The Convention on Nuclear Safety (CNS)

An overview





What is the Convention on Nuclear Safety (CNS)?

The CNS is the cornerstone of the international legal framework for nuclear safety and the first international treaty to address the safety of nuclear installations. Adopted in 1994, the CNS is relevant not only for countries operating nuclear power plants, but also those planning, constructing or commissioning them, or embarking on a nuclear programme.

The CNS represents a legal commitment by Contracting Parties 'to achieve and maintain a high level of nuclear safety worldwide' (safety objective), 'to establish and maintain effective defences in nuclear installations against potential radiological hazards' (radiation protection objective) and 'to prevent accidents with radiological consequences and to mitigate such consequences should they occur' (technical safety objective).

Status

The CNS entered into force on 24 October 1996. As of December 2025, there were 98 Contracting Parties to the CNS, including one regional organization, the European Atomic Energy Community (EURATOM), and six Signatory States: Algeria, Israel, Monaco, Nicaragua, Philippines and Sudan.



How does it work?

The CNS is an 'incentive' convention prioritizing consensus and participation. As such, it combines general nuclear safety requirements with a non-coercive peer review mechanism, which is its main dynamic element that ultimately informs the effectiveness of the CNS. The CNS provides for 'Meetings of the Contracting Parties' (Articles 20–28), which include Review Meetings and Extraordinary Meetings.

Review Meetings, where the Contracting Parties submit National Reports on the implementation of their obligations under the CNS for peer review, are held at intervals not exceeding three years. The First CNS Review Meeting took place in 1999; following that, all review meetings up to the Seventh were held at three-year intervals. However, due to the COVID-19 pandemic, the Eighth Review Meeting was not held in 2020. Based on the decision of the Contracting Parties, the Joint 8th and 9th Review Meeting was conducted in 2023. The Tenth Review Meeting will be held in 2026.

The review process, including the duties of the CNS Secretariat, is detailed in the following rules and guidelines agreed by the Contracting Parties: Rules of Procedure and Financial Rules (INFCIRC/573), Guidelines regarding the Review Process (INFCIRC/571), and Guidelines regarding National Reports (INFCIRC/572).







573/Rev. 8

571/Rev. 9

572/Rev. 8



What does the peer review process involve?

- The Contracting Parties submit National Reports for the consideration of all other Contracting Parties. These reports detail how the Contracting Parties meet their obligations under the Convention.
- The Contracting Parties seek clarification on the National Reports of other Contracting Parties through a system of written questions, comments and answers.
- The Contracting Parties present and discuss their National Reports during a Review Meeting in Country Group sessions.

- The Contracting Parties in each Country Group agree on the Country Review Reports for each Contracting Party.
- The Contracting Parties adopt by consensus a Summary Report reflecting the Major Common Issues identified during the Review Meeting, which are to be addressed in the National Reports submitted to the next Review Meeting.



T: Time before the next Review Meeting in months

Have the CNS and its peer review process enhanced nuclear safety?

Yes. The main reasons are as follows:

- The preparation of the National Report contributes to the self-assessment.
- The Contracting Parties take part in the review process by reading the National Reports, making comments, asking and answering questions. During Country Group sessions of the Review Meetings, the Contracting Parties may identify challenges, suggestions, areas of good performance and good practices for individual Contracting Parties.
- At the final Plenary, the Contracting Parties agree on Major Common Issues to be addressed by all in their National Reports for the next Review Meeting.
- The peer review process demonstrates a Contracting Party's commitment to nuclear safety and helps gain and maintain public trust and confidence.
- Review Meetings contribute to the sharing of regulatory and safety practices among the Contracting Parties, leading to increased awareness of good practices in nuclear safety.

What are the outcomes of the CNS Review Meetings?

- Review Meetings provide an opportunity to share and discuss challenges that arise in implementing obligations under the CNS.
- During Country Group sessions, constructive exchanges and knowledge sharing take place in an open and frank manner.
- Each Review Meeting contributes to further achieving and maintaining a high level of nuclear safety worldwide. The formal publicly available outcome of each Review Meeting is the Summary Report, which reflects Major Common Issues identified during that Review Meeting.
- The number of Contracting Parties has been gradually increasing over the years and stands at 98 (Dec. 2025).

What are the benefits of becoming a Contracting Party?

The CNS peer review process:

- provides a unique overview of the assessment of nuclear safety worldwide;
- encourages continued improvement of nuclear safety;
- provides a forum for sharing regulatory and technical experience:
- improves transparency and openness about nuclear safety through making the National Reports of the individual Contracting Parties publicly available; and
- assures the public that national arrangements for the safety of nuclear power plants conform to international standards. In this regard, the peer review process:
 - provides a peer review of each Contracting Party's national nuclear safety programme in a challenging, but constructive, atmosphere;
 - provides a structure and time-bound process for a national self-assessment;

- provides an external acknowledgment of good practices and areas of good performance; and
- encourages early identification of challenges and provides ideas on how to address them based on Contracting Parties' experiences.

In light of all the above benefits, the review process creates a unique opportunity for experience sharing and collective learning, which is especially beneficial for Contracting Parties with existing nuclear programmes and those planning to embark on a nuclear power programme. At the same time, the CNS affords all Contracting Parties the opportunity to review the National Reports submitted by Contracting Parties with nuclear programmes and assure themselves that relevant international standards are being met. Furthermore, Contracting Parties without nuclear programmes have an opportunity to learn about such programmes, including best practices in the field of emergency preparedness and response that may be directly relevant to them.

The Convention on Nuclear Safety (CNS) in more detail

Background

The CNS was adopted in Vienna on 17 June 1994 at a diplomatic conference convened by the IAEA at its headquarters from 14 to 17 June 1994 and entered into force on 24 October 1996. The Convention was drawn up in the aftermath of the Three Mile Island and Chornobyl nuclear accidents at a series of legal and technical expert-level meetings held from 1992 to 1994. It was the outcome of considerable efforts by the Member States, including their national regulatory bodies, and the IAEA.

The obligations of the Contracting Parties under the CNS are based to a large extent on the fundamental safety principles for nuclear installations contained in the 1993 IAEA publication *The Safety of Nuclear Installations*, IAEA Safety Series No. 110, superseded by *Fundamental Safety Principles*, IAEA Safety Standards Series No. SF-1.

The objectives of the Convention (Article 1)

The objectives of the Convention are:

- to achieve and maintain a high level of nuclear safety worldwide;
- to establish and maintain effective defences in nuclear installations against potential radiological hazards in order to protect individuals, society and the environment from the harmful effects of ionizing radiation from such installations; and
- to prevent accidents with radiological consequences and to mitigate such consequences should they occur.

Scope of application (Article 3)

The Convention applies to the safety of nuclear installations, defined as 'any land-based civil nuclear power plant under a Contracting Party's jurisdiction, including such storage, handling and treatment facilities for radioactive materials as are on the same site and are directly related to the operation of the nuclear power plant'.

Structure of the Convention

The Convention is structured as follows:

- General Provisions (Articles 4-6)
- Legislation and Regulation (Articles 7–9)
- General Safety Considerations (Articles 10–16)
- Safety of Installations (Articles 17–19)
- Meetings of the Contracting Parties (Articles 20–27)
- Role of Secretariat (Article 28)
- Other Provisions (Articles 29–35)

Obligations under the Convention

- legislative and regulatory framework
- regulatory body
- responsibility of the licence holder
- availability of adequate financial and human resources
- · assessment and verification of safety
- emergency preparedness
- technical safety obligations related to siting, design, construction and operation of nuclear installations



Related international instruments

Legally binding

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, adopted in 1997, addresses, on a global scale, the safety of spent fuel and radioactive waste management. It does so by establishing fundamental safety principles and creating a peer review process similar to that of the CNS. This is a 'sister Convention' to the CNS, as together these two conventions cover the whole nuclear fuel cycle.

The Convention on Early Notification of a Nuclear Accident, adopted in 1986, establishes a mechanism for rapid information exchange in case of nuclear accidents from which a release of radioactive material occurs or is likely to occur and which has resulted or may result in an international transboundary release that could be of radiological safety significance for another State. The Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, adopted in 1986, sets out a mutual assistance mechanism, which requires States Parties to cooperate with each other and with the IAEA to facilitate prompt assistance and support in the event of nuclear accidents or radiological emergencies.

Non-legally binding

The Vienna Declaration on Nuclear Safety (VDNS), unanimously adopted by the Contracting Parties in 2015, aims to strengthen nuclear safety in light of the lessons learned from the Fukushima-Daiichi accident. The VDNS includes principles for the implementation of the objective of the Convention to prevent accidents with radiological consequences and mitigate such consequences should they occur.

The Code of Conduct on the Safety of Research Reactors (2004) serves as guidance on the development and harmonization of laws, regulations and policies on the safety of research reactors. It provides 'best practice' guidance to the State, the regulatory body and the operating organization for the management of research reactor safety.

The Code of Conduct on the Safety and Security of Radioactive Sources (2003) aims to help national authorities to ensure that radioactive sources are used within an appropriate framework of radiation safety and security.

The IAEA serves as the Secretariat for the CNS

The CNS IAEA public web page offers a comprehensive overview of the CNS rules and guidelines, past reports and the current status of the Convention at:

www.iaea.org/topics/nuclear-safetyconventions/convention-nuclear-safety

For more information, please contact the CNS Secretariat at:

Convention-for-Nuclear-Safety.Contact-Point @iaea.org

In addition, a dedicated CNS secure web site allows for electronic submission, distribution and easy access to all documents submitted by the Contracting Parties or issued by the CNS Secretariat, including the National Reports of Contracting Parties and the Summary Reports of the CNS Review Meetings.

