

Convention on the Safety of Spent Fuel and Radioactive Waste Management

Background¹

- 4.1 The *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, done at Vienna on 5 September 1997* (the Joint Convention) provides for an internationally recognised best practice approach for the safe management of spent fuel and radioactive waste. It covers the treatment, transboundary movement, storage and disposal of spent fuel and radioactive waste.
- 4.2 The Joint Convention is incentive based and provides principles for the management of radioactive wastes through exchanges of information between contracting parties rather than providing for specific minimum technical requirements.
- 4.3 Australia signed the Joint Convention on 13 November 1998. The Joint Convention entered into force generally on 18 June 2001. As of 25 October 2002 there were 29 contracting parties and 42 signatories to the Joint Convention.

¹ Unless otherwise specified the material in this and the following section was drawn from the National Interest Analysis (NIA) and Regulation Impact Statement (RIS) for the *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, done at Vienna on 5 September 1997*.

- 4.4 The Joint Convention would enter into force for Australia on the ninetieth day after the date of the deposit of Australia's instrument of ratification with the Director-General of the International Atomic Energy Agency.

Proposed treaty actions

- 4.5 The Joint Convention requires that each contracting party shall establish and maintain a legislative and regulatory framework to govern the safety of spent fuel and radioactive waste management.
- 4.6 Contracting parties are required to provide a national report at periodic review meetings. The national report should address measures taken to implement Joint Convention obligations as well as:
- spent fuel management policy and practice;
 - radioactive waste management policy and practice;
 - criteria used to define and categorise radioactive waste;
 - a list of spent fuel and radioactive waste management facilities;
 - an inventory of spent fuel and radioactive waste; and
 - a list of nuclear facilities in the process of being decommissioned and the status of decommissioning activities at those facilities.
- 4.7 The Commonwealth's obligations under the Joint Convention are covered by the *Australian Radiation Protection and Nuclear Safety Act 1998 (Cwth)* and no further legislative measures are required.
- 4.8 The Joint Convention will require implementation by the States and Territories in areas under their jurisdiction. In 1998 the Prime Minister wrote to all State Premiers and Territory Chief Ministers requesting their support for Australia's signing of the Joint Convention.
- 4.9 On 22 February 1999 the Minister for Industry, Science and Resources wrote to the relevant Health and Environment State and Territory Ministers advising them that Australia had signed the Joint Convention.
- 4.10 The NIA stated that New South Wales was the only state where further legislative steps would need to be taken in order to meet the requirements of the Joint Convention. The Committee was subsequently advised by the Department of Education, Science and

Training that, after further detailed discussion between the NSW Environment Protection Authority and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), the existing legislative framework for managing radioactive waste in that state is adequate to ensure compliance with the Convention.

4.11 All other States and Territories:

have formally advised the Commonwealth that the legislation in their respective jurisdictions would allow implementation of the Joint Convention.²

Evidence presented and issues arising

Nuclear terrorism

4.12 The Committee noted that the NIA makes mention of the threat of nuclear terrorism in light of the events of 11 September 2001. It sought clarification on how the Joint Convention might allay the threat of nuclear terrorism.

4.13 The Australian Nuclear Science and Technology Organisation (ANSTO) advised the Committee that implementation of measures provided for in the Joint Convention would make it more difficult for terrorists to procure radiological material from responsible agencies.³

4.14 As an exporter of uranium, the Treaty will:

Allow us to view the regulatory frameworks and the practices of those countries to whom Australia sells uranium to satisfy ourselves that it is dealt with in a proper manner.⁴

Implementation of international best practice

4.15 The Committee expressed concern at the possibility that international best practice in the management of nuclear waste was not currently observed in all Australian jurisdictions. It sought to establish in which, if any, Australian jurisdictions management of spent fuel and radioactive waste falls short of international best practice and what, if

2 Stephen Irwin, *Transcript of Evidence*, 9 December 2002, p. 34.

3 Steven McIntosh, *Transcript of Evidence*, 9 December 2002, p. 35.

4 Donald Macnab, *Transcript of Evidence*, 9 December 2002, p. 41.

any, agency was responsible for ensuring adherence to the highest safety management standards.

- 4.16 ANSTO affirmed its knowledge of the location of all its nuclear materials (which constitute more than 90 percent of all nuclear waste in Australia⁵) but could not speak for other agencies.⁶ Mr Steven McIntosh of ANSTO indicated that:

As to the small amount [of radioactive waste] which falls under the jurisdiction of the States and Territories, what we are saying is that this process will enable the Commonwealth to get a better handle on how that is being managed.⁷

- 4.17 ARPANSA confirmed the absence of an enforceable uniform standard across Australian jurisdictions for the safe management of spent fuel and radioactive waste. ARPANSA:

looked after the Commonwealth jurisdiction and the States look after their own jurisdictions.⁸

- 4.18 The Committee inquired how the Commonwealth might achieve a uniform standard that meets international best practice in nuclear waste management across Australian jurisdictions.

- 4.19 ANSTO advised the Committee that the Joint Convention would not be used to impose standards upon the States and Territories. The Joint Convention would support current moves to set in place a process of internal peer review among Australian jurisdictions in addition to the international peer review that occurs through the submission of a national report to review meetings of the contracting parties.⁹

- 4.20 The Committee was advised that the Radiation Health Committee (RHC), which consists of a senior radiation protection regulator from each jurisdiction, the Chief Executive Officer of ARPANSA, a public representative and two others (currently a nominee of the Royal Australian and New Zealand College of Radiologists, and a non-ionizing radiation expert), was responsible for achieving uniformity between the States and Territories and the Commonwealth.¹⁰ The Radiation Health Committee:

5 Regulation Impact Statement, p. 3.

6 Steven McIntosh, *Transcript of Evidence*, 9 December 2002, p. 35.

7 Steven McIntosh, *Transcript of Evidence*, 9 December 2002, p. 37.

8 Donald Macnab, *Transcript of Evidence*, 9 December 2002, p. 36.

9 Donald Macnab, *Transcript of Evidence*, 9 December 2002, p. 37.

10 ARPANSA, *Submission No. 8*, p. 4.

does not hold sway over a jurisdiction; its function is to prepare codes of practice and standards jointly across the jurisdictions that are picked up separately by the jurisdictions on a voluntary basis.¹¹

4.21 Dr John Loy, the Chief Executive Officer of ARPANSA, informed the Committee in correspondence subsequent to the public hearing that the Commonwealth manages radioactive waste and spent fuel through the issue of licences that:

require the licence holder to

- develop, maintain, and implement arrangements for their radioactive waste management in a form acceptable to the CEO of ARPANSA;
- make arrangements for the control and monitoring of all radioactive discharges to the environment; and
- make arrangements for consultation with local government and other relevant statutory authorities on any radioactive waste issues.¹²

4.22 Dr Loy confirmed that Australian States and Territories adopt codes developed by the RHC for the safe management of radioactive waste on a voluntary basis and use these codes as they see fit.¹³ He advised that:

Initiatives towards uniformity of regulatory frameworks across Australia, which are currently progressing, will ensure that codes are adopted within the regulatory framework in each jurisdiction. In 1999 the Australian Health Minister's Conference agreed to the proposal for a *National Directory for Radiation Protection*, which will establish a uniform framework for radiation protection, including provision for the national adoption of codes and standards.¹⁴

Conclusions and recommendation

4.23 The Committee accepts the benefits of the framework provided under the terms of the Joint Convention for the development and

11 Donald Macnab, *Transcript of Evidence*, 9 December 2002, p. 40.

12 ARPANSA, *Submission No. 8*, p. 2.

13 ARPANSA, *Submission No. 8*, p. 5.

14 ARPANSA, *Submission No. 8*, p. 5.

implementation of international best practice in relation to the safe management of spent fuel and radioactive waste.

- 4.24 The Committee acknowledges that ratification of the Joint Convention will support moves to develop a code of uniform national standards for the safe management of radioactive waste across all Australian jurisdictions.

Recommendation 3

- 4.25 **The Committee supports the *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, done at Vienna on 5 September 1997* and recommends that binding treaty action be taken.**

Julie Bishop MP
Committee Chair

March 2003