

National Interest Analysis [2013] ATNIA 3

with attachment on consultation

**Agreement between the Government of Australia and
the Government of the United Arab Emirates
on Cooperation in the Peaceful Uses of Nuclear Energy
(Abu Dhabi, 31 July 2012)**

[2012] ATNIF 14

NATIONAL INTEREST ANALYSIS: CATEGORY 1 TREATY

SUMMARY PAGE

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Nature and timing of proposed treaty action

1. It is proposed to bring into force the *Agreement between the Government of Australia and the Government of the United Arab Emirates on Cooperation in the Peaceful Uses of Nuclear Energy* (the proposed Agreement). The proposed Agreement was signed by Senator the Hon Bob Carr, Minister for Foreign Affairs of Australia and Sheikh Abdullah bin Zayed al-Nahyam, Minister for Foreign Affairs of the UAE, in Abu Dhabi on 31 July 2012.
2. Pursuant to Article XVIII of the proposed Agreement, it will enter into force on the last date upon which the Parties advise each other in writing through diplomatic channels that their respective internal procedures necessary for its entry into force have been completed. It is anticipated that Australia will advise the UAE of this as soon as practicable after consideration of the proposed Agreement by the Joint Standing Committee on Treaties (JSCOT).

Overview and national interest summary

3. Bilateral nuclear cooperation agreements such as the proposed Agreement serve Australia's national interests by setting high international standards for the use of uranium through the application of strict conditions. Such agreements also enhance strategic bilateral relationships, as well as Australia's commercial position as a supplier of an important energy resource commodity. All of Australia's bilateral nuclear cooperation agreements, including the proposed Agreement with the UAE, provide stringent nuclear safeguards and security conditions designed to ensure Australian uranium is used exclusively for peaceful purposes. By virtue of Australia's extensive network of such agreements, these stringent conditions apply to a significant proportion of uranium in peaceful use worldwide, hence contributing to raising overall standards.
4. The proposed Agreement governs cooperation between the Parties in peaceful uses of nuclear energy and creates reciprocal obligations regarding the application of safeguards to the transfer and use of nuclear material, non-nuclear material, equipment, components and technology supplied by the Parties. The proposed Agreement also includes cooperation on research and development. The UAE is a party to the *Treaty on the Non-Proliferation of Nuclear Weapons*, done at London, Moscow and Washington on 1 July 1968 (NPT) [1973] ATS 3, and has in force a comprehensive safeguards agreement and Additional Protocol with the International Atomic Energy Agency (IAEA).
5. The proposed Agreement reflects commitments the UAE has made for its developing civil nuclear energy program, which are outlined in the UAE Government paper *Policy of the United Arab Emirates on the Evaluation and Potential Development of Peaceful Nuclear Energy* (released April 2008). For instance, the proposed Agreement has incorporated an

essential element of the UAE's model of nuclear power development, namely its decision to forgo enrichment and reprocessing in the UAE, and high standards of nuclear safety and security.

Reasons for Australia to take the proposed treaty action

6. To meet the UAE's request for the supply of Australian uranium for its developing nuclear power industry, the Australian Government agreed to negotiate a bilateral nuclear cooperation agreement on the peaceful uses of nuclear energy to allow for supply of Australian uranium. Under long-standing policy, Australia requires a bilateral safeguards agreement to supply uranium to any country, which includes stringent nuclear safeguards and security conditions. This policy provides assurances that exported uranium and its derivatives cannot benefit the development of nuclear weapons or be used in other military programs.

7. The Government considers that the proposed Agreement with the UAE would provide benefits to Australia, namely:

- a. opening an important expanding market for Australian uranium producers by enabling the transfer of uranium between Australia and the UAE for peaceful purposes, subject to appropriate controls consistent with Australia's policies and international obligations to prevent the proliferation of nuclear weapons;
- b. supporting Australia's efforts in nuclear non-proliferation by applying Australia's stringent safeguards and security standards to another uranium market;
- c. reinforcing Australia's close strategic bilateral relations with the UAE;
- d. consolidating Australia's position as a reliable supplier of energy resources;
- e. providing opportunities to engage with the UAE on a range of nuclear matters (e.g. nuclear safeguards, scientific and technical matters, nuclear safety, radioisotopes, nuclear medicine and environmental research); and
- f. reinforcing Australia's commitment to nuclear and radiation safety by requiring that international standards of nuclear safety and waste management are applied.

The UAE's nuclear plans

8. The UAE is seeking secure, long-term sources of uranium for its developing civil nuclear energy program. There is strong commercial interest in the long term amongst Australian uranium producers in supplying uranium to the UAE. The UAE states that the known volumes of natural gas that could be made available to the nation's electricity sector would be insufficient to meet its power generation capacity by 2020. Consequently, the UAE has evaluated a number of other alternative energy sources (e.g., crude oil and/or diesel, nuclear, solar and wind) to meet its future power generation capacity.

9. The UAE opted to develop nuclear power-generation as it emerged as a proven, and commercially competitive, option which it believes would make a significant base-load contribution to the UAE's economy and future energy security. The UAE has chosen to use advanced third-generation reactors to achieve high safety standards in its nuclear program. Construction of the first reactor is underway, with three more to follow in the next few years.

10. In developing its nuclear program the UAE is making significant use of international expertise, aimed at ensuring international standards and practices are followed. For example, in December 2011, the UAE hosted an International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service mission, comprising the IAEA and other international experts, that reviewed the effectiveness of the national regulatory infrastructure for nuclear safety and radiation protection. The review considered regulatory, technical and policy issues, with comparisons against IAEA safety standards and where appropriate, good practices in other countries. The review highlighted several good practices of the UAE regulatory system, and made some recommendations for improvements.

11. The UAE is also expanding its international nuclear cooperation through similar agreements with several other countries (e.g. the United States, Republic of Korea, France, the United Kingdom, Canada and Japan).

Nuclear safeguards

12. Australian uranium and nuclear material derived from its use (such as plutonium) is termed Australian obligated nuclear material (AONM). Australia's bilateral nuclear cooperation agreements provide assurance that AONM, which is nuclear material subject to such an agreement, is used solely for peaceful purposes and is not diverted to nuclear weapons or other military uses. At present, Australia has 21 such agreements in place, providing for the transfer of AONM to up to 39 countries, plus Taiwan.

13. The UAE is party to the NPT as a non-nuclear weapon State, and has entered into a comprehensive safeguards agreement with the IAEA (*Agreement between the United Arab Emirates and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons* done on 15 December 2002) and an additional protocol on strengthened safeguards (*Protocol Additional to the Agreement between the United Arab Emirates and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons*, done on 8 April 2009).

14. The proposed Agreement includes the essential elements of Australia's policy for the control of nuclear materials. These elements are:

- a. an assurance that AONM supplied to the UAE, including associated non-nuclear material, equipment, components and technology will be used only for peaceful purposes and will not be diverted to military or explosive purposes (proscribed military purposes include depleted uranium munitions and tritium production for use in nuclear weapons) (Articles I(f), I(i), II(1) and IX of the proposed Agreement);
- b. the provision for 'fallback safeguards' or contingency arrangements which would apply in the event that, for any reason, the IAEA is no longer able to administer safeguards in the UAE (Article X(3));
- c. application of IAEA safeguards to nuclear material, non-nuclear material, equipment, components and technology subject to the proposed Agreement (Article X);

- d. a requirement for prior Australian consent before any transfer by the UAE of AONM to a third State (Article VII);
- e. an assurance that effective physical protection measures which satisfy accepted international standards are applied to all AONM within, and sent from, its jurisdiction (Article VI);
- f. restrictions on enrichment and reprocessing of nuclear material subject to the proposed Agreement (Article VIII, outlined in more detail in paragraph 21 below);
- g. the provision for cessation of supply by, and the repatriation of supplied nuclear material, non-nuclear material, equipment, components and technology to Australia, in the event of material non-compliance with IAEA safeguards arrangements, or with key provisions in the proposed Agreement (Article XV);
- h. the provision for administrative arrangements to be established between the appropriate governmental authorities of the Parties to ensure the effective implementation of the proposed Agreement (including a system of accounting and control for material, equipment and components subject to the proposed Agreement) (Article XIII); and
- i. the provision for consultation between the Parties on the implementation of the proposed Agreement (Article XIV).

Obligations

15. The key obligation on both Parties is to ensure that nuclear material, including nuclear material derived from its use, as well as non-nuclear material, equipment, components and technology subject to the proposed Agreement, will only be used for peaceful purposes (Article IX). This is ensured through the application of IAEA safeguards under Article X of the proposed Agreement, complemented by accountability controls such as restrictions on enrichment and reprocessing (Article VIII) and administrative arrangements on effective implementation of the proposed Agreement (Article XIII).

16. Article II affirms the intent of the Parties to cooperate in the use of nuclear energy for peaceful purposes. Article II also outlines the areas and forms of cooperation envisaged such as nuclear safety and radiation protection, safeguards, nuclear research and development activities, and regulatory aspects of the peaceful uses of nuclear energy.

17. Article IV outlines the items subject to the proposed Agreement. These include nuclear material transferred between the Parties (whether directly or through a third State) and all forms of nuclear material prepared or derived from the use of such transferred nuclear material. Non-nuclear material, equipment, components or technology transferred between the Parties are also subject to this Agreement. Nuclear material, non-nuclear material, equipment, components or technology subject to this proposed Agreement will be transferred only to the legal entities authorised to receive it. Article IV provides that nuclear material, non-nuclear material, equipment, components and technology will continue to be subject to the proposed Agreement until they are no longer usable for any nuclear activity relevant from the point of view of safeguards; they are practicably irrecoverable for processing into a form which is usable for any nuclear activity; they are transferred beyond the territory of the Parties; or the Parties mutually determine in writing that they should no longer be subject to the proposed Agreement.

18. Article V obliges the Parties to take all necessary measures to ensure that nuclear safety and radioactive waste management practices are consistent, as appropriate, with the main international instruments related to nuclear safety and waste management, namely: the *Convention on Nuclear Safety* [1997] ATS 5; the *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management* [2003] ATS 21; the *Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency* [1987] ATS 15; and the *Convention on Early Notification of a Nuclear Accident* [1987] ATS 14. Article V establishes that any amendments to these existing Conventions, or future additional international agreements or arrangements, will have effect with respect to the proposed Agreement if both Parties inform each other in writing through diplomatic channels that they accept the application of the amendment or additional agreement or arrangement. The Parties are also required to cooperate in the use of mechanisms and undertakings in the international instruments outlined above, to ensure the effective application of the nuclear and radiological safety arrangements in these international instruments.

19. Article VI obliges each Party to ensure adequate physical protection of nuclear material, non-nuclear material, equipment, components and technology subject to the proposed Agreement within its jurisdiction. This obligation extends to international transport until responsibility is properly transferred to the receiving State. In addition to meeting international obligations under the *Convention on the Physical Protection of Nuclear Material*, Article VI also provides that each Party must apply measures of physical protection which meet levels not less than the recommendations of IAEA document INFCIRC/225/Rev.5 (adopted by the IAEA in 2011).

20. Article VII requires the UAE to seek Australia's prior written consent before any transfer by the UAE of nuclear material, non-nuclear material, equipment, components and technology subject to the proposed Agreement to a third State, unless, in respect of nuclear material, that third State is on a list of countries provided by Australia to the UAE that have a bilateral safeguards agreement with Australia (Article VII(4)) to which transfers may be made.

21. Article VIII provides that nuclear material subject to the proposed Agreement will not be enriched or reprocessed within the territory of the UAE. With respect to enrichment, this is different to Australia's other bilateral nuclear cooperation agreements, which require consent only for enrichment to 20% or more in the isotope uranium-235. Australia's consent is required for the enrichment or reprocessing of nuclear material outside the territory of the UAE.

22. Article IX establishes that nuclear material, non-nuclear material, equipment, components and technology subject to the proposed Agreement will only be used for peaceful purposes and will not be used for the research, development or manufacture of nuclear weapons or other nuclear explosive devices, or to further any other military purpose.

23. Article X provides that compliance with the military use proscription established in Article IX will be ensured by a system of safeguards in accordance with the IAEA Safeguards Agreement of each Party. In the event that the IAEA safeguards cease to apply in either Party's jurisdiction, the Parties are required to immediately arrange for the application of alternative ('fallback') safeguards which conform to IAEA principles and procedures to provide reassurance equivalent to that of the IAEA safeguards system.

24. Article XI requires the Parties to ensure the adequate and effective protection of intellectual property related to technology created or transferred pursuant to the cooperation

under the proposed Agreement. Such protection of intellectual property will be in accordance with written arrangements between the Parties and with applicable international agreements and arrangements, and the national laws and regulations of the Parties. Article XII obliges the Parties to take appropriate precautions to preserve the confidentiality of information received as a result of the operation of the proposed Agreement. Further, the Parties are required to use the information transferred exclusively in accordance with the proposed Agreement and not for any other purpose.

25. Article XIII requires the Parties to establish administrative arrangements to ensure the effective implementation of the provisions of the proposed Agreement. In accordance with Australia's policy and consistent with Australia's other bilateral nuclear cooperation agreements, the administrative arrangements would include provisions for the maintenance of detailed records of transactions involving AONM; an annual report on all transactions and inventories; and regular liaison with the Australian Safeguards and Non-Proliferation Office (ASNO) on the operation of the proposed Agreement, particularly reconciliation of any accounting discrepancies.

26. Article XIV requires regular consultation between the Parties, to ensure the effective implementation of the proposed Agreement, or to further cooperation in the peaceful uses of nuclear energy.

27. Article XV confirms that each Party has the right to suspend or cancel further transfer of nuclear material, non-nuclear material, equipment, components and technology and to require the receiving Party to take corrective steps if it is in material non-compliance with IAEA safeguards arrangements or is in material non-compliance with Articles IV to X, or XVI of the proposed Agreement. Further, either Party can require the return of nuclear material, non-nuclear material, equipment, components and technology subject to the proposed Agreement in circumstances where such corrective steps are not implemented within a reasonable time period (90 days following the conclusion of consultations or as otherwise agreed). Article XV sets out a range of issues for each Party to consider in exercising these rights, including whether the non-compliance of the other Party was caused wilfully and deliberately. Article XV provides that the detonation of a nuclear explosive device by either Party would constitute non-compliance with the provisions of the proposed Agreement.

28. Article XVI provides that disputes that cannot be settled by negotiation between the Parties will be resolved, at the request of either Party, by a three-member arbitral tribunal, the decisions of which will be binding on the Parties. This provision reflects the dispute resolution mechanism established in Australia's other bilateral nuclear cooperation agreements.

Implementation

29. The legislative framework already in place in relation to nuclear transfers will be sufficient to comply with the terms of the proposed Agreement. However, it will be necessary to promulgate regulations pursuant to the *Nuclear Non-Proliferation (Safeguards) Act 1987* to add the proposed Agreement to the list of 'prescribed agreements' under that Act, and to take similar action under the *Australian Radiation Protection and Nuclear Safety Act 1998*. No changes to the existing roles of the Commonwealth or the States and Territories will arise as a consequence of implementing the proposed Agreement.

Costs

30. The costs associated with the proposed Agreement would be limited to travel to the UAE by ASNO officers to facilitate proper operation of the nuclear material accounting system and by Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) officers to cooperate on nuclear safety obligations. ASNO expects that each agency will be able to manage these costs within their respective departmental allocation (by the Department of Foreign Affairs and Trade for ASNO and Department of Health and Ageing for ARPANSA).

Regulation Impact Statement

31. The Office of Best Practice Regulation, Department of Finance and Deregulation, has been consulted and confirms that a Regulation Impact Statement is not required.

Future treaty action

32. Article XVII of the proposed Agreement provides that it may be amended by agreement between the Parties in writing through diplomatic channels. Such amendments would be subject to Australia's domestic treaty-making processes, including tabling in Parliament and consideration by JSCOT.

33. No future legally binding instruments connected with the proposed Agreement are envisaged at this stage. As noted at paragraph 25 above, the proposed Agreement contains provision for the conclusion of administrative arrangements to deal with the details of implementing the proposed Agreement. This provision is standard Australian practice where bilateral nuclear cooperation agreements are in place.

Withdrawal and denunciation

34. The proposed Agreement will remain in force for an initial period of 30 years and will be automatically renewed thereafter for additional 30 year periods. Either Party is able to terminate the proposed Agreement by notifying the other Party in writing through diplomatic channels of its intention to terminate at least one year prior to the expiry of the initial 30 year period, or any renewal period. Any decision to terminate the proposed Agreement would be subject to Australia's domestic treaty processes. Unless otherwise agreed in writing by the Parties, termination, suspension or expiration of the proposed Agreement or any cooperation under it would not release either Party from obligations established under Articles IV to XVI of the proposed Agreement in respect of nuclear material, non-nuclear material, equipment, components and technology transferred while the proposed Agreement was in force.

Contact details

IAEA Safeguards Section (Dr Craig Everton)
Bilateral Safeguards Section (Dr Vanessa Robertson)
Australian Safeguards and Non-Proliferation Office
Department of Foreign Affairs and Trade

ATTACHMENT ON CONSULTATION

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CONSULTATION

35. The proposed Agreement would not have any general impact on businesses or Commonwealth Government agencies in Australia.

36. A briefing was provided to the States and Territories through the Commonwealth-State/Territory Standing Committee on Treaties for its meetings on 15 May 2011, 5 October 2011, 15 May 2012 and 4 October 2012. No comments with respect to this proposed Agreement were registered by the Committee.

37. Commonwealth Government agencies consulted prior to and during the negotiations for the proposed Agreement included the Attorney-General's Department, the Australian Nuclear Science and Technology Organisation, the Department of Prime Minister and Cabinet, the Department of Resources, Energy and Tourism, and the Australian Radiation Protection and Nuclear Safety Agency. Other relevant Commonwealth Government agencies were also briefed through the Nuclear Agencies Consultative Committee meetings held in 2011 and 2012. No objections to the proposed Agreement were raised.