



# JOINT CONVENTION

on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

**NEWS**

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# 1. President's message

Dear readers,

As you have probably noticed this year's Joint Convention Newsletter comes in a new format. This modern and contemporary layout was designed and implemented by our colleagues from the Contracting Party of Canada, and I would like to use this opportunity to thank our Canadian colleagues for their excellent work.

The year 2022 was especially characterized by two important meetings of the Joint Convention, namely the Fourth Extraordinary Meeting in May and the Seventh Review Meeting in summer of last year. Both events were also characterized by tense discussions on the worrying safety situation of nuclear facilities in Ukraine due to the unprecedented and exceptional circumstances caused by the armed conflict, underlining the importance of the implementation of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

After several postponements, the Fourth Extraordinary Meeting could take place from 4 to 6 May 2022. 61 Contracting Parties came together in Vienna to address the need to improve the procedural mechanisms of the review process in order to cope with the constantly increasing number of Contracting Parties and thereby further strengthening the safety of spent fuel and radioactive waste globally.

The Seventh Review Meeting, which was originally planned to take place in 2021, was held in Vienna from 27 June to 8 July 2022 and was attended by more than 750 delegates from 76 Contracting Parties.

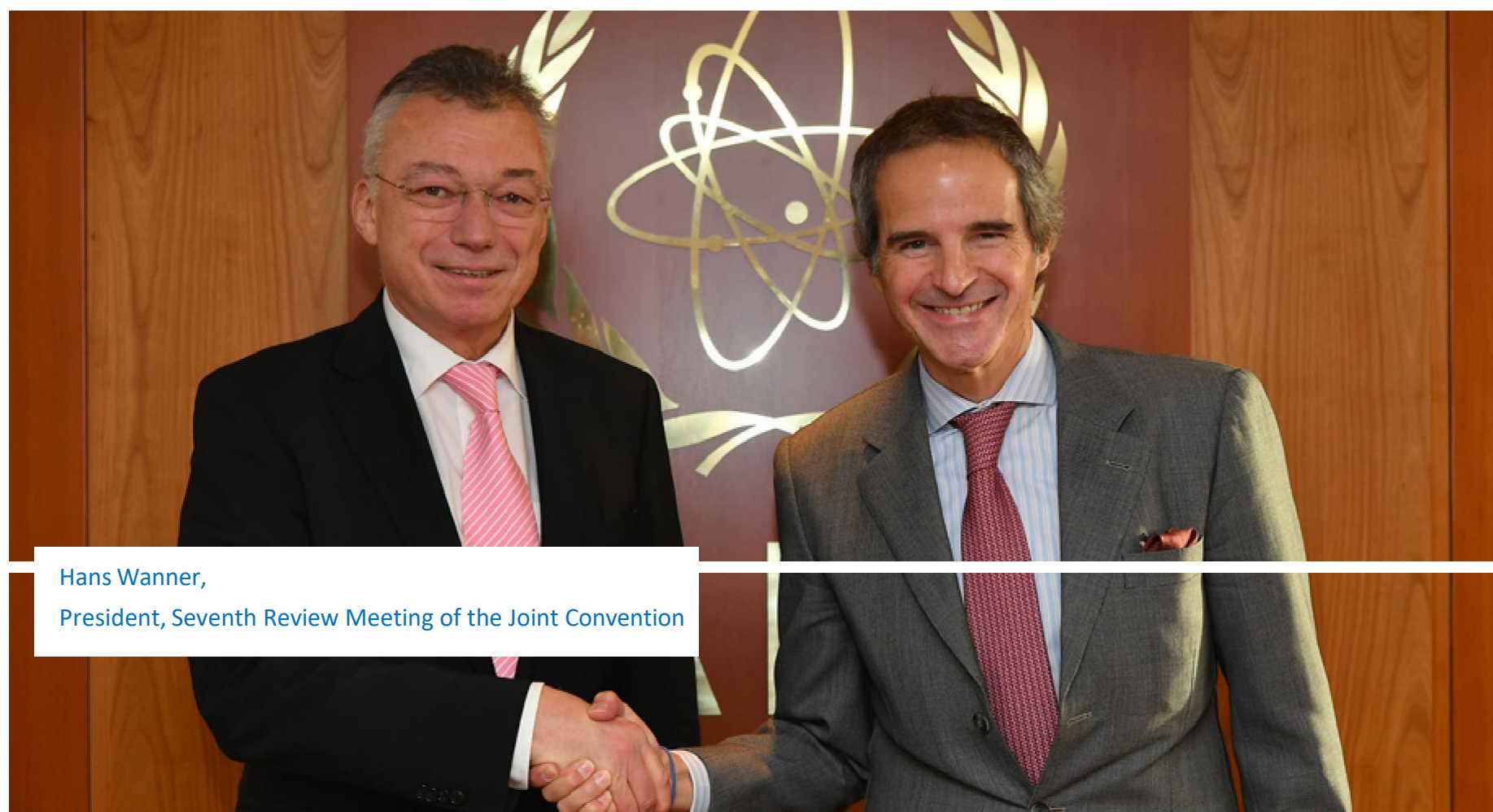
The presentation of the National Reports and the corresponding discussions formed the basis for a constructive exchange with the aim to learn from one another, share solutions to common and individual safety challenges, and to further contribute to continuously improving nuclear safety. Various common issues were identified, for

example, the competence of staffing, the public's inclusive engagement, ageing management, and long-term management.

The difficult situation of nuclear safety in Ukraine due to the unprecedented and exceptional circumstances caused by the war also affected the discussions in the second week of the Seventh Review Meeting. Accordingly, finding consensus on the Summary Report was not an easy task. On a positive note, with the preceding Fourth Extraordinary Meeting and the discussions held within the Open-Ended Working Group at the Seventh Review Meeting, Contracting Parties have been able to accept several proposals that will help to further improve the peer review process of the Joint Convention.

An additional highlight of the past year was the Side-Event at the 66<sup>th</sup> General Conference of the International Atomic Energy Agency (IAEA), entitled "25 Years Joint Convention: A Proven Instrument for Improving Nuclear Safety and Promoting Transparency and Public Confidence in Spent Fuel and Radioactive Waste Management", which was co-organized by the IAEA and Switzerland. Interest has been shown by many attendees. The Side-Event was supported by insights into the Canadian and Ghanaian regulatory authorities and the value added they received from being part of the Joint Convention. Furthermore, during the question and answers time a discussion on how countries with small radioactive waste inventories could be encouraged to join the Convention was launched. Last but not least, the event ended with IAEA Director General Rafael Mariano Grossi highlighting the continued relevance of the Joint Convention.

Finally, I warmly welcome Türkiye as a new Contracting Party and encourage IAEA Member States - regardless of the size of their radioactive waste programmes - that have not yet ratified the Joint Convention to do so in order to work together to meet today's challenges.



Hans Wanner,  
President, Seventh Review Meeting of the Joint Convention



## 2. Progress of the Joint Convention



### Meetings of the Contracting Parties

#### Fourth Extraordinary Meeting

As part of the continuous review and improvement of the Joint Convention, the Contracting Parties agreed at the Sixth Review Meeting of the Joint Convention to convene the Fourth Extraordinary Meeting to discuss possible ways to improve procedural mechanisms of the Joint Convention in view of the growing number of Contracting Parties and in order to identify and eliminate technical discrepancies between existing procedural documents of the Joint Convention. Sixty-one of the Contracting Parties to the Joint Convention met at the IAEA's Headquarters, Vienna, Austria, from 4 to 6 May 2022 for the Fourth Extraordinary Meeting.

Ms Elena Buglova, acting Deputy Director General, Head of the Department of Nuclear Safety and Security of the IAEA, welcomed Contracting Parties and assured that the Joint Convention Secretariat will do its utmost to support the Contracting Parties in this vital endeavour to improve the review process.

Mr Hans Wanner from Switzerland presided over the meeting as delegates considered proposals to improve implementation of the Joint Convention. The Contracting Parties received a Status Report on the deliberations of the Working Group to prepare for the Fourth Extraordinary Meeting. Seven proposals, discussed within the Working Group, were further considered by Contracting Parties at the Extraordinary Meeting. A constructive discussion took place on each proposal, resulting in the adoption of the following two proposals:

- To optimise the time allocations and use of time in Country Group Sessions, and in the plenary for improved peer review
- Nomination and Selection of Country Group Officers for the Joint Convention Review Meetings

On the basis of the adopted proposals, the relevant guidance documents were amended and Contracting Parties agreed that the implementation of adopted proposals will start with the Eighth Review Cycle of the Joint Convention. The general expectation for the remaining proposals was that modified proposals may be submitted for further consideration at the Seventh Review Meeting.

More details can be found in the Final Summary Report of the Fourth Extraordinary Meeting, available on the [Joint Convention public website](#).



## Seventh Review Meeting

To advance the objective of the Joint Convention to achieve and maintain a high level of worldwide safety in spent fuel and radioactive waste management, Contracting Parties submit National Reports on implementation of the Convention's obligations – that are discussed and debated as part of a peer review process at the Review Meetings.

Seventy-six Contracting Parties participated in the Seventh Review Meeting – originally scheduled for 2021, but postponed to 2022 due to the COVID-19 pandemic – to conduct an effective, rigorous and transparent peer review of National Reports so that through constructive exchange of views they can learn from one another about solutions to common and individual safety issues related to spent fuel and radioactive waste management and contribute to achieving and maintaining high level of safety worldwide.

Journalists were [invited](#) to attend the opening plenary session and the part of the closing session where the Contracting Parties will adopt a Summary Report and the sessions were [streamed live](#).

IAEA Director General Rafael Mariano Grossi addressed the meeting and highlighted the relevance of the Convention not only to countries with a major nuclear power programme, but to any country using radioactive sources. *“More patients are getting lifesaving treatment for cancer. More countries are using nuclear science and technology to support their sustainable development goals, and more countries are turning to nuclear energy to address the climate and energy crisis,”* he said in his opening remarks. *“The use of nuclear material is rising. We are here today to ensure that the ensuing spent fuel and radioactive waste are managed safely, in accordance with the obligations of the Joint Convention and international safety standards,”* he said. *“Good policies aren’t enough. They only work if they are implemented,”* Mr Grossi added. In this context, he also highlighted the importance of steadfastly nurturing public trust over the long term. Since the last Review Meeting in 2018, 10 new Contracting Parties have joined the Joint Convention, bringing the total number to 88. *“We must redouble our efforts to increase the number of Contracting Parties so that we achieve a higher level of safety worldwide,”* Mr Grossi said. *“Radioactive waste is relevant to all countries.”*<sup>1</sup>



Mr Grossi also informed delegates of the IAEA’s preliminary discussions to support Ukraine, where needed, including with the safe management of radioactive sources, in particular disused and orphan sources. *“Our experts are available to provide immediate remote assistance, for example to support the verification of the inventory of radioactive sources or for the provision of technical assessments; and teams are also ready to travel to Ukraine to deliver on-site support in areas such as source recovery and consolidation, and the safe and secure transportation of radioactive sources to centralized storage facilities.”*<sup>2</sup>

At the Country Group sessions during the first week of the Seventh Review Meeting, Contracting Parties identified a total of 13 “Good Practices” and 244 “Areas of Good Performance” in all areas of safety of spent fuel and radioactive waste management. However, there was a general sense that the application of the concept of Good Practice was not uniform across the Country Groups.

During the Country Group discussions the Contracting Parties further identified several overarching issues. Some of these issues had already been identified at the Sixth Review Meeting, and continue to be overarching issues:

1. Competence and staffing linked to timetable for spent fuel management and radioactive waste management programmes;
2. Inclusive public engagement on radioactive waste management and on spent fuel management programmes;
3. Funding of long-term projects;
4. Management of radioactive waste and spent fuel from new technology applications as well as planned new projects using existing technologies;
5. Legacy wastes linked to decommissioning and remediation projects;
6. Ageing management of packages and facilities for radioactive waste and spent fuel, considering extended storage periods;
7. Response to natural or man-made events that could adversely affect the safety of spent fuel and radioactive waste;

<sup>1</sup> [Focus on Safety of Spent Fuel and Radioactive Waste Management at 7th Review Meeting of the Joint Convention | IAEA](#)

<sup>2</sup> [Focus on Safety of Spent Fuel and Radioactive Waste Management at 7th Review Meeting of the Joint Convention | IAEA](#)



8. Realization of disposal facilities;

9. Long term management of disused sealed sources, including sustainable options for regional as well as multinational solutions.

These were presented at the final plenary and the Contracting Parties agreed that National Reports for the Eighth Review Meeting should address, as appropriate, the actual measures that have been taken in implementing overarching issues Nos. 1, 2, 6, and 9 listed above.

Following the close of the daily Country Group sessions during the first week of the Review Meeting, Contracting Parties also took part in meetings of an open-ended working group (OEWG) to consider, under chairmanship of Vice-President Mr. Thiagan Pather from South Africa, the six proposals submitted to the Seventh Review Meeting. The outcomes of deliberations in the OEWG were presented in plenary in the second week of the Review Meeting for consensus agreement by all Contracting Parties.

At the Organizational Meeting for the Seventh Review Cycle, it was agreed to hold a half-day Topical Session to share Contracting Parties' experiences and lessons learned on stakeholder engagement relating to the management of radioactive wastes from decommissioning and legacy. The session was organized in the second week of the Seventh Review Meeting and was chaired by Vice-President Ms Mina Golshan. Eight Contracting Parties, namely Argentina, Australia, Canada, France, Germany, South Africa, the United Kingdom, and the United States of America made presentations in which stakeholder engagement related to decommissioning and clean-up of the full range of the nuclear lifecycle from mining through to geological disposal, was presented.

The Seventh Review Meeting showed that the international safety community continues to work towards improving safety in radioactive waste and spent fuel management, but that a robust peer review process requires the full and active engagement by all Contracting Parties and that measures to increase further active participation should be discussed and encouraged.

The increase in the number of Contracting Parties by 10 since the last Review Meeting was an encouraging step noted by Contracting Parties towards universalization of the Joint Convention. Nevertheless, the Review Meeting identified the need for Contracting Parties and the Secretariat to increase efforts to encourage States who are not yet Contracting Parties to the Joint Convention to accede to it.

Interested in getting more information? Please see the Final Summary Report of the Seventh Review Meeting, available on the [Joint Convention public website](#).





## 25 Years Joint Convention: A Proven Instrument for Improving Nuclear Safety and Promoting Transparency and Public Confidence in Spent Fuel and Radioactive Waste

On 27 September 2022, in the margins of the 66th regular session of the General Conference, Switzerland, with the support of the Joint Convention Secretariat, organized a side event on the occasion of the 25th anniversary of the adoption of the Joint Convention. This event was also designed to promote the Convention and increase the awareness of IAEA Member States that are not yet Contracting Parties to the Convention of the importance of adhering to this unique “incentive” instrument.

The event provided an opportunity to reflect on the past two and half decades of the Joint Convention from the perspectives of Contracting Parties, as well as opportunity to discuss and share their experiences regarding the benefits of adherence to this important instrument that addresses the safety of spent fuel and radioactive waste management on a global scale.

In her welcoming remarks, Ms Lydie Evrard, Deputy Director General for the Department of Nuclear Safety and Security of IAEA and the Secretary of the Joint Convention, thanked all Contracting Parties for contributing substantively to progress in the safe management of spent fuel and radioactive waste in the past decades. She further encouraged all participants to familiarize themselves with the posters in the room that *“reflect the history of the Joint Convention, illustrating details on the first 25 Contracting Parties that deposited instruments of accession and, as such, contributed to ensure the Joint Convention entry into force. Another aspect of these posters are the reflections of their experiences as a Contracting Party and to pass on*

*their messages to those who are yet to accede this Convention.”*

Mr Wolfram Tonhauser, Section Head of Nuclear and Treaty Law Section of the IAEA Office of Legal Affairs provided an overview of the background of the establishment of the Joint Convention.

Dr. Emmanuel Ampomah-Amoako, Director, Nuclear Installations Directorate of the Nuclear Regulatory Authority of Ghana elaborated on the reasons that prompted the country to accede to the Joint Convention in 2011, shared the benefits Ghana had gained since then, and emphasized the value of the Convention. He mentioned that Ghana seeks to ensure the safe, secure and safeguarded introduction of nuclear power and called on all IAEA Member States to participate in the Joint Convention.

Mr Ramzi Jammal, executive Vice-President and Chief Regulatory Operations Officer, Canadian Nuclear Safety Commission (CNSC) provided the audience with the Canada’s history in the Joint Convention, which begun in 1998. He emphasized the importance of the Convention to Canada and the CNSC, to which the Government of Canada delegated responsibility for coordination of Canada’s contributions to the Joint Convention. Mr Jammal further outlined the improvements agreed by Contracting Parties that will come into force for the 8<sup>th</sup> review cycle to enhance the peer review process and concluded by encouraging Contracting Parties to commit to peer reviews, openness, and transparency.

IAEA Director General Rafael Mariano Grossi attended the side event and acknowledged Contracting Parties for facilitating progress in the safe management of spent fuel and radioactive waste over the past 25 years and for sharing the benefits of the Convention. He [tweeted](#) about the event afterward.



## Joint Convention Promotional Events

Since 2005, the Joint Convention Secretariat has been conducting promotional activities to introduce the Convention to IAEA Member States, explain the obligations and benefits of participation in it. These activities, funded by extrabudgetary contributions from the United States of America, are aimed at Member States embarking on nuclear power programmes and at Member States with radioactive waste outside the nuclear fuel cycle, such as disused sealed radioactive sources.

In accordance with resolution GC(66)/RES/6 adopted by the 66<sup>th</sup> IAEA General Conference in September 2022, the Secretariat continued its activities “... to promote the importance of conventions concluded under the auspices of the IAEA and to assist Member States upon request with adherence, participation and implementation...”. Following the release of JC Newsletter #9, three events were organized to promote the Joint Convention as a cornerstone of the international legal framework for nuclear safety, to explain - through presentations, accompanying discussions, and practical exercises - the essence of the Joint Convention and relevant obligations, and provide a forum for invited experts from Contracting Parties to share their experiences with the Joint Convention, such as activities leading to accession, country-level preparation of the National Report, review and submission of questions and answers to National Reports, lessons learned from participation in Review Meetings, and benefits by their countries as Contracting Parties.

Prior to the events, an online survey was offered to the officially designated representatives of participating Member States to share their views on the status, major obstacles to their countries' participation in the Joint Convention, and further assistance to facilitate their eventual accession to this international legal instrument. The responses received were presented and discussed at the meeting.

To tailor the discussions to the needs of participating IAEA Member States, an overview of the national legal and regulatory framework and activities was provided for the safe management of spent fuel, as applicable, radioactive waste, and disused sealed radioactive sources.

### Interregional workshop

The interregional workshop was held in September 2022 at the IAEA Headquarters in Vienna, Austria. Ms Anna Bradford, Director of the IAEA Division of Nuclear Installation Safety, in her opening remarks recalled the importance of the Joint Convention. She expressed her confidence that the workshop would make a positive contribution to the understanding of the obligations and processes under the Convention and would assist Member States in their decision to accede to the Joint Convention. Ms Bradford also assured that the IAEA, as the Secretariat of the Joint Convention, remained available to Member States beyond the workshop to continue to provide assistance.

Mr Douglas Tonkay, Vice-President of the Sixth Review Meeting of the Joint Convention and the National Contact of the United States of



America, and Mr Vidas Paulikas, National Contact of Lithuania for the Joint Convention, participated in this event. They briefed the representatives from Azerbaijan, Egypt, Mongolia, Pakistan, Sudan, and Türkiye<sup>3</sup> on the effective implementation of the Joint Convention in their countries.

Mr. Hans Wanner, President of the Seventh Review Meeting of the Joint Convention, attended this event and led a panel discussion with participants on the challenges of Member States in accessing the Joint Convention.

In their online feedback received after the workshop, Member State representatives highlighted these elements:

- The interactive way the workshop was conducted, the practical sessions that were very beneficial and fruitful, useful case studies and interesting discussions.
- The U-shaped seating arrangement allowed meeting participants to interactively participate in the discussions. This could be also taken into account in other conventions.
- The workshop helped to better understand the essence of the Joint Convention and provided a comprehensive insight on the importance of the Convention for States to be a Contracting Party in the future.
- Detailed information about the articles of the Convention and the preparation processes of the National Reports was valued.

<sup>3</sup> In February 2023, Türkiye acceded to the Joint Convention.



## Regional workshop for Member States in the Asia and Pacific region

The event was organized in December 2022 in collaboration with the Government of the Kingdom of Thailand through the Office of Atoms for Peace (OAP). Mr. Rutjaphan Kateklum, Director of Nuclear and Radiation Licensing Division from OAP addressed the Representatives from Bangladesh, Malaysia, Nepal, Pakistan, the Philippines, and Sri Lanka.

The Joint Convention entered into force for Thailand in October 2018, and representatives of Thailand shared their recent experiences with the Convention. Mr. Geoff Williams, Vice-President of the Sixth Review Meeting, complemented the information on Australia's experience with the implementation of the Joint Convention since 2003 and the benefits it had gained as a Contracting Party. Workshop participants engaged in an open and frank exchange of views with the speakers. OAP also organized a visit to the Phuket Waste Management Center during the workshop.

In evaluating the event, participants noted the following:

- It provided an in-depth understanding of the Convention, its objectives and scope, the obligations, and the review process.
- The time allotted for the exercises and demonstration sessions was adequate and that the combination of presentations and practical examples had ensured the success of the workshop.
- The exchange of hands-on experience by both seasoned (Australia) and new (Thailand) Contracting Parties had been of value and encouraged IAEA to continue its efforts in promoting the Joint Convention, particularly in sensitizing policymakers on the need to join this international legal instrument.

The participants from the Philippines - a signatory to the Joint Convention but not yet a Contracting Party - noted that *“with the Government’s plan to push with the Nuclear Power Program in the country, we will need all the help we can get to assist us to promote the Joint Convention to the high-level government officials who has the power to approve it.”*

All in attendance also commended Office of Atoms for Peace of Thailand for being an excellent host.

## Regional workshop in April 2023 for Member States in the Latin America and Caribbean region, Mexico

The event was organized April 2023 in collaboration with the Government of the United Mexican States through the Instituto Nacional de Investigaciones Nucleares (ININ). Dr Javier Palacios Hernández, Director General of ININ, welcomed the participants from Costa Rica, Dominica, and Honduras. Nicaragua withdrew its participation prior to the workshop.



Mr Marco Leal, National Contact of Brazil for the Joint Convention, and representatives of Mexico led the participants through the thematic sessions, outlining the various provisions of the Joint Convention, their first-hand experience in implementing the obligations under the Convention, and practical exercises.

Perceived challenges for participating countries in joining the Convention was a topical discussion moderated by Brazilian and

Mexican experts.

The Workshop was favourably evaluated by the participants. The mock-up of a Country Group session organised during the Workshop was valued not only by participants from non-Contracting Party Member States, but also allowed Mexican participants from different authorities - Secretaría de Energía (SENER); Comisión Nacional de Seguridad Nuclear y Salvaguardias (CNSNS); Instituto Nacional de Investigaciones Nucleares (ININ) – to get an insight of what takes place at the session. All participants also appreciated the opportunity of exchange with experienced (Brazil) and new (Mexico) Contracting Parties.

Local participants further underlined the importance of the event and feedback received from them assessed the event as an *“enriching experience”* that *“helped understand some of the concepts that we had complications in the development of the national report”*.



# 3. Topics of Interest

## ARTEMIS peer review first follow-up mission held in Germany

As a first of its kind, in November 2022, a follow-up mission to the German ARTEMIS Peer Review of 2019 was held in Cologne, Germany. ARTEMIS is the Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation convened by the IAEA and directed at facility operators and relevant organisations, as well as regulators and other decision makers in the field of radioactive waste management. For European Union (EU) Member States, the review service offers to conduct peer reviews in line with Council Directive 2011/70/Euratom which stipulates that an international peer review of the national framework, competent regulatory authority, and national radioactive waste management programme shall be arranged at least every 10 years.

The opportunity for this follow-up mission coincided with the German ongoing efforts to phase out the nuclear production of electricity – to be concluded in April 2023 – and decommissioning of the commercial nuclear reactor fleet, as well as the impending commissioning of the Konrad disposal facility and the ongoing site-selection process for a disposal facility for spent fuel and high-level radioactive waste (HLW).

The 2019 peer review had resulted in the identification of one Good Practice as well as three recommendations and twelve suggestions to support Germany in further improving its high standards for the safe and responsible management of radioactive waste and spent fuel.

Three years later, a team of five senior experts from multiple IAEA Member States, led by Mr. Patrice François and accompanied by IAEA staff for coordination and administrative support, was invited by the German Federal Government to have a close and investigative look on the German efforts to address the findings from the initial peer review.



Participants of the ARTEMIS Follow-up Mission to Germany in front of Cologne Cathedral

They were supported on the German side by a team of experts from regulatory authorities and relevant operators, led by Ms. Anke Krause of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) and supported by the German technical support organisation, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS).

At the conclusion of the one-week review – which included a site visit to the Biblis NPP decommissioning project – the international experts found that Germany had successfully implemented one of the three recommendations as well as 10 of the 12 suggestions. These findings could thus be closed due to the progress made or the processes initiated since the initial review. Two recommendations and two suggestions will remain open, until further progress can be demonstrated.

The results were published in an official report by the review team and made publicly available by the German Federal Government - [IAEA-ARTEMIS REPORT GERMANY](#)

## Strategies and practical solutions in spent fuel and radioactive waste management and nuclear decommissioning in the Russian Federation

### Strategies for spent nuclear fuel management

At the beginning of 2022, the accumulated spent fuel inventory totaled some 26,500 tons mostly accounting for RBMK and VVER-1000 spent fuel. Over 50,000 spent fuel assemblies (SFAs) from RBMK-1000 reactor units from the Leningrad, Kursk, and Smolensk NPPs, making up about half of the total inventory as regards this spent fuel type, have been accommodated in dry storage facilities.

The strategy for nuclear power development in the Russian Federation is based on gradual transition to a closed NFC involving continued construction of VVER power units with an increased safety level, development of fast reactor designs of different types, nuclear fuel reprocessing and breeding, transmutation of minor actinides and establishment of a radioactive waste disposal system.

In order to implement the elements of the strategy, in 2023 it is planned to complete full loading of the BN-800 reactor at the Beloyarsk NPP with advanced MOX fuel, the BREST OD-300 reactor is currently under construction at the SCC site.

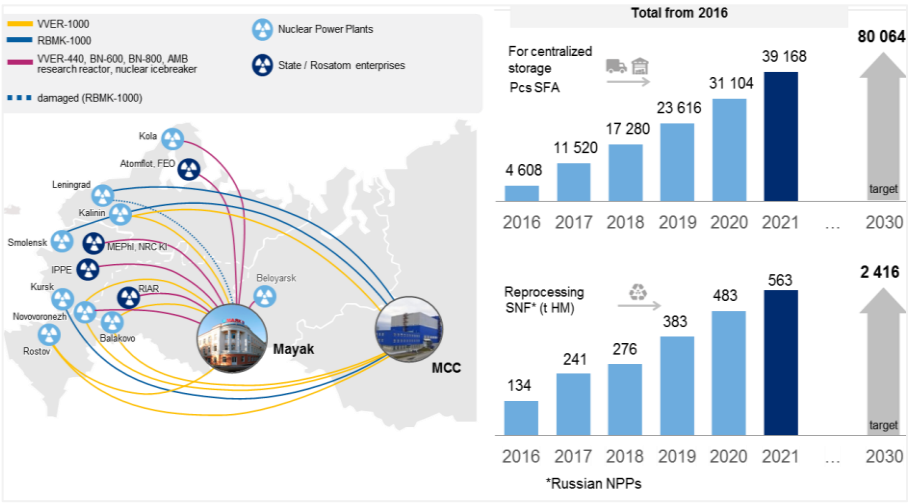
### Strategies for the radioactive waste management

Construction of an underground research facility (URF) is ongoing in the Krasnoyarsk Territory to test deep disposal methods. It is planned to complete the construction of the first URF section and to launch the R&D after 2026.

At the same time, large-scale research and development (R&D) are being implemented to study the properties of the rock mass, to develop long-term monitoring programs, to refine the knowledge on the potential DGR impact zone among others. URF digital twin has started being developed seeking to visualize various operations and R&D during its construction and operation.

Construction and installation activities are being implemented under the preliminary and the first construction stage at the sites of future disposal facilities designed for solid radioactive waste Class 3 and 4 in Chelyabinsk

and Tomsk regions.



**Decommissioning and management of nuclear legacy facilities**

In 2022, decommissioning efforts were ongoing at 15 sites covering a total of 40 facilities. As regards the key facilities, the total volume of decommissioned buildings and structures amounted to over 2.3 mln m3. The key efforts can be summarized as follows:

- building of factory for uranium enrichment of JSC "Angarsk Electrochemical Combine" was decommissioned;
- nuclear icebreaker Siberia and the floating maintenance base Lepse were decommissioned at FSUE Atomflot site;
- plutonium extraction facility U-5 was decommissioned at JSC VNIINM site;
- efforts preceding actual activities on surface LRW storage reservoir isolation were launched at SCC site;
- 180,000 m2 of radioactively contaminated territories were remediated.

waste to be generated in the future. Regarding the spent fuel, CNLV has Spent Fuel Pools, one for each of its two units, and an Independent Spent Fuel Storage Installation (ISFSI), which, together, are designed with enough capacity for the storage of the spent fuel to be generated for CNLV through its entire operational life.

The National Institute of Nuclear Research (ININ is the acronym in Spanish) is in charge of the predisposal management of low-level radioactive waste and disused sealed radioactive sources generated from the use of radioactive materials in industry, medicine, and research. Likewise, it has a permit for the operation of a research reactor; the spent fuel of the reactor is safely stored in the same pool that holds the core. ININ has started to study the recycling of Ra-226 disused spent sources for the production of Ac-225, for its use in cancer treatments; with this, it is expected to reduce technical implications for the storage and later disposal of this radionuclide.

Mexico recognizes the importance of a regulatory framework that allows the effective regulation of the safe management of spent fuel and radioactive wastes. For this reason, CNSNS is currently working on the following projects:

- Development of the project for the Regulation of Nuclear Facilities;
- Development of the project for updating the Radiological Safety General Regulations, which will incorporate circularity criteria that, together with the clearance criteria, will encourage the fulfillment of the radioactive waste minimization principle;
- Internal review of the draft for modification of the Mexican Official Regulations that establish the system for the classification of radioactive wastes, proposing the adoption of the system recommended by the International Atomic Energy Agency (IAEA);
- Development of the draft for modification of the Mexican Official Rules that establish the clearance criteria.

On this same subject, SENER is currently in charge of the important task of promoting, before the National Commission for Regulatory Improvement (CONAMER is the acronym in Spanish), the approval of the regulatory impact analysis of the projects for modification of the Mexican Official Regulations that regulate the characterization of radioactive wastes and the discharges of liquid and gaseous effluents to the environment from the normal operation of nuclear and radioactive facilities; such phase is the previous one for their entry into force.

Finally, the Mexican nuclear sector in general, particularly regarding the safety of the management of spent fuel and radioactive waste, assumes its commitment of working for the safety of people and the environment, not only for the current generation but for future generations, both on national territory and beyond its borders. Mexico is committed to work on the analysis and possible implementation of the recommendations given to the Country during the Seventh Meeting of the Contracting Parties to the Joint Convention.

**Update: Mexico moves on its technical and regulatory infrastructure for the management of spent fuel and radioactive waste**

With the adherence to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management in 2018, the Mexican Government endorses the commitment to the enforcement of internationally recognized best practices on the matter of safety on the management of spent fuel and radioactive waste. Even though this is an incentive instrument, the fulfillment of the Convention has a binding character according to the National Legal Framework.

Most of the radioactive waste generated in Mexico comes from the operation of the Nuclear Power Plant Laguna Verde (CNLV is the acronym in Spanish). In recent years, the Department of Energy (SENER is the acronym in Spanish), with prior technical opinion from the National Commission of Nuclear Safety and Safeguards (CNSNS is the acronym in Spanish), authorized the renewal of permits for Units 1 and 2 of CNLV, which will allow for their operation until years 2050 and 2055, respectively. Due to the authorized life extension, it will be necessary to increase the storage capacity of CNLV, to this end; there is a plan for the construction of three new warehouses to store the dry solid radioactive



## Becoming a Contracting Party of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention) entered into force on 18 June 2001<sup>4</sup>.

The IAEA Director General is the Depositary for the Joint Convention. At the opening plenary of the Seventh Review Meeting of the Joint Convention held in 2022, Director General Rafael Mariano Grossi stated that *“the Joint Convention remains the only legally binding international treaty that addresses the safety of spent fuel and radioactive waste management at the global level - an area of great importance for nuclear safety.”* Further, the IAEA General Conference in the latest safety resolution adopted at its 66th regular session urged *“Member States that have not yet done so, particularly those managing radioactive waste or spent fuel, to become Contracting Parties to the Joint Convention”* (OP 15 of GC(66)/RES/6)<sup>5</sup>.

To become a Contracting Party to the Joint Convention, a State must demonstrate, through a concrete act, its willingness to undertake the legal rights and obligations contained therein. In other words, it must express its consent to be bound by the Joint Convention.

Since its entry into force, the Joint Convention is open for accession. *Accession*<sup>6</sup> is the traditional term defining the act whereby a state that has not signed<sup>7</sup> a treaty may express its consent to be bound and thus become a Party to that treaty.

The instrument expressing consent to be bound must be signed by the Head of State, Head of Government or Minister for Foreign Affairs or any other person acting in such a position or with full powers for that purpose issued by one of the above authorities, depending on each State's national legal framework.

The original instrument must be deposited with the IAEA Director General. This can be achieved by formally handing it over to the Director General or, informally, directly with the IAEA Office of Legal Affairs. The annual IAEA Treaty Event, held during the margins of the General Conference, also provides an opportunity to deposit an original instrument.

For each state that deposits an original instrument expressing its consent to be bound, the Joint Convention enters into force on the 90th day after such deposit.

For more information, please contact the IAEA Office of Legal Affairs here < [Depositary.Contact-Point@iaea.org](mailto:Depositary.Contact-Point@iaea.org) >.

## Experience of new Contracting Parties in the Joint Convention

### Accession and adherence to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management: The road map for Zimbabwe

The Government of Zimbabwe is committed to contributing to global nuclear safety and security and has set out to strengthen such measures through updating the regulatory framework and being party to the relevant international instruments related to safety and security. Zimbabwe does not have nuclear power applications; however, radiation applications are being used for socio-economic development in industry, medicine, agriculture, mining, and research.

The decision to accede to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was made in 2018 on realisation of the benefits the country draws from being a Contracting Party. In addition, Zimbabwe also sought to ratify the Convention on Early Notification of a Nuclear Accident and of the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency as well as the Physical Protection of Nuclear Material (CPPNM). These were all deposited during the Treaty event of the 65th General Conference, International Atomic Energy Agency (IAEA) Headquarters, Vienna, Austria, 20 September 2021. The IAEA provided assistance and support in terms of awareness of senior decision makers in government and in parliament throughout the ratification process.



Zimbabwean Minister of Energy and Power Development Hon. Z. Soda and IAEA Director Mr. Rafael Mariano Grossi depositing instruments of ratification at the Treaty event of the 65<sup>th</sup> General Conference, IAEA Headquarters, Vienna, Austria, 20 September 2021

After becoming a Contracting Party to the Joint Convention in September 2021, IAEA support was also provided to ensure initialisation of processes to adhere to the Joint Convention obligations, including the development and submission of the First National Report in March 2022. Further, provisions of the Convention were incorporated in the Radiation Amendment Bill that seeks to review and update the current Radiation Protection Act.

<sup>4</sup> [Status List](#)

<sup>5</sup> [Safety Resolution](#)

<sup>6</sup> [Glossary of Select Depositary Terms](#)

<sup>7</sup> There are only two states (Lebanon and the Philippines) that signed the Joint Convention but have still not expressed their consent to be bound through the deposit of an instrument of ratification, of acceptance or of approval of the Joint Convention.

Zimbabwe participated in the Seventh Review Meeting of the Contracting Parties held in Vienna from 27 June to 8 July, 2022. The delegation led by the Secretary for Monitoring and Evaluation in the Office of the President and Cabinet presented the First National Report for critical peer review and responded to questions raised by other Contracting Parties. The delegation had an opportunity to review radioactive waste management infrastructures for other Contracting Parties including those within the South African Development Community (SADC) Region.



Zimbabwean delegation to the Joint Convention Seventh Review Meeting

Contracting Parties noted that Zimbabwe has made considerable progress in establishing adequate legislative framework and infrastructure for the management of radioactive waste and disused sealed radioactive sources in fulfilment of provisions of the Joint Convention. Future efforts shall focus on ensuring promulgation of the Radiation Protection Amendment Bill to ensure it is put into effect, and to develop National Policy and Strategy documents on Radioactive Waste Management. Zimbabwe's Policy and Strategy is in draft form and provides political commitment to implement the provisions of the IAEA Supplementary Guidance on the Management of Disused Radioactive Sources. The centralised radioactive waste management facility under construction shall also be operationalized.

#### **Development of Malawi's first National Report for the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management**

Malawi became a Member State of the International Atomic Energy Agency in 2006. It acceded to the Joint Convention on 11 February 2022, and the Convention entered into force on 12 May 2022. Malawi's first National Report for the Convention was submitted in June 2022. The Report was prepared in accordance to the "Guidelines Regarding the Form and Structure of National Reports" (INFCIRC/604/Rev.3, Date: 18 September 2014).

The first step in the process of developing the report was a virtual national workshop, which was held from 31 May to 2 June 2022, to provide Malawian authorities with tools and assistance on how to develop its first National Report for the Joint Convention. Considering the multi-disciplinary and multi-sectoral nature of waste management in Malawi, the Atomic Energy Regulatory Authority (AERA), as the national focal point office for the Convention, identified key relevant stakeholders involved in the various aspects and stages of the

development of the radioactive waste management programmes. These stakeholders included; the Environmental Affairs Department, the Department of Mines, and the Ministry of Foreign Affairs.

After the virtual meeting, AERA prepared the first draft of the Report, which was shared with the stakeholder institutions who attended the virtual meeting for their review and feedback. Once AERA received comments and suggestions from stakeholders, the document was updated, finalized and uploaded on the Joint Convention secure website.

The key challenge that Malawi had in the preparation of the first National Report for the Joint Convention was timing. Malawi had limited time to assemble data and compile the report in a proper consultative manner. However, the assistance provided by the IAEA through the Joint Convention Coordinator and expert was very useful and helped Malawi to understand the reporting requirements and procedures. In future, Malawi will develop a workplan to ensure that it begins the process of collecting data and engaging stakeholders in advance before compiling the national report.

Malawi was unable to participate in the Joint Convention Review Meeting held in July 2022, however, it has planned to attend the next meeting.

#### **Thailand – The First National Report and its first attendance in the Review Meeting for the Joint Convention**

Thailand acceded the Joint Convention on 3 July 2018, and has become a Contracting Party to the Joint Convention since 1 October 2018. One of the obligations under the Joint Convention is to attend Review Meetings and to submit a National Report in each Review Meeting. Thailand participated in the Seventh Review Meeting held from 27 June to 8 July 2022 and submitted its first National Report for the Seventh Review Meeting.

Preparing the first National Report was not an easy task. A drafting team was composed of staff from the Office of Atoms for Peace, the national nuclear and radiation regulatory authority of Thailand, and the Thailand Institute of Nuclear Technology (Public Organization), currently the sole radioactive waste management service provider of Thailand, as well as other relevant entities. The team used the Guidelines regarding the Form and Structure of National Reports (INFCIRC/604/Rev.3). Apart from the self-explanatory Guidelines, the team also looked for publicly available National Reports as practical examples, especially the ones from countries with comparable nuclear and radiation programs.

After a National Report had been submitted, it was circulated among the Contracting Parties to the Joint Convention. The IAEA provides a secured website dedicated for the Joint Convention, which is used to submit a National Report, post questions on National Reports, and answer those questions. Thailand received 42 questions and comments, and we responded to all of them. However, Thailand did not post any questions on National Reports to other countries. It was our first time in the Joint Convention Review Meeting, so we were waiting to find out how the winds going to blow in the actual Review Meeting.

When the Seventh Review Meeting started, we found out that some countries had not submitted National Reports and some countries did not attend the Review Meeting at all and that this information got



reported one way or another. So, we were glad that we could make it to the Review Meeting. Thailand encourages all Contracting Parties to attend a Review Meeting as it is to the advantage of the Contracting Party and also an obligation under the Joint Convention.

What we had learned was that if a Contracting Party submitted a National Report but does not attend a Review Meeting, the review on such country's National Report cannot be done properly. In this context, the Contracting Party might get an acknowledge of submission of the National Report, but the delegations in Country Group cannot go through the context of such National Report because it will not be fair to judge or discuss without the present of a responsible country. Therefore, all the efforts in drafting a National Report will not be fruitful if a country does not present its National Report.

Another thing we had learned is that during the first week the meeting atmosphere is tense and technically geared. Representatives from each delegation can be very frank and direct in asking questions and commenting national presentations. We also had to focus on national presentations and felt a little bit of pressure to ask questions after each presentation. This is because a Country Group Rapporteur will jot down what questions asked and how many questions asked from each Contracting Party. It seemed as if you were in a game and you had to score to play along in the game.



Delegation of Thailand to the Seventh Review Meeting of the Joint Convention, 2022

From our observations at the Seventh Review Meeting, some vivid arguments have emerged in the Country Group discussions on “Good Practice” and “Area of Good Performance.” A Contracting Party cannot earn a “Good Practice” if the Country Group cannot reach consensus. This becomes troublesome that it requires clearer definitions of “Good Practice” and “Area of Good Performance” in the revised Guidelines regarding the Review Process. During the Seventh Review Meeting, an Open-Ended Working Group (OEWG) was established, the meetings of which, as the name implies, were open to participation by any Contracting Party.

The second week was not as technically intensive as the first week, with a Topical session and a plenary discussion of reports.

Lastly, another benefit for participating in a Review Meeting is that a participating country receives a “free” review of its overall radioactive waste management. This review may tackle on different angles than the usual ARTEMIS mission from the IAEA.

## **Development of the first National Report to the Joint Convention for the Syrian Arab Republic**

It is well documented that the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (JC) was created to attain a high level of nuclear and radiological safety worldwide and to fulfill a commitment outlined in the Preamble of the Convention on Nuclear Safety (Subsection ix).

It is clearly stated that under the JC, Contracting Parties have to submit periodic national reports on the steps that they are taking to implement the obligations contained in the JC and that these reports will be reviewed and discussed at Review Meetings of the Parties.

Radiation sources in the Syrian Arab Republic are strictly used in medical, industrial, agricultural and research applications. No spent fuel is produced from the Syrian research reactor MNSR (30 kW). Therefore, Syria's main objective to join the JC, like other Contracting Parties with no nuclear power plant, was the issue concerning the management of the disused sealed radioactive sources.

A virtual comprehensive workshop from 11 to 13 January 2022 was held to assist the Syrian Arab Republic, as a new Contracting Party, in developing its first National Report to the JC, including preparation and participation in the Seventh Review Meeting. Based on this useful workshop and IAEA valuable assistance, the Syrian Arab Republic had drafted its first National Report which is structured according to the “Guidelines Regarding the Form and Structure of National Reports” (INFCIRC/604/Rev. 3, date: 18 September 2014) and submitted to the JC Secretariat on time.

Furthermore, the Syrian Arab Republic actively participated in the Seventh Review Meeting held from 27 June to 8 July 2022, in Vienna, Austria. Syria was assigned to Country Group 7, which included Brazil, Cuba, Eritrea, Germany, Mauritania, Morocco, Netherlands, Serbia, Syria, Ukraine, and Uruguay. Therefore, Syria had the opportunity to review and discuss the National Reports, take benefit from the experiences of other countries, and identify possible areas for multilateral technical and regulatory cooperation under the auspices of the IAEA.

## **Paraguayan experience in the development of the Joint Convention first National Report**

As the entity in charge of regulating the peaceful use of atomic energy and ionizing radiation, the Radiological and Nuclear Regulation Authority (ARRN) has presented the first National Report, in accordance with the provisions of Article 32 of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, ratified by Law No. 6064/2018.

In relation to the preparation of the aforementioned report, there have been no problems in completing the information required in Article 32 – Presentation of Reports. All the supporting documentation is available at our institution (Regulatory Body of Paraguay), clarifying that the topics related to Spent Fuel Management don't apply to our country because Paraguay doesn't have any nuclear facilities.

Regarding the steps prior to the Seventh Review Meeting (2022), 15 questions were received from representatives of different countries. All questions were answered through the Joint Convention secure website.

Unfortunately, the Paraguayan delegation was not able to participate in the Seventh Joint Convention Review Meeting due to prior commitments that could not be postponed by the ARRN Executive Minister-Secretary, who is the Contact Point for this Convention. For this reason, the Chair of Country Group 1, Dr. Sven Keßen, was authorized to make a brief introduction and presentation on the National Report of our country.

Regarding the Guidelines on the Review Process, our country agreed that the Secretariat could make our National Report available to the public within 90 days after the Review Meeting. For that reason, the refusal to publish has not been notified.

Finally, Paraguay is expected to be able to participate in the subsequent meetings of the Joint Convention (with a delegate and substitutes – experts and advisors, complying with Rule 41) and comply with the suggestions that have arisen in relation to the First Report submitted.



# 4. Status of Contracting Parties

The Joint Convention is relevant to all IAEA Member States as 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 and education. As of August 2023, the Joint Convention consists of 89 Contracting Parties.

## How will the Joint Convention benefit your country?

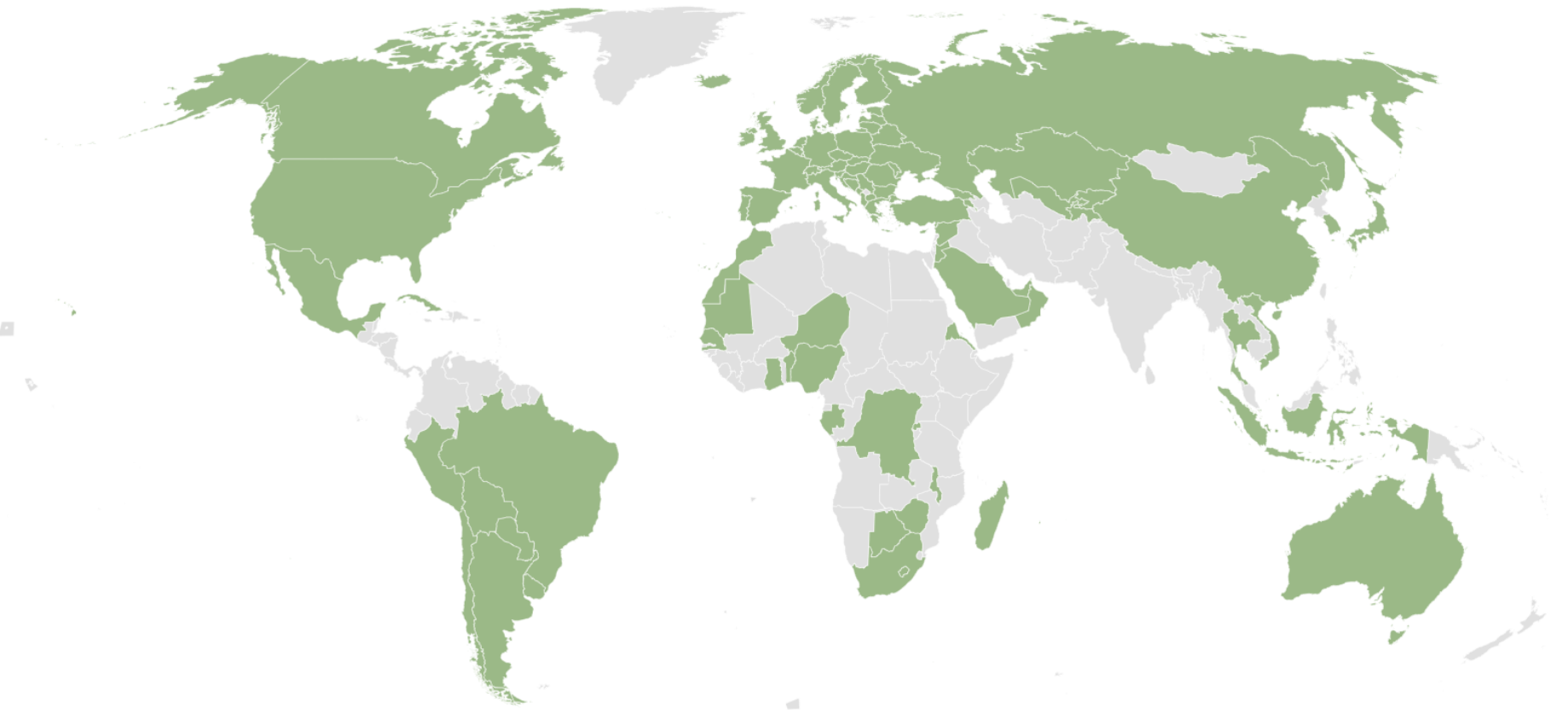
- By fostering an international approach to spent fuel and radioactive waste management and sharing expertise in these areas.
- By assuring the public that national arrangements for spent fuel and radioactive waste management conform to international standards.
- By highlighting the opportunities to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

View the Joint Convention brochure to learn more about its scope and processes here: [Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management | IAEA](#).

The Joint Convention brochure is available in [Arabic](#), [Chinese](#), [English](#), [French](#), [Russian](#), and [Spanish](#).

## Map of Contracting Parties to the Joint Convention

Contracting Parties to the Joint Convention as of September 2023 are shown in green.



## Recently joined Contracting Parties

Continent	Country	Entry into Force
Europe	Türkiye	21 May 2023

# 5. Important Dates

**26 - 27 March 2024**  
Organizational Meeting  
for the Eighth Review Meeting



**25 to 26 June 2024**  
Workshop of Incoming and  
Outgoing Officers

**16 August 2024**  
Deadline for submission of  
National Reports

**17 December 2024**  
Deadline for submission of  
questions and comments

**17 February 2025**  
Deadline for submission of  
answers

**3 March 2025**  
Deadline for notification of  
participation in Country Groups



**17 March 2025**  
Start of the Eighth Review Meeting





*Joint Convention News*

Thank you to the Contracting Parties who contributed  
to this issue of the Joint Convention Newsletter

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