

Appendices

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Appendix A World Nuclear Energy, June 2011

TABLE 16: WORLD NUCLEAR ENERGY, JUNE 201129

	Operating Reactors		% of Total Electricity	Reactors under Construction	
	Total	Capacity (GWe)	in 2010	Total	Capacity (GWe)
United States*	104	101.2	19.6	1	1.2
France*	58	63.1	74.1	1	1.6
Japan*	50	44.2	29.2	2	2.7
Russian Federation*	32	22.7	17.1	11	9.2
Germany*	17	20.5	28.4	0	0
Republic of Korea*	21	18.7	32.2	5	5.6
Ukraine	15	13.1	48.1	2	1.9
Canada*	18	12.6	15.1	0	0
China*	14	11.1	1.8	27	27.2
United Kingdom*	19	10.1	15.7	0	0
Sweden*	10	9.3	38.1	0	0
Spain*	8	7.6	20.1	0	0
Belgium*	7	5.9	51.1	0	0
Taiwan ³⁰	6	5.0	19.3	2	2.6
India	20	4.4	2.9	5	3.6
Czech Republic*	6	3.7	33.3	0	0
Switzerland*	5	3.3	38.0	0	0
Finland*	4	2.7	28.4	1	1.6
Bulgaria*	2	1.9	33.1	2	1.9
Brazil	2	1.9	3.1	1	1.2
Hungary*	4	1.9	42.1	0	0
Slovak Republic*	4	1.8	51.8	2	0.8
South Africa	2	1.8	5.2	0	0
Romania*	2	1.3	19.5	0	0
Mexico*	2	1.3	3.6	0	0
Argentina*	2	0.9	5.9	1	0.7
Slovenia*	1	0.7	37.3	0	0
Netherlands*	1	0.5	3.4	0	0
Armenia	1	0.4	39.4	0	0
Pakistan	2	0.4	2.6	1	0.3
Iran	0	0	0	1	0.9
TOTAL	440	374.3	(est) 13.0	65	62.9

Source: IAEA Power Reactor Information System (PRIS) (www.iaea.or.at/programmes/a2/)

²⁹ Countries having bilateral agreements with Australia covering use of AONM are marked with an asterisk. These countries operate 365 power reactors, which produce around 13% of total world electricity and about 88% of world nuclear energy.

³⁰ Supply of AONM to Taiwan is covered by an agreement between Australia and the United States.

Appendix B Australia's Bilateral Safeguards Agreements

TABLE 17: AUSTRALIA'S BILATERAL SAFEGUARDS AGREEMENTS AT 30 JUNE 2011

Country	Entry into Force
Republic of Korea	2 May 1979
United Kingdom	24 July 1979
Finland	9 February 1980
Canada	9 March 1981
Sweden	22 May 1981
France	12 September 1981
Euratom ³¹	15 January 1982
Philippines	11 May 1982
Japan	17 August 1982
Switzerland	27 July 1988
Egypt	2 June 1989
Mexico	17 July 1992
New Zealand	1 May 2000
United States (covering cooperation on Silex technology)	24 May 2000
Czech Republic	17 May 2002
United States (covering supply to Taiwan)	17 May 2002
Hungary	15 June 2002
Argentina	12 January 2005
People's Republic of China ³²	3 February 2007
Russian Federation	11 November 2010
United States	22 December 2010

Note: Australia also has an Agreement with Singapore concerning cooperation on physical protection of nuclear materials, which entered into effect on 15 December 1989.

³¹ The Euratom agreement covers all 27 member states of the European Union. The agreement is due to expire on 15 January 2012. At the end of the reporting period, a revised and expanded agreement was under negotiation. The new agreement was subsequently signed on 5 September 2011 and is awaiting entry into force.

³² Australia has two agreements with China, one covering nuclear material transfers and one covering nuclear cooperation.

Appendix C Status of Additional Protocols

At 30 June 2011, there were 70 states (plus Taiwan) with significant nuclear activities³³. Of these states, five were nuclear weapon states (NWS), 62 were non-nuclear-weapon states (NNWS) party to the NPT, and four were non-NPT Parties.

In the following tables, states with significant nuclear activities are shown in bold.

At 30 June 2011, there were a total of 109 states with an Additional Protocol in force, an increase of eight over the same time last year. Of the 62 NNWS NPT Parties with significant nuclear activities, 48 had an Additional Protocol in force (Table 18).

TABLE 18: STATES WITH ADDITIONAL PROTOCOLS IN FORCE AT 30 JUNE 2011

State			
Afghanistan	Ecuador	Libya	Portugal
Albania	El Salvador	Lithuania	Republic of Korea
Angola	Estonia	Luxembourg	Romania
Armenia	Fiji	Madagascar	Russia
Australia	Finland	Malawi	Rwanda
Austria	France	Mali	Seychelles
Azerbaijan	FYROM	Malta	Singapore
Bangladesh	Gabon	Marshall Islands	Slovakia
Belgium	Georgia	Mauritania	Slovenia
Botswana	Germany	Mauritius	South Africa
Bulgaria	Ghana	Mexico	Spain
Burkina Faso	Greece	Monaco	Swaziland
Burundi	Guatemala	Mongolia	Sweden
Canada	Haiti	Montenegro	Switzerland
Central African Rep	Holy See	Morocco	Tajikistan
Chad	Hungary	Mozambique	Tanzania
Chile	Iceland	Netherlands	Turkey
China	Indonesia	New Zealand	Turkmenistan
Colombia	Ireland	Nicaragua	Uganda
Comoros	Italy	Niger	Ukraine
Costa Rica	Jamaica	Nigeria	United Arab Emirates
Croatia	Japan	Norway	United Kingdom
Cuba	Jordan	Palau	Uruguay
Cyprus	Kazakhstan	Panama	USA
Czech Republic	Kenya	Paraguay	Uzbekistan

^{33 &#}x27;Significant nuclear activities' encompasses any amount of nuclear material in a facility or 'location outside a facility' (LOF), or nuclear material in excess of the exemption limits in INFCIRC/153 paragraph 37.

State		
DR Congo	Kuwait	Peru
Denmark	Latvia	Philippines
Dominique Republic	Lesotho	Poland
TOTAL: 109 states (inc	cluding 48 NNWS with si	gnificant nuclear activities), plus Taiwan

Source: International Atomic Energy Agency (www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html)

At 30 June 2011, 31 states did not have an Additional Protocol (AP) in force but had signed an AP and or had an AP approved by the IAEA Board of Governors. During the period from 1 July 2010 to 30 June 2011 a further four states either signed or had the Board of Governors approve an AP, two of which also brought their AP into force during the period (Table 19).

TABLE 19: STATES WITH AN ADDITIONAL PROTOCOL SIGNED OR APPROVED BUT NOT IN FORCE AT 30 JUNE 2011

State			
Algeria	Côte d'Ivoir	Kiribati	Thailand
Andorra	Djibouti	Kyrgyzstan	Timor-Leste
Bahrain	The Gambia	Liechtenstein	Togo
Belarus	Guinea	Malaysia	Tunisia
Benin	Honduras	Moldova	Vanuatu
Cameroon	India (non-NPT)	Namibia	Vietnam
Cape Verde	Iran (1)	Senegal	Zambia
Congo, Rep of	Iraq	Serbia	
TOTAL: 31 states (including 8 NNWS NPT Parties with significant nuclear activities)			

Source: International Atomic Energy Agency (http://www.iaea.org/OurWork/SV/Safeguards/documents/sir_table.pdf)

The remaining six NNWS NPT Parties and two non-NPT states with significant nuclear activities had not signed an Additional Protocol.

TABLE 20: STATES WITH SIGNIFICANT NUCLEAR ACTIVITIES AND NO AP AT 30 JUNE 2011

Note: (1) Iran implemented its AP 'provisionally' from 2003 but 'suspended' this in 2005.

State			
Argentina	DPRK ³⁴	Israel (non-NPT)	Syria
Brazil	Egypt	Pakistan (non-NPT)	Venezuela
TOTAL: 8 states (include	ding 6 NPT Parties)		

Source: International Atomic Energy Agency (http://www.iaea.org/OurWork/SV/Safeguards/documents/sir_table.pdf)

³⁴ On 10 January 2003, DPRK gave notice of withdrawal from the NPT. Pending clarification of its status, DPRK is counted here as an NPT Party.

Appendix D IAEA Statements of Conclusions for Australia 2010

Inventory verification inspections carried out by the IAEA at Australian nuclear facilities and locations are shown in Table 7. In addition, the Agency carries out a range of other verification activities, such as short notice inspections, complementary accesses, design verifications and increased data collection and analysis.

The IAEA provides statements of conclusions of inspections under Article 91(b) of Australia's NPT Safeguards Agreement. Table 21 summarises the latest available Article 91(b) statements arising from physical inventory inspections.

TABLE 21: IAEA CONCLUSIONS OF INSPECTIONS IN AUSTRALIA

Verification Activity	Applicable Facilities	End Date of Material Balance Period	Conclusion
Examination of records	OPAL R&D Laboratories	24/03/2011 22/03/2011	'The records satisfied the Agency requirements.'
Examination of Reports to the Agency	OPAL R&D Laboratories	24/03/2011 22/03/2011	'The reports satisfied the Agency requirements.'
Verification of Domestic and International Transfers	OPAL	24/03/2011	'The domestic and international transfers declared by the operator were verified and the results satisfied the Agency requirements.'
Verification of Physical Inventory	OPAL R&D Laboratories	24/03/2011 22/03/2011	'The physical inventory declared by the operator was verified and the results satisfied the Agency requirements.'
Confirmation of the Absence of Unrecorded Production of Direct-Use Material from Material Subject to Safeguards	OPAL	24/03/2011	'The absence of unrecorded production of plutonium from nuclear material subject to safeguards was confirmed by the Agency in accordance with its requirements.'
Verification Activities for Timely Detection	OPAL R&D Laboratories	24/03/2011 22/03/2011	The verification activities for timely detection during the material balance period satisfied the Agency requirements.'

The IAEA provides statements of conclusions for states in which strengthened safeguards are in force. These statements are provided under Article 10.c. of the Additional Protocol to Australia's NPT Safeguards Agreement. The Statement for 2010 concluded as follows:

Access pursuant to Article 4.a.(i) did not indicate the presence of undeclared nuclear material or activities at the following sites:

- Olympic Dam Mine, South Australia AS-2010/001
- Lucas Heights Science & Technology Centre, Building 21 and Hut 36 AS-2010/002
- Royal Melbourne Institute of Technology, Victoria AS-2010/003.

Appendix E IAEA Safeguards Statement for 2010

The following is extracted from the IAEA's Annual Report for 2010.

In 2010, safeguards were applied for 175 States ³⁵ with safeguards agreements in force with the Agency. The Secretariat's findings and conclusions for 2010 are reported below with regard to each type of safeguards agreement. These findings and conclusions are based upon an evaluation of all the information available to the Agency in exercising its rights and fulfilling its safeguards obligations for that year.

- 1. Ninety-nine States had both comprehensive safeguards agreements and additional protocols in force:
 - (a) For 57 of these States³⁶, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities and no indication of undeclared nuclear material or activities. On this basis, the Secretariat concluded that, for these States, all nuclear material remained in peaceful activities.
 - (b) For 42 of the States, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities. Evaluations regarding the absence of undeclared nuclear material and activities for each of these States remained ongoing. On this basis, the Secretariat concluded that, for these States, declared nuclear material remained in peaceful activities.
- 2. Safeguards activities were implemented for 68 States with comprehensive safeguards agreements in force, but without additional protocols in force. For these States, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities. On this basis, the Secretariat concluded that, for these States, declared nuclear material remained in peaceful activities. While the Secretariat concluded that, for 2010, declared nuclear material in Iran remained in peaceful activities, it was unable to conclude that all nuclear material in Iran was in peaceful activities.
- 3. As of the end of 2010, 17 non-nuclear-weapon States party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) had not yet brought comprehensive safeguards agreements with the Agency into force as required by Article III of that Treaty. For these States, the Secretariat could not draw any safeguards conclusions.
- 4. Three States had safeguards agreements in force based on INFCIRC/66/Rev.2, which require the application of safeguards to nuclear material, facilities and other items specified in the relevant safeguards agreement. For these States, the Secretariat found no indication of the diversion of nuclear material or of the misuse of the facilities or other items to which safeguards had been applied. On this basis, the Secretariat concluded that, for these States, nuclear material, facilities or other items to which safeguards had been applied remained in peaceful activities.

³⁵ The 175 States do not include the Democratic People's Republic of Korea (DPRK), where the Secretariat did not implement safeguards and, therefore, could not draw any conclusion.

³⁶ And Taiwan, China.

5. Five nuclear-weapon States had voluntary offer safeguards agreements and additional protocols in force. Safeguards were implemented with regard to declared nuclear material in selected facilities in all five States. For these five States, the Secretariat found no indication of the diversion of nuclear material to which safeguards had been applied. On this basis, the Secretariat concluded that, for these States, nuclear material to which safeguards had been applied in selected facilities remained in peaceful activities or had been withdrawn from safeguards as provided for in the agreements.

Appendix F Status of CTBT International Monitoring System Facilities in Australia

TABLE 22: STATUS OF AUSTRALIAN CTBT IMS FACILITIES AT 30 JUNE 2011

Facility	Status	Operator
Primary Seismic Stations		
Warramunga, NT	Operational and certified against CTBTO standards	ANU
Alice Springs, NT	Operational and certified against CTBTO standards	GA / USA
Stephens Creek, NSW	Operational and certified against CTBTO standards	GA
Mawson, Australian Antarctic Territory	Operational and certified against CTBTO standards	GA
Auxiliary Seismic Stations		
Charters Towers, QLD	Operational and certified against CTBTO standards	GA
Fitzroy Crossing, WA	Operational and certified against CTBTO standards	GA
Narrogin, WA	Operational and certified against CTBTO standards	GA
Infrasound Stations		
Warramunga, NT	Operational and certified against CTBTO standards	ANU
Hobart, TAS	Operational and certified against CTBTO standards	GA
Shannon, WA	Operational and certified against CTBTO standards	GA
Cocos Islands	Construction underway in 2011	GA
Davis Base, Australian Antarctic Territory	Site survey completed	GA
Radionuclide Stations		
Melbourne ³⁷ , VIC	Operational and certified against CTBTO standards	ARPANSA
Perth, WA	Operational and certified against CTBTO standards	ARPANSA
Townsville, QLD	Operational and certified against CTBTO standards	ARPANSA
Darwin ³⁸ , NT	Operational and certified against CTBTO standards	ARPANSA
Cocos Islands	Operational and certified against CTBTO standards	ARPANSA
Macquarie Island, TAS	Operational, yet to be certified against CTBTO standards	ARPANSA
Mawson, Australian Antarctic Territory	Construction underway in 2011	ARPANSA
Radionuclide Laboratory		
Melbourne, VIC	Operational and certified against CTBTO standards	ARPANSA
Hydroacoustic Stations		
Cape Leeuwin, WA	Operational and certified against CTBTO standards	GA

³⁷ In addition to the IMS particulate monitoring station at Melbourne, an IMS noble gas monitoring system is installed and operating in a testing and evaluation phase.

³⁸ In addition to the IMS particulate monitoring station at Darwin, an IMS noble gas monitoring system is installed and operating in a testing and evaluation phase.

Appendix G Freedom of Information Statement

This statement is provided in accordance with section 8 of the *Freedom of Information Act 1982* (FOI Act). The following section 8 statement covers the period for 1 July 2010 to 30 April 2011 inclusive.

The FOI Act extends the right to obtain access to documents in the Government's possession. Access is limited only by exemptions that, for example, protect essential public interests and the private and business affairs of people about whom departments and statutory authorities collect and hold information.

Members of the public seeking access to documents should lodge a formal FOI request. This must be made in writing and include a contact name, address to which notifications can be sent, telephone number and fax number (if available). All enquiries should be directed to:

Director

Freedom of Information and Privacy Law Section Domestic Legal Branch Department of Foreign Affairs and Trade R.G. Casey Building, John McEwen Crescent BARTON, ACT 0221

E-mail: foi@dfat.gov.au

From 1 May 2011 agencies subject to the Freedom of Information Act 1982 (FOI Act) are required to publish information to the public as part of the Information Publication Scheme (IPS). This requirement, given in Part II of the FOI Act has replaced the former requirement to publish a section 8 statement in an annual report. An agency plan showing what information is published in accordance with IPS requirements is accessible from http://www.dfat.gov.au/foi/ips.html

Documents

ASNO produces a wide range of documents in administering its responsibilities including:

- Submissions to the portfolio minister, Cabinet, the Director General ASNO and other government agencies
- Records of parliamentary related business such as responses to parliamentary
 questions on notice, briefings for parliamentary delegations and parliamentarians,
 possible parliamentary questions, written submissions to parliamentary committees
 and responses to questions from parliamentary committee inquiries
- Records of technical and other reports, literature, media reports and journals relevant to ASNO's responsibilities
- · Replies to ministerial and departmental correspondence
- Papers prepared in whole or in part by ASNO officers for presentation at conferences and meetings
- Texts of speeches and press statements on issues related to ASNO's responsibilities

- Briefs, reports and documents on international and Australian aspects of policy relevant to ASNO's safeguards, CWC and CTBT responsibilities
- Annual Reports
- Treaties, memoranda of understanding and other agreements between the Australian Government and other governments
- Documents relating to program and financial management, contracts and tenders
- Reviews, evaluations and audit reports on management systems, controls and the efficiency and effectiveness of development programs and activities
- Minutes and working documents of the working groups, committees and organisations to which ASNO is party
- Guidelines, policies and procedures relating to strategies and corporate planning, project planning and implementation, including risk assessment and fraud prevention
- Materials relating to staff development, training, personnel management and general administration
- · Customer feedback surveys.

Publications, Presentations and Submissions

ASNO produced a range of publications and conducted various presentations to increase community awareness and understanding of ASNO responsibilities and issues for which it has expertise. ASNO also made a number of submissions to Parliamentary and other inquiries. These include:

- Stephan Bayer, Regulation of nuclear material and associated items under the Safeguards Act, Presentation to ARPANSA staff 26th July 2010.
- John Carlson, Strengthening Safeguards through Regional Cooperation:
 Establishment of the Asia-Pacific Safeguards Network, Annual Meeting of the
 Institute of Nuclear Materials Management, Baltimore, Maryland, USA, 11–15 July
 2010.
- Russell Leslie, Craig Everton and John Carlson, Revisiting the Practices and Technical Objective of Safeguards, Annual Meeting of the Institute of Nuclear Materials Management, Baltimore, Maryland, USA 11–15 July 2010.
- Craig Everton, Stephan Bayer and John Carlson, Developments in the IAEA's
 Nuclear Security Series and Physical Protection Guidance Document INFCIRC/225,
 Annual Meeting of the Institute of Nuclear Materials Management, Baltimore,
 Maryland, USA, 11–15 July 2010.
- John Carlson, Strengthening the NPT and IAEA Safeguards: Recommendations of the International Commission on Nuclear Non-Proliferation and Disarmament, Annual Meeting of the Institute of Nuclear Materials Management, Baltimore, Maryland, USA, 11–15 July 2010.
- Stephan Bayer, *Nuclear Terrorism Threats*, presentation made at the meeting of the National Counter Terrorism Committee CBRN Subcommittee Secretariat, 31 August 2010.

- Craig Everton, Initiatives and Technologies for Next Generation Safeguards -Australian Experiences and Perspectives, 6th International Workshop on Nuclear Energy and Non-Proliferation in East and Southeast Asia, Gyeongju, Republic of Korea, 27–29 October 2010.
- Robert Floyd, *WMD: Challenges for Australia's national interests and security,* National Security College Australian National University, 5 May 2011.
- Craig Everton, Russell Leslie, Stephan Bayer and Michael East, Transparency and other State-Specific Factors: Exploration of Ideas for Evolving the IAEA's System of State-Evaluations and Safeguards Implementation, 33rd ESARDA Annual Meeting, Symposium on Safeguards and Nuclear Material Management, Budapest, Hungary, 16–20 May 2011.
- Robert Floyd, Australian Uranium Export Policy, presented at The Australasian Institute of Mining and Metallurgy International Uranium Conference 2011, Perth, 8–9 June 2011.
- Michael East and Stephan Bayer, IAEA Safeguards Verification at Uranium Mines, presented at The Australasian Institute of Mining and Metallurgy International Uranium Conference 2011, Perth, 8–9 June 2011.

LIST OF REQUIREMENTS

This list is prepared from the checklist of annual report requirements set out in Attachment F to the Requirements for Annual Reports for Departments, Executive Agencies and FMA Act Bodies as approved by the Joint Committee of Public Accounts and Audit under subsections 63(2) and 70(2) of the Public Service Act 1999 on 8 July 2011.

Description	Requirement	Location
Letter of transmittal	Mandatory	Page iii
Table of contents	Mandatory	Page v
Index	Mandatory	Page 118
Glossary	Mandatory	Page 111
Contact officer(s)	Mandatory	Page ii
Internet home page address and Internet address for report	Mandatory	Page ii
Review by Statutory Officer		
Review by statutory office holder	Mandatory	Page 3
Summary of significant issues and developments	Suggested	Page 3
Overview of department's performance and financial results	Suggested	N/A
Outlook for following year	Suggested	Page 9
Significant issues and developments – portfolio	Portfolio departments – suggested	Pages 15–33
Departmental Overview		
Role and functions	Mandatory	Page 37
Organisational structure	Mandatory	Page 88
Outcome and program structure	Mandatory	Page 44
Where outcome and program structures differ from PB Statements/PAES or other portfolio statements accompanying any other additional appropriation bills (other portfolio statements), details of variation and reasons for change	Mandatory	N/A
Portfolio structure	Mandatory for portfolio departments	DFAT AR
Report on Performance		
Review of performance during the year in relation to programs and contribution to outcomes	Mandatory	Pages 49–83
Actual performance in relation to deliverables and KPIs set out in PB Statements/PAES or other portfolio statements	Mandatory	DFAT AR
Where performance targets differ from the PBS/ PAES, details of both former and new targets, and reasons for the change	Mandatory	N/A

Description	Requirement	Location
Narrative discussion and analysis of performance	Mandatory	Pages 49–83
Trend information	Mandatory	Pages 49-83
Performance of purchaser/provider arrangements	If applicable, suggested	N/A
Significant changes in nature of principal functions/ services	Suggested	N/A
Factors, events or trends influencing departmental performance	Suggested	N/A
Contribution of risk management in achieving objectives	Suggested	N/A
Social inclusion outcomes	If applicable, mandatory	N/A
Performance against service charter customer service standards, complaints data, and the department's response to complaints	If applicable, mandatory	N/A
Discussion and analysis of the department's financial performance	Mandatory	Page 90
Discussion of any significant changes from the prior year or from budget.	Suggested	N/A
Agency resource statement and summary resource tables by outcomes	Mandatory	DFAT AR
Developments since the end of the financial year that have affected or may significantly affect the department's operations or financial results in future	If applicable, mandatory	N/A
Management Accountability		
Corporate Governance		
Agency heads are required to certify that their agency comply with the Commonwealth Fraud Control Guidelines.	Mandatory	DFAT AR
Statement of the main corporate governance practices in place	Mandatory	DFAT AR
Names of the senior executive and their responsibilities	Suggested	Page 87
Senior management committees and their roles	Suggested	N/A
Corporate and operational planning and associated performance reporting and review	Suggested	DFAT AR
Approach adopted to identifying areas of significant financial or operational risk	Suggested	DFAT AR
Policy and practices on the establishment and maintenance of appropriate ethical standards	Suggested	DFAT AR
How nature and amount of remuneration for SES officers is determined	Suggested	Page 87
External Scrutiny		
Significant developments in external scrutiny	Mandatory	DFAT AR
Judicial decisions and decisions of administrative tribunals	Mandatory	DFAT AR
Reports by the Auditor-General, a Parliamentary Committee or the Commonwealth Ombudsman	Mandatory	DFAT AR

Description	Requirement	Location
Management of Human Resources		
Assessment of effectiveness in managing and developing human resources to achieve departmental objectives	Mandatory	DFAT AR
Workforce planning, staff turnover and retention	Suggested	Page 88
Impact and features of enterprise or collective agreements, individual flexibility arrangements (IFAs), determinations, common law contracts and AWAs	Suggested	DFAT AR
Training and development undertaken and its impact	Suggested	Page 89
Occupational health and safety performance	Suggested	DFAT AR
Productivity gains	Suggested	DFAT AR
Statistics on staffing	Mandatory	Page 88
Enterprise or collective agreements, IFAs, determinations, common law contracts and AWAs	Mandatory	DFAT AR
Performance pay	Mandatory	DFAT AR
Assets Management		
Assessment of effectiveness of assets management	If applicable, mandatory	DFAT AR
Purchasing		
Assessment of purchasing against core policies and principles	Mandatory	DFAT AR
Consultants		
The annual report must include a summary statement detailing the number of new consultancy services contracts let during the year; the total actual expenditure on all new consultancy contracts let during the year (inclusive of GST); the number of ongoing consultancy contracts that were active in the reporting year; and the total actual expenditure in the reporting year on the ongoing consultancy contracts (inclusive of GST). The annual report must include a statement noting that information on contracts and consultancies is available through the AusTender website.	Mandatory	DFAT AR
(Additional information as in Attachment D to be available on the Internet or published as an appendix to the report. Information must be presented in accordance with the pro forma as set out in Attachment D.)		
Australia National Audit Office Access Clauses		
Absence of provisions in contracts allowing access by the Auditor-General	Mandatory	DFAT AR
Exempt Contracts		
Contracts exempt from the AusTender	Mandatory	DFAT AR
Financial Statements		
Financial Statements	Mandatory	DFAT AR

Description	Requirement	Location
Other Mandatory Information		
Occupational health and safety (section 74 of the Occupational Health and Safety Act 1991)	Mandatory	DFAT AR
Freedom of information for the period 1 July 2010 to 30 April 2011 inclusive (see terms of subsection 8(1) of the Freedom of Information Act 1982 as it existed prior to 1 May 2011)	Mandatory	Page 104
Advertising and Market Research (Section 311A of the Commonwealth Electoral Act 1918) and statement on advertising campaigns	Mandatory	DFAT AR
Ecologically sustainable development and environmental performance (Section 516A of the Environment Protection and Biodiversity Conservation Act 1999)	Mandatory	DFAT AR
Grant programs	Mandatory	DFAT AR
Disability reporting – explicit and transparent reference to agency-level information available through other reporting mechanisms	Mandatory	DFAT AR
Correction of material errors in previous annual report	If applicable, mandatory	N/A
List of Requirements	Mandatory	Page 107

GLOSSARY

Additional Protocol (AP)	An agreement designed to complement a state's Safeguards Agreement with the IAEA in order to strengthen the effectiveness and improve the efficiency of the safeguards system. The model text of the Additional Protocol is set out in IAEA document INFCIRC/540.	
ANSTO	Australian Nuclear Science and Technology Organisation	
APSN	Asia-Pacific Safeguards Network	
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency	
ASSP	Australian Safeguards Support Program	
Australian Obligated Nuclear Material (AONM)	Australian Obligated Nuclear Material. Australian uranium and nuclear material derived therefrom, which is subject to obligations pursuant to Australia's bilateral safeguards agreements.	
BAPETEN	Indonesian Nuclear Energy Regulatory Agency (Badan Pengawas Tenaga Nuklir)	
BWC	Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. Also known as the Biological Weapons Convention.	
Challenge Inspection	(For CWC purposes) An inspection, requested by a CWC State Party, of any facility or location in the territory or in any other place under the jurisdiction or control of another State Party.	
Complementary Access	The right of the IAEA, pursuant to the Additional Protocol, for access to a site or location to carry out verification activities.	
Comprehensive Safeguards Agreement (CSA)	Agreement between a state and the IAEA for the application of safeguards to all of the state's current and future nuclear activities (equivalent to 'full scope' safeguards) based on IAEA document INFCIRC/153.	
Concise Note	Supplementary explanatory notes on formal reports from a national safeguards authority to the IAEA.	
Conversion	Purification of uranium ore concentrates or recycled nuclear material and conversion to a chemical form suitable for isotopic enrichment or fuel fabrication.	
СРРИМ	Convention on the Physical Protection of Nuclear Material	
СТВТ	Comprehensive Nuclear-Test-Ban Treaty	
ствто	Comprehensive Nuclear-Test-Ban Treaty Organization. The Vienna- based international organisation established at entry into force of the CTBT to ensure the implementation of its provisions.	
Customs	Australian Customs & Border Protection Service	
cwc	Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. Also known as the Chemical Weapons Convention.	

CWC Scheduled Chemicals	Chemicals listed in the three Schedules to the Chemical Weapons Convention. Some are chemical warfare agents and others are dual-use chemicals (that can be used in industry or in the manufacture of chemical warfare agents).	
Department of Defence	Australian Department of Defence	
Depleted Uranium (DU)	Uranium with a ²³⁵ U content less than that found in nature (e.g. as a result of uranium enrichment processes).	
DFAT	Department of Foreign Affairs and Trade	
Direct-Use Material	Nuclear material defined for safeguards purposes as being usable for nuclear explosives without transmutation or further enrichment, e.g. plutonium, HEU and ²³³ U.	
Discrete Organic Chemical (DOC)	Any chemical belonging to the class of chemical compounds consisting of all compounds of carbon, except for its oxides, sulphides and metal carbonates, identifiable by chemical name, by structural formula, if known, and by Chemical Abstracts Service registry number, if assigned. Long chain polymers are not included in this definition.	
DOE	United States Department of Energy	
DPRK	Democratic People's Republic of Korea	
Enrichment	A physical or chemical process for increasing the proportion of a particular isotope. Uranium enrichment involves increasing the proportion of ²³⁵ U from its level in natural uranium, 0.711%. For LEU fuel the proportion of ²³⁵ U (the enrichment level) is typically increased to between 3% and 5%.	
Euratom	Atomic Energy Agency of the European Union. Euratom's safeguards office, called the Directorate General of Transport and Energy H (DG), is responsible for the application of safeguards to all nuclear material in Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden; and to all nuclear material in civil facilities in France and the United Kingdom.	
Facility	(For CWC purposes) A plant, plant site or production/processing unit. (For safeguards purposes) A reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, isotope separation plant, separate storage location or any location where safeguards significant amounts of nuclear material are customarily used.	
Fissile	Referring to a nuclide capable of undergoing fission by neutrons of any energy, including 'thermal' neutrons (e.g. ²³³ U, ²³⁵ U, ²³⁹ Pu and ²⁴¹ Pu).	
Fissile Material Cut-off Treaty (FMCT)	A proposed international treaty to prohibit production of fissile material for nuclear weapons.	
Fission	The splitting of an atomic nucleus into roughly equal parts, often by a neutron. In a fission reaction, a neutron collides with a fissile nuclide (e.g. ²³⁵ U) that then splits, releasing energy and further neutrons. Some of these neutrons may go on to collide with other fissile nuclei, setting up a nuclear chain reaction.	

Fissionable	Referring to a nuclide capable of undergoing fission by 'fast' neutrons (e.g. ²³³ U, ²³⁵ U, ²³⁸ U, ²³⁹ Pu, ²⁴⁰ Pu, ²⁴¹ Pu and ²⁴² Pu).
Full Scope Safeguards	The application of IAEA safeguards to all of a state's present and future nuclear activities. Now more commonly referred to as comprehensive safeguards.
GA	Geoscience Australia
GW	Gigawatt (Giga = billion, 10 ⁹).
GWe	Gigawatts of electrical power.
GWt	Gigawatts of thermal power.
Heavy Water (D ₂ 0)	Water enriched in the 'heavy' hydrogen isotope deuterium (2 H) which consists of a proton and a neutron. D_2 O occurs naturally as about one part in 6000 of ordinary water. D_2 O is a very efficient moderator, enabling the use of natural uranium in a nuclear reactor.
HIFAR	High Flux Australian Reactor. The 10 MWt research reactor located at ANSTO, Lucas Heights.
High enriched uranium (HEU)	Uranium enriched to 20% or more in $^{\rm 235} \rm U.$ Weapons-grade HEU is enriched to over 90% $^{\rm 235} \rm U.$
Hydroacoustic	Term referring to underwater propagation of pressure waves (sounds). One category of CTBT IMS station monitoring changes in water pressure generated by sound waves in the water.
IAEA	International Atomic Energy Agency
Indirect-Use Material	Nuclear material that cannot be used for a nuclear explosive without transmutation or further enrichment (e.g. depleted uranium, natural uranium, LEU and thorium).
INFCIRC	IAEA Information Circular. A series of documents published by the IAEA setting out, inter alia, safeguards, physical protection and export control arrangements.
INFCIRC/153 (Corrected)	The model agreement used by the IAEA as a basis for comprehensive safeguards agreements with non-nuclear-weapon states party to the NPT.
INFCIRC/225 Rev.5 (Corrected)	IAEA document entitled 'Nuclear Security Recommendations on Physical Protection of Nuclear Materials and Nuclear Facilities'. Its recommendations reflect a consensus of views among IAEA member states on desirable requirements for physical protection measures on nuclear material and facilities, that is, measures taken for their physical security.
INFCIRC/540 (Corrected)	The model text of the Additional Protocol.
INFCIRC/66 Rev.2	The model safeguards agreement used by the IAEA since 1965. Essentially this agreement is facility-specific. For NNWS party to the NPT it has been replaced by INFCIRC/153.
Infrasound	Sound in the frequency range of about 0.02 to 4 Hertz. One category of CTBT IMS stations will monitor sound at these frequencies with the aim of detecting explosive events such as a nuclear test explosion at a range up to 5000 km.

Integrated safeguards	The optimum combination of all safeguards measures under comprehensive safeguards agreements and the Additional Protocol to achieve maximum effectiveness and efficiency.
International Data Centre (IDC)	Data gathered by monitoring stations in the CTBT IMS network are compiled, analysed to identified events and archived by the Vienna-based IDC. IDC products giving the data about events are made available to CTBT signatories.
International Monitoring System (IMS)	A network of monitoring stations and analytical laboratories established pursuant to the CTBT which, together with the IDC, gather and analyse data with the aim of detecting any nuclear explosion.
Inventory Change Report (ICR)	A formal report from a national safeguards authority to the IAEA on changes to nuclear materials inventories in a given period.
Isotopes	Nuclides with the same number of protons, but different numbers of neutrons, e.g. ²³⁵ U (92 protons and 143 neutrons) and ²³⁸ U (92 protons and 146 neutrons). The number of neutrons in an atomic nucleus, while not significantly altering its chemistry, does alter its properties in nuclear reactions. As the number of protons is the same, isotopes are different forms of the same chemical element.
Light water	H ₂ O. Ordinary water.
Light water reactor (LWR)	A power reactor which is both moderated and cooled by ordinary (light) water. In this type of reactor, the uranium fuel must be slightly enriched (that is, LEU).
Low Enriched Uranium (LEU)	Low Enriched Uranium. Uranium enriched to less than 20% ²³⁵ U. Commonly, LEU used as fuel in light water reactors is enriched to between 3% and 5% ²³⁵ U.
Material Balance Area (MBA)	A delineation for nuclear accounting purposes as required under comprehensive safeguards agreements. It is a defined and delineated area in or outside of a facility such that: (a) the quantity of nuclear material in each transfer into or out of the material balance area can be determined; and (b) The physical inventory of nuclear material in the material balance area" can be determined; in order that the nuclear material balance can be established for IAEA safeguards purposes.
Material Balance Report (MBR)	A formal report from a national safeguards authority to the IAEA comparing consolidated inventory changes in a given period with the verified inventories at the start and end of that period.
Mixed oxide fuel (MOX)	Mixed oxide reactor fuel, consisting of a mixture of uranium and plutonium oxides. The plutonium content of fresh MOX fuel for a LWR is typically around 5–7%.
Moata	Small training reactor previously located at Lucas Heights.
Moderator	A material used to slow fast neutrons to thermal speeds where they can readily be absorbed by ²³⁵ U or plutonium nuclei and initiate a fission reaction. The most commonly used moderator materials are light water, heavy water or graphite.

MUF	Material Unaccounted For. A term used in nuclear materials accountancy to mean the difference between operator records and the verified physical inventory. A certain level of MUF is expected due to measurement processes. MUF does not usually indicate "missing" material — because it is a difference due to measurement, MUF can have either a negative or a positive value.
MWe	Megawatts of electrical power.
MWt	Megawatts of thermal power.
Natural uranium	In nature uranium consists predominantly of the isotope ²³⁸ U (approx. 99.3%), with the fissile isotope ²³⁵ U comprising only 0.711%.
Non-nuclear-weapon state(s) (NNWS)	States not recognised by the NPT as having nuclear weapons at 1 January 1967 when the Treaty was negotiated.
NPT	Treaty on the Non-Proliferation of Nuclear Weapons.
Nuclear material	Any source material or special fissionable material as defined in Article XX of the IAEA Statute (in practice, this means uranium, thorium and plutonium).
Nuclear-weapon state(s) (NWS)	States recognised by the NPT as having nuclear weapons at 1 January 1967 when the Treaty was negotiated, namely the United States, Russia, the United Kingdom, France and China.
Nuclide	Nuclear species characterised by the number of protons (atomic number) and the number of neutrons. The total number of protons and neutrons is called the mass number of the nuclide.
Old Chemical Weapons (OCW)	Defined under the Chemical Weapons Convention as: a) chemical weapons produced before 1925; or b) chemical weapons produced between 1925 and 1946 that have deteriorated to such extent that they can no longer be used as chemical weapons.
On-Site Inspection (OSI)	On-Site Inspection. A short notice challenge-type inspection provided for in the CTBT as a means for investigation concerns about non-compliance with the prohibition on nuclear explosions.
OPAL	Open Pool Australian Light-Water reactor. The 20 MWt research reactor located at ANSTO, Lucas Heights, reached full power on 3 November 2006 and was officially opened on 20 April 2007.
OPCW	Organisation for the Prohibition of Chemical Weapons
Other Chemical Production Facility (OCPF)	Defined under the Chemical Weapons Convention as all plant sites that: a) produced by synthesis during the previous calendar year more than 200 tonnes of unscheduled discrete organic chemicals; or b) comprise one or more plants which produced by synthesis during the previous calendar year more than 30 tonnes of an unscheduled discrete organic chemical containing the elements phosphorus, sulphur or fluorine.
Physical Inventory Listing (PIL)	A formal report from a national safeguards authority to the IAEA on nuclear materials inventories at a given time (generally the end of a Material Balance Report period).

PrepCom	Preparatory Commission. In this report the term is used for the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization.
Production	(For CWC purposes) The formation of a chemical through chemical reaction. Production of chemicals specified by the CWC is declarable, even if produced as intermediates and irrespective of whether or not they are isolated.
PTS	Provisional Technical Secretariat for the CTBTO Preparatory Commission
²³⁹ Pu	An isotope of plutonium with atomic mass 239 (94 protons and 145 neutrons). The fissile isotope of plutonium most suitable for nuclear weapons.
R&D	Research and Development.
Radionuclide	An isotope with an unstable nucleus that disintegrates and emits energy in the process. Radionuclides may occur naturally, but they can also be artificially produced, and are often called radioisotopes. One category of CTBT IMS stations will detect radionuclide particles in the air. Other IMS stations are equipped with radionuclide noble gas technology to detect the abundance of the noble gas xenon in the air.
Reprocessing	Processing of spent nuclear fuel to separate uranium and plutonium from highly radioactive fission products.
Safeguards Inspector	For domestic purposes, person declared under section 57 of the Safeguards Act to undertake inspections to ensure compliance with provisions of the Act and to assist IAEA Inspectors in the conduct of Agency inspections and complementary access in Australia.
Schedule 2A/2A*	These are toxic Part A Schedule 2 chemicals (2A: Amiton and PFIB, 2A*: BZ) listed under the CWC
Seismic	Referring to the movements of the ground that can be generated by earthquakes, explosions etc The seismic element of the CTBT monitoring system is a network of 50 primary stations and 120 auxiliary stations. Analysis of seismic waves can be used to distinguish between earthquakes and explosive events.
Small Quantities Protocol (SQP)	A protocol to a state's Safeguards Agreement with the IAEA, for states with small quantities of nuclear material and no nuclear facilities. The protocol holds in abeyance most of the provisions of the state's Safeguards Agreement.
Source Material	Uranium containing the mixture of isotopes occurring in nature; uranium depleted In the isotope uranium-235; thorium; or, any of the foregoing in the form of metal, alloy, chemical compound, or concentrates.
Special Fissionable Material	Plutonium-239; uranium-233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing. The term special fissionable material does not include source material.
Standing Advisory Group on Safeguard Implementation (SAGSI)	An international group of experts appointed by, and advising, the IAEA Director General on safeguards implementation matters.

²³² Th	The only naturally occurring isotope of thorium, having an atomic mass of 232 (90 protons and 142 neutrons).
233U	An isotope of uranium containing 233 nucleons, usually produced through neutron irradiation of ²³² Th.
235[An isotope of uranium containing 235 nucleons (92 protons and 143 neutrons) which occurs as 0.711% of natural uranium.
²³⁸ U	An isotope of uranium containing 238 nucleons (92 protons and 146 neutrons) which occurs as about 99.3% of natural uranium.
UNSCR	United Nations Security Council Resolution
Uranium ore concentrate (UOC)	A commercial product of a uranium mill usually containing a high proportion (greater than 90%) of uranium oxide.
Weapons of Mass Destruction (WMD)	Refers to nuclear, chemical, biological and occasionally radiological weapons.

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