

Agreement between the Government of Australia and the European Atomic Energy Community (Euratom) for Co-Operation in the Peaceful Uses of Nuclear Energy

Introduction

- 3.1 On 23 August 2011, the *Agreement between the Government of Australia and the European Atomic Energy Community (Euratom) for Co-Operation in the Peaceful Uses of Nuclear Energy* was tabled in the Commonwealth Parliament.
- 3.2 The proposed Agreement replaces a number of existing agreements. Namely:
- *Agreement between the Government of Australia and the European Atomic Energy Community concerning Transfers of Nuclear Material from Australia to the European Atomic Energy Community done on 21 September 1981, (hereinafter referred to as “the 1982 Agreement”), which is due to expire on 15 January 2012;*
 - *Exchange of Notes constituting an Implementing Arrangement, concerning International Obligation Exchanges, to the Agreement between the Government of Australia and the European Atomic Energy Community (Euratom) concerning Transfers of Nuclear Material done on 8 September 1993;*
 - *Exchange of Notes constituting an Implementing Arrangement, concerning Plutonium Transfers, to the Agreement between the Government of Australia*

and the European Atomic Energy Community (Euratom) concerning Transfers of Nuclear Material done on 8 September 1993; and

- *Exchange of Notes constituting an Implementing Arrangement between the Government of Australia and Euratom concerning Plutonium Transfers under the Agreement between the Government of Australia and Euratom concerning Transfers of Nuclear Material from Australia to Euratom, and accompanying Side Letter No. 2, of 21 September 1981, and the Implementing Arrangement concerning Plutonium Transfers of 8 September 1993.*¹

3.3 Further, the provisions of any bilateral agreements between Australia and Member States of Euratom would be regarded as complementary to the proposed Agreement and would, where appropriate, be superseded.²

Background and Overview

3.4 Euratom is an international organisation which establishes and administers safeguards designed to ensure that special nuclear materials and other related nuclear facilities, equipment and material are not diverted from peaceful purposes to non-peaceful purposes. Euratom is legally distinct from the European Union (EU) but has the same membership.³

3.5 Euratom has a central place in Australia's network of nuclear co-operation agreements. All of the member states of the EU accept the jurisdiction of Euratom over their peaceful nuclear activities. All of the non-nuclear-weapon member states of the EU are signatories to a comprehensive safeguards agreement with the International Atomic Energy Agency (IAEA) and its associated Additional Protocol.⁴

1 National Interest Analysis [2011] ATNIA 20 with attachment on consultation *Agreement between the Government of Australia and the European Atomic Energy Community (Euratom) for Co-operation in the Peaceful Uses of Nuclear Energy*, (Date and place of signature to be confirmed), [2011] ATNIF 13, (Hereafter referred to 'NIA'), para 1.

2 NIA, para. 1.

3 NIA para. 8.

4 NIA, para. 9.

Australia's interest in the Agreement

- 3.6 Nuclear co-operation agreements such as the proposed Agreement serve Australia's national interests by enhancing our commercial position as a supplier of uranium and by setting high international standards for its use through the application of strict conditions. All of Australia's bilateral nuclear agreements, including this proposed Agreement, provide stringent safeguards and security arrangements designed to ensure Australian uranium is used exclusively for peaceful purposes. By virtue of our extensive network of such agreements, Australia's strict conditions apply to a significant proportion of uranium in peaceful use worldwide, hence contributing to raising overall standards.⁵
- 3.7 The proposed Agreement would govern co-operation in peaceful uses of nuclear energy between the Parties, including reciprocal obligations on transfers and the use and application of non-proliferation safeguards on nuclear material, dual use materials, equipment and technology supplied by the Parties. The proposed Agreement is also consistent with Australia's other bilateral agreements and is Australia's first such agreement to include specific provisions on nuclear safety.⁶
- 3.8 The proposed Agreement's purpose is to provide a framework for co-operation between the Parties in the peaceful uses of nuclear energy on the basis of mutual benefit and reciprocity and without prejudice to the respective competences of each Party.⁷
- 3.9 In addition to maintaining strict safeguards and security arrangements concerning nuclear material and equipment already transferred under the 1982 Agreement, the Government considers that continued co-operation with Euratom under the proposed Agreement will provide clear economic benefits to Australia.⁸
- 3.10 The proposed Agreement will also strengthen the international legal framework supporting ongoing technical co-operation with Euratom by the Australian Nuclear Science and Technology Organisation.⁹
- 3.11 More broadly, the proposed Agreement adds to the strong joint commitment of Australia and the EU to nuclear non-proliferation and to nuclear security, as well as to renewed efforts on nuclear safety. The

5 NIA, para. 4.

6 NIA, para. 6.

7 NIA, para. 7.

8 NIA, para. 8.

9 NIA, para. 10.

proposed Agreement refers explicitly to the IAEA Additional Protocol as part of the proposed Agreement's safeguards framework. This underscores the diplomatic efforts of both Australia and the EU to promote the IAEA Additional Protocol as part of the internationally recognised safeguards standard.¹⁰

- 3.12 The proposed Agreement includes all the essential elements of Australia's policy for the control of nuclear materials. The Australian Government regards these elements as integral elements of its broader policy against the proliferation of nuclear weapons. The maintenance of multilateral, regional and bilateral arrangements that operate to counter nuclear proliferation is a matter of high priority for Australia.¹¹
- 3.13 The Department of Foreign Affairs and Trade highlighted the importance of the new agreement. Although superseding existing arrangements, it is more specific in terms of safety and the requirement for notification.

...it is the first of our agreements where we are proposing to put more specific language around nuclear safety into the agreement and the way that we read that with Euratom is by reference to a number of conventions – and there are four of these different conventions that relate to nuclear safety and nuclear incidents and the notification thereof – and the parties agree to the application of those key international conventions in their practices both in Australia and in the EU. We see this as a prudent and very appropriate step in light of the Fukushima incident earlier this year.¹²

Obligations

- 3.14 **Article III** would confirm that nuclear material, non-nuclear material, equipment and technology subject to the proposed Agreement, together with all such items produced as a by-product, would be used for peaceful purposes and would not be used for any military purpose.¹³
- Article III also outlines the areas and forms of co-operation including the supply of nuclear material, non-nuclear material and equipment;

10 NIA, para. 11.

11 NIA, paras. 13-14.

12 Dr Robert Floyd, Director-General, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 31 October 2011, p. 5.

13 NIA, para. 15.

technology transfer; nuclear safety and radiation protection; safeguards; nuclear research and development activities; organisation and establishment of joint ventures and bilateral working groups; and trade and commercial co-operation relating to the nuclear fuel cycle.¹⁴

- 3.15 **Article IV** would oblige the Parties to apply to all items (i.e. nuclear material, non-nuclear material or equipment) transferred between the Parties, regardless of whether it is transferred directly or through a third country.¹⁵
- 3.16 **Article V** would require the written consent of both Parties before enriching uranium to 20 per cent or greater in the isotope uranium-235 (U-235).¹⁶ This would include the conditions under which the uranium enriched to 20 per cent or more may be used. This provision is included in all of Australia's safeguards agreements to provide additional controls on this proliferation-sensitive activity.
- 3.17 **Article VI** would oblige any transfer of nuclear material, non-nuclear material or equipment to be carried out in accordance with the relevant international commitments of Euratom, the Member States and Australia.¹⁷ Article VI would also:
- require the Parties to assist each other in procurement of nuclear material, non-nuclear material or equipment undertake transfers under fair commercial conditions and not impede implementation of the principle of free movement in the EU's internal market; and
 - oblige the Parties to only permit retransfers of material in accordance with the framework of the Nuclear Suppliers Group and the Guidelines for Nuclear Transfers prepared by the IAEA.¹⁸
- 3.18 **Article VII** would oblige the Parties to place all nuclear material under their respective safeguards agreements with the IAEA. In the event that IAEA safeguards cease to apply in either Party's jurisdiction they would be required to arrange immediately for the application of alternative ('fallback') safeguards which conform to IAEA principles and procedures

14 NIA, para. 15.

15 NIA, para. 16.

16 U-235 enriched to 20 per cent or more is known as highly enriched uranium. Highly enriched uranium is considered a special fissionable material and a direct use material. (NIA, para. 17.) The fissile uranium in nuclear weapons usually contains 85 per cent or more of uranium-235 known as weapon(s)-grade, though for a crude, inefficient weapon 20 per cent is sufficient (called weapon(s) -usable). The Energy Library, <<http://theenergylibrary.com/node/539>> accessed 28 September 2011.

17 NIA, para. 18.

18 NIA, para. 19.

to provide reassurance equivalent to that of the IAEA safeguards system.¹⁹ Article VII would also oblige the Parties:

- to apply physical protection measures in accordance with international guidelines. Furthermore, nuclear safety and waste management will be subject to relevant international conventions;²⁰ and
- not to transfer nuclear material beyond their territorial jurisdiction unless they have received prior written consent from the other Party or the recipient is included in a pre-approved list of third countries.²¹

3.19 **Article VIII** would confirm the Parties' consent to the reprocessing of nuclear fuel containing nuclear material subject to the proposed Agreement, provided such reprocessing takes place in accordance with conditions mutually determined between the Parties.²²

3.20 **Article X** would require the Parties to encourage and facilitate information exchange and to take all appropriate precautions to preserve the confidentiality of information received as a result of the proposed Agreement.²³

3.21 **Article XII** would require the Parties to establish administrative arrangements to ensure the effective implementation of the provisions of the proposed Agreement.²⁴

Implementation

3.22 The legislative framework already in place in relation to nuclear transfers will be sufficient to provide for 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

19 NIA, para. 20.

20 NIA, para. 21.

21 NIA, para. 21.

22 NIA, para. 22.

23 NIA, para. 23.

24 NIA, para. 24.

the States and Territories will arise as a consequence of implementing the proposed Agreement.²⁵

- 3.23 The Department of Foreign Affairs also stated that as this treaty is superseding existing agreements, other countries also have little or no requirement to alter their existing legislation.²⁶ Euratom have confirmed that the internal procedures provided for in the treaty have been completed.²⁷

Practical outcomes

- 3.24 Again, given that this treaty supersedes existing agreements, the practical impact on Australia is minimal. There is no increase in nuclear waste returning to Australia.²⁸ In addition, the treaty does not change the ultimate destination of unwanted nuclear material²⁹ and it also maintains Australia's current practice and policy.³⁰

Costs

- 3.25 The costs associated with the proposed Agreement would be limited to travel to Europe by Australian Safeguards and Non-proliferation Office (ASNO) officers to facilitate proper operation of the nuclear material accounting system. ASNO expects to be able to manage these costs within its departmental allocation by the Department of Foreign Affairs and Trade.³¹

25 NIA, para. 25.

26 Dr Stephan Bayer, Director, Nuclear Security Section, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 31 October 2011, p. 8.

27 Australian Safeguards and Non-Proliferation Office, *Submission 4*, p. 1.

28 Dr Robert Floyd, Director-General, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 31 October 2011, p. 9.

29 Dr Stephan Bayer, Director, Nuclear Security Section, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 31 October 2011, p. 7.

30 Dr Robert Floyd, Director-General, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 31 October 2011, p. 7.

31 NIA, para. 26.

Community Concerns

- 3.26 The Committee received a submission for the Australian Conservation Foundation (ACF), and the Gundjeihmi Aboriginal Corporation on the treaty.
- 3.27 The ACF outlined a number of concerns, particularly with regard to the fact that the treaty text was concluded before the March 2011 Fukushima incident. The ACF commented:

The continuing Fukushima nuclear emergency has led to a significant global reappraisal and review of the role and safety of nuclear energy – the lessons of which are not adequately reflected in the ‘business as usual’ approach that underpins much of this treaty and the accompanying National Interest Analysis.³²

Following the Fukushima nuclear crisis the UN Secretary General initiated a comprehensive review of international nuclear safety, security and safeguards. It is deeply disappointing that a detailed assessment and operational impact analysis of this process has not been provided with the accompanying ATNIA or to assist in the Committee’s deliberations as much of this review has a relevance to the Australian uranium sector.³³

- 3.28 Furthermore, the ACF also expressed the view that any distinction between the civil and military use of uranium was largely psychological and that once Australian uranium is exported, the receiving country can use that uranium as it see fit despite international commitments.

Successive Australian governments have attempted to maintain a distinction between civil and military end uses of Australian uranium exports, however this distinction is more psychological than real. No amount of safeguards can absolutely guarantee Australian uranium is used solely for peaceful purposes.

According the former US Vice-President Al Gore, ‘in the eight years I served in the White House, every weapons proliferation issue we faced was linked with a civilian reactor program.’ Despite Government assurances that bilateral safeguard agreements ensure peaceful uses of Australian uranium in nuclear power reactors, the fact remains that by exporting uranium for use in

32 Australian Conservation Foundation, *Submission 2*, p. 2.

33 Australian Conservation Foundation, *Submission 2*, p. 4.

nuclear power programs to nuclear weapons states, other uranium supplies are free to be used for nuclear weapons programs.³⁴

- 3.29 The Gundjeihmi Aboriginal Corporation is an organisation established, managed and controlled by the Mirarr people to protect and advance their rights and interests.
- 3.30 Like the ACF, the Corporation made a submission to the inquiry expressing concern about the Fukushima incident. The Corporation is specifically concerned that the nuclear material involved in the Fukushima incident may have come from the Ranger and Jabiluka uranium mines, located on the traditional lands of the Mirarr people.
- 3.31 The Gundjeihmi Aboriginal Corporation also discussed the impact uranium mining was having on indigenous lands. The corporation was concerned that uranium mined at these mines was being used in power station that were unsafe, and could be diverted into nuclear weapons.

Today, Mirarr country encompasses the Ranger and Jabiluka Mineral Leases, the mining town of Jabiru and parts of Kakadu National Park. Uranium mining has been taking place on Mirarr land for three decades.... the European Union buys just under one third of Australia's uranium. Over the past three decades - the lifetime of the current treaty - roughly half of the uranium exported from Australia has come from Mirarr land: from the Ranger uranium mine.³⁵

Mirarr have long held concerns... regarding the impacts of uranium once it is exported for use in nuclear power stations.³⁶

- 3.32 The Mirarr people have in the past opposed uranium mining on their lands and the submission explained that they felt responsibility for the consequences of the use of uranium from their lands.

Mirarr acknowledge widely held concerns regarding the lack of enforceable safeguards to ensure uranium intended for nuclear power is not diverted to nuclear weapons. As Traditional Owners, Mirarr bear responsibility for the impacts of any product of their country.³⁷

- 3.33 They concluded:

34 Australian Conservation Foundation, *Submission 2*, p. 2. The quote from Vice President Al Gore is referenced to *Guardian Weekly*, 167 (25), 9-15 June 2006.

35 Gundjeihmi Aboriginal Corporation, *Submission 3*, p. 1.

36 Gundjeihmi Aboriginal Corporation, *Submission 3*, p. 1.

37 Gundjeihmi Aboriginal Corporation, *Submission 3*, p. 2.

Before extending the Treaty framework, Australia should seek a commitment from all Euratom members to conduct renewed safety studies on all existing reactors and undertaking to decommission those that have exceeded their safely functional lifespan.

The responsibility Traditional Owners have for the impacts of material from their country demands such safeguards.³⁸

Conclusion

- 3.34 The Committee notes the concerns of both the ACF and the Gundjeihmi Aboriginal Corporation. The full consequences of the Fukushima incident are yet to be ascertained and should further treaty amendments be required as a result of this incident, the Committee expects they will be introduced in due course.
- 3.35 While noting their concerns, the Committee is confident that the existing safeguards regarding nuclear fuel and nuclear weapons proliferation incorporated into the treaty are appropriate and adequate. Nonetheless, this should not preclude further amendments should they be considered necessary.
- 3.36 The Committee notes that this agreement supersedes existing treaties and hence there are no fundamental changes to existing outcomes and practices. What changes there are, strengthen safety requirements which the Committee supports. Furthermore, there are no changes required to Australian legislation and there are no expected additional costs. Given this, the Committee agrees that binding treaty action be taken.

Recommendation 2

The Committee supports *Agreement between the Government of Australia and the European Atomic Energy Community (Euratom) for Co-Operation in the Peaceful Uses of Nuclear Energy* and recommends that binding treaty action be taken.

38 Gundjeihmi Aboriginal Corporation, *Submission 3*, p. 3.