

Exchange of Notes constituting an Agreement to amend the Agreement between the Government of the United States of America and the Government of Australia concerning Space Vehicle Tracking and Communication Facilities of 29 May 1980, as amended (Canberra, TBA 2011)

Introduction

- 7.1 On 20 September 2011, the *Exchange of Notes constituting an Agreement to amend the Agreement between the Government of the United States of America and the Government of Australia concerning Space Vehicle Tracking and Communication Facilities of 29 May 1980, as amended* (Canberra, TBA 2011) was tabled in the Commonwealth Parliament.

Background

- 7.2 The United States (US) and Australia celebrated the 50th anniversary of space vehicle tracking treaty-level cooperation in 2010. Operational-level cooperation on space-related activities began in 1957 with the establishment of facilities at Woomera in South Australia, to track US satellites. This was broadened to include additional scientific facilities set

up by the US National Aeronautics and Space Administration (NASA) in 1960. Since then, the space vehicle tracking and communication relationship between Australia and the US has been the subject of a succession of agreements and exchanges of notes between the two countries.¹

NASA's Deep Space Network

- 7.3 NASA's scientific investigations of the solar system are accomplished primarily through the use of robotic spacecraft. The Deep Space Network (DSN) provides a two-way communications link for the guidance and control of spacecraft and the relay of data and images.
- 7.4 The DSN consists of three complexes strategically located around the world: at Goldstone in California, near Madrid in Spain, and at the Canberra Deep Space Communication Centre (CDSCC) located at Tidbinbilla in the Australian Capital Territory.² NASA also maintains Tracking and Data Relay Satellite Ranging System Facilities at Alice Springs in the Northern Territory and at Dongara in Western Australia.³
- 7.5 The CDSCC tracks many robotic spacecraft, including:
- Voyagers 1 and 2;
 - the twin Mars Rovers;
 - the Cassini probe to Saturn; and
 - the Hubble Space Telescope.⁴
- 7.6 All activities conducted in Australia under the Agreement are managed to ensure that they are consistent with Australian interests. CSIRO manages the facilities on behalf of NASA, with operational and maintenance activities contracted out to Australian industry.⁵

1 National Interest Analysis [2011] ATNIA 25 with attachment on consultation *Exchange of Notes constituting an Agreement to amend the Agreement between the Government of the United States of America and the Government of Australia concerning Space Vehicle Tracking and Communication Facilities* of 29 May 1980, as amended (Canberra, TBA 2011), [2011] ATNIF 17, (Hereafter referred to as 'NIA'), paras 3-5.

2 See the Canberra Deep Space Communication Centre website at <<http://www.cdsc.nasa.gov/>> accessed 14 October 2011.

3 NIA, para. 9.

4 See 'Tracking Schedule', <<http://www.cdsc.nasa.gov/Pages/trackingtoday.html>>, accessed 14 October 2011.

5 NIA, para. 10.

7.7 Approximately 120 engineers, technicians, operators and support staff are presently employed at the CDSCC. NASA funds the total cost of the facilities, including the salaries and administrative costs of Australian Government personnel involved in the management of activities under the Agreement.⁶

Overview of the Agreement

7.8 Australia and the US first concluded an *Exchange of Notes constituting an Agreement relating to Space Vehicle Tracking and Communications* in 1960. This agreement was superseded by a similar agreement concluded in 1970 which was in turn replaced in 1980 by the current Agreement. Since 1980, the Agreement has been reviewed and amended every 10 years.⁷

7.9 Thus, the proposed treaty action is to extend, through an exchange of notes, the 1980 Agreement – the *Exchange of Notes constituting an Agreement between the Government of Australia and the Government of the United States of America concerning Space Vehicle Tracking and Communication Facilities* – which is due to expire on 26 February 2012.

7.10 The proposed extension will enter into force from that date, once Australia has advised the US that all domestic requirements for entry into force have been met.⁸ The proposed extension provides for the continuation of the Agreement until 26 February 2014, or until a further agreement between the Australian and US Governments enters into force, whichever is earlier.⁹

7.11 The Agreement consists of a base document and multiple subsequent Exchanges of Notes. In 2009, it was agreed by both Parties to conclude a new agreement to consolidate the provisions contained in previous Exchanges of Notes into one document. Both Parties also agreed to extend the Agreement for two years until 2012 to allow the new agreement to be developed.¹⁰¹¹

6 NIA, para. 11.

7 NIA, para. 3.

8 NIA, paras. 1-2.

9 NIA, paras. 9-12.

10 NIA, para. 7.

11 The previous iteration of this Exchange of Notes was reviewed by the Committee in 2010 and was covered in two reports: *Report 109: Review into treaty tabled on 2 February 2010*, <<http://www.aph.gov.au/house/committee/jsct/2february2010/report.htm>> accessed 14 October 2011 and in Chapter 5 of *Report 110: Review into treaties tabled on 18, 25 (2) and 26*

- 7.12 Unfortunately, due to extended consultation processes on the draft of the new agreement in the US, the new agreement will not be finalised before the 26 February 2012. Hence, both Parties have agreed to extend the Agreement for a further two year period until the new agreement can be brought into force.¹²
- 7.13 This exchange of notes has been an Australian initiative as the US agencies are as yet unable to provide a finalised amended treaty.¹³

National interest summary, and the reasons for Australia to take the proposed treaty action

- 7.14 The proposed extension confirms Australia's long-standing relationship with NASA and provides for continuing cooperation in space vehicle tracking and communication support.¹⁴
- 7.15 NASA has spent in excess of A\$740 million on space-related activities in Australia since 1960. Australia has derived significant scientific and economic benefits from activities conducted under the Agreement, especially through collaboration between Australian and NASA scientists.
- 7.16 In addition, the arrangement has provided direct employment for several hundred Australian engineering, scientific, technical and administrative staff, and indirectly provided a pool of trained personnel for high-end engineering, scientific and technical roles. Outreach activities at the CDSCC attract approximately seventy thousand visitors per year.¹⁵
- 7.17 While a large part of the A\$740 million spend was in the 1960s and early 1970s there are currently two new antennas being built at CDSCC and there is again significant investment – most likely for another five years –

November 2009 and 2 (2) February 2010

<<http://www.aph.gov.au/house/committee/jsct/25november2009/report1.htm>> accessed 14 October 2011.

12 NIA, para 8.

13 Mr Mike Lawson, Division Head, Manufacturing Division, Department of Innovation, Science and Research, *Committee Hansard*, 31 October 2011, p. 28.

14 NIA, paras 9-12.

15 NIA, para 4.

while the new antennas are under construction.¹⁶ A third antenna is also under active consideration.¹⁷

7.18 In terms of training, Australian personnel receive overseas training on top of their base training qualification that is conducted here in Australia:

Their base training qualification is done in Australia; they get a qualification as engineers or senior technical trades people across a wide range of skills. Then on a fairly regular basis exchanges and trips over to the US or to our other station in Spain occur. It has been relatively restricted over the last year or two simply because of budget pressures on NASA to pay for travel, but our engineering and technical staff work at the other stations on a regular basis and JPL [Jet Propulsion Laboratory] and NASA experts come over on a regular basis to conduct in-house training. The initial training is done within Australia and through the Australian system, but the follow-on training and the experiential training that comes and moves on from there is generally conducted either here under tutelage from NASA/JPL experts – plus our own, obviously – or over in the US and Spain.¹⁸

7.19 The proposed extension will ensure the continuation of benefits flowing from the establishment, operation and maintenance of NASA facilities in Australia under the Agreement.¹⁹

Further benefits

7.20 Australia also receives all the data from NASA's civilian space program:

NASA's policy with all of the data from its civilian space program, which is what we are engaged in, is that it all be made available to the public, pretty much, and it becomes available very quickly. In fact, you can often get the results and signals back – from mission supports that we are undertaking – almost as quickly by jumping on the internet and going to the NASA website as we get the images and signals at Tidbinbilla. So access to that data is readily

16 Mr Desmond McNicholas, Acting Director, Canberra Deep Space Communication Complex and NASA Operations, CSIRO Astronomy and Space Science, *Committee Hansard*, 31 October 2011, p. 29.

17 NIA, para. 5.

18 Mr Desmond McNicholas, Acting Director, Canberra Deep Space Communication Complex and NASA Operations, CSIRO Astronomy and Space Science, *Committee Hansard*, 31 October 2011, p. 32.

19 NIA, para. 5.

available. And, of course, at a technical level, we have very good exchange arrangements in place for data from the point of view of our engineering and technical staff. So, I think as a general statement, yes, we do have access to all of that data. In addition, the antennas are all capable of doing radio astronomy work as well, and radio astronomers in Australia get very low cost access directly to the use of the antennas and the data when they are not being used to track spacecraft...²⁰ [T]he Bureau of Meteorology and Geoscience Australia are users of the data that is made available.²¹

Obligations

- 7.21 The proposed extension continues existing arrangements under the current Agreement for exchange of scientific data, facilitation of the entry and exit of US personnel through immigration barriers, and duty-free import of personal and household effects of US personnel.
- 7.22 Taxation of US personnel continues to be governed by the *Convention between the Government of Australia and the Government of the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income*.²²
- 7.23 The Agreement explicitly provides for further (non-treaty) arrangements between NASA and the CSIRO, as the cooperating agencies, in respect of the establishment and operation of facilities. These arrangements encompass financing, constructing and installing new facilities, and disposing of or removing infrastructure and remediation work (where a facility is surplus to requirements).

Implementation

- 7.24 No changes are required to existing legislation to implement the proposed extension. Exemptions from duties and taxes as set out in Article 9 of the

20 Mr Desmond McNicholas, Acting Director, Canberra Deep Space Communication Complex and NASA Operations, CSIRO Astronomy and Space Science, *Committee Hansard*, 31 October 2011, p. 30.

21 Mr Mike Lawson, Division Head, Manufacturing Division, Department of Innovation, Science and Research, *Committee Hansard*, 31 October 2011, p. 30.

22 NIA, para. 15.

Agreement are covered by existing legislation, as described in paragraph 19 below. No further implementation measures are required.²³

Costs

- 7.25 No additional costs are anticipated as a consequence of this treaty action. NASA funds the total cost of the establishment, operation and maintenance of space vehicle tracking and communication facilities in Australia through its contractual arrangements with CSIRO.
- 7.26 NASA is also responsible for remediation work in relation to its facilities. Any additional activities or the set-up of new infrastructure under the Agreement as further amended would not impose any costs on the Commonwealth or the respective State and Territory Governments.
- 7.27 However, under the Agreement, the Australian Government is obliged to grant NASA an exemption from or refund of duties, taxes and like charges, including GST, on imports to Australia of goods for use in connection with the Agreement.²⁴
- 7.28 The Agreement also requires Australia to give a refund of Commonwealth indirect taxes (including GST) for goods and services purchased in Australia. The proposed extension does not change this obligation.²⁵

Conclusion

- 7.29 The exploration of space, while led by larger countries such as the United States, is an international endeavour. On occasion, it can unite all of humanity in common purpose and achievement – the first moon landing by Apollo 11 in July 1969 is the most obvious example. The scientific information gathered is also of benefit to all people.
- 7.30 This agreement is a tangible expression of international cooperation in this field, and Australia also gets practical benefits from this arrangement including overseas training for our personnel and investment in facilities here in Australia.

23 NIA, para. 17.

24 NIA, para. 16.

25 NIA, paras .18-20.

- 7.31 This exchange of notes will continue a productive and successful relationship that has lasted over 50 years and the Committee recommends that binding treaty action be taken.

Recommendation 8

The Committee supports the *Exchange of Notes constituting an Agreement to amend the Agreement between the Government of the United States of America and the Government of Australia concerning Space Vehicle Tracking and Communication Facilities of 29 May 1980, as amended (Canberra, TBA 2011)* and recommends that binding treaty action be taken.

Senator Simon Birmingham

Acting Chair