

Fifth Agreement to Extend the 1987 Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology done at Bali on 15 April 2011

Introduction

- 2.1 On 20 March 2012, the *Fifth Agreement to Extend the 1987 Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology done at Bali on 15 April 2011* was tabled in the Commonwealth Parliament.

Background

- 2.2 *The Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology for Asia and the Pacific (RCA)* is forty years old this year. This makes it the oldest regional cooperative agreement within the International Atomic Energy Agency's (IAEA) framework. The RCA was revised in 1987 and is now a regionally significant intergovernmental agreement which incorporates seventeen countries in the Asia-Pacific.¹

¹ Mr Steve McIntosh, Manager, International Relations, Government Affairs and Policy, Division of Government, International and External Relations, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 25 June 2012. p. 1.

- 2.3 The Fifth Extension Agreement extends the RCA for a further five-year period. The Agreement entered into force generally on 31 August 2011, and will enter into force for Australia on the date of receipt by the Director General of the IAEA of Australia's instrument of acceptance.²
- 2.4 Australia became a Party to the 1972 RCA in 1977 and became a Party to the 1987 RCA upon its entry into force in that year.³ As of 5 June 2012, six member states had accepted the extension of the RCA agreement.⁴ The 1987 RCA will continue in force from 12 June 2012.⁵
- 2.5 The 1987 RCA is based on a previous agreement of the same name negotiated in 1977. The basic principle behind the RCA is for the signatory parties to cooperate with each other to promote research, development and training projects in nuclear science and technology.⁶
- 2.6 The purpose of the 1987 update was to enhance overall coordination and supervision of cooperative projects carried out under RCA arrangements. The 1987 RCA was extended in 1992, 1997, 2002 and 2007. RCA projects are implemented under the auspices of the Technical Cooperation Programme administered by the IAEA.⁷
- 2.7 The RCA contains a process for developing cooperative projects between parties. Briefly, the process is as follows:
- a party wishing to undertake a cooperative project initiates the project by submitting a proposal to the IAEA, which will then notify all the other parties to the RCA;
 - the other parties respond if they are interested in participating in the cooperative project; and

2 National Interest Analysis [2012] ATNIA 9 with attachment on consultation, *Fifth Agreement to Extend the 1987 Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology* done at Bali on 15 April 2011, [2011] ATNIF 35, (Hereafter referred to as 'NIA'), paras 1 - 2.

3 The other Parties to the 1987 RCA are: Bangladesh, the People's Republic of China, India, Indonesia, Japan, the Republic of Korea, Malaysia, Mongolia, Myanmar, New Zealand, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand and Vietnam.

4 Mr Steve McIntosh, Manager, International Relations, Government Affairs and Policy, Division of Government, International and External Relations, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 25 June 2012. p. 1.

5 NIA, para 7.

6 International Atomic Energy Agency, *1987 Regional Cooperative Agreement for Research, Development and Training relating to Nuclear Science and Technology*, Article i.

7 NIA, para 6.

- the project is approved, provided two parties to the RCA in addition to the initiating party agree to the project.⁸
- 2.8 Once a project has been agreed, the IAEA prepares an agreement which:
- defines the participating parties, the project, and how it will be implemented;
 - provides for adequate health and safety measures;
 - prevents military use of any assistance provided to a party as part of the project; and
 - includes a dispute settling mechanism and a description of the liabilities of the parties.⁹
- 2.9 The Australian Nuclear Science and Technology Organisation (ANSTO) is Australia's designated point of contact for participation in the 1987 RCA.¹⁰

National interest summary

- 2.10 The 1987 RCA has been continually extended due to its usefulness in providing a regional framework for initiating cooperative projects and coordinated research programming between IAEA Member States in the Asia-Pacific region.¹¹
- 2.11 Extension of the 1987 RCA for a further five years will have important benefits for Australia from a security, economic and political perspective. As a regional agreement under the aegis of the IAEA, the 1987 RCA is an important mechanism in fulfilling the technical cooperation provisions of the *Treaty on the Non-Proliferation of Nuclear Weapons* (NPT). Australia's participation helps contribute to a non-proliferation regime which has kept our immediate neighbourhood free of nuclear weapons proliferation for the past forty years. The 1987 RCA also allows Australia to participate in international collaborative projects and to maintain and extend a national capacity in cutting-edge nuclear technologies. Finally, the 1987 RCA facilitates Australian technical and political cooperation with sixteen
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8 International Atomic Energy Agency, *1987 Regional Cooperative Agreement for Research, Development and Training relating to Nuclear Science and Technology*, Article ii.

9 International Atomic Energy Agency, *1987 Regional Cooperative Agreement for Research, Development and Training relating to Nuclear Science and Technology*, Article ii.

10 NIA, para 10.

11 NIA, para 4.

regional countries in nuclear science and technology, which in turn contributes to maintaining and improving bilateral and multilateral relationships in the Asia-Pacific region.¹²

Reasons for Australia to take the proposed treaty action

- 2.12 Australia has important national interests in maintaining its participation in the 1987 RCA.¹³ Australia is a designated member of the IAEA Board of Governors, the only such Board member without a civil nuclear power program. Cooperation through the RCA is an important means for Australia to share its recognised leading expertise on civil nuclear research and technology.¹⁴

Nuclear Non-Proliferation Treaty

- 2.13 Agreements such as the 1987 RCA provide an important means of fulfilling the technical cooperation provisions of the NPT. Under the NPT, non-nuclear-weapon States Parties have forsworn nuclear weapons and must accept IAEA safeguards for the purpose of verifying their fulfilment of NPT obligations. Continued membership of the 1987 RCA is one way for Australia to fulfil its undertaking to cooperate with other Parties in the peaceful uses of nuclear energy as it establishes a framework for Parties to cooperate with each other in respect of research, development and training projects in nuclear science and technology.¹⁵
- 2.14 The Department of Foreign Affairs and Trade (DFAT) and Australian Safeguards and Non-Proliferation Office (ASNO) expanded on the Agreement's relationship with the NPT:

The [RCA] helps us fulfil the technical cooperation provisions within the nuclear non-proliferation treaty. There are three pillars to the treaty. One is about non-proliferation. The second is a commitment by countries that have nuclear weapons to disarm. The third is about the peaceful use of nuclear energy and the cooperative aspect of that. This particular agreement is part of that third commitment, and that is why it is really important.

Article IV of the nuclear non-proliferation treaty provides that all parties to that treaty have the right to develop research,

12 NIA, para 5.

13 NIA, para 8.

14 NIA, para 7.

15 NIA, para 8.

production and use of nuclear energy for peaceful purposes and are obliged to facilitate the fullest possible exchange of equipment, material and scientific and technological information for the peaceful use of nuclear energy. The mechanisms for the implementation of that obligation are primarily through the [IAEA] and instruments such as the [RCA].¹⁶

[The RCA] contributes to one of the three pillars that were part of that [NPT] grand deal... One of the critical aspects of that grand deal was to assure those who did not have nuclear weapons that they would not be disadvantaged in the peaceful application of nuclear technologies for purposes of – I am adding this now – radiopharmaceuticals, agriculture or environment et cetera. So it is a part of fulfilling the grand deal, rather than specifically that the projects and the activities under this would be targeting issues of disarmament or non-proliferation per se.¹⁷

- 2.15 On a practical level, DFAT and ASNO explained how Australian Government agencies assessed the various projects that might be conducted under the RCA's auspices, but which might contribute directly or indirectly to nuclear proliferation:

If there was to be a project which could be of relevance to a weapons program then we would look very seriously at whether we could participate. If, under a project we had assessed as a whole to be of no relevance, there was a particular activity we thought could be relevant, we would again decline to take part in that activity.¹⁸

We take those issues very seriously. The safeguards act in Australia covers issues of nuclear material transfers of a special group of technologies called 'associated technologies', which are the most sensitive technologies to reactor function as well as enrichment reprocessing. There are laws and regulations around whether we are allowed to exchange those materials or technologies or not, and they would apply. There are other

16 Dr Robert Floyd, Director General, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 25 June 2012, p. 2.

17 Mr Steve McIntosh, Manager, International Relations, Government Affairs and Policy, Division of Government, International and External Relations, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 25 June 2012. p. 3.

18 Mr Steve McIntosh, Manager, International Relations, Government Affairs and Policy, Division of Government, International and External Relations, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 25 June 2012. p. 6.

mechanisms that would deal with those specific issues to ensure that Australia's cooperation is restricted to peaceful uses only.¹⁹

If there is an issue where we might have the slightest concern we talk to ASNO [Australian Safeguards and Non-Proliferation Office] about it before we proceed.²⁰

- 2.16 Finally, through projects which strengthen regional regimes governing the safety and security of radioactive materials, the 1987 RCA also assists in preventing potentially dangerous material and technical know-how from being utilised by terrorist organisations.²¹

Nuclear science and technology

- 2.17 Over the past 40 years, the successive RCAs have evolved to become an important vehicle for Australia's cooperation with regional countries in nuclear science and technology.²² The 1987 RCA also helps Australia maintain and extend its national capacity in leading-edge nuclear technologies. Examples include medical, industrial, environmental and agricultural technologies.²³ They have enabled Australia to participate in mutually beneficial research and training related to nuclear science and technology with sixteen countries in the Asia-Pacific region. Such cooperation has had a positive flow-on effect on our bilateral and multilateral relationships in the region, with significant political benefits.²⁴

Obligations

- 2.18 Australia's obligations under the Fifth Extension Agreement derive from the 1987 RCA. The 1987 RCA places a number of obligations on the Parties, which are to be implemented within the framework of their national laws. In particular, the 1987 RCA requires that the Parties:

19 Dr Robert Floyd, Director General, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 25 June 2012, pp. 6-7.

20 Mr Steve McIntosh, Manager, International Relations, Government Affairs and Policy, Division of Government, International and External Relations, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 25 June 2012. p. 7.

21 NIA, para 9.

22 NIA, para 11.

23 NIA, para 10.

24 NIA, para 11.

- promote and coordinate cooperative research, development and training projects in nuclear science and technology through their appropriate national institutions;
- attend meetings to consider, approve and evaluate cooperative projects and conduct other business relating to the 1987 RCA;
- make available the necessary scientific and technical facilities and personnel for the implementation of cooperative projects in which the Party is participating;
- take reasonable and appropriate steps for the acceptance of scientists, engineers or technical experts designated by other participating governments or by the IAEA to work at designated installations for the purpose of implementing cooperative projects in which the Party is participating;
- submit to the IAEA an annual report on the implementation of the portion of cooperative projects assigned to it;
- contribute, financially or otherwise, to the implementation of cooperative projects and notify the IAEA annually of any such contributions;
- ensure that the IAEA's safety standards and measures are applied to relevant cooperative projects; and
- ensure that any assistance provided to the Party under the 1987 RCA is used only for peaceful purposes, in accordance with IAEA's statute.²⁵

2.19 The Fifth Extension Agreement simply serves to extend the 1987 RCA by a further five years to 11 June 2017 and thus there are no new obligations imposed on Australia by the Agreement.²⁶

Implementation

2.20 No legislation is required to give effect to the Fifth Extension Agreement,²⁷ and no changes to the existing roles of the Commonwealth or the States and Territories will arise as a consequence of implementing the Fifth Extension Agreement.²⁸

25 NIA, para 13.

26 NIA, para 14.

27 NIA, para 15.

28 NIA, para 16.

Costs

- 2.21 Australia has the option of contributing financially and ‘in-kind’ to facilitate the effective implementation of cooperative projects. Financial contributions to project costs will be assessed on a case-by-case basis and provided for through normal budgetary processes.²⁹
- 2.22 Australia's contributions ‘in-kind’ are given through: the placement of RCA and IAEA fellowship and scientific visitor awardees for study and training in Australia; the provision of courses and experts to provide assistance to the IAEA or to individual RCA Member States on behalf of the IAEA; and the hosting of RCA meetings sponsored by the IAEA. These costs are met by relevant agencies from their existing resources.³⁰

Further issues

The Fukushima disaster

- 2.23 The Committee was interested in hearing how the on-going Fukushima nuclear disaster that began following the earthquake and tsunami of March 2011 had affected this treaty and its re-negotiation.
- 2.24 DFAT and ANSTO explained that the Fifth Agreement was simply ‘rolled over’ and that there were no changes within the treaty text as a result of the accident.³¹ However, this did not mean that there was no change to the international regulatory architecture. Changes in the safety standards in the IAEA would effectively change and update the RCA. DFAT explained:

Article IX, paragraph 1 in the agreement states: ‘In accordance with its applicable laws and regulations, each Government Party shall ensure that the Agency’s safety standards and measures relevant to a co–operative project are applied to its implementation.’

29 NIA, para 17.

30 NIA, para 18.

31 Mr Steve McIntosh, Manager, International Relations, Government Affairs and Policy, Division of Government, International and External Relations, Australian Nuclear Science and Technology Organisation, *Committee Hansard*, 25 June 2012. p. 3.

If there were changes in those safety standards of the agency – and you are aware of various activities that have gone on since Fukushima looking at that – that would be gathered up in that particular paragraph. So we would not need to change the RCA because it is referencing agency safety standards, 'agency' meaning the IAEA.³²

- 2.25 Despite this explanation, the Committee notes that there may have been an opportunity missed to upgrade the agreement rather than simply 'rolling it over'. The Australian Conservation Foundation (ACF) argued that Australia, as a major supplier of nuclear fuel, should have taken the opportunity to strengthen the safety and non-proliferation aspects of the agreement following the Fukushima accident. They stated:

I do not expect this treaty to be everything, but it should be something more than: 'This is what we arranged last time pre-Fukushima and we'll just roll it over.' Let us not 'just roll it over'. Let us have a genuine look at how it can be strengthened, tightened and improved. Let us, as a country with deep responsibilities for fuelling this industry, step up to being a country that takes seriously our responsibility for policing and making safer this sector.³³

Conclusion

- 2.26 The RCA is a useful mechanism in providing a regional framework for initiating cooperative projects and coordinated research between IAEA Member States in the Asia-Pacific. Its continued operation over a forty year period provides tangible evidence of its usefulness.
- 2.27 The Committee notes that the majority of the twenty projects conducted under the RCA are medical and agricultural projects dealing with such issues as improving cancer management with hybrid nuclear medicine imaging and implementing best practices of food irradiation for sanitary and phytosanitary purposes.³⁴

32 Dr Robert Floyd, Director General, Australian Safeguards and Non-Proliferation Office, Department of Foreign Affairs and Trade, *Committee Hansard*, 25 June 2012, pp. 3-4.

33 Mr Dave Sweeney, Nuclear Free Campaigner, Australian Conservation Foundation, *Committee Hansard*, 25 June 2012, p. 10.

34 Australian Nuclear Science and Technology Organisation, *Submission 6*, pp. 6-8.

- 2.28 Although the RCA's role in the non-proliferation architecture is limited, it does perform a role in promoting the NPT's objectives. Furthermore, as part of a broader regulatory architecture for nuclear activities, it also plays a role in implementing improved standards following events such as those that occurred at Fukushima.
- 2.29 Notwithstanding the concerns of the ACF, the Committee is satisfied that the agreement should be renewed. However, on the next iteration of the agreement some of the non-proliferation and safety issues canvassed by the ACF could be reviewed by the agreement's parties.

Recommendation 1

The Committee supports the *Fifth Agreement to Extend the 1987 Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology done at Bali on 15 April 2011* and recommends that binding treaty action be taken.