

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

An overview



What is the Joint Convention?

The Joint Convention is the only international legally binding instrument to address, on a global scale, the safety of spent fuel and radioactive waste management.

The Joint Convention is relevant not only to those States with major nuclear power programmes, but also to those using radiation sources in medicine, industry, agriculture and research.



Safety of spent fuel and radioactive waste management

Nearly all countries generate radioactive waste, either from the production of nuclear electricity or from the use of radioisotopes in medical diagnosis and treatment, in industrial or agricultural applications, or in research.

Countries operating nuclear reactors generate spent fuel. Some countries consider it a resource; others consider it as radioactive waste. In either case, its safe management should be ensured.

The Joint Convention contributes significantly to the safety of spent fuel and radioactive waste management. The Contracting Parties demonstrate commitment to apply stringent safety measures, to prepare a National Report on the applied measures and to submit it for review by all other Contracting Parties, as well as to actively participate in the Review Meetings of the Contracting Parties.





How will the Joint Convention benefit your country?

- By fostering an international approach to spent fuel and radioactive waste management, and sharing expertise in these areas.
- By assuring the public that national arrangements for spent fuel and radioactive waste management conform to international standards.
- By highlighting the opportunities to receive assistance, in the case of a country having limited resources to improve its infrastructure.



How does it work?

The Joint Convention is an 'incentive' convention which seeks to promote a high level of safety for the management of spent fuel and radioactive waste through a peer review process every three years.



The peer review process

What does it mean?

- Contracting Parties submit to all other Contracting Parties National Reports on how they meet their obligations under the Convention.
- Contracting Parties seek clarification on the National Reports of other Contracting Parties through a system of written questions and answers.
- Contracting Parties present and discuss their National Reports during the Review Meeting in Country Group sessions.

“Review Meetings provide the opportunity to discuss continuous improvement of the peer review process and to foster the implementation of the safety measures of the Joint Convention. I see active participation in the review meetings as essential to us all if we are to learn from each other's successes and failures.”

David Huizenga, USA, President of the 5th Review Meeting



Information exchange fostered by Review Meetings can be especially beneficial for countries that have less expertise in ensuring safety of spent fuel and radioactive waste management.



Examples of good practices

Countries with major nuclear programmes also benefit from peer reviews, which provide independent and objective assessments of national safety practices.



Review Meeting outcomes

The Review Meetings provide the opportunity to compare and discuss challenges that arise in implementing the obligations, which are set out in the Joint Convention.

Constructive exchanges and knowledge sharing take place in an open and frank manner.

Each Review Meeting contributes further to achieving and maintaining a high level of safety, in spent fuel and radioactive waste management.

The number of Contracting Parties has been increasing over the years. Notwithstanding, Contracting Parties strongly believe that efforts should be pursued to accelerate this trend in the future, for the purpose of strengthening the safety of spent fuel and radioactive waste management worldwide.



Have the Joint Convention and its peer review process improved safety?

Yes.

Main reasons:

- The preparation of the National Report contributes to the self-assessment of all involved parties.
- The Contracting Parties take part in the review process, ask and answer questions, and make suggestions for improvements.
- The peer review process demonstrates a country's commitment to waste safety and helps to gain public confidence.

The Review Meetings contribute to the sharing of regulatory and safety practices among Contracting Parties, leading to increased awareness of spent fuel and radioactive waste management.

Status of Contracting Parties

As of May 2023, there were 89 Contracting Parties. Two Signatory States have not yet ratified the Convention.

The current status can be found at:

www.iaea.org/sites/default/files/22/06/jointconv_status.pdf



The Joint Convention
in more detail

Background and objectives

Background

The Convention was adopted on 5 September 1997 at a diplomatic conference convened by the IAEA in Vienna.

The Convention was opened for signature on 29 September 1997 and entered into force on 18 June 2001.

Objectives (Article 1)

- Achieve and maintain a high level of safety worldwide in spent fuel and radioactive waste management.
- Ensure that there are effective defences against potential hazards in the course of such activities.
- Prevent accidents with radiological consequences and mitigate their consequences should they occur during any stage of spent fuel or radioactive waste management.

Scope of application (Article 3)

- Spent fuel arising from the operation of civilian nuclear reactors
- Radioactive waste arising from civilian applications
- Uranium mining and milling wastes
- Discharges from regulated activities
- Specific provisions on disused sealed sources

Structure of the Convention

The Joint Convention combines two distinct subject matters: (i) the safety of spent fuel management, and (ii) the safety of radioactive waste management, in a joint structure.

The structure of the Convention is as follows:

Objectives, Definitions and Scope of Application (Articles 1 to 3)
SPECIFIC SAFETY Provisions (Articles 4 to 17): <ul style="list-style-type: none">• Articles 4 to 10: Safety of Spent Fuel Management• Articles 11 to 17: Safety of Radioactive Waste Management
GENERAL SAFETY Provisions (Articles 18 to 26)
MISCELLANEOUS Provisions (Articles 27 and 28)
Peer Review Process (Articles 29 to 37)
Final Clauses and other Provisions (Articles 38 to 44)

Main provisions of the Convention

Specific safety provisions

The Convention contains separate articles on spent fuel and radioactive waste management (Articles 4 to 17) in a parallel structure on:

- General safety requirements
- Existing facilities
- Siting of proposed facilities
- Design and construction of facilities
- Assessment of safety of facilities
- Operation of facilities
- Disposal of spent fuel / Institutional measures after closure

General safety provisions

The general safety provisions apply to both spent fuel and radioactive waste management (Articles 18 to 26) and contain articles on:

- Legislative and regulatory framework
- Establishment of a regulatory body
- Responsibility of the licence holder
- Human and financial resources
- Quality assurance
- Operational radiation protection
- Emergency preparedness
- Decommissioning

Miscellaneous provisions

- Transboundary movement (Article 27)
- Disused sealed sources (Article 28)

Peer review process

- Review Meetings (Article 30)
- Extraordinary Meetings (Article 31)
- Reporting (Article 32)
- Attendance (Article 33)
- Summary Reports (Article 34)
- Languages (Article 35)
- Confidentiality (Article 36)
- Secretariat (Article 37)

The procedures governing the conduct of the Review Meetings of the Contracting Parties, the reporting obligations of the Contracting Parties, as well as the duties of the Secretariat of the Convention are supported by guidance documents that have been prepared by the parties, i.e. INFCIRC/602, INFCIRC/603 and INFCIRC/604.

The first of these documents specifies rules of procedure and financial rules, the second gives guidance on how the review process should be managed, and the third describes what should be contained in National Reports.

Are there any costs involved?

Contracting Parties have to prepare a National Report detailing their measures taken to implement each of the obligations of the Convention, and participate at their own cost in the Review Meetings of the Contracting Parties, held every three years.

Connection to other international legal instruments

- The Convention on Nuclear Safety also addresses spent fuel and radioactive waste managed at nuclear power plants
- The Code of Conduct on the Safety and Security of Radioactive Sources also addresses the management of disused sealed sources

The International Atomic Energy Agency (IAEA) serves as the Secretariat for the Joint Convention

For more information please contact the Scientific Secretary at:

jointconvention@iaea.org

The Joint Convention home page offers a comprehensive overview of information circulars, past reports and the current status of the Convention on:

<http://goto.iaea.org/JointConvention>

In addition, a dedicated secure web page allows Contracting Parties to easily submit their National Reports, exchange questions and answers to their reports, and access a great variety of documents related to all previous meetings organized under the Joint Convention.





