

Australian Government Department of Foreign Affairs and Trade

AUSTRALIAN SAFEGUARDS AND NON-PROLIFERATION OFFICE REGULATORY PERFORMANCE FRAMEWORK SELF-ASSESSMENT REPORT 2019 - 2020

October 2020

STATEMENT

This performance report for the Australian Safeguards and Non-Proliferation Office (ASNO) is prepared for the Government's Regulatory Performance Framework (RPF) and covers financial year 2019-20.

OVERVIEW OF ASNO'S REGULATORY FUNCTIONS

ASNO is an independent federal regulatory authority that covers all states and territories. Its principal focus is on international and domestic action to prevent the proliferation of nuclear and chemical weapons. ASNO resides within the Department of Foreign Affairs and Trade (DFAT).

The *Non-Proliferation Legislation Amendment Act 2003* formally consolidated the offices of the national authority for nuclear safeguards, the national authority for the Chemical Weapons Convention (CWC) and the national authority for the Comprehensive Nuclear-Test-Ban Treaty (CTBT) under a common title, named the Australian Safeguards and Non-Proliferation Office (ASNO). The legislation also combined the titles of each of the directors of the three national authorities to be the Director General (DG) ASNO.

The *Nuclear Non-Proliferation (Safeguards) Act 1987* (Safeguards Act) gives effect to Australia's nuclear safeguards obligations under the following international treaties:

- the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)
- Australia's Comprehensive Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency (IAEA)
- nuclear cooperation agreements (NCAs) concerning exports of uranium and cooperation in peaceful uses of nuclear energy (currently there are 25 NCAs in force covering 43 countries)
- the Amended Convention on the Physical Protection of Nuclear Material (Amended CPPNM)
- the International Convention for the Suppression of Acts of Nuclear Terrorism.

The Safeguard Act forms the legislative basis for ASNO's nuclear domestic regulatory functions to ensure Australia complies with the above treaty commitments. To meet these international obligations, ASNO maintains a permit system for possession and transport of nuclear material and associated items in Australia. The system requires permit holders to report on their nuclear holdings and activities to ASNO. This reporting provides the basis for Australia's annual reporting to the IAEA of nuclear material, associated material, equipment, technology and facilities. Verification of permit holder reporting is undertaken though inspections. This can include ASNO inspections or outreach visits, or official IAEA inspections during which ASNO acts as a facilitator between the permit holder and the IAEA inspectors.

The *Chemical Weapons (Prohibition) Act 1994* (CWP Act) and Regulation 5J of the Customs (Prohibited Imports) Regulations 1956 form the basis for ASNO's chemical regulatory activities across Australia to fulfil Australia's obligations under the CWC. The CWC prohibits the development, production, acquisition, stockpiling, retention, transfer and use of chemical weapons. The basis of this verification regime is

declaration by States Parties of facilities and activities dealing with particular chemicals, and on confirmation of compliance through on-site inspections. ASNO is the focal point in Australia for liaison between domestic CWC stakeholders such as declared chemical facilities, the Organisation for the Prohibition of Chemical Weapons (OPCW), and the national authorities of other States Parties.

ASNO gathers information from the chemical industry, traders, universities and research institutions through a system of permits and notifications to compile declarations that Australia must submit to the OPCW. Under the CWP Act, ASNO has the right to conduct compliance inspections of relevant facilities in Australia, but only exercises such powers in exceptional circumstances. However, ASNO conducts outreach activities, including site visits, to promote compliance, prepare industry for OPCW inspections and check the accuracy of information provided by industry.

ASNO also administers the *Comprehensive Nuclear-Test-Ban Treaty Act 1998* (CTBT Act) and the *South Pacific Nuclear Free Zone Treaty Act 1986* to implement Australia's treaty commitments. Neither Act establishes a system of routine regulation. Substantial elements of the CTBT Act will come into effect only when the CTBT enters into force.

ASNO works to strengthen the operation and effectiveness of current and future non-proliferation regimes through the application of specialist knowledge to complex policy problems and proposals in technical areas, including treaty verification and compliance. The application of strong arms control and verification regimes allows Australian industries to use dual-use chemical or nuclear materials or technologies in a supported environment. It also provides Australia a platform to encourage other states, including those Australian companies trade with, to maintain a similar high standard.

Like everyone, ASNO has been affected by the COVID-19 epidemic in 2020, including greatly limiting travel, face-to-face meetings and significantly increasing the logistics of facilitating IAEA and OPCW inspections. However, ASNO was able to maintain connections with its regulated entities through its online portals, emails, phones and video teleconferencing (VTC). This has enabled Australia to continue to meet its obligations to the IAEA, OPCW and NCA partners, while minimising the impact upon Australian industry. This report provides a summary and analysis of the information ASNO collected during the 2019-20 reporting period and describes ASNO's ongoing efforts for future improvement.

PERFORMANCE UNDER THE COMMONWEALTH KEY PERFORMANCE INDICATORS AND ASNO METRICS

KPI 1: Regulators do not unnecessarily impede the efficient operation of regulated entities.

Metric 1: Timely processing of permit applications and approvals.

ASNO processes permit applications and approvals required under the permits in a prompt and professional manner so that the efficient operation of the regulated entities is not unnecessarily impeded.

ASNO's different permits and approvals and their timeframe benchmarks are:

- nuclear permits to possess and transport nuclear material (21 days)¹
- approvals for the transfer of uranium ore concentrate (UOC) internationally (7 days)
- facility permits for CWC-Scheduled chemicals (21 days), and
- import permits for CWC-Scheduled chemicals (7 days).

The approval time benchmarks correspond to the number of days an application needs to be submitted to ASNO before an activity occurs.² These timeframes are required to ensure ASNO is able to meet its onward reporting obligations to the IAEA, OPCW or international counterparts. ASNO encourages permit holders to submit their applications as early as practical, in case any unforeseen complications occur. However, when needed, ASNO works with regulated entities and other federal regulators to expedite matters to facilitate their operations as much as possible, while still ensuring Australia meets its international obligations.

The diverse nature of the organisations applying for nuclear or chemical permits makes it difficult to compare approval times from one reporting period to the next, as some permit applications will require complex analysis. ASNO will not compromise its regulatory requirements in order for 100 per cent of approvals to meet the timeframe benchmarks.

During the reporting period, ASNO approved **10** nuclear permits to possess and transport nuclear material (**three** new permits and **seven** variations to permits).³ The average time to approve/renew a permit was **38** days, and **70 per cent** were completed within 21 days of obtaining all the required information. The processing of three permits that were greater than 21 days was a result of a temporary, but significant reduction in ASNO resourcing. None of these delays unduly affected the regulated entity.

¹ Nuclear material is any source material or special fissionable material as defined in Article XX of the IAEA Statute. In practice, this means uranium, thorium and plutonium.

² While this these timeframes are true for the majority of ASNO's approvals there are some rare exceptions, such as the importation of Schedule 1 chemicals which can only take place 30 days after the OPCW has been advised by both the importing/exporting States Parties.

³ All nuclear permits are gazetted.

The number of nuclear permits processed during the reporting period was also down from the 31 in the previous financial year. This was a positive side effect of the revised permit system that ASNO initiated from 2015 (see ASNO's previous Regulator Performance Framework self-assessment reports⁴), which established a five-year review of each class of permit, providing consistency in approach for each permit class and spreading the workload over several years. None of the permit classes were due for revision in 2019-20. The first review of a permit class will commence later this year.

Processing of permits and approvals July 2019 – June 2020	
Number of nuclear permit applications processed ⁽¹⁾	10
Average number of calendar days	38 days
Per cent of permits issued within 21 days of final application	70%
Number of chemical import permit applications processed	65
Average number of calendar days	3 days
Per cent of import permits issued within 7 days of final application	89%
Number of chemical facility permit applications processed ⁽²⁾	8
Average number of calendar days	5 days
Per cent of facility permits issued within 21 days of final application	100%
Number of approved applications to transport UOC internationally	60
Average number of days	2
Per cent of approvals issued within 7 days of final application	98%

⁽¹⁾ Includes granting new permits and permit variations. It does not include two permits that were revoked (without prejudice) during the reporting period.

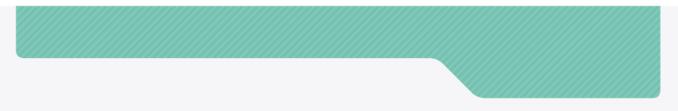
⁽²⁾This does not include regulated chemical facilities that do not need a facility permit, but are required to notify ASNO of the production of certain chemicals. The OPCW may nominate to inspect such a facility.

ASNO processed **65**permits to import CWC-Scheduled chemicals, including new, renewed and variation permits. These chemical import permits took an average **3** days to complete, with **89 per cent** completed within seven calendar days. This is an improvement from the previous reporting period where 80 per cent were within the benchmark timeframe. Of the 11 per cent of import permits that took more than 7 days, nine per cent were import permit renewals; the delay in approving the permit renewals had no impact on industry as they already had a valid import permit covering the time period.

ASNO also completed **eight** chemical facility permits (up from two in the previous reporting period), **100 per cent** of which were within the 21 day benchmark, maintaining the high level reached the previous year.

ASNO has established a streamlined approval process for the export of UOC, including seeking to annual prior assurances for UOC exports to Canada, the United States and Europe (the majority of UOC shipments)

⁴ https://www.dfat.gov.au/about-us/corporate/Pages/deregulation



rather than approving exports on a shipment-by-shipment basis. Consequently, during the reporting period, ASNO approved **98 per cent** of the **60** approvals of UOC shipments⁵ within seven calendar days. The average approval time was **2** days.

⁵ This includes re-approvals when the exporting permit holder amended the shipping information prior to the shipment leaving Australia.

KPI 2: Communication with regulated entities is clear, targeted and effective.

Metric 2: Regulations and permit conditions are reviewed for clarity and suitability.

The key platform though which ASNO communicates with its regulated entities, and facilitates their reporting obligations to ASNO, is through the online chemical and nuclear portals. The online portals are intended to provide targeted information and requirements for each regulated entity, as requirements can vary greatly depending on their activities and chemical or nuclear holdings.

The redevelopment of ASNO's nuclear database and associated permit holder web portal, which came into operation in 2018, has enabled ASNO to clarify the reporting requirements of each permit holder and eliminate unnecessary regulatory administration. A major review of the nuclear permit categories (outlined on ASNO's website https://www.dfat.gov.au/international-relations/security/asno/Pages/template-permits-and-compliance-codes) was undertaken at the same time as designing the nuclear database, to ensure the permit conditions were clear and appropriate. Further development and refinement of the database and online portal continued during this reporting period. Each class of nuclear permit will be reviewed every five years for clarity and suitability, with the first reviews planned for the second half of 2020.

In 2014, the chemical database and associated web portal was ASNO's first web platform. Unfortunately, the platform has become unstable and its function continues to degrade. DFAT's Information Management and Technology Division (IMD) and ASNO staff continue to support chemical permit holders with the current system, but its future is untenable. ASNO and IMD have commenced a software development project to create a new database and industry portal to replace those currently in use. To this end, ASNO reached out to our industry stakeholders through a survey to determine what features they would like in the new system (see also KPI-5). The feedback from the regulated entities will be incorporated into the design process to create a database that is intuitive, robust and simple to use. The new database will give the regulated entities easy access to the information they require, making their obligations clearer and more targeted to their reporting requirements.

KPI 3: Actions undertaken by regulators are proportionate to the regulatory risk being managed.

Metric 3: Implement risk informed regulatory program.

The OPCW and IAEA have robust systems that enable them to provide risk-based and objective assurances that states are meeting their chemical/nuclear peaceful-use obligations. ASNO is able to leverage off their well-established methods to implement regulations that are proportionate to the risk posed by the material or technology, as well as ensure Australia remains compliant with its international obligations.

The OPCW considered chemicals, or families of chemicals, that can be used as a chemical weapon, as well as precursor chemicals that can be used in the production of chemical weapons (see text box below). The OPCW factors in any adverse effect that regulation may have on industry, as some chemicals are widely used for peaceful purposes. However, the CWC includes a catchall of prohibiting the use of any toxic chemical as a weapon, even if it is not specifically listed in the Schedules.

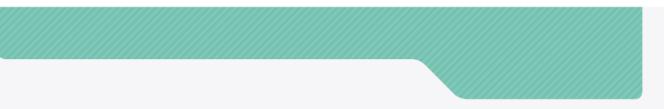
CWC Scheduled Chemicals

The CWC has identified four categories of chemicals relevant to the Convention:

- Schedule 1 chemicals are of the highest concern as they can either be used as chemical weapons themselves, or used in the production of chemical weapons, and they have no, or very limited use outside chemical warfare. Facilities that hold Schedule 1 chemicals are termed Schedule 1 Facilities and have the highest reporting requirements and, for facilities above the inspection threshold, are inspected more frequently due to the higher risk associated with the chemicals they hold.
- Schedule 2 chemicals can also be used as chemical weapons, or manufactured into chemical weapons, but they also have some legitimate application outside chemical warfare in small quantities.
- Schedule 3 chemicals can be used as toxic chemical weapons, or used in the manufacture of chemical weapons, but have legitimate large-scale industrial use.
- Facilities that produce Discrete Organic Chemicals can also be inspected as they could be used to produce chemical weapons.

The OPCW has confirmed that the chemical detected in the United Kingdom's March and June 2018 chemical incidents at Salisbury were from a family of nerve agents known as Novichoks. Novichok nerve agents and their related precursor chemicals were previously unverified and not listed in the CWC's Schedules of prohibited substances, and represented a new chemical weapon threat.

In November 2019, the Conference of the States Parties to the Chemical Weapons Convention (CWC) adopted two proposals to add additional chemical families/chemicals, representing the Novichok nerve agents, to the CWC Annex on Chemicals as Schedule 1 chemicals. This was the first time that the Annex on Chemicals has been updated since the CWC entered into force in 1997. The decision requires all 193 States Parties, including Australia, that are signatories to the CWC to adopt strict regulations on these Novichok-related chemicals.



In preparation for updating Australia's regulations, ASNO contacted the chemical stakeholders, chemical industry associations and other chemical regulators in Australia, to gauge the impact of adding these new chemicals to Australia's regulations. The impact on Australian industry is likely to be minimal, as there is no known production or use of these chemicals in Australia.

ASNO worked collaboratively with partner agencies to ensure that changes to the CWC were given effect in Australian regulations. The Defence and Strategic Goods List already regulated exports of these chemicals. ASNO ensured that the *Chemical Weapons (Prohibition) Regulations 1997* and the Australian Border Force ensured that the *Customs (Prohibited Imports) Regulations 1956* were updated to regulate the production, use and importation of these chemicals on 7 June 2020, ensuring the CWC continues to be fully implemented in Australia.

KPI 4: Compliance and monitoring approaches are streamlined and coordinated.

Metric 4: Establish streamlined compliance assessment and inspection processes.

An important part of ASNO's role is coordinating and streamlining compliance and monitoring approaches between the international regulators – the IAEA and OPCW – and Australia's nuclear and regulated chemical facilities. It is a requirement of ASNO's permits that regulated entities allow an IAEA or OPCW inspection if called. ASNO is also responsible for ensuring regulated entities are prepared for a possible inspection by keeping them informed through outreach activities and email and phone correspondence. Once an inspection is called, ASNO acts as the conduit between the IAEA or OPCW inspectors and the regulated entity, both during the inspection, and for any follow-up activity, if required. ASNO's annual report also provides further details of all IAEA and OPCW inspections.⁶

There were three OPCW inspections in Australia during the reporting period, compared to one in the previous reporting period. This was slightly higher than the long-term average of 2.5 inspection per year.⁷ The inspections proceeded smoothly and received excellent support and cooperation from government and industry. The OPCW inspection team verified Australia's declarations, including the absence of any undeclared CWC-Schedule chemical production, in accordance with the inspection mandate.

The IAEA implements safeguards in Australia in accordance with the provisions in a range of instruments: the Comprehensive Safeguards Agreement; Additional Protocol; Subsidiary Arrangements; and facility attachments for each material balance area (MBA) - an area established by the IAEA for nuclear accountancy purposes that does, or could, hold nuclear material.

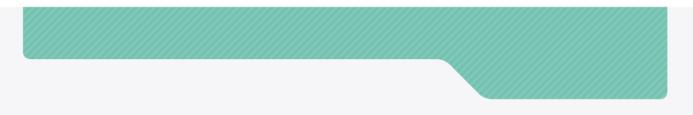
Every year the IAEA conducts Physical Inventory Inspections at the Australian Nuclear Science and Technology Organisation (ANSTO) in order to verify ANSTO's nuclear accounts. This year the two-week inspection was scheduled for June 2020, which presented some challenges with COVID-19 restrictions. In March, IAEA Director General Grossi vowed that inspections and safeguarding nuclear material worldwide "will not stop for a single minute". ASNO accepted the challenge and was able to negotiate the required parameters with the IAEA, ANSTO and other Australian regulators.

In accordance with health regulations, the IAEA inspectors spent two weeks in quarantine prior to the inspections. In addition, ANSTO incorporated safety risk mitigation measures during of the inspection. The inspectors were able to meet their inspection goals, including the conduct of a Complementary Access inspection under Australia's Additional Protocol with the IAEA.

ASNO has also been able to maintain its informal quota of safeguards and security inspections and visits, while avoiding face-to-face contact during lock-down periods when VTC options were employed.

⁶ https://dfat.gov.au/international-relations/security/asno/Pages/annual-reports.aspx

⁷ Part of the nature of the inspections is that they are random and unpredictable, and as result, year-to-year fluctuations are expected. The number of OPCW inspections called in Australia has varied from zero to five each year, with an average of 2.5 inspections per year.



ASNO Inspections, Visits and Desktop Reviews, July 2019– June 2020		
	number	total days
ASNO nuclear inspections	7	8 days
IAEA nuclear inspections/visits (ASNO facilitator) $^{(1)}$	13	14 days
Nuclear desktop reviews ⁽²⁾	1	1 day
ASNO chemical outreach visits	1	0.5 days
OPCW chemical inspections (ASNO facilitator)	3	6 days

⁽¹⁾ The IAEA conduct several different types of inspections, sometimes conducting more than one in a day, depending on the type of inspection and location. See ASNOs annual report for more information.

⁽²⁾ Reviews done at ASNO offices - examples include review of security plans and permit holder reports.

KPI 5: Regulators are open and transparent in their dealings with regulated entities.

Metric 5: Outreach activities conducted to communicate regulatory requirements to stakeholders and receive feedback.

During the reporting period, ASNO and the chemical portal redevelopment team conducted a survey to receive feedback on the chemical regulated entities' experiences with the current chemical portal. Key findings were that the current chemical portal is not fit for purpose for user requirements, nor is it intuitive or user friendly enough to provide a seamless 'self-serve' experience. The majority of respondents reported that they required ASNO assistance to complete required tasks in the current portal. While many of the respondents were satisfied with the current processes, this was largely because ASNO was friendly, easy to engage and quick to resolve issues as they were raised. The survey results also provide an insight into the regulated entities' preferences for communicating with ASNO and their requirements for the new portal.

ASNO will continue to work with the portal-development team, as well as regulated entities who have volunteered to contribute to its redevelopment. The survey will provide a baseline to quantify the improvements of the new system after it has been rolled out.

ASNO employs a range of approaches to communicate regulatory requirements to permit holders, regulated facilities and other stakeholders, as well as receive feedback on ASNO's performance. On-site inspections, discussed in KPI-4, remain a key outreach opportunity, which is supported by communication through the on-line portals, as well as phone, and email exchanges.

During the COVID-19 restrictions in the second half of the reporting period, however, the majority of ASNO communication was conducted online or by phone. Because of these exceptional circumstances for the regulated entities, ASNO provided more time and provided as much assistance as possible for regulated entities to provide their required reporting to ASNO. This included:

- Permit holders were emailed well in advance of their reporting due date, reminding them of their obligations, updating them on any developments, and requesting that ASNO be updated on any relevant changes to the permit holder. The emails also provided ASNO's group phone numbers and email addresses if the permit holder had any problems, questions or feedback.
- ASNO promptly followed up issues raised by all chemical and nuclear regulators through email and telephone interactions.
- Meetings (face-to-face when appropriate, or teleconferencing) with major permit holders, or groups of similar permit holders, were undertaken to facilitate good two-way communication. Other regulators, such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Department of Immigration and Border Protection, or Department of Industry, Science, Energy and Resources (DISER) were also included in these meetings, as appropriate, to reduce double handling for regulated entities.
- ASNO also adjusted procedures for its annual stocktake of nuclear material held by small permit holders (largely comprising radiographers, universities, state regulators and laboratories) to allow flexibility for COVID-19 impacted industries which could not readily conduct inventory-taking during the usual time period.

KPI 6: Regulators actively contribute to the continuous improvement of regulatory frameworks.

Metric 6a: Number of meetings attended to influence international policy.

ASNO actively engages with the international community and multilateral organisations to help shape current and future regulatory frameworks in relation to non-proliferation, safeguards, security, monitoring and verification. From March 2020, many of the previously scheduled multilateral meetings were postponed due to the COVID-19 pandemic, reducing the number of face-to-face meetings ASNO attended from 26 in the previous reporting period to **18**, with **nine** face-to-face meetings postponed. Since April, ASNO participated in **seven** smaller VTC meetings to progress specific activities (see below). Most of the larger formal meetings have procedural requirements that mandate that the meeting be conducted in person.

While the break from travelling to meetings overseas provided an opportunity to reflect and consolidate ideas, it also highlighted the importance of personal relationships forged during face-to-face meetings. The success of the VTC meetings varied, in part based on the number of participants, language barriers, their familiarity with VTC technology and knowledge of the subject matter.

Two areas of note that ASNO has made significant contributions to in the reporting period, including VTC meetings, were the Comprehensive Nuclear-Test-Ban Treaty and the Convention on the Physical Protection of Nuclear Material.

Comprehensive Nuclear-Test Ban Treaty Organization (CTBTO)

ASNO continues to support the CTBTO's detailed preparatory work that will allow the CTBT verification regime to be operational when the treaty enters into force. ASNO was a lead participant at meetings of the technical Working Group B that deals with the examination of verification issues that monitor all States Parties' compliance with the Treaty Provision – principally, not conducting a nuclear explosion for any purpose.

ASNO also continued its leadership role in the area of On-Site Inspection (OSI) including development of the CTBT OSI Manual and the planning and running of the next OSI exercise. On-Site Inspections will provide the CTBTO with the capability to inspect the location of a suspected nuclear test, once the Treaty comes into force. ASNO has continued to participate, albeit remotely, in meetings for the planning of the exercise with the expectation that the OSI exercise will be completed once COVID-19 restrictions are lifted.

Convention on the Physical Protection of Nuclear Material (CPPNM)

In July and December 2019, DG ASNO co-chaired the meetings of Legal and Technical Experts to put together a draft agenda and program for the first CPPNM Review Conference. One of the goals of the Review Conference will be to promote universalisation of the Amended CPPNM. The original CPPNM only dealt with the security of nuclear material in transit, whereas the Amended CPPNM includes security of nuclear material in domestic use. Currently only 124 of 161 (77 per cent) of CPPNM Parties have the Amendment in force⁸.

DG ASNO was also asked to co-chair a Preparatory Committee in June 2020 which was subsequently postponed due to COVID-19 and is tentatively scheduled for December 2020. Continued delays of the Review Conference will make it harder to build the required momentum to promote the universal adoption

⁸ See <u>https://www-legacy.iaea.org/Publications/Documents/Conventions/cppnm_status.pdf</u> and <u>https://www-legacy.iaea.org/Publications/Documents/Conventions/cppnm_amend_status.pdf</u>.

of the Amended CPPNM. However, preparation for the Review conference has continued through VTC meetings.

Other meetings that ASNO attended in the reporting period include:

- <u>IAEA Director General's Standing Advisory Group on Safeguards Implementation (SAGSI)</u> DG ASNO chairs SAGSI, which provides recommendations to the IAEA Director General on vital safeguards implementation issues.
- International Partnership for Nuclear Disarmament Verification (IPNDV)
 IPNDV is an ongoing partnership of more than 25 countries with and without nuclear weapons that are working together to identify challenges associated with nuclear disarmament verification and developing potential procedures and technologies to address those challenges
- <u>IAEA's Nuclear Security Guidance Committee Security (NSGC)</u>
 In 2018, ASNO's Director of Nuclear Security took up a three year term as the Chair of the NSGC. The core role of the NSGC is to manage the production of guidance documents in the IAEA Nuclear Security Series (NSS) that provide guidance for all IAEA's member states.
- Other Non-Proliferation and Nuclear Policy Forum
 - o Moscow Non-Proliferation Conference
 - o Institute of Nuclear Materials Management Annual Conference
 - o IAEA General Conference
- Other nuclear security forums:
 - o International Conference on Nuclear Security
 - o Nuclear Security Contact Group
 - o Global Dialogue on Nuclear Security Priorities (Nuclear Threat Initiative)

Metric 6b: Engagement with other regulators to explore opportunities for regulatory efficiencies.

During the reporting period, ASNO continued to work with domestic and international regulators to explore opportunities for efficiencies and improve the experience for regulated entities.

Domestic Engagement:

- ASNO continues to participate in the Regulator Science Network (RSN), which has representatives of all federal government chemical regulators, among others. During the reporting period, the RSN was particularly useful to inform other chemical regulators that ASNO was amending its chemical regulations to include Novichok chemicals. This enables ASNO to determine if there was any conflict with other Australian regulations. It also helped ASNO assess if there are companies that could be affected by the new regulation that have previously not required an ASNO permit nor provided annual notification on chemical activities.
- ASNO hosted a round table for regulators and government departments involved in nuclear exports. This was a valuable forum to learn more about the activities of other regulators and related entities and explore opportunities for efficiencies.
- ASNO continues to engage with the Australian Border Force on the Customs and Border Modernisation Program. This program aims to provide a single window to all Australian exporters. ASNO remains open to the possibilities of how we may fit into the project as it develops.

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- ASNO has attended several interdepartmental committee meetings hosted by DISER on the National Radioactive Waste Management Facility (NRWMF) ASNO continues to provide input on the safeguards and security measures that must be applied to nuclear material held within the NRWMF.
- ASNO continues to work closely with ARPANSA on various issues including ANSTO's security plans and the conduct of a Periodic Safety and Security Review of the OPAL reactor.

International Engagement:

Internationally, ASNO engages with foreign regulators and international agencies to encourage the global implementation of effective and efficient nuclear and chemical non-proliferation norms.

• <u>Nuclear Safeguards</u>

ASNO has worked closely with the IAEA and IAEA Member States to enhance the effectiveness of nuclear safeguards through the Member Safeguards Support Program. Nuclear safeguards have evolved substantially over several decades, reflecting changes in nuclear technology and advances in monitoring and control. ASNO has been working with Australian research and development leaders, such as CSIRO and UNSW, to bring advances in robotics and distributed digital ledgers (blockchain) to the IAEA's safeguards toolkit, which have the potential to make the application of safeguards more efficient in the future.

ASNO's experts have helped to deliver capacity building regionally through the Asia-Pacific Safeguards Network (APSN). Launched in 2009, this has been a major commitment from Australia to support best practice nuclear safeguards implementation in the region.

Implementation of Nuclear Cooperation Agreements

ASNO representatives were also key participants at specialists' meetings with regulatory authorities of like-minded nations to discuss common approaches to regulating and tracking obligated nuclear material. These meetings assist Australian industry and other regulated entities by ensuring that any nuclear material (exported UOC or imported fuel for ANSTO) remains accountable under the bilateral nuclear cooperation agreements. Meetings included the Nuclear Cooperation Authorities Group meeting and bilateral meetings with counterparts from Canada, China, Euratom, Japan, ROK and the United States.

<u>CWC Regulation</u>

ASNO's chemical team engaged with fellow national regulators at the Chemical Weapons Convention National Authority meeting in order to build capacity and coordination between international regulators.