



**Australian Government**

**Department of Foreign Affairs and Trade**



# **AUSTRALIAN SAFEGUARDS AND NON-PROLIFERATION OFFICE REGULATOR PERFORMANCE FRAMEWORK SELF-ASSESSMENT REPORT 2020 – 2021**

December 2021

# STATEMENTS

This performance report for the Australian Safeguards and Non-Proliferation Office (ASNO) is prepared for the Government's Regulator Performance Framework (RPF) and covers the financial year 2020-2021.

## OVERVIEW OF ASNO'S REGULATORY FUNCTIONS

The principal focus of the Australian Safeguards and Non-Proliferation Office (ASNO) is domestic and international activity to prevent the proliferation of nuclear and chemical weapons.

ASNO is an independent federal regulator, covering all states and territories, and consolidates<sup>1</sup> 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). The Director General of ASNO (DG ASNO) is a statutory position and is the director of the three national authorities. ASNO is located in the Department of Foreign Affairs and Trade and DG ASNO reports to the Minister of Foreign Affairs.


The *Nuclear Non-Proliferation (Safeguards) Act 1987* (Safeguards Act) forms the legislative basis for ASNO's domestic nuclear regulatory functions and gives effect to Australia's nuclear safeguards and nuclear security obligations under several 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), and
- the International Convention for the Suppression of Acts of Nuclear Terrorism.

ASNO maintains a permit system for possession and transport of nuclear material and associated items in Australia. Nuclear permit holders are required to provide information periodically to ASNO and be available, upon request, for inspections to verify the information. Inspections can be undertaken by ASNO or by IAEA inspectors with ASNO acting as a facilitator between the permit holder and the IAEA. ASNO is also Australia's reporting agency to the IAEA and overseas NCA counterparts, ensuring Australia fulfils its international obligations.

<sup>1</sup> The *Non-Proliferation Legislation Amendment Act 2003*





The CWC is an international disarmament treaty that bans, among other things, the development, production, possession and use of chemical weapons. The Organisation for the Prohibition of Chemical Weapons (OPCW) provides an international, independent verification system for countries signed up to the CWC (referred to as States Parties). Three pieces of legislation – *Chemical Weapons (Prohibition) Act 1994* (CWP Act), *Regulation 5J of the Customs (Prohibited Imports) Regulations 1956* and *Regulation 13E of the Customs (Prohibited Exports) Regulations 1958* – form the basis for Australia to fulfil its obligations under the CWC through the regulation of CWC-Scheduled chemicals and other declarable chemicals. ASNO acts as the primary liaison between domestic stakeholders (such as declared chemical facilities), the OPCW and the national authorities of other States Parties.

ASNO collects information from the chemical industry, traders, universities, and research institutions through a system of permits and notifications, from which ASNO prepares Australia's declarations for the OPCW. To verify Australia's declarations, the OPCW calls short notice inspections of declared chemical facilities. These inspections are facilitated by ASNO. Under the CWP Act, ASNO has the right to conduct its own compliance inspections, but only exercises such powers in exceptional circumstances. ASNO also 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.<sup>2</sup>

In addition, 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 produce, use and trade dual-use chemicals or nuclear materials or technologies without fear of inadvertently contributing to a nuclear or chemical program of concern. It also provides Australia a platform to encourage other states, especially those with which Australian companies trade, to maintain a similar high standard.

This report provides a summary and analysis of the information ASNO collected during the 2020-21 reporting period and describes ASNO's ongoing efforts to maintain regulatory best practise and minimise the regulatory burden on nuclear and chemical regulated entities.

Further information on ASNO's activities and performance is provided in the ASNO Annual Report <https://www.dfat.gov.au/international-relations/security/asno/annual-reports>.

<sup>2</sup> [Comprehensive Nuclear-Test-Ban Treaty | Australian Government Department of Foreign Affairs and Trade \(dfat.gov.au\)](#)

## 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 legislation/permit systems below in a prompt and professional manner so that the efficient operation of the regulated entities is not unnecessarily impeded.

ASNO's permits and approvals and their benchmarked timeframes for processing are:

- nuclear permits to possess and transport nuclear material (21 calendar days),
- approvals for the transfer of uranium ore concentrate (UOC) internationally (7 calendar days),
- facility permits for CWC-Scheduled chemicals (21 calendar days),
- import permits for CWC-Schedule 1 chemicals (37 days), and
- import permits for CWC-Schedule 2 and 3 chemicals (7 calendar days).<sup>3</sup>

The processing time benchmarks correspond to the length of time before an activity occurs that ASNO requires to meet Australia's onward reporting obligations to the IAEA, OPCW, foreign/international NCA counterparts, or as required by legislation. ASNO encourages permit holders to submit their applications as early as practical in case any unforeseen complications occur. ASNO does not compromise its regulatory requirements to achieve 100 per cent of approvals within the benchmark times. However, when needed, ASNO works with the regulated entity and other federal regulators to support the operations of the regulated entities as much as possible, while ensuring Australia meets its international obligations.

The relatively small number of nuclear and chemical regulated entities in Australia, combined with the diverse nature of their operations, can make it difficult to compare approval times between years.

This is particularly true for the current reporting period (2020-2021) during which ASNO began a 5-year renewal cycle of its different classes of nuclear permits (discussed further in KPI-2 and KPI-5). The two classes of permits reviewed were for activities that present the lowest safeguards and security risks, but included the broadest representation of permit holders, accounting for 89 of the 105 permits processed in the reporting period - approximately four times more than average. ASNO pre-emptively initiated the permit renewals to ensure new permits were finalised before the original permits expired and are not included in the analysis of processing time below. Due to the ASNO-initiated process, no permit holder operations or activities were disrupted as a result of the permit renewals.

<sup>3</sup> See KPI-3 for a description of the difference between the different CWC-Schedules for chemicals.

ASNO also processed 16 nuclear permits that were initiated by the permit holder, nine of which were new permits and seven were permit variations. The average time for processing these permits was 15 calendar days, although 31 per cent took longer than 21 calendar days to process due to the permits being more complex, requiring additional consideration and one permit requiring Ministerial approval.

In addition, ASNO processed 87 uranium ore concentrate (UOC) export permissions, maintaining the high standard of 97 per cent processed within the seven-calendar day benchmark. Requests for UOC export permissions increased approximately 50 per cent compared to previous reporting periods due to exporters' need to seek reapprovals resulting from increased variability in shipping due to COVID-19 and the blockage of the Suez Canal in March 2021.

Finally, ASNO processed 63 Schedule 2 or 3 chemical import permits comprised of 58 new permits and five varied permits. The average time to process these permits was two days, with 98 per cent within the seven-day benchmark. This represents a consistent improvement in processing chemical import permits over the last four years. There were no import permits for Schedule 1 chemicals in the reporting period. ASNO also processed ten chemical facility permits, with an average time of four calendar days, with 100 per cent within the benchmark time of 21 calendar days, maintaining the high standard set over the last three years.

### Processing of permits and approvals July 2020 – June 2021

Number of ASNO-initiated nuclear permits processed	89
Number of nuclear permit applications processed (permit holder initiated)*	16
Average number of calendar days (permit holder initiated)	15 days
Per cent of permits issued within 21 days of final application (permit holder initiated)	69%
Number of approved applications to transport UOC internationally	87
Average number of days	2
Per cent of approvals issued within 7 days of final application	97%
Number of Schedule 2 or 3 chemical import permit applications processed**	63
Average number of calendar days	2 days
Per cent of import permits issued within 7 days of final application	98%
Number of chemical facility permit applications processed***	10
Average number of calendar days	4 days
Per cent of facility permits issued within 21 days of final application	100%

\* Includes granting new permits and permit variations during the reporting period. It does not include three permits that were revoked (without prejudice) and four permits that expired and were not renewed (as they were no longer required).

\*\* This does not include:

- 9 companies that realised, in discussions with ASNO, that they no longer required an import permit.

\*\*\* This does not include:

- 2 companies that ceased to require a facility permit, or
- 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.

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

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

In order to ensure ASNO's regulations and permit conditions are clear, targeted and effective, ASNO developed nuclear permit templates and compliance codes tailored for various user-types, grouping together users that hold similar types and quantities of nuclear material and therefore represent similar safeguards and security risks<sup>4</sup>. In 2020, ASNO commenced a five-year cycle to review permit templates and compliance codes for clarity and suitability.

During the reporting period ASNO completed the review and processed the renewals of 43 Class-L permits by November 2020 and 40 Class-R permits by April 2021<sup>5</sup>:

- Class-L Permits (Locations Outside Facilities (LOF) Series) are for entities that hold small amounts of nuclear material for non-fuel cycle education, research, training, calibration and storage.
- Class-R Permits (Radiography Series) are for Industrial Radiography facilities which require a permit as their equipment contains depleted uranium shielding.

The renewal process provided ASNO with an opportunity to review the permit templates and compliance codes to ensure they are fit for purpose and applied consistently. The revised permit templates and compliance codes were updated on the ASNO webpages reference information for current and future permit holders.<sup>6</sup>

Once revision of the permit templates were completed, ASNO prepared and sent draft permits to Class-L and Class-R permit holders with their details and inventories pre-populated. They were asked to provide feedback on the revised permit and confirm or update information. Once the permit holder had responded and ASNO had made required changes, the permit holder was sent their new approved permit.

Finally, Class-L permit holders were provided an opportunity to provide feedback on both the permit review process and ASNO in general, in an anonymous online survey (discussed further in KPI-5).

During the reporting period, ASNO also continued digitising its nuclear forms with the resulting efficiencies for industry. For example, ASNO has made it easier for two nuclear permit holders to domestically transfer between them, nuclear material that is of low safeguard and security risk. The change made it easier for the permit holders to notify ASNO, update their inventory and sign digitally through the nuclear portal. Modifications to the database were also made so that only one permit holder needed to fill out the details of such a transfer, rather than both.

ASNO also consulted with stakeholders on the development of a new permit template and compliance code for decommissioning a UOC concentration plant, which had not been required until this reporting period.


ASNO also undertook an interim review of the Australian Nuclear Science and Technology Organisation (ANSTO) permit.

In 2020-2021, ASNO additionally undertook a review of chemical facility and import permit holders. Eleven companies were identified and confirmed as no longer requiring a chemical facility or import permit, as changes to their operation meant that they were no longer producing, processing, consuming or importing CWC-Scheduled chemicals. These companies will no longer be asked to provide nil reporting to ASNO each year.

<sup>4</sup> See ASNO reports in [Deregulation | Australian Government Department of Foreign Affairs and Trade \(dfat.gov.au\)](#)

<sup>5</sup> Some smaller permit classes are also included in the ASNO-initiated permits numbers in KPI-1.

<sup>6</sup> [Template Permits and Compliance Codes | Australian Government Department of Foreign Affairs and Trade \(dfat.gov.au\)](#)



On a less positive note, the much-needed redevelopment of a new chemical database and industry portal (see previous RPF self-assessment reports) was halted because the IT platform selected for the development was not adequately flexible to meet Australia's domestic legislative and international treaty requirements. Funding has been obtained to redevelop the database and portal on an alternative platform and work is expected to begin in 2021-22. In the meantime, ASNO's chemical team continues to work with the current database system, employing workarounds, assisting permit holders and seeking assistance from the Information Management Division (IMD) to sustain the system and fix bugs as they occur.

### 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 risk-informed systems that enable them to provide objective assurances to the international community that states are meeting their chemical/nuclear peaceful-use obligations. ASNO works within these frameworks in order to meet Australia's international obligations. It also provides a risk-framework for ASNO's domestic regulations to ensure regulations are proportionate to the risk posed by the material or technology.

The OPCW addresses risk by identifying the chemicals, or families of chemicals, that are of concern due to their potential use as chemical weapons, or to produce chemical weapons (precursor chemicals). The identified chemicals, listed in the CWC (CWC-Scheduled chemicals), are subdivided into four categories based on risk and the possible adverse effect that regulation may have on industry, as some chemicals are widely used for peaceful purposes. The reporting and inspection requirements are different for each CWC-Scheduled chemical category and proportional to risk. The list of Scheduled chemicals was updated in 2020 when new chemicals of concern were identified.<sup>7</sup> In summary:

- 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 most stringent 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.
- 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 the facilities could be used to produce chemical weapons or chemical weapons precursors.

In addition, the CWC includes a catch-all which prohibits the use of any toxic chemical as a weapon, even if it is not specifically listed in the CWC Schedules. This catch-all is particularly important for chemicals that can be used as a weapon, but are used widely and legitimately in industry, meaning regulation of these chemicals would be impractical and potentially harmful. Chlorine is the most common example, as it has been used as a chemical weapon, but also improves world health in its global use as a disinfectant.

The IAEA also recognises that different nuclear material and nuclear facilities represent different levels of risk and so has a well-established framework that provides a proportionate response to each level of risk. For example, the IAEA defines a *Significant Quantity* as the approximate amount of nuclear material for which the possibility of manufacturing a nuclear explosive device cannot be excluded<sup>8</sup>. It would be of great concern and risk if a Significant Quantity of nuclear material could not be inspected and verified by the IAEA. Significant Quantities vary greatly for different types of nuclear material, ranging from 8 kg for plutonium<sup>9</sup>, 25 kg for highly enriched uranium<sup>10</sup>, 75 kg of low enriched uranium<sup>11</sup>, 10 tonnes of natural or depleted

<sup>7</sup> <https://www.dfat.gov.au/publications/international-relations/asno-annual-report-2019-20/report/html/section-4-5.html>

<sup>8</sup> Significant quantities take into account unavoidable losses due to conversion and manufacturing processes and should not be confused with critical masses, which is the minimum amount of a given fissile material (usually highly enriched uranium or plutonium) necessary to achieve a self-sustaining fission chain reaction under stated conditions. In a nuclear weapon, the fissile material must have a mass greater than the critical mass once the device is detonated in order to produce a nuclear yield.

<sup>9</sup> For Pu containing less than 80% <sup>238</sup>Pu

<sup>10</sup> Uranium that contains more than or equal to 20% <sup>235</sup>U.

<sup>11</sup> Uranium enriched in <sup>235</sup>U, but less than 20% <sup>235</sup>U



uranium, and 20 tonnes for thorium. Significant Quantities are one of the metrics the IAEA used to establish the frequency and type of reporting and inspection goals for states.

ASNO has used a similar risk-informed approach in the development of its template permits and compliance codes, where the nature of the conditions that are applied increase in stringency depending on the type and amount of material held by the permit holder. For example, the three levels for Class-L permits are outlined below:

Class	Name	User-Type
L1	LOF Very Low Quantity	Less than 10 kg source material <sup>12</sup> and Less than 1 g special fissionable material <sup>13</sup>
L2	LOF Low Quantity	Less than 500 kg source material and Less than 5 g special fissionable material
L3	LOF Moderate Quantity	Less than 5000 kg source material and Less than 10 g special fissionable material

As Australia has a small nuclear industry, some nuclear permits are bespoke and there is not a publicly available template permit and compliance code. However, the permit conditions continue to reflect the risk-informed framework developed by the IAEA and to meet Australia's domestic legislative and policy requirements.

<sup>12</sup> Source material includes natural and depleted uranium and thorium.

<sup>13</sup> Special fissionable material includes <sup>239</sup>Pu and uranium enriched in <sup>233</sup>U or <sup>235</sup>U.

#### 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 activity is coordinating and streamlining compliance verification activities, particularly IAEA and OPCW inspections of Australia's regulated nuclear and chemical facilities.

It is a requirement that ASNO's regulated entities allow ASNO, IAEA or OPCW inspections. This requirement enables Australia to meet international treaty obligations and support global norms to prevent the proliferation of nuclear and chemical weapons. It is also ASNO's responsibility to ensure that regulated entities are prepared for an IAEA or OPCW inspection, as they can occur at short notice. ASNO also acts as a facilitator during IAEA or OPCW inspections and undertakes follow-up activities after inspections, as required.

##### ASNO Inspections, Visits and Desktop Reviews, July 2020– June 2021

	Number of inspections	total days
ASNO nuclear inspections	8	15 days
IAEA nuclear inspections/visits (ASNO facilitated)*	18	17 days
Nuclear desktop reviews**	5	63 days
ASNO chemical outreach visits	1	1 days
OPCW chemical inspections (ASNO facilitated)	2	6 days

\* The IAEA conducts 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 further information.

\*\* Reviews done at ASNO offices - examples include review of security plans and permit holder reports.

Despite Australia's COVID-19 travel restrictions, the number of IAEA and OPCW inspections performed during the reporting period was similar to previous years. ASNO worked with the inspectors and the Commonwealth and NSW Government agencies to ensure all travel complied with Australian requirements. Inspectors spent two weeks in quarantine in Sydney before the inspections. The location and type of inspection were sometimes not announced until the inspectors were released from quarantine. It is reasonably standard for IAEA and OPCW inspectors to conduct back-to-back inspections when in Australia to make the most of the travel time. This was particularly true in this reporting period which involved significant time periods in quarantine.

The IAEA conducted eighteen inspection activities in total. This included several inspections at ANSTO including a technical visit (not strictly an inspection but included for transparency) and the annual Physical Inventory Verification that enables the IAEA to verify ANSTO's reported holdings of nuclear material. The IAEA also performed inspections at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and a uranium mine. All inspections achieved their objectives and the IAEA Statements of

Conclusions and other the inspection findings will be published in Appendix B to the ASNO Annual Report for 2020-2021.<sup>14</sup>

Two routine OPCW inspections occurred during the reporting period, compared to three in the previous reporting period. The inspections achieved their objectives, with the OPCW inspection team verifying the absence of any undeclared CWC-Schedule 1 chemical production at both sites. Prior to the first inspection starting, the facility identified that its annual notification of past activities for 2020 was missing information for one chemical. The record keeping oversight, impacted, in part, by Melbourne's sudden COVID-19 lockdowns, was identified in a briefing to the OPCW inspectors on their arrival at the facility. The facility amended its annual declarations of past activities based on information verified during the inspection and the OPCW considers the inspection closed. ASNO will be working with the permit holder in the 2021-2022 financial year to address record keeping issues.

In addition to the international inspections, ASNO conducted 15 days of domestic inspections and five desktop reviews. These fulfil multiple purposes, including to ensure the regulated entity understands its obligations, provide it an opportunity to provide ASNO direct feedback, verify that domestic permit conditions are being met, and prepare the organisation for a potential IAEA or OPCW inspection.

<sup>14</sup> <https://www.dfat.gov.au/publications/international-relations/asno-annual-report-2019-20/report/html/section-6-2.html>. Reports provided by the IAEA after the cut-off period for publishing the annual report will be included in the following year's report.

## 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.*

On the completion of the Class-L nuclear permit review (noted in KPI-2) ASNO sent out a survey to receive feedback on the review process, any difficulties the permit holders might be facing during COVID-19 that ASNO could help with, and their overall experience with ASNO as a regulator.<sup>15</sup> There was a 14% response rate to the survey from a range of sectors, including mining, government and university/education. Overall, the survey indicated a high level of satisfaction with ASNO, particularly the helpfulness of the ASNO staff.<sup>16</sup> Results included:

- a high level of satisfaction with the permit renewal process (average score of 89 per cent)
- a high level of satisfaction with the current process of submitting applications, notifications and reports to ASNO (nuclear) (average score of 87 per cent)
- information sources that permit holders relied on the most were their permit, email reminders from ASNO, and direct contact with ASNO by email or phone
- a high level of satisfaction with ASNO's response to direct queries (timeliness scored an average of 89 per cent, and usefulness of information scored an average of 85 per cent)
- COVID-19 had minimal effect on permit holders' implementation of their nuclear permit requirements. About half the respondents indicated that ASNO could assist them best by continuing to provide the same service currently provided.

The survey also indicated some areas that ASNO should keep in mind for the future, including:

- further development of the online nuclear portal (NUMBAT) and digitisation of forms
- more in-person training/workshops, when conditions allowed
- minimise jargon and poor definitions.<sup>17</sup>

There was some frustration by permit holders that their small quantities of nuclear material could not be disposed of in Australia, which would enable them to relinquish their permit and obligations. There was acknowledgement, however, that this was not within ASNO's remit.

In addition to the activities already mentioned, ASNO conducted several outreach exercises to provide assistance to regulated entities to help them meet their reporting requirements, discuss issues in their current operations, and discuss how their obligations would change if their operations changed.

During the reporting period ASNO also provided feedback to the Australian Business Licence and Information Service (ABLIS) which runs a website<sup>18</sup> to help prospective business owners identify the licences/permits their business will need. This will help raise awareness of the need for an ASNO permit for companies that hold nuclear material or CWC-Scheduled chemicals.

<sup>15</sup> There was not sufficient time in the reporting period to receive surveys from the Class-R permit holders to be included in the report. However, ASNO ultimately decided not to send surveys to the Class-R permit holders due to the additional burden on the permit holders and the suggestion that independent baseline surveys be conducted at the end of the year as part of the benchmarking of regulator performance [Regulator Performance Guide and supporting material | Deregulation \(pmc.gov.au\)](#).

<sup>16</sup> This was also a theme of the survey of chemical permit holders in the previous reporting period.

<sup>17</sup> These references were mainly to the Safeguard Act and IAEA definitions that have been intentionally left slightly ambiguous in order to not limit changes in the future.

<sup>18</sup> <https://ablis.business.gov.au/>



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

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

During the reporting period, ASNO's most significant engagement with the international community was in support of the election of Dr Robert Floyd (ASNO Director General 2010-21) as the Executive Secretary of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) Preparatory Commission. This important international post leads the joint efforts of 184 countries to ensure a permanent end to nuclear weapon test explosions. Australia has advocated at a high political level for such a ban since the 1980s and is a strong and active supporter for the Treaty, particularly through the work undertaken by ASNO as the national authority for the CTBT. Dr Floyd is the first leader of the CTBTO from the Indo-Pacific region and his election to this post will enable him to contribute directly to setting rules, policies and implementation of the international rule of law.

In addition to Dr Floyd's election, during the reporting period ASNO supported the CTBTO's detailed preparatory work that will allow the CTBT verification regime to be operational at the time the Treaty enters into force. This included:

- Oversight of the operation and maintenance of International Monitoring System stations hosted by Australia.
- leadership role in development of an On-Site Inspections (OSI) capability for the CTBTO.

International meetings ASNO attended during the reporting period were almost exclusively virtual due to COVID-19 restrictions.

- International Partnership for Nuclear Disarmament Verification (IPNDV)  
IPNDV is an ongoing initiative that includes more than 25 countries with and without nuclear weapons. Together, the partners are identifying challenges associated with nuclear disarmament verification and developing potential procedures and technologies to address those challenges. During the reporting period, ASNO contributed to the ongoing development of technical papers by IPNDV and participated in virtual exercises to test and refine verification concepts.
- Regional and Multinational meetings with the OPCW  
ASNO promotes effective international implementation of the CWC, particularly in Australia's region, including the OPCW Executive Committee meeting.
- IAEA's Nuclear Security Guidance Committee (NSGC)  
ASNO continued to play an active role in the NSGC, including participating in a subgroup on the revision of Nuclear Security recommendations.
- Convention for the Physical Protection of Nuclear Material (CPPNM)  
ASNO participated in, and DG ASNO co-chaired the Preparatory Commission for the Amended CPPNM Review Conference.
- Other Non-Proliferation and Nuclear Policy Forums attended
  - IAEA Director General's Standing Advisory Group on Safeguards Implementation (SAGSI)
  - ASEAN Regional Forum 2021 Presentation
  - International Framework for Nuclear Energy Cooperation
- Other nuclear security forums:
  - NSGC representative (as chair of NSGC) in IAEA Committees on Safety Standards (CSS)
  - Meeting of Chairs of NSGC and CSS
  - Global Dialogue on Nuclear Security Priorities (Nuclear Threat Initiative)
  - IAEA Consultancy – Incident and Trafficking Database reporting
- Other technical and scientific forums:
  - Steering Committee for the IAEA Radioactive Waste Conference

- Workshop on Signatures of Man-Made Isotope Production (WOSMIP) - Remote 2

***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, within the confines of COVID-19 restrictions, to explore opportunities for efficiencies and improve the experience for regulated entities. See the ASNO Annual Report 2020-2021 for further information.

Domestic Engagement included:

- Regulator Science Network (RSN)

The RSN is a network of Australian Government agencies responsible for regulating chemical, biological or radiological agents.<sup>19</sup> With the annual RSN symposium on hold due to COVID-19 restrictions, a monthly VTC presentation series was initiated to strengthen understanding across regulatory agencies, foster collaboration and promote the sharing of knowledge and experience. ASNO gave the first presentation, to over 80 participants, focusing on the CWC requirements and potential areas of overlap.

- Department of Industry, Science, Energy and Resources (DISER)

ASNO regularly meets with DISER on issues of mutual interest such as export approvals of UOC and controlled ores; the establishment of a permit for the decommissioning of a UOC concentration plant; and safeguards and security measures that must be applied to nuclear material that could be held within a National Radioactive Waste Management Facility.

- Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

ASNO continues to work closely with ARPANSA on various issues including ANSTO's security plans and the conduct of the Periodic Safety and Security Review of ANSTO's OPAL reactor, coordination on Australia's contribution to IAEA safety and security committees, and participation in international exercises to provide emergency preparedness and response systems for a radiological or nuclear incident.

- Nuclear Agencies Consultative Committee (NACC)

ASNO is part of the NACC which includes agencies working on nuclear safety, security, safeguards and non-proliferation issues, including Defence, ANSTO, ARPANSA, DISER and DAWE. The group meets monthly with the aim of keeping each other informed and coordinating on areas of mutual interest.

- Simplified Trade System Border Modernisation Program

ASNO continues to engage on developments on the Simplified Trade System, which is now being led by a newly established taskforce in Austrade.

International Engagement included:

- Implementation of Nuclear Cooperation Agreements (NCAs)

ASNO continued to engage regularly with bilateral regulatory counterparts on the effective implementation of the network of NCAs, and to ensure imports and exports of nuclear material remained accountable under the bilateral NCAs.

<sup>19</sup> <https://www.dfat.gov.au/publications/international-relations/asno-annual-report-2019-20/report/html/section-4-5.html>

Of particular note during the reporting period, ASNO worked closely with the UK and Euratom nuclear regulators to ensure the movement of Australian Obligated Nuclear Material (AONM) within the NCA network was not impeded and remained fully accounted for during UK's formal exit from the EU.<sup>20</sup>

- 11th Annual Meeting of the Asia-Pacific Safeguards Network (APSN)

APSN establishes a community of safeguards professionals, both in and outside the region, to strengthen regional capability through both high-level and operation-level discussions and projects. The 2020 meeting was held virtually and hosted by Indonesia. Seventy attendees from 16 countries, the IAEA and European Safeguards Research and Development Association (ESARDA) shared their experiences on IAEA safeguards implementation with a focus on challenges during COVID-19. ASNO gave a presentation on domestic management of IAEA safeguards and safeguards resilience.

- CWC National Authority meetings

ASNO's chemical team engaged with international counterparts at the Annual Chemical Weapons Convention National Authority meeting and two regional National Authorities meetings: one for Western Europe and Other Group (of which Australia is a member) and the other with Asian States Parties (which ASNO was invited to attend).

- Meetings of IAEA Safeguards Support Programs

The IAEA has established programs with volunteering member states to undertake projects that contribute to the development and implementation of nuclear safeguards. The Australian Safeguards Support Program (ASSP) is coordinated by ASNO and has been in place for more than 40 years. It is one of 21 Member State Support Programs (MSSP) programs. During the reporting period, ASNO took part in the ASSP/MSSP Annual Review Conference. ASNO, along with other MSSP, is also participated in the IAEA's Comprehensive Capacity Building Initiative for SSACs<sup>21</sup> and SRAs<sup>22</sup> (referred to as COMPASS). COMPASS is multi-year program intended to provide requesting IAEA Member States with assistance on practical issues related to the establishment and operation of their regulatory duties.

<sup>20</sup> <https://www.dfat.gov.au/publications/international-relations/asno-annual-report-2019-20/report/html/section-4-3.html>

<sup>21</sup> SSAC is State System of Accounting for and control of nuclear Material. The term is broad in scope, encompassing the national authority overseeing safeguards implementation, as well as other supporting elements, such as facility operators, operating/accounting records, accounting systems and procedure, etc. <https://apsn-safeguards.org/resources/fundamentals-and-good-practices-safeguards-regulatory-authorities>

<sup>22</sup> SRA is the Safeguard Regulatory Authority, for example, ASNO in Australia.