

**JOINT CONVENTION ON THE SAFETY OF SPENT FUEL
MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE
MANAGEMENT, DONE AT VIENNA ON 5 SEPTEMBER 1997**

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Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, done at Vienna on 5 September 1997

Date of Tabling of Proposed Treaty Action

1. 3 December 2002.

Nature and Timing of Proposed Treaty Action

2. It is proposed that Australia ratify the Joint Convention as soon as all jurisdictions comply with its requirements. Australia signed the Joint Convention, subject to ratification, on 13 November 1998. The Joint Convention entered into force generally on 18 June 2001 and would enter into force for Australia on the ninetieth day after the date of deposit of Australia's instrument of ratification with the Director General of the International Atomic Energy Agency (IAEA).

Overview and National Interest Summary

3. The Joint Convention was adopted by the Member States of the IAEA to achieve and maintain the highest possible level of safety for the management of spent nuclear fuel and radioactive waste. Australia played a key role in drafting the Joint Convention. As of 14 October 2002, there were 29 Contracting Parties to the Joint Convention.

4. It is in Australia's political, economic, social, cultural and environmental interests to adopt international 'best practice' with regard to the management of spent nuclear fuel and radioactive waste that is codified by the Joint Convention. This is particularly the case given the potential for nuclear terrorism in the post-September 11 environment.

5. The objectives of the Joint Convention are to:

- achieve and maintain a high level of safety worldwide in spent fuel and radioactive waste management, through the enhancement of national measures and international cooperation, including where appropriate, safety-related technical cooperation;
- ensure that during all stages of spent fuel and radioactive waste management there are effective defences against potential hazards so that individuals, society and the environment are protected from the harmful effects of ionising radiation now and in the future, in such a way that the needs and aspirations of the present generation are met without compromising the ability of future generations to meet their needs and aspirations;
- prevent accidents with radiological consequences and to mitigate their consequences should they occur during any stage of spent fuel or radioactive waste management.

Reasons for Australia to Take the Proposed Treaty Action

6. The Joint Convention is an internationally recognised ‘best practice’ approach to managing spent fuel and radioactive waste. Australia is well regarded by the international community in terms of our approach to nuclear issues, and ratification of the Joint Convention would further demonstrate that Australia follows international standards with respect to the management of radioactive waste and spent fuel. Ratification will assist all Australian jurisdictions by providing an incentive to pursue the highest international standards in the systematic and secure management of spent fuel and radioactive waste.

7. Failure to ratify the Joint Convention may call into question Australia’s commitment to the highest level of safety in the management of spent fuel and radioactive waste. It may also indicate that Australia is not prepared to take the required steps to ensure that there are effective defences against potential hazards so that individuals, society and the environment are protected from the harmful effects of radiation.

8. Widespread adherence to the Joint Convention has attained even greater importance since the events of 11 September 2001, and the consequent urgent need to ensure that governments have in place the necessary physical and regulatory infrastructure to prevent terrorists gaining access to radioactive materials.

9. The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), the Commonwealth nuclear safety regulator, supports ratification of the Joint Convention.

Obligations

10. Chapter 2 of the Joint Convention details the obligations for each Contracting Party relating to the *safety of spent fuel management*. Each Contracting Party is obliged to:

- take the appropriate steps to ensure that at all stages of spent fuel management, individuals, society and the environment are adequately protected against radiological hazards (Article 4);
- review the safety of any spent fuel management facility existing when the Joint Convention enters into force for that Party and upgrade its safety as necessary and reasonably practicable (Article 5);
- establish and implement procedures for proposed spent fuel management facilities that evaluate the safety of the facility; make information on its safety publicly available; and consult with and provide data to Contracting Parties likely to be affected by the facility (Article 6);
- design and construct spent fuel management facilities which incorporate suitable measures to limit possible radiological impact; take into account technical provisions for decommissioning; and incorporate proven technologies (Article 7);
- carry out lifetime safety and environmental assessments appropriate to the hazard presented by the facility before its construction, and prepare updated assessments as necessary before operations begin (Article 8);

- ensure that: the licence to operate a spent fuel management facility is based upon appropriate assessments and is conditional on a demonstration that the facility is consistent with design and safety requirements; appropriate operational limits are defined and revised as necessary; operation, maintenance, and monitoring are conducted in accordance with established procedures; engineering and technical support in all safety-related fields are available throughout the facility's operating lifetime; incidents significant to safety are reported in a timely manner by the licence holder to the regulatory body; programs to collect and analyse relevant operating experience are established and the results acted upon where appropriate; and decommissioning plans for the facility are prepared and updated as necessary, and reviewed by the regulatory body (Article 9); and
- dispose of spent fuel in accordance with Chapter 3 of the Joint Convention (Article 10).

11. Chapter 3 details the obligations for each Contracting Party relating to the *safety of radioactive waste management*. It does so by taking the obligations set out in Articles 4 to 9 and applying them to radioactive waste management (Articles 11 to 16 respectively), with the following additional elements specific to radioactive waste management:

- Article 14 includes, in addition to the elements in Article 7, the necessity for technical provisions at the design stage for the closure of a disposal facility;
- Article 16 includes, in addition to the elements in Article 9, the necessity for: applying the results of monitoring a disposal facility to safety assessments, including after closure; procedures for characterisation and segregation of radioactive waste; and plans for the closure of a disposal facility to be prepared and updated as necessary and reviewed by the regulatory body.

12. Chapter 3 includes an additional provision obliging Contracting Parties to ensure that, after closure of a disposal facility, records required by the regulatory body are preserved, active or passive institutional controls are carried out if required, and intervention measures to deal with an unplanned release of radioactive materials during any period of active institutional control are implemented if necessary (Article 17).

13. Chapter 4 details the obligations for each Contracting Party relating to general safety provisions. Each Contracting Party is obliged to:

- take the legislative, regulatory and other measures necessary to implement its obligations under the Joint Convention (Article 18);
- establish and maintain a legislative and regulatory framework to govern the safety of spent fuel and radioactive waste management (Article 19);
- establish or designate an appropriately resourced regulatory body entrusted with the implementation of that legislative and regulatory framework, and ensure the effective independence of its regulatory functions (Article 20);
- ensure that prime responsibility for the safety of spent fuel and radioactive waste management rests with the holder of the relevant licence and ensure that each licence holder meets its responsibility; and acknowledge that if there is no such licence holder,

the responsibility rests with the Contracting Party which has jurisdiction over the spent fuel or radioactive waste (Article 21);

- ensure that spent fuel and radioactive waste management facilities have their safety supported by the appropriate resources, including after closure (Article 22);
- ensure that appropriate quality assurance programs are established and implemented (Article 23);
- ensure that during the operating lifetime of a spent fuel or radioactive waste management facility, radiation exposure of people shall be kept as low as reasonably achievable and in normal situations do not exceed national dose limitations which have regard to internationally endorsed standards; that measures are taken to prevent unplanned and uncontrolled releases of radioactive material into the environment; and that during the operating lifetime of a regulated nuclear facility appropriate measures are implemented to control an unplanned or uncontrolled release of radioactive materials and mitigate its effects (Article 24);
- ensure that appropriate emergency plans are in place and appropriately tested (Article 25); and
- ensure the safety of decommissioning of a nuclear facility (Article 26).

14. Chapter 5 sets out obligations on Contracting Parties to ensure that transboundary movements are undertaken in a manner consistent with the provisions of the Joint Convention and relevant binding international instruments (Article 27); and that disused sealed sources are safely handled and, if the Contracting Party concerned has accepted under its national law that they be returned to a qualified manufacturer, allowed to re-enter its territory (Article 28).

15. Chapter 6, concerning Meetings of the Contracting Parties, provides for each Contracting Party to submit a national report for consideration at review meetings to be held at least once every three years (Article 30 and 32).

16. Chapter 7 contains provisions on resolution of disagreements between Contracting Parties (Article 38), entry into force of the Joint Convention (Article 40), and amendments to the Joint Convention (Article 41).

Implementation

17. The Commonwealth's obligations under the Joint Convention are covered by the *Australian Radiation Protection and Nuclear Safety Act 1998 (Cwth)*. No new Commonwealth legislation is required to give effect to the obligations contained in the Joint Convention.

18. The Convention requires implementation by States and Territories in areas under their jurisdiction. New South Wales is the only State where further legislative steps need to be taken in order fully to meet the requirements of the Joint Convention. The New South Wales Environmental Protection Authority has indicated that the *Radiation Control Amendment Act 2002 (NSW)*, which provides the framework which would allow compliance with the Joint Convention, has been passed by the NSW Parliament, but not yet proclaimed. Under the Act, regulations will be required to enforce the provisions in the Act which regulate the use of

radioactive sources. The outstanding regulation is expected to be passed by July 2003. This regulation must be passed for New South Wales to comply with the Joint Convention.

Costs

19. It is not anticipated that there will be significant ongoing costs associated with Australia's ratification of the Joint Convention.

20. Every three years, Australia will be required to submit a national report addressing the measures taken to implement its obligations under the Joint Convention. It is expected that ARPANSA will prepare this report, given its leading role representing Australia's interests in the activities of relevant national and international organisations, and its role supporting radiation protection and nuclear safety throughout Australia. Production of the report is expected to cost approximately A\$20,000, which will be met from ARPANSA's existing budget.

21. A review meeting will be held at intervals not exceeding three years at which the national reports will be discussed. Australia will be represented at such meetings by one delegate and by such alternates, experts and advisers as it deems necessary. It is envisaged that officials from ARPANSA, the Australia Nuclear Science and Technology Organisation (ANSTO), and the Department of Education, Science and Training (DEST) would attend review meetings on Australia's behalf. The anticipated cost for these officials to attend such meetings would be approximately A\$40,000, which those agencies will meet from their existing budgets.

22. Australia's membership of the Joint Convention can therefore be anticipated to result in direct costs of approximately A\$60,000 every three years, all met from existing budgets.

Consultation

23. In 1998, the Prime Minister, the Hon John Howard MP, wrote to all State Premiers and Territory Chief Ministers requesting their support for Australia's signing of the Joint Convention. On 22 February 1999, the then Minister for Industry, Science and Resources, Senator Minchin, wrote to relevant Health and Environment State and Territory Ministers advising them that Australia had signed the Joint Convention, subject to ratification, and indicating that discussions concerning ratification should occur at officials level through the Commonwealth/State Consultative Committee on Radioactive Waste Management (the Committee).

24. States and Territories were supportive of the proposal, but asked whether Commonwealth legislation would override State legislation with the implementation of the Joint Convention, and whether naturally-occurring or mining radioactive materials (NORM) waste would be included under the Joint Convention. The States and Territories were informed via the Committee that:

- Australia's ratification of the Joint Convention will not involve Commonwealth legislation overriding State legislation; and
- The Joint Convention does not apply to NORM waste, unless the waste constitutes a disused sealed source, or is declared as radioactive waste for the purposes of the Joint Convention.

25. On 5 January 2000, members of the Committee were formally requested by the then Department of Industry, Science and Resources to seek legal advice as to whether existing legislation/regulations in their respective jurisdictions would allow implementation of the Joint Convention. On 31 August 2001, Senator Minchin wrote to the Premiers of New South Wales and South Australia, and the Health Ministers in Victoria and the Northern Territory repeating this request, as those States and Territories had not responded to the initial letter. All States and Territories, with the exception of New South Wales, have confirmed that their legislation complies with Australia's potential obligations under the Joint Convention. The Minister for Science, the Hon Peter McGauran MP, has written to the Premier of New South Wales highlighting the significance of the Joint Convention to Australian interests, and requesting that New South Wales formally notify the Commonwealth that it is fully compliant with the Joint Convention when it has passed the required regulation, currently expected to be in July 2003. The Minister for Science has also written to the other States and Territories informing them that he intends to proceed with the domestic treaty-tabling process and that Australia will ratify the Joint Convention when all jurisdictions comply with the relevant legislative requirements.

Regulation Impact Statement

26. A Regulation Impact Statement is attached.

Future Treaty Action

27. Any Contracting Party may propose an amendment to the Joint Convention. Proposed amendments are considered at a review meeting or at an extraordinary meeting. Amendments to the Joint Convention are subject to ratification, acceptance, approval, or confirmation by the Contracting Parties and enter into force for those Contracting Parties which have ratified, accepted, approved, or confirmed them on the ninetieth day after the receipt by the Director General of the IAEA of the relevant instruments of at least two-thirds of the Contracting Parties. For a Contracting Party which subsequently ratifies, accepts, approves, or confirms the said amendments, the amendments enters into force on the ninetieth day after that Contracting Party has deposited its relevant instrument.

28. The Convention is silent on the question of future legally-binding instruments, reservations and declarations. This means such instruments, reservations and declarations may be made in accordance with the Vienna Convention on the Law of Treaties. One State, Denmark, has made a declaration upon signing and ratifying the Joint Convention relative to the application of the Joint Convention to parts of its territory.

Withdrawal or Denunciation

29. Under Article 42, any Contracting Party may denounce the Joint Convention by written notification to the IAEA Director General. Denunciation takes effect one year following the date of the receipt of such notification, or on such later date as may be specified in the notification. Denunciation by Australia would be subject to Australia's domestic treaty-making process.

Contact Details

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