

Agreement with the People's Republic of China on the Transfer of Nuclear Material

Purpose of the Nuclear Material Transfer Agreement

- 2.1 The *Agreement between the Government of Australia and the Government of the People's Republic of China on the Transfer of Nuclear Material*, (the Nuclear Material Transfer Agreement) creates a nuclear safeguards and physical protection regime for the supply of Australian Obligated Nuclear Material (AONM)¹ to China.² The second agreement, expanded on in the next chapter, the *Agreement between the Government of Australia and the Government of the People's Republic of China for Cooperation in the Peaceful Uses of Nuclear Energy* (the Nuclear Cooperation Agreement), provides for cooperation on nuclear related matters, including the transfer of nuclear-related material, equipment and technology.³
- 2.2 Together, the Agreements have the same effect as the provisions contained in Australia's other nuclear material safeguards agreements.⁴ Australia's other nuclear material safeguards

1 AONM is defined in the Nuclear Material Transfer Agreement as Australian uranium and nuclear material derived from it. E.g. Plutonium.

2 National Interest Analysis (NIA), para. 6.

3 NIA, para. 5.

4 NIA, para. 5; Australia's safeguards agreements are with: the Republic of Korea, the United Kingdom of Great Britain, Finland, the United States of America, Canada, Sweden, France, Euratom (or the European Atomic Energy Community which includes the 25 Member States of the European Union and is administered by the European Commission), Philippines, Japan, Switzerland, Egypt, the Russian Federation, Mexico,

agreements combine nuclear material transfers (incorporating safeguards) and cooperation into one agreement.⁵ The purpose of Australia's nuclear material safeguards agreements is to provide assurances that AONM is used exclusively for peaceful purposes, and not diverted to nuclear weapons or for other military purposes. These agreements form part of Australia's obligations under the International Atomic Energy Agency's (IAEA)⁶ safeguards system, which is aimed at the non-proliferation of nuclear weapons.⁷

- 2.3 The Committee was informed that the Chinese Government requested two agreements instead of the usual one to reflect its domestic responsibilities for implementing international agreements.⁸
- 2.4 The Nuclear Material Transfer Agreement establishes strict safeguards arrangements and conditions which ensures that AONM equivalence is applied to AONM exported to China with the aim of ensuring that it is used exclusively for peaceful purposes. The Australian Safeguards and Non-Proliferation Office (ASNO) informed the Committee that provisions included in the Agreements are equivalent to, and in some areas stronger than, Australia's bilateral

New Zealand, Czech Republic, the United States of America (for transfers to Taiwan), Hungary and Argentina. NIA Attachment. In addition, Australia has an NPT safeguards Agreement concluded on 10 July 1974 with the IAEA and an Exchange of Notes Constituting an Agreement with Singapore Concerning Cooperation on the Physical Protection of Nuclear Materials, which entered into force on 15 December 1989. NIA, List of Australia's bilateral nuclear safeguards agreements; Department of Foreign Affairs and Trade, Australian Safeguards and Non-Proliferation Office, Australia's Network of Nuclear Safeguards Agreements, viewed 26 October 2006, <www.dfat.gov.au>; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 22.

5 NIA, para. 5.

6 The International Atomic Energy Agency (IAEA) is a United Nations organisation created in 1957. The IAEA is an independent, intergovernmental science and technology-based organisation tasked with promoting safe, secure and peaceful global cooperation in nuclear technologies. The IAEA also helps its member states in planning and using nuclear science and technology for peaceful purposes including the generation of electricity. In addition, the IAEA is charged with developing nuclear safety standards and verifying through its inspection system that states comply with their commitments under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and other non-proliferation agreements. These agreements provide for the peaceful use of nuclear material and facilities. IAEA, viewed 26 October 2006, <www.iaea.org>; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 20.

7 NIA, para. 10; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 21.

8 NIA, para. 5; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 20.

nuclear agreements⁹ with the four remaining declared nuclear-weapon States.¹⁰

- 2.5 Each safeguards Agreement including this Agreement includes a confidential Administrative Arrangement (AA), which is a less-than-treaty status agreement, setting out the operational arrangements for the principles committed to by the parties to the treaty level safeguards agreement.¹¹ The AAs include accounting procedures and reporting required for tracking AONM. ASNO informed the Committee that the negotiation and inclusion of AAs for nuclear transfer agreements is standard practice.¹²
- 2.6 ASNO and China's equivalent nuclear authority, the China Atomic Energy Authority (CAEA) will administer the AA.¹³

Benefits of the Nuclear Material Transfer Agreement

- 2.7 The Australian Government has stated that in addition to strengthening Australia-China ties and capitalising on China's rapidly expanding nuclear energy sector, the Nuclear Material Transfer Agreement with China would benefit Australia:
- by enabling the transfer of nuclear material (namely uranium) between Australia and China subject to nuclear safeguards and appropriate controls consistent with Australia's policies and obligations to prevent the proliferation of nuclear weapons;
 - by providing assistance to China to achieve environmental benefits by reducing greenhouse gas emissions through the use of nuclear power; and

9 NIA, para. 6; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, pp. 20-22.

10 The five declared nuclear weapon States as identified by the NPT are: China, France, the Russian Federation, the United Kingdom of Great Britain and the United States of America. The International Atomic Energy Agency, viewed 17 August 2006, <www.iaea.org/index.html>.

11 NIA, paras 23 and 31.

12 Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 21.

13 Nuclear Non-Proliferation, Trade and Security, Nuclear Exports and Safeguards, Australia's Network of Nuclear Safeguards Agreements, Department of Foreign Affairs and Trade, viewed 17 August 2006, <www.dfat.gov.au>; Article II; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 21 and 25 October 2006, p. 35.

- through the consolidation of Australia's position as a reliable supplier of energy resources.¹⁴
- 2.8 The Committee also received evidence about the treaties' economic and environmental impacts and their safeguards. Issues pertaining to safeguards include comment on their estimated effectiveness and how they are expected to operate.
- 2.9 Further discussion on the impact of the Agreement is included in Chapter 4. Further discussion on the safeguards included in the Agreements is in Chapter 5.

Australia's obligations under the Nuclear Material Transfer Agreement

- 2.10 Under the Nuclear Material Transfer Agreement, Australia and China would be obliged to ensure that no nuclear material transferred between Parties is ever used for, or diverted to, any military purpose.¹⁵
- 2.11 Article III requires Parties to apply the Nuclear Material Transfer Agreement to all nuclear material transferred for peaceful non-explosive purposes, regardless of whether it is transferred directly or through a third party. Article III applies to any nuclear material produced (including irradiated nuclear material produced by China which is subject to the Nuclear Material Transfer Agreement), processed or used in, or produced through the direct and major contribution of material, equipment, components or technology transferred between countries in line with provisions contained in the Nuclear Cooperation Agreement.¹⁶
- 2.12 Article IV requires that nuclear material would remain subject to the Nuclear Material Transfer Agreement until that nuclear material was no longer useable for nuclear activity and practically irrecoverable (as determined by the IAEA), or had been transferred beyond the territorial jurisdiction of the Party, unless otherwise agreed by the Parties.¹⁷

14 NIA, para. 7; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 20.

15 NIA, para. 15

16 NIA, para. 16.

17 NIA, para. 17.

- 2.13 Article V, Article I(a) and Annex E obliges Parties to prohibit the use of nuclear material for any nuclear weapons or other nuclear explosive device or associated research and development, or for any military purpose. The Agreement does not allow the use of nuclear material for the production of tritium for military purposes, for military nuclear propulsion, or for direct military non-nuclear applications such as munitions including depleted uranium munitions.¹⁸
- 2.14 Article VI obliges Parties to apply the Nuclear Material Transfer Agreement to comply with the IAEA's safeguards agreements.¹⁹
- 2.15 Article VII obliges Parties to arrange for alternative safeguards equivalent to the IAEA safeguards system, in the event that the IAEA safeguards cease to apply in either Party's jurisdiction.²⁰
- 2.16 Article VIII obliges Parties to ensure that adequate physical protection measures consistent with the international standard, cover nuclear material subject to the proposed Agreement within their jurisdiction and while in transport until responsibility is properly transferred to another State, as appropriate.²¹
- 2.17 Article IX requires Parties to obtain permission from one another before transferring nuclear material supplied by the other Party to a third country, except in accordance with Annex A. Annex A provides automatic prior consent for transfers within Australia's network of bilateral nuclear agreements provided certain conditions are met. Article IX also requires a Party to obtain prior consent from the supplier Party before enriching supplied nuclear material to a level of 20 per cent or more in the isotope Uranium-235 or reprocessing supplied nuclear material. Under Annex C, Australia undertakes under the specified conditions, to give reprocessing consent when China's plans for reprocessing are sufficiently advanced for it to nominate the facilities, reactors and other facilities concerned for inclusion in the Delineated Chinese Nuclear Fuel Cycle Program.²²
- 2.18 Articles X and XI outline implementation obligations and oblige Parties to establish and maintain an accounting system to control

18 NIA, para. 18; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 20.

19 NIA, para. 19.

20 NIA, para. 20; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, pp. 20-22.

21 NIA, para. 21.

22 NIA, para. 22.

nuclear material subject to the Agreement and regularly consult on implementation. Article X also obliges Parties to put AAs in place to implement the Agreement. The AAs specify reporting, material accounting and other implementation details.²³

- 2.19 Article XII obliges Parties to take action as requested by the other Party to ensure compliance with Articles III to XI and Article XIII of the Agreement. Article XII enables either Party supplying nuclear material to suspend or cancel further transfers of nuclear material if compliance with the Agreement and the IAEA safeguards is not attained.²⁴
- 2.20 Annex D provides that Australia may inform China when non-nuclear ores or concentrates containing trace, but recoverable quantities of nuclear material are transferred from Australia to China. Annex D obliges China, when it is notified to ensure that no nuclear material is extracted from such ores for nuclear use. Annex D also requires China not to extract nuclear material until the Parties have consulted and agreed safeguards measures to apply to such nuclear material. The AAs will include notification procedures.²⁵
- 2.21 Article XIII provides for a dispute resolution process. The process includes the appointment of a three member arbitral tribunal, whose decisions are binding on the Parties.²⁶

The Australian Government's consultation

- 2.22 ASNO informed the Committee that in 2004, the Australian Government was approached by both Chinese Government officials and Australian uranium producers²⁷ and asked to consider a formal Agreement to sell uranium to China.²⁸ Australian uranium producers were consulted prior to the start of treaty negotiations with China.²⁹

23 NIA, para. 23.

24 NIA, para. 24.

25 NIA, para. 25.

26 NIA, para. 26; Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 33.

27 These producers are: BHP Billiton (Olympic Dam Mine), Energy Resources Australia (Ranger Mine), Heathgate Resources (Beverley Mine), and other mines given approval to operate. RIS, p. 5.

28 Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 33.

29 RIS, p. 5.

- 2.23 Commonwealth agencies³⁰ participated in negotiations held on 18-19 January, 28 February-1 March 2006, interdepartmental committee meetings held on 10 and 22 February 2006, and contributed to briefings. Additional Commonwealth agencies were briefed through the Nuclear Agencies Consultation Committee on 4 May 2006. No objections to the Agreements were raised by Commonwealth agencies.³¹
- 2.24 State and Territory Governments were consulted about the treaties through the Commonwealth-State/Territory Standing Committee on Treaties at its meeting on 17 May 2006. There has been no opposition to the treaties from any State, Territory or Federal Government organisations,³² but it should be noted that uranium is only mined in two jurisdictions, South Australia and the Northern Territory.
- 2.25 Public consultation commenced after a bilateral Nuclear Material Safeguards Agreement with China was discussed at Senate Estimates hearings on 17 February 2005. On 9 August 2005, a press release was issued announcing that the Australian Government had decided to proceed with negotiations on a bilateral Nuclear Material Safeguards Agreement with China. The Agreement and frequently asked questions and answers were made available on the ASNO website shortly after both Agreements were signed.³³
- 2.26 Public enquiries related to the Nuclear Material Transfer Agreement and the Nuclear Cooperation Agreement have been handled by ASNO, the North Asia Division of DFAT and the Uranium Industry Section of the Department of Industry, Tourism and Resources.³⁴
- 2.27 The Australian Government received 90 public enquiries in relation to the Agreements. Approximately 10 per cent of these were positive or neutral. Relevant Government Departments replied to enquiries that sought information (approximately 50%). Most enquiries raised concerns about human rights and freedom of expression in China. In responding, DFAT explained that the Australian Government's
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30 These are: the Department of Foreign Affairs and Trade, Australian Safeguards and Non-Proliferation Office, Prime Minister and Cabinet, Attorney-General's Department, Department of Defence, Department of Industry, Tourism and Resources, Department of Education, Science and Training and the Australian Nuclear Science and Technology Organisation. Regulation Impact Statement (RIS), para. 5.

31 NIA Consultation Annex, para. 3.

32 RIS, p. 6.

33 These treaties were signed on 3 April 2006; NIA Consultation Annex, para. 4.

34 NIA Consultation Annex, para. 4.

approach to pursuing human rights issues with China is directly through discussion and practical cooperation. The Committee believes that these approaches are facilitated by stronger links between Australia and China. ASNO informed the Committee that where safeguard related issues were raised, published materials were drawn on, including ASNO's annual reports, to explain the operation of the nuclear non-proliferation regime, the work of the IAEA and the practical application of nuclear safeguards in the transfer and use of nuclear material.³⁵

Costs of implementation

- 2.28 Costs will be incurred for ASNO officers' travel to China to facilitate operation of the nuclear material accounting system. These costs will be absorbed by the Department of Foreign Affairs and Trade.³⁶

Implementing legislation

- 2.29 No new legislation or regulations are required to give effect to Australia's obligations under the Agreement. However, it is necessary to promulgate regulations pursuant to the *Nuclear Non-Proliferation (Safeguards) Act 1987* and the *Australian Radiation Protection and Nuclear Safety Act 1998* to add the Nuclear Material Transfer Agreement to the list of prescribed agreements under the Acts.³⁷
- 2.30 No legislative or regulatory changes will be required to the existing roles of the Commonwealth, States or Territories as a result of implementing the Agreement.³⁸

Entry into force and withdrawal

- 2.31 The Agreement will enter into force 30 days after the date of the last notification between Parties that all domestic procedures have been completed for this Agreement and the Nuclear Cooperation Agreement.³⁹

35 NIA Consultation Annex, para. 5.

36 NIA, para. 28.

37 NIA, para. 27.

38 RIS, p. 6.

39 NIA, para. 4.

- 2.32 Article XV of the Agreement provides that it will remain in force for an initial period of 30 years. Either Party may terminate the Agreement by written notice. The Agreement would automatically terminate if the Nuclear Cooperation Agreement were terminated. Under Article XV, termination would not release either party from obligations in respect of nuclear material transferred while the Nuclear Material Transfer Agreement was in force.⁴⁰

Further discussion on the Nuclear Material Transfer Agreement

- 2.33 The economic, environmental and social impact of the Nuclear Material Transfer Agreement is discussed in more detail in Chapter 4.
- 2.34 The Committee also received evidence about the treaties' safeguards, namely, their estimated effectiveness and how they are expected to operate. Issues pertaining to the safeguards included in the Agreements are discussed further in Chapter 5.

40 NIA, para. 32.

