previous year (35%), partly because regulatory officers are more efficient in following up actions.</li> <li>Improvement in this PI was seen as a management priority following the previous self-assessment because it reflects the safety culture of license holders.</li> </ul>

#### 2.4.3 Other evidence to indicate compliance with KPI 4

A review of facility risk ranking takes place at least annually and following an inspection. The risk ranking determines inspection frequency and monitoring strategies. The inspection schedule is reviewed annually with any changes taking effect from 1 January. As such, ARPANSA can reduce its efforts expended on regulatory oversight of facilities with a high level of control and demonstrated good performance. Source inspection frequencies are determined primarily on the inherent hazard of the source.

#### 2.4.4 Analysis of evidence presented

Overall performance against this KPI was assessed as good. This is based on evidence that there was a high level of transparency of inspection and monitoring arrangements, feedback mechanisms in place to seek stakeholder views on the inspection and monitoring regimes, and monitoring and enforcement strategies that allow for a range of regulatory responses. The assessment team did, however, recommend that the mechanism for stakeholder feedback be strengthened by introducing a customer survey relating to the licence application process as a way of improved performance monitoring and to drive continuous improvement. This is discussed in Sections 2.1 and 2.2.

While the PIs relate to the KPI, the measures used may not provide sufficient information to fully and accurately assess performance.

**PI 4.1** relates to the number of inspections performed on higher risk licences compared to the lower risk licences. This PI was intended to represent how well ARPANSA targets resources to higher risk licence holders.

The team noted that since the establishment of this PI, the risk ranking method for source licences was adjusted. A large proportion of source licences are in the lower risk categories. These graded strategies help to meet the intention of the PI. However, the introduction of less resource-intensive inspections has resulted in an increased number of low risk inspections that has devalued the measure. The team was satisfied that the intent of this measure is fulfilled based on data provided to the team that showed 78% of time spent working on individual licences was recorded against those with a medium and high-risk ranking.

The revised source inspection schedule retains the option to undertake more inspections when poor safety performance is identified. However, there is no system in place to reward good performance with reduced regulatory oversight, in line with what in the RPF is referred to as 'earned autonomy' (note that the word "autonomy" may suggest that the regulator otherwise assumes some level of responsibility for safety, which is never the case – responsibility for safety rests with the operator at all times<sup>4</sup>). The team was told that a revised inspection plan would be introduced in the near future.

The assessment team was satisfied that the implementation of regular review of monitoring and compliance strategies had been improved over the year especially the review of risk ranking of facilities and sources and consequential adjustment of the inspection schedule. However, it was not demonstrated that the comparative risks between sources and facilities, and the corresponding allocation of resources is properly aligned, i.e. there is no level playing field. The equivalency of risks between sources and facilities should be researched to provide a consistently proportionate level of resources aligned to risk.

The assessment team noted that from 1 July 2017, this measure had been replaced by a measure to evaluate how well ARPANSA collaborates and shares information with other regulators. This is more aligned to the KPI although the team also considered that the proportion of time spent working on medium and high-risk licences is still a useful measure.

-

<sup>&</sup>lt;sup>4</sup> Principle 1 of the *Fundamentals: Protection against Ionising Radiation* (RPS F-1; ARPANSA 2014) states: The prime responsibility for management of radiation risks must rest with the person or organisation responsible for facilities and activities that give rise to radiation risks.

**PI 4.2** relates to initiation of action to address a performance deficiency within three months. The PI shows the effectiveness of light touch regulation, allowing a licence holder to address issues with reduced regulatory interference. It is both a measure of regulatory influence and licence holder safety culture.

There was evidence that inspectors were more efficient in following up actions resulting from inspections. There was also evidence that inspectors were grouping previously individual performance issues under a combined AFI that would make it more compelling for the licence holder to address.

The assessment team recognised complementary to this measure is a measure introduced to the RSB branch plan that aims for licence holders to self-report more non-compliances than those found during inspections. This is a move towards promoting greater ownership of safety and security by the licence holder and fewer interventions by ARPANSA.

#### 2.4.5 Self-assessed rating of performance against KPI 4 – 2016-17

Excellent	Very Good	Good	Fair	Poor
Strong performance against all the measures under the KPI	Strong performance against majority of the measures under the KPI and no evidence of negative/poor performance against any measure	Average performance against the measures under the KPI	Poor performance against some measures under the KPI	Poor performance against most of the measures under the KPI

This rating is unchanged from the 2015-16 self-assessment. The team found that there was good alignment of regulatory resources with risk and that there was a significant improvement in regard to the follow-up and implementation of corrective actions identified during inspection. The team considered that the good rating remained appropriate.

#### 2.4.6 Actions for improving performance against KPI 4

The team identified the following AFI related to PI 4.1:

 There is no system in place on source licences, to reward good performance with reduced regulatory oversight. The equivalency of risks between sources and facilities is not demonstrated, i.e. it is not known if sources and facilities with the same overall risk attract similar regulatory attention of effort.

## 2.5 KPI 5 – Regulators are open and transparent in their dealings with regulated entities

#### 2.5.1 Overview of KPI 5

ARPANSA has endeavoured to become increasingly open and transparent in its approach to regulation and regulatory outcomes. This policy is important to promote consistent and high standards of regulation and to build trust and mutual respect with a licence holder.

During the year ARPANSA implemented a major upgrade to its website to provide a modern, refreshed look with an improved structure and search engine. ARPANSA has published on its website a range of information on how it implements a risk-based approach to regulation. The <u>Regulation and Licensing</u> <u>webpages</u> are the starting point for this information. Information includes how to apply for a licence; details about the inspection program; and the promotion of international best practice. ARPANSA publishes

the majority of its <u>inspection reports</u>. However content may be redacted or a report withheld for security reasons.

As discussed in previous sections, ARPANSA publishes guides, codes and standards on a range of regulatory topics that describes how ARPANSA carries out its regulatory business and sets out expectations for a licence holder with respect to safety and security of sources and facilities. These guides, codes and standards reflect international best practice; hence their requirements and expectations are predictable and in keeping with the international framework for safety and security. Consultation with licence holders on the development of such documents improves transparency in regulation and supports continuous improvement.

ARPANSA appoints a 'lead inspector' for each licence. As the title suggests, the lead inspector is responsible for co-ordinating inspection and compliance monitoring activities. The lead inspector is also the main point of contact for communication between ARPANSA and the licence holder, and plays an important role in ARPANSA's open and transparent approach to regulated entities.

ARPANSA tracks the amount of time spent on direct regulatory activities attributed to a particular licence holder. Activities include inspections, site visits, compliance monitoring, application assessments, and enforcement activities. As regulation is a core business activity, time spent on direct regulatory activities is likely to enhance ARPANSA's understanding of licence holder operations, resulting in better compliance outcomes. Recording time spent on regulatory activities increases transparency, as it provides the basis on which licence fees are determined to meet the goals of the Australian Government Charging Framework that establishes that those who create the need for regulation should incur the costs.

#### 2.5.2 Approved evidence metrics for KPI 5

Indicator	Evidence	Comment
PI 5.1 – Percentage of RSB time devoted to regulatory activities (core business efficiency).	27% of RSB time spent on regulatory activities – target (40%) not met.	<ul> <li>The PI measures only the time spent working directly on individual licences.</li> <li>The indicator includes all RSB personnel but does not account for many important regulatory activities or support functions.</li> <li>This target is a major input into a transparent cost recovery tool, from which the allocation of licence charges can be determined.</li> </ul>
PI 5.2 – Percentage of instances in which Licence holders are consulted on the development of Guides, Codes and Standards (transparent development of standards).	100% of guides codes and standards consulted on – target (90%) exceeded.	<ul> <li>ARPANSA has established processes to ensure consultation is undertaken in the development and amendment of all significant Guides, Codes and Standards.</li> </ul>

#### 2.5.3 Other evidence to indicate compliance with KPI 5

ARPANSA publishes a large number of reports and guidance on its Regulation and Licensing webpages.

As discussed above, ARPANSA conducts regular meetings, forums and site visits to improve communications and transparency of its regulatory requirements and processes. Similar opportunities are provided during inspections.

In relation to applications for a licence for a nuclear installation, the CEO is obliged to invite submissions on the application from the public and bodies. During the year, submissions were invited on the application to operate the ANSTO Nuclear Medicine Facility. Rather than just "invite submissions" ARPANSA chose to organise a public forum on the application; this was the second such forum organised by ARPANSA in relation to this facility.

The Act establishes a Nuclear Safety Committee (NSC) to provide advice on nuclear safety and the safety of controlled facilities to support the CEO of ARPANSA. The NSC is an independent group of senior national experts drawn from nuclear and other high reliability industries and regulatory bodies. Any matters of nuclear interest in ARPANSA's regulatory environment, its approach to regulation, and its operational performance, is referred to the NSC for information or discussion. The NSC also reviews any significant guidance under development. Matters of nuclear safety and security and radiation protection interest may also be put the ARPANSA's other advisory bodies, namely the Radiation Health Committee, and the Radiation Health and Safety Advisory Council. The minutes from the meetings of all advisory bodies established under the Act, and written advice from those bodies to the CEO of ARPANSA, are available on ARPANSA's website at https://www.arpansa.gov.au/about-us/advisory-council-and-committees.

The team that undertook this self-assessment included a senior safety manager from a large licence holder and a consultant with 25 years' experience in senior Australian Government roles including leadership of two Federal Government regulators. This is another demonstration of openness and transparency.

#### 2.5.4 Analysis of evidence presented

Overall performance against this KPI was assessed as excellent. This is based on evidence such as the amount of information publicly available online, including the enforcement strategy and risk approaches, regulatory guides, and inspection outcomes. Although performance against the PI was taken into account, the team considered that they might not accurately reflect the intent of the KPI.

**PI 5.1** is a measure of the proportion of time regulatory staff spend on direct regulatory activities. These are activities associated with a specific licence such as application assessments, inspections, compliance monitoring, and enforcement. This measure was primarily introduced to assist the determination of annual licence charges. Indirect regulatory work can be highly effective and reduce the need for direct intervention by regulatory staff.

Indirect regulatory work includes administration of the licensing framework, including the licence administration database; managing the development of codes and guides; promotion of national uniformity, education and training; reporting; implementing measures for continuous improvement; and managing the regulatory management system. Much of this indirect regulatory work is required to establish and maintain the systems that support direct regulatory activities. For example, forms and guides must be in place before a licence application can be made. Applicants must understand the regulatory framework in order to prepare an application. After a licence is issued, licence holders must understand compliance and enforcement.

The indirect activities are important to ARPANSA's approach of enabling and supporting licence holder ownership and management of safety and security and to avoid direct regulatory intervention. From 1 July 2017 a new time tracking system has been introduced to capture a wider range of regulatory activities. This will provide an improved holistic measure of branch efficiency and one that will adapt to an approach needing less intervention as greater autonomy is earned.

**PI 5.2** relates to the level of consultation with licence holders on the development of ARPANSA's regulatory guides, codes and standards.

During the year ARPANSA had consulted on the publication of all new guides and all significant amendments. Amendments involving simple updates, such as updating of terminology and references were not subject to consultation. During the 2015-16 self-assessment an observation from some licence holder representatives was that where comments were sent to ARPANSA, no advice on how those comments were considered or addressed was returned. No similar observations were received during this assessment.

**Other evidence:** Early in 2017 ARPANSA implemented a major reform of its website providing a modern, simpler, clearer and easier to use platform. The website has an improved search engine and a number of new features including mobile phone accessibility. The regulation and licensing section of the website has an extensive range of information describing how ARPANSA carries out its regulatory business along with guides and resources for stakeholders. RSB is also using the website as a portal for important safety performance data to licence holders.

During the reporting period, ARPANSA held 32 information-sharing meetings, 60 facility site visits and 16 source site visits to promote clarity and transparency.

With regard to siting of contentious facilities, in particular waste storage and disposal facilities, international experience demonstrates that early visibility of the regulator in the local debate is imperative to build trust in the licensing process. This outreach must commence well before a licence application is received and respond to legitimate concerns and requests for information on the role of the regulator in the process. ARPANSA has taken a whole-of-agency approach to reaching out to stakeholders in South Australia regarding the proposed National Radioactive Waste Management Facility. ARPANSA has carried out several visits to relevant communities and engaged with wide range of stakeholders. This in no way preempts a regulatory decision but contributes to the establishment of a regulatory process that is characterised by trust, rigour and transparency.

#### 2.5.5 Self-assessed rating of performance against KPI 5 – 2016-17

Excellent	Very Good	Good	Fair	Poor
Strong	Strong performance against	Average	Poor performance	Poor performance
performance	majority of the measures under	performance	against some	against most of
against all the	the KPI and no evidence of	against the	measures under	the measures
measures under	negative/poor performance	measures under	the KPI	under the KPI
the KPI	against any measure	the KPI		

This rating increased from good in the 2015-16 self-assessment. This reflected improvements in the consultation with stakeholders, stakeholder outreach activities and an improved website that provides expanded information on ARPANSA regulatory expectations, the basis for all major licence decisions and outcomes from the inspection programme.

#### 2.5.6 Actions for improving performance against KPI 5

The assessment team did not identify any specific improvement measures for KPI 5.

# 2.6 KPI 6 – Regulators actively contribute to the continuous improvement of regulatory frameworks

ARPANSA operates in a dynamic regulatory environment with many of its licence holders operating at the cutting edge of science and technology. ARPANSA must be adaptable to meet the needs of regulated entities while assuring compliance with the Act and maintaining high levels of nuclear and radiation safety and security. A program of continuous improvement is recognised as being important to building a resilient regulator that is able to know what to expect, monitor its regulatory environment, adapt to any challenges, and learn from its experience. To help facilitate this, RSB was split into four functional areas, including one focusing on regulatory standards and another on continuous improvement.

Areas for improvement in the regulatory framework are identified via various methods including this annual self-assessment. Additional opportunities include performance and governance processes, routine reviews of the regulatory management system, stakeholder feedback surveys, external audits including peer review missions by international teams of comparable regulators, international, national and stakeholder forums.

Effective communication is one of the keys to continuous improvement. ARPANSA strives for efficient and effective communication internally between its staff, and externally with licence holder representatives, other domestic stakeholders, and the international community. See Section 2.2 for more information on communication.

Opportunities for improvement can come from external sources. The inspection program uses external experts with experience in a particular field and/or regulation of particular sources or facilities. Judicious use of certain expertise promotes efficiency and improves regulatory outcomes. The use of external experts provides a valuable source of independent advice in specialised areas and can actively contribute to improvements in the regulatory framework.

In addition, ARPANSA can, for specialised inspections and for other regulatory activities, make use of inhouse expertise, outside of RSB. This is consistent with the draft *Policy for ARPANSA's Regulatory Activities* that was expected to be finalised in the next quarter. Special care needs to be taken to avoid perceived or real conflicts of interest and to manage such issues appropriately, in accordance with the aforementioned policy. The use of personnel external to ARPANSA for inspection of sources and facilities held by ARPANSA's Radiation Health and Medical Radiation Branches is a means to maintain impartiality and avoid conflicts of interest.

Members of the Nuclear Safety Committee (NSC) have diverse regulatory experience in high reliability industries, such as aviation, and advise the CEO on such matters. The NSC contributes to the development of regulatory documents such as codes, standards, guides and operating procedures.

ARPANSA is active in international standards development and risk assessments through, *inter alia*, the IAEA and the International Commissions on Radiological Protection (ICRP) and Non-Ionizing Radiation Protection (ICNIRP). ARPANSA strives to ensure that international standards fully meet Australian safety and security interests and that risk assessments are relevant in the Australian context. This is part of

ARPANSA's work to promote the use of international standards and risk assessments where possible and appropriate, rather than developing local documents. International fora are an important source of new ideas and initiatives in regulatory policy and practices.

#### 2.6.1 Approved evidence metrics for KPI 6

Indicator	Evidence	Comment
PI 6.1 – Number of improvements, identified through self-assessment or external reviews, that were implemented (continuous improvement).	3 improvements identified – target (3) met.	<ul> <li>Innovation and continuous improvement are highly valued and promoted.</li> <li>A number of improvements that have been developed during the year are due to be implemented in the 2017/18 reporting year.</li> </ul>
PI 6.2 – Percentage of facility inspections in which expertise external to RSB was utilised (judicious use of regulatory expertise).	20% of facility inspections conducted with external expertise – target (30%) not met.	• This target was not reached due to lower performance during initial implementation in the first quarter. A renewed focus resulted in the target being exceeded in the next two quarters (33%, 43%) and close in the last quarter (25%).

#### 2.6.2 Other evidence to indicate compliance with KPI 6

ARPANSA works with the Department of Health (DoH) on any changes to the ARPANS Act and Regulations that form its regulatory framework. The last amendments to the Act, to improve the clarity of regulatory requirements related to legacy sites and for contractors working with Commonwealth agencies, took effect in October 2015. On 1 July 2016, certain changes to the Australian Radiation Protection and Nuclear Safety Regulations 1999 (the Regulations) and Licence Charges Regulations took effect. These included the annual indexation of the fees and charges and consequential amendments flowing from the amendments to the Act.

ARPANSA participates, and is frequently a driver, in the development and promotion of national and international codes and standards covering radiation protection, nuclear safety and security, transport of radioactive material, and management of radioactive waste. Examples include; a new 'Code for Radiation Protection in Planned Exposure Situations (RPS C-1)' that was published during the year; the Regulatory Guide on Applying for a licence for a radioactive waste storage and disposal facility, and the Information for Stakeholders on Radioactive Waste Storage and Disposal Facilities.

ARPANSA also promotes national uniformity of radiation regulation through the Radiation Health Committee.

An overarching *Policy for ARPANSA's Regulatory Activities* is currently being developed and will be published on ARPANSA's website. It goes beyond the previously published Statement of Regulatory Intent and has been developed with the IAEA General Safety Requirements Part 1 (GSR Part 1, Revision 1); *Governmental, Legal and Regulatory Framework for Safety* in mind. The Policy is intended to enhance the basis for and delivery of ARPANSA's regulatory activities by more effectively utilising the competence

across all ARPANSA's branches and offices, without jeopardising the rigour and integrity of ARPANSA's regulatory work delegated to the RSB.

#### 2.6.3 Analysis of evidence presented

**PI 6.1** represents the number of improvements formally identified and implemented. Improvements included improved communication practices both internal and external that have been discussed throughout this report. Licence holder feedback mechanisms have also been enhanced both through the inspection survey and from meetings such as the annual licence holder forum. Enhancements to performance metrics have also been made and took effect from 1 July 2017.

The target was met indicating strong performance in this area despite a highly demanding environment in terms of tightening regulatory resources. More improvements are anticipated during 2017-18.

The current Licence Administration Database (LAD) remains a significant system to improve. While LAD is an effective tool for the management of licence information, it is lacking a number of necessary features, as its development is still incomplete. As further innovation and refinement of ARPANSA's regulatory systems is undertaken, the LAD system has been kept up to date. Due to the current limitations of LAD, alternative methods are used to record data and a supplementary reporting system has been created to bring this and LAD data together where possible. This could be described as a 'Band-Aid' approach whereas as a more efficient holistic licence information system would offer significant benefits to the management of licence holder data and performance reporting. ARPANSA has recently invested in Customer Relationship Management (CRM) software and the LAD system is one of a number of projects to be transitioned to this system in the future. The RSB has undertaken some initial scoping for the system and is ready to go when the ARPANSA Corporate Office initiates the CRM project. A delay in the CRM project initiation is expected to have an adverse impact on the transition to a more efficient system. CRM will offer significant benefits not only for ARPANSA but also for its regulated community. This observation was also made in the 2015-16 self-assessment.

**PI 6.2** relates to the number of facility inspections where a consultant external to ARPANSA was included on the inspection team. External expertise is used to supplement the depth of knowledge held by the inspection team and to challenge existing inspection practices by working with experts with different skills, knowledge and experience. However, during the 2016/17 year due to the nature of the specific inspections, it was considered that only a handful of the inspections would benefit from the use of external expertise. No issues were found with this KPI or ARPANSA's performance in this area.

**Other evidence:** To drive continuous improvement, ARPANSA benchmarks its performance against comparable regulatory agencies through external audits including international peer reviews.

Performance against the PIs was taken into account, however they, alone, may not accurately reflect the full scope or intent of the KPI.

The team observed ARPANSA's commitment to continuous improvement that fits well within the aims expressed in the RPF. The assessment team noted that the ARPANSA staff interviewed displayed a strong regulatory culture. Importantly the team noted that without exception, licence holder representatives consider that ARPANSA's performance has improved and there was satisfaction in the service provided.

Some difficulties were identified regarding internal accountabilities within the RSB, largely around quality matters and record keeping. A review of roles and responsibilities would be useful to ensure that the accountabilities for specific roles are optimally assigned and properly understood.

Overall performance against this KPI was assessed as very good. This is based on the evidence presented including a high level of involvement in the development of documentation and regulatory frameworks, the number of stakeholder events, the frequent interactions with Licence holder representatives, and inputs from external experience and expertise.

#### 2.6.4 Self-assessed rating of performance against KPI 6 – 2016-17

Excellent	Very Good	Good	Fair	Poor
Strong	Strong performance against	Average	Poor performance	Poor performance
performance	majority of the measures under	performance	against some	against most of
against all the	the KPI and no evidence of	against the	measures under	the measures
measures under	negative/poor performance	measures under	the KPI	under the KPI
the KPI	against any measure	the KPI		

This rating is unchanged from the 2015-16 self-assessment. There is solid performance against this KPI that continued to meet the very good rating.

#### 2.6.5 Actions for improving performance against KPI 6

The team identified the following AFI related to KPI 6:

- Current licence administration systems are not meeting regulatory needs in an efficient or effective
  manner. Whilst some improvements have been introduced during the year to improve efficiency, a
  holistic licence information system would offer significant benefits to the management of licence
  holder data and performance reporting.
- Roles and accountabilities may not be optimally assigned or properly understood or managed for some specific roles associated with quality and record keeping.

#### 3 Overall Assessment

#### 3.1 Analysis of evidence

This was the second annual self-assessment under the Regulator Performance Framework (RPF). The review assessed regulatory performance against previously approved metrics as well as established processes and procedures, and through discussions with staff and stakeholders. As with the first self-assessment, in some cases it was found that the metrics did not closely align with the intention of the KPI and that the use of additional evidence to gauge ARPANSA's overall performance against the framework was important. This assessment noted that ARPANSA workshopped an improved set of metrics that were approved by the Minister to take effect from 1 July 2017. This review also found that ARPANSA has a deep-seated culture to improve the effectiveness and efficiency of its regulatory service. This was demonstrated by a number of improvement initiatives that are currently ongoing, some of which are linked to the findings of the previous self-assessment.

Whereas Section 2 of this report considers specific evidence against individual KPIs, this section summarises the data more holistically to provide an overall picture of how ARPANSA meets the aims and objectives of the RPF. This same approach is used in discussing broad themes that should be worked on over the coming year or longer to strengthen performance through a cycle of continuous improvement.

Despite some specific aspects to address, overall the standard of communication between ARPANSA, its licence holders and the wider stakeholder community was excellent. ARPANSA is seen as approachable and

has systems in place to consult on changes that may affect licence holder operations. A range of information sharing meetings are held, predominately with large licence holders, and the annual licence holder forum was perceived as valuable to the entire range of licence holders.

Licence holders reported high satisfaction levels for the inspection processes and appreciated the written guidance and information available to them. The improved structure and planning of inspections was driving improved consistency in the delivery of this service that is aligned with risk. The use of 'complex site inspections' was welcomed as being a more co-ordinated and efficient use ARPANSA and licence holder resources for locations with multiple business units. The 'no-surprises' approach to inspection is appreciated as is the opportunity to provide feedback, including face to face, during the inspection exit meeting. Inspectors were reported as professional, helpful and well regarded. Licence holders often saw inspections as an opportunity to identify and bring about improvements rather than just a regulatory compliance assessment.

A reduction in red-tape was perceived from the clearer approach to ARPANSA's use of international best practice and improvements in licensing documents and regulatory guidance.

Internally, inspectors reported that they were well supported in doing their job and had good opportunities for personal development. However, this was countered somewhat by some difficulties with high workload and some ambiguity regarding internal accountabilities.

#### 3.2 Overall self-assessed rating of performance – 2016-17

The performance rating of four individual KPIs is now rated as very good compared with two in the previous year's self-assessment. The other two KPIs are maintained at a good rating. This review assessed overall performance against agreed metrics as very good compared with good in the previous self-assessment. Problems associated with the PIs, and their alignment to RPF KPIs, undervalues ARPANSA's regulatory performance without the use of additional evidence. The recent approved amendments to the suite of PIs used by ARPANSA will provide a more accurate appraisal of ARPANSA performance for the 2017-18 reporting period.

Excellent	Very Good	Good	Fair	Poor
Strong	Strong performance against	Average	Poor performance	Poor performance
performance	majority of the measures under	performance	against some	against most of
against all the	the KPI and no evidence of	against the	measures under	the measures
measures under	negative/poor performance	measures under	the KPI	under the KPI
the KPI	against any measure	the KPI		

#### 3.3 Performance improvement actions identified

The assessment team identified the following broad areas for improvement. These should be read in conjunction with the actions for improving performance previously identified throughout Section 2 of this report.

#### • Feedback Systems

Feedback mechanisms are sometimes limited in their reach and are not always effective in promoting a uniform service or maximising learning and improvement. For example, there is no mechanism to capture conversations or feedback delivered directly to inspectors to be shared with the branch, through the Continuous Improvement Section of other formal systems. The effectiveness of internal communication

and transfer of information, particularly in regard to inspection findings, may also be improved through more regular meetings of the whole inspection team's cohort.

#### Consistency

There is a fundamental question regarding the equivalency of risk between source and facility licences, each of which is prioritised under different systems. This would benefit from a detailed review to establish a clearer relationship between the two areas that in turn can be used to focus appropriate resources

The approach to inspections is on the path to consistency but there is further room for improvement. The PO&C are consistently and extensively used for facilities but their use is not always apparent to licence holders during source inspections. The concept of PO&Cs has been successful, however while they are important for all inspections, the applicability of the current set for low hazard sources should be reviewed.

Some variation was also reported in the depth and thoroughness of inspections. While, some variation is accepted due to different levels of licence holder performance, the rationale for degree of variation was not always clear. This had an impact on the licence holder expectations, and their efficient allocation of resources for inspections.

#### Information Management

The RSB had a range of information management needs that are currently being met through a collage of, at times, overlapping tools. Over the past year some improvements have been made to knit some tools together but this can best be described as a Band-Aid approach. ARPANSA and its licence holders are likely to benefit from a holistic review of its information management needs leading to an integrated and improved system that reduces duplication and 'red-tape'.

#### Planning

RSB was found to work in a demanding, service driven, environment where performance has been measured against a range of quantitative measures, effectively setting priorities around direct regulatory work. A number of tasks are therefore not always undertaken on time as a consequence. A review of tasks and how they are allocated may be useful to assist in the setting of appropriate performance targets. In addition, workloads were seen to be variable between staff with an especially high demand on those working in specialist areas or where there is a lack of redundancy of skills. It is recommended that improved workforce planning including succession planning at a strategic level is undertaken. The assessment team noted that some projects have been initiated that may help to alleviate this issue.

## 4 Concluding remarks

This was the second self-assessment performed under the Government Regulatory Performance Framework. It was undertaken at a time prior to a number of improvements identified during the first self-assessment being implemented. Despite that it was clear that ARPANSA has a deep-seated culture to improve the effectiveness and efficiency of its regulatory service and is always striving for continuous improvement.

This self-assessment followed a similar approach to the first self-assessment and provided a consistent, thorough and robust examination of regulatory performance for the period 1 July 2016 to 30 June 2017. In the interests of openness and transparency, the self-assessment team included a senior manager from one of ARPANSA's largest licence holders (CSIRO). This year the team also included a management consultant that previously headed two Federal Government regulators (Office of the Gene Technology Regulator and the Australian Pesticides and Veterinary Medicines Authority).

The team set out to review current regulatory performance against previously agreed metrics. They undertook a qualitative review based on established processes, procedures, and data. Interviews and discussions were held with more than half of the RSB staff and managers, and five staff and managers from two major licence holders.

The assessment team concluded that ARPANSA has been an effective regulator during the reporting period and that the structure and consistency of its services is overall very good. The team found that ARPANSA has a good regulatory culture with appropriate responsibilities and accountabilities, with a need to clarify some internal accountabilities. The team noted that without exception, licence holder representatives also consider that ARPANSA is open and transparent in dealing with them and has an effective graded approach to regulation.

Several areas for improvement were identified and some suggestions are given for consideration. Addressing the issues will improve ARPANSA's performance. The team recommends that a corrective action program be established for this purpose.

Throughout the self-assessment, the team found RSB staff to be open and responsive. This was an indication that staff are engaged in the process of continuous improvement which is commendable.

# Appendix A ARPANSA Licenced Entities as at 30 June 2017

#### Facility licence holders:

Australian Defence Force / Department of Defence

**Australian National University** 

Australian Nuclear Science and Technology Organisation (ANSTO)

Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

Department of Immigration and Border Protection

Department of the Environment – Parks Australia

#### Source licence holders:

ASC Pty Ltd and ASC AWD Shipbuilder Pty Ltd

Attorney-General's Department

Australian Criminal Intelligence Commission

Australian Defence Force/Department of Defence

Australian Federal Police

Australian Institute of Marine Science

**Australian National University** 

Australian National University Enterprise Pty Ltd

Australian Nuclear Science and Technology Organisation

**Australian Postal Corporation** 

Australian Radiation Protection and Nuclear Safety Agency

Australian Securities and Investments Commission

**Australian Sports Commission** 

Australian Trade Commission

Australian Transaction Reports and Analysis Centre

Australian War Memorial

Bureau of Meteorology - Cape Grim

Commonwealth Scientific and Industrial Research Organisation

Decipha Pty Ltd

Department of Agriculture and Water Resources

Department of Foreign Affairs and Trade

Department of Immigration and Border Protection

Department of Industry, Innovation and Science

Department of Industry, Innovation and Science - Geodesy and Seismic Monitoring Branch, Geoscience

Australia

Department of Industry, Innovation and Science – Geoscience Australia

Department of Industry, Innovation and Science – National Measurement Institute

Department of Infrastructure and Regional Development

Department of Infrastructure and Regional Development - Indian Ocean Territories Health Service

Department of Parliamentary Services

Department of the Environment and Energy – Australian Antarctic Division

Department of the Environment and Energy – Australian Antarctic Division, Polar Medicine

Department of the Environment and Energy – Supervising Scientist

Department of the Prime Minister and Cabinet
Federal Court of Australia
High Court of Australia
Law Courts Limited
National Archives of Australia
National Gallery of Australia
National Museum of Australia
Note Printing Australia
Reserve Bank of Australia
Royal Australian Mint
Silex Systems Limited

### **Appendix B**

## Information sources and documents provided to the assessment team

- 1. Australian Government Regulator Performance Framework ISBN 978-1-925237-07-8
- 2. <u>ARPANSA Regulator Performance Framework Self-Assessment Report 2015-2016</u> (HPE document R16/09670)
- 3. ARPANSA Regulatory Services Branch Focus Self-Assessment Report July 2016 v1 (HPE document R16/04090)
- 4. Regulatory Services Performance Indicators 2015-2016 (HPE document R16/01258)
- 5. Reporting on Performance Indicators 2016/17 (HPE document R17/06380)
- 6. Nuclear Safety Committee Validation of the Regulator Performance Framework Self-Assessment 2015-16 (HPE document R16/13735)
- 7. ARPANSA Performance Objectives and Criteria (PO&C)
- 8. The Auditor-General Audit Report No.29 2013–14 Performance Report No.29 2013–14
- 9. ARPANSA Internal Audit Report Follow up of ANAO Recommendations June 2015 (HPE document D175071)
- 10. ARPANSA Closure Report of ANAO Audit No.29 2013–14, February 2015
- 11. Proposed Performance Indicators for 2017-18 (Document describing evolution from 2015-17 indicators to 2017-18 indications) (HPE document R17/02037)
- 12. Regulatory Delivery Model (HPE document R16/04048)
- 13. ARPANSA Regulatory Services Branch Plan (HPE document R16/03641)
- 14. Source Licences for CSIRO & ANSTO (HPE document S0025 and S0202)
- 15. Inspection Reports from 1 July 2016
- 16. Post Inspection Survey Results 2016-2017
- 17. Performance Indicators/Inspection Outcomes Quarterly Reports from July 2016 to June 2017 (HPE documents R17/07943, R17/07942, R17/03959, R17/03958, R17/03956)
- 18. Source Inspection Programme 2016 (HPE document R15/16394).
- 19. ARPANSA Regulatory Services Inspection Manual (HPE document R15/08057)
- 20. Three Year Facility and five year Source inspection schedules
- 21. Regulatory Services Annual Training Programme 13-16 February 2017 (HPE document R17/00347)
- 22. ARPANSA Organisational Charts
- 23. Information on in-house IT systems including the Licence Administration Database (LAD)
- 24. NEA/CNRA/R(2014)3 The Characteristics of an Effective Nuclear Regulator OECD 2014
- 25. Report to the <u>Australian Communications and Media Authority on the Regulatory Performance</u>
  Framework (RPF) June 2015