



Joint Convention NEWS

JOINT CONVENTION ON THE SAFETY OF
SPENT FUEL MANAGEMENT AND ON THE
SAFETY OF RADIOACTIVE WASTE



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President's Message

FACING THE CHALLENGE OF DEALING WITH THE COVID-19 PANDEMIC

Dear Readers,

Preparations for the Seventh Review Cycle of the Joint Convention on the Safety of Spent Fuel and Radioactive Waste Management began in a virtual format in October 2020. This was due to the global Covid-19 pandemic. Many uncertainties are facing us in the organization of the Seventh Joint Convention Review Meeting. Due to the pandemic, we are likely to see reduced participation if the Review Meeting was to take place in its normal physical format. My intention as President of the Seventh Joint Convention Review Meeting is to allow for an effective and rigorous Review Meeting with the widest possible worldwide participation. Although video conferencing is in many cases a viable substitute for physical meetings, in the case of the Review Meeting this approach would give rise to several difficulties, allowing only for a very limited scope of the peer review. It is for these reasons, that the Presidency proposed to the Joint Convention Contracting Parties to postpone the Seventh Review Meeting into the year 2022, so that a physical presence at the Review Meeting is hopefully possible again. This proposal was agreed upon by Contracting Parties in November 2020. The Seventh Review Meeting of the Joint Convention will therefore be postponed. The new dates are 27 June – 8 July 2022.

Then, it was my task, in consultation with the Contracting Parties and the Joint Convention Secretariat, to adapt the timeline for the submission of questions and answers to the National Reports, as well as addressing any other open organizational and logistical challenge in the view of a smooth and effective peer review. This included references in the National Presentations to include updates since the submission of the National Reports in 2020.

Despite these difficult circumstances, we have made progress, and I would like to assure you that I remain fully committed to lead through the Seventh Review Cycle of the Joint Convention. I will put the main focus on continuous improvement, which I believe is a demonstration of a good safety culture. Every Contracting Party should show in what areas and to what extent they have made progress since the last Review Meeting. In particular, specific reference should be made to the overarching issues identified as part of the Sixth Review Meeting. Whilst some of these issues are only relevant to Contracting Parties with nuclear programmes, an issue that is relevant to all is the safe management of disused radiation sources. It is with this in mind that I would like to encourage more countries to become signatories to the Joint Convention.

This is an ongoing process, and I am pleased that since the last JC Newsletter of December 2018 the number of Contracting Parties has further increased from 80 to 83, with the Joint Convention entering into force for Bolivia, for Benin, and for Eritrea.

I take this opportunity to thank you for your commitment to an effective Joint Convention peer review process and for supporting us in our efforts to find the most pragmatic and effective way to prepare and to organize the Seventh Review Meeting of the Joint Convention.

Hans Wanner

President

Seventh Review Meeting of the Joint Convention



Recent Developments

The COVID-19 (corona-virus) pandemic has created an unprecedented situation. In order to adhere as far as possible to the prescribed procedure for preparing and holding the Seventh Review Meeting of the Contracting Parties to the Joint Convention, the following modifications to the schedule have been made:

- The Organizational Meeting which, according to the original schedule, was to be held from 28-29 May 2020 was postponed and was held as a virtual meeting over four days from 28 September 2020 to 2 October 2020.
- The Fourth Extraordinary Meeting, originally scheduled for 26-27 May 2020, was postponed and will be held as a physical meeting at a date to be determined in due course.
- The Third Meeting of the informal working group, which was established to develop proposals to enhance the effectiveness of the review process, scheduled for March 2020, was cancelled. The Contracting Parties agreed to consider the proposals at the Open-Ended Working Group during the Seventh Review Meeting.

In view of the COVID-19 pandemic, the Contracting Parties had agreed to hold the Organizational Meeting as a virtual meeting from 28 to 30 September and on 2 October 2020. A total of 68 of the 83 Contracting Parties attended the meeting. Among other important items, the agenda included:

- The election of the President and the two Vice-Presidents;
- The establishment of Country Groups; and

- The election of Country Group Officers.

By secret ballot, Mr. Hans Wanner (Switzerland) was elected as the President to the Seventh Review Meeting. The Contracting Parties elected by consensus Mr. Thiagan Pather (South Africa), and Ms. Mina Golshan (United Kingdom) as the two Vice-Presidents to the Seventh Review Meeting.

Eight Country Groups were established pursuant to the guidance of INFCIRC/603/Rev.7. The officers for the Country Groups were elected on the basis of nominations received by the Secretariat by 13 September 2020. The composition of the Country Groups and the names of the elected officers can be found on the secure JC Website.

Due to continued uncertainty surrounding the COVID-19 pandemic the Contracting Parties had agreed to postpone the Seventh Review Meeting of the Contracting Parties to the Joint Convention. Thus, the new dates for the Seventh Review Meeting are 27 June - 8 July 2022. The Contracting Parties had also agreed to adjust other deadlines. This applies to the deadlines for submission of questions and comments on National Reports (30 October 2021), and responses on questions and comments on National Reports (31 March 2022).

New regulations for the financing of radioactive waste management in Germany

The proper and safe treatment of radioactive waste is a basic requirement for the responsible use of nuclear energy and for the application of radioactive substances in medicine, industry, and research in all countries. This applies equally to the management of spent fuel elements from nuclear reactors whenever they accumulate. The individual steps are sometimes associated with great effort and correspondingly high costs. In most countries, these costs are to be borne by the waste producers in accordance with the polluter-pays principle.

This is also the case in Germany.

In Germany, the operators of nuclear facilities are basically responsible for the processing of radioactive waste into waste packages that are suitable for storage and deep geological disposal. Spent nuclear fuel elements are packed into dry storage casks in accordance with the acceptance conditions of the respective storage facility. For the management of waste from the large research centres, including decommissioning and dismantling waste, the public owners provide appropriate funds in their current budgets. Radioactive waste from medicine, industry, and research must be delivered to land collecting facilities for a fee. If costs arise in connection with the monitoring of a repository after it has been closed, the Federal Government would have to provide – as a state task – the necessary funds.

In the past, the respective private operators were obliged to make sufficient provisions for the disposal of spent nuclear fuel and radioactive waste and for the decommissioning of nuclear facilities. The Federal Government refinanced the necessary expenses for the

planning and construction of the repositories through advance payments on construction fees. Although this concept was practicable, it also entailed the risk that unforeseen circumstances (e.g., insolvency, liquidation) could mean that a company might no longer be able to fully pay its obligations. This was taken into account by a new financing model that has already proven itself in other countries.

The Waste Management Fund Act came into force in Germany on 16 June 2017. It ensures long-term financing for decommissioning, dismantling, and waste management without the costs being passed on unilaterally to society. The operators of the nuclear power plants will continue to be responsible for the entire process and the financing of decommissioning, dismantling, and appropriate packaging of the radioactive waste. However, the Federal Government will be responsible for the implementation and financing of storage and disposal. These tasks are performed by federally-owned companies. The financial resources amounting to approximately EUR 24.1 billion for storage and disposal have been made available to the Federal Government by the operators and transferred to a fund organized as a foundation under public law on 3 July 2017. The fund takes the financial resources, invests them, and pays them out. The money of the fund may only be used to fulfill this purpose. The foundation reimburses the Federal Government for the costs of safely disposing of radioactive waste.

The fund is subject to legal supervision by the Federal Ministry for Economic Affairs and Energy, which is carried out in agreement with the Federal Ministry of Finance, and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Status Update on Deep Geological Repository Projects in Canada

There is currently one active deep geological repository (DGR) project in Canada, the Nuclear Waste Management Organization’s (NWMO) Adaptive Phased Management (APM) project. Ontario Power Generation (OPG) is exploring other options to a proposed DGR for low- and intermediate-level radioactive waste (L&ILW). The present article summarizes these projects and the significant developments that have happened since the 2018 Joint Convention Review Meeting.

Adaptive Phased Management

The NWMO, a not-for-profit corporation established under the Canadian Nuclear Fuel Waste Act, is responsible for implementing, collaboratively with Canadians and Indigenous peoples, Canada’s plan for the safe, long-term management of used nuclear fuel, in a manner that protects both people and the environment. The Government of Canada has accepted Canada’s plan, or APM, for the long-term management of Canada’s used nuclear fuel.

Canada’s plan involves the construction and implementation of a DGR for the centralized isolation and containment of used nuclear fuel. The DGR will be located in an area with informed and willing hosts, with operations expected to begin in the 2040s.

The site selection process began in 2010 with 22 self-identified communities. As of January 2020, the number of areas has been narrowed down to two landlocked areas: Ignace and South Bruce, both in the province of Ontario. NWMO’s goal is to select a single, preferred site by 2023.

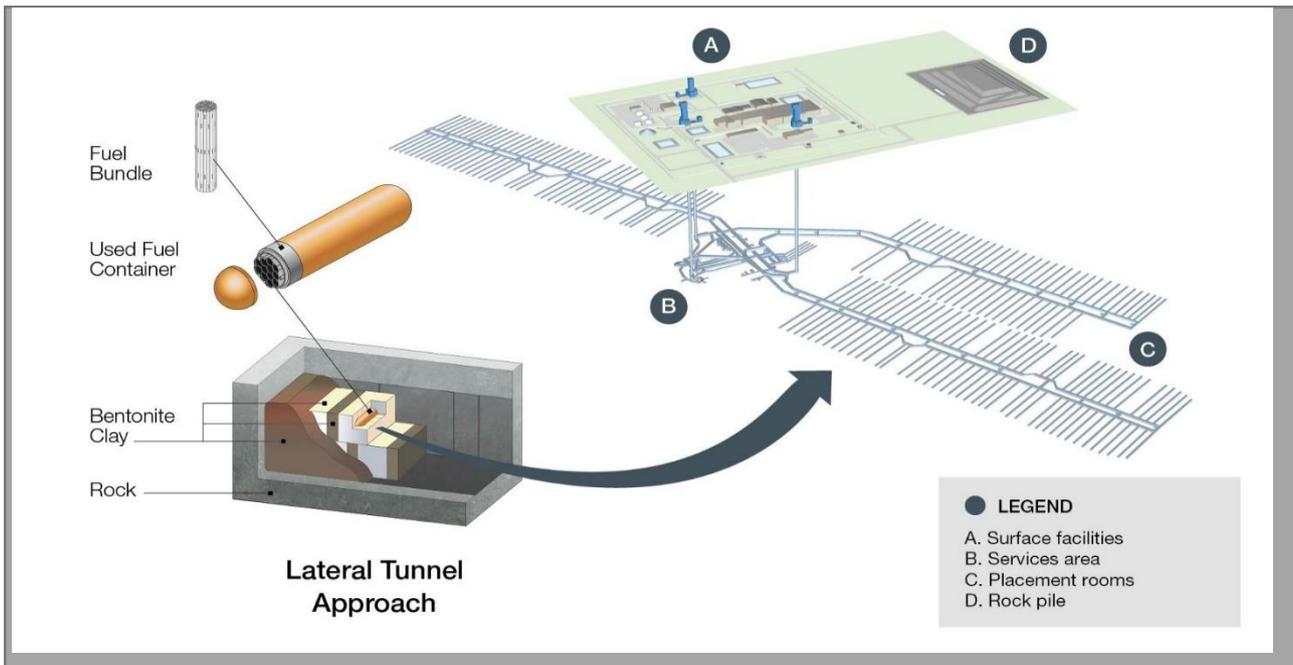
Technical site evaluations are currently underway. Once a preferred site has been selected, the NWMO plans to develop a Centre of Expertise in the vicinity of the area. At the same time, more detailed site characterization activities will collect the information required to assemble a safety case and obtain regulatory approvals for a federal impact assessment and for Canadian Nuclear Safety Commission

(CNSC) licensing (site preparation and construction). It is anticipated that studies for a licence application for site preparation will be submitted in 2024.

Since 2009, special project service arrangements have been in place between the NWMO and the CNSC, enabling the CNSC to engage in pre-licencing outreach and technical review activities. In addition, to help staff prepare for the review of a future DGR licence application by the NWMO, the CNSC established an independent advisory group (IAG) in 2013. The IAG consists of six Canadian experts in geosciences and provides objective, independent advice to CNSC staff on the geoscience aspects of the initiative for the safe, long-term management of used nuclear fuel.



NWMO technical experts and staff providing a tour of the Oakville Proof Test Facility



Illustrative diagram of proposed NWMO DGR.

Ontario Power Generation Deep Geological Repository

OPG, with the support of Bruce County municipalities, proposed to construct and operate a DGR for the long-term management of L&ILW adjacent to the Bruce nuclear site in Tiverton, Ontario.

OPG's DGR project was designed for 200,000 cubic metres of emplaced L&ILW from operations and refurbishment activities at OPG-owned or operated nuclear generating facilities. It was planned to be constructed at a depth of 680 metres in low permeability limestone, beneath a 200 metres thick layer of low permeability shale at a site adjacent to OPG's existing Western Waste Management Facility, which provides centralized storage for L&ILW from the operation of OPG-owned or operated reactors in Ontario.

The regulatory process for OPG's DGR began in 2005 with the submission of the DGR Project Description to the CNSC. In 2012, the federal Minister of the Environment and the CNSC established a joint review panel (JRP) which reviewed OPG's environmental impact statement for a site preparation and

construction licence. The JRP held 33 days of public hearings and, in 2015, issued the Environmental Assessment Report that concluded OPG's DGR project was not likely to cause significant adverse environmental effects.

OPG committed in 2013 that it would not build the DGR without the support of Saugeen Ojibway Nation (SON), a First Nation whose traditional territory includes the proposed location at the Bruce nuclear site. Four years later in 2017, the Minister of the Environment and Climate Change asked OPG to update its analysis of the potential cumulative effects of the DGR Project on the physical and cultural heritage of the SON. OPG continued its ongoing dialogue with the SON who decided to put the decision of whether to support the project to a vote by its Members. In January 2020, Members of the SON voted not to support the DGR.

OPG stated that it respects the decision of SON Members and will explore other options, engaging with key stakeholders to develop an alternate site-selection process. OPG added that any new process would include engagement with Indigenous peoples as well as interested municipalities.

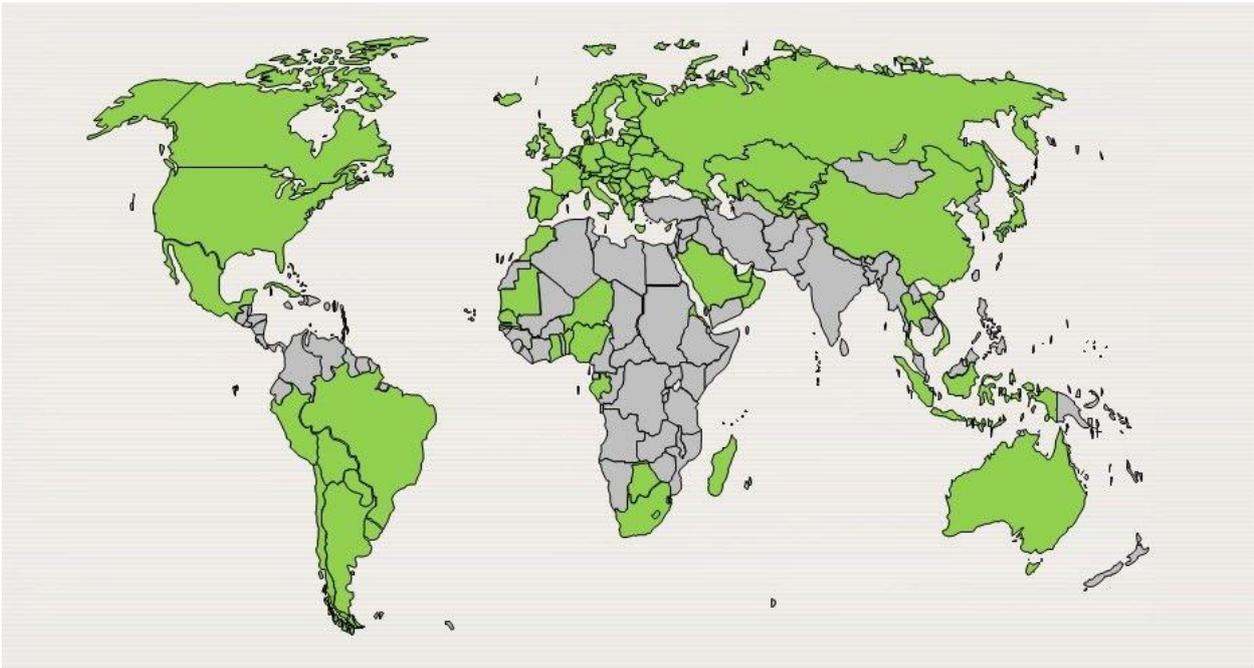


Figure 3. Green shading indicates Contracting Parties to the Joint Convention as of December 2020.

New Contracting Parties

The Joint Convention consists of 83 Contracting Parties as of December 2020. Three Contracting Parties have joined since the last issue of *Joint Convention News* in December 2018.

RECENTLY JOINED CONTRACTING PARTIES		
<i>Continent</i>	<i>Country</i>	<i>Entry into Force</i>
Africa	Eritrea	11 June 2020
Africa	Benin	17 December 2019
South America	Bolivia	15 December 2019

Seventh Review Meeting Process Schedule

28 - 30 September 2020 & 2 October 2020 (Virtual Meeting)

Organizational Meeting for the Seventh Review Meeting

27 October 2020

Deadline for Submission of National Reports

30 October 2021

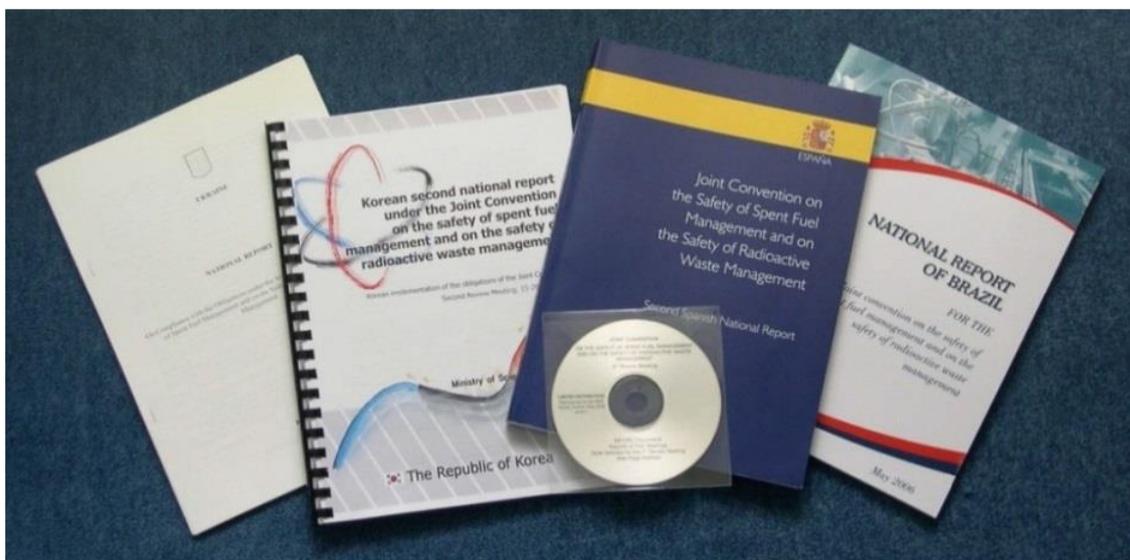
Deadline for Submission of Questions and Comments on National Reports

31 March 2022

Deadline for Submission of Answers for National Reports

27 June 2022

Commencement of the Seventh Review Meeting



Joint Convention News

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