



The effects of the COVID-19 pandemic on stakeholder engagement practices

Beyond the tragic loss of human lives, COVID-19 caused a series of major changes in society, including in the way people communicate and engage with each other. In the nuclear sector, while operations continued, many organisations found themselves forced to abruptly rethink their ways of working due to restrictions affecting meetings and travel. The nuclear industry and the radioactive waste management field had to adapt to these new circumstances. The stakes were high due to the nature of the activities in this safety-focused sector.

The impact on communication and stakeholder engagement activities was particularly strong due to restrictions on the ability to hold both large public meetings and smaller in-person discussions to foster mutual trust and confidence. In some instances, nothing can replace in-person dialogue, especially where building trust is concerned. Some waste management organisations (WMOs), regulators and technical safety organisations (TSOs) found themselves facing the dilemma of suspending their stakeholder engagement activities, thereby jeopardising decision-making processes with established milestones, or carrying on with them using teleconferencing.

In most cases the second option was chosen, requiring changes but allowing the organisations to move forward with their work and stay in contact with all stakeholders. The changes which had to be made have had significant impacts in terms of milestones, internal resources, external stakeholders and relationships overall. The impacts were positive in some cases, negative in others.

Due to the magnitude and potentially long-lasting effect of these changes, the Nuclear Energy Agency (NEA) Forum on Stakeholder Confidence (FSC) decided to investigate them and to reflect on lessons learnt, what changes will endure and what will likely return to the way it was before. To do so, a questionnaire was drafted and circulated to the FSC members. The results are presented in this document.

The questionnaire

The NEA and the National Waste Management Organization (NWMO, Canada) prepared a questionnaire composed of ten questions and an open section to provide additional input, and sent it to FSC members in October 2022. The questions were as follows:

1. Preliminary question: a little bit about your national context.
2. What tools and practices for communication and engagement did you begin to use for the first time or expand use of during the pandemic?
3. Which of these tools/practices did you find the most successful? Why?
4. Which of these tools/practices did you find the least successful? Why?
5. Were there tools/practices that you used less than before the pandemic started? What was the impact?
6. Did you note differences in the ways different audiences or demographics responded to tools and practices during the pandemic?
7. What tools/practices do you intend to keep using more than you used before the pandemic? Why?
8. What tools/practices do you intend to use less when pandemic restrictions are not in place? Why?
9. What challenges did your communication and engagement teams face during the pandemic with respect to collaborating internally within your organisation?
10. Were there tools or practices your organisations found useful for collaborating and sharing information internally?
11. Anything to add?

Participating countries

- Belgium
- Canada
- France
- Hungary
- Italy
- Japan
- Norway
- Spain
- Switzerland

The first question aimed at providing context to understand the level of activity that the different organisations were facing when the pandemic started in 2020. Questions 2 to 8 allowed them to detail the different tools and practices that have been used in the context of the pandemic, highlighting any positive and negative aspects that could be analysed. Questions 9 and 10 looked at how audiences responded to the tools and practices used, and which of those organisations intend to keep using them.

Fourteen organisations from nine countries responded to the questionnaire: **Belgium**: ONDRAF/NIRAS (National Agency for Radioactive Waste and enriched Fissile Material – WMO); **Canada**: NWMO (WMO), AECL (Atomic Energy of Canada Ltd – TSO), OPG (Ontario Power Generation – utility); **France**: Andra (National Agency for Radioactive Waste Management – WMO), IRSN (Radioprotection and Nuclear Safety Institute – TSO); **Hungary**: PURAM (Public Limited Company for Radioactive Waste – WMO); **Italy**: SOGIN (state-owned enterprise responsible for decommissioning Italian nuclear power plants – WMO); **Japan**: NUMO (Nuclear Waste Management Organization – WMO); **Norway**: DSA (Norwegian Radiation Protection Authority – Regulator); NND (Norwegian Nuclear Decommissioning – WMO); **Spain**: Enresa (Spanish Radioactive Waste Management Organisation – WMO); **Switzerland**: NAGRA (National Cooperative for the Disposal of Radioactive Waste – Project’s Implementer), SFOE (Swiss Federal Office of Nuclear Energy – Federal Government).

Context of participating countries (at the beginning of the pandemic)

Country	Intensity of stakeholder engagement activities
Belgium	High activity level
Canada	High activity level
France	High activity level
Hungary	Low activity level
Italy	High activity level
Japan	High activity level
Norway	Average activity level
Spain	Average activity level
Switzerland	High activity level

Decision-making processes for nuclear waste projects were at different stages in the participating countries when the pandemic started. In some cases, important steps in siting programmes were ongoing or expected in the short term, while in others no immediate milestone was approaching. As a result, some programmes required a significant level of stakeholder involvement while others demanded less engagement. The survey captured the different levels of engagement required as well as initiatives conducted in each country.

Countries with a high degree of ongoing activities

In **Belgium**, the licensing process for the near-surface repository was ongoing, together with a reshaping of the partnerships, while the public consultation for a deep geological repository (DGR) was scheduled for April 2020. In **Canada**, the different organisations were engaged in several processes when the pandemic arose, including the recent identification of two potential sites for the DGR. They were also involved in a proposal that was in the licensing phase to create a facility for low-level waste (LLW) at an existing nuclear laboratories site, and in dialogue with other local communities about alternate solutions for disposal of low- and intermediate-level waste (LILW). In **Italy**, the green light for the publication of the map of potentially suitable areas for a national repository was issued at the end of 2020 and a public consultation and a national workshop took place throughout 2021. **Japan** had begun an intensive nationwide dialogue towards the siting of a DGR, hosting more than 150 public meetings, initiating a literature review with two communities involved in the process and organising a wide range of public engagement activities that began in 2020. In **Switzerland**, the third and final stage for the DGR site selection had begun at the end of 2018. Regional participation and information exchanges with the public continued during the pandemic with the arrangement of online and/or hybrid meetings. Where possible, in-person meetings were held according to COVID-19 restrictions. In **France**, activities related to the DGR consultation and dialogue roadmap were organised as well as a public consultation on the possible extension of the storage capacity for very low-level waste (VLLW) disposal. In practice, that meant that meetings and discussions with both local and national stakeholders were organised by Andra as well as IRSN on a regular basis.

Countries with a low/average degree of ongoing activities

In **Hungary**, the siting programme for the DGR continued with the completion of three additional boreholes. In **Norway**, several types of activities were considered, including public meetings, but only some of them were implemented. **Spain** was expected to update its General Radioactive Waste Plan (GRWP) and Enresa worked on the application for the transfer of ownership and authorisation for the first phase of the dismantling of Santa María de Garoña Nuclear Power Plant. These milestones required intense interactions with the media and consultations with administrations and interested individuals.

Main findings

New ideas

Participating countries were asked to explain which tools and practices they began to use for the first time or expanded use of during the pandemic. The practice of “going virtual” is, as expected, common among almost all countries.

Level of stakeholder involvement activities



Six of the nine participating countries (Belgium, Canada, France, Italy, Japan, Switzerland) described a high level of activity during the pandemic from the point of view of the development of radioactive waste management programmes. Two countries (Norway, Spain) declared a medium level of activity, as they were preparing activities to carry out, while one country (Hungary) indicated a low level of activity compared to other periods.

In **Belgium** and in **Italy**, teleconferences were used for workshops and educational activities. In **Canada**, the NWMO adopted teleconference meetings and open houses to replace in-person events. **France** created “virtual site visits” to maintain a connection with the local public, which could no longer be welcomed at the facilities. **Hungary** had to increase the availability of written documents to foster participation, while **Japan** arranged online lectures to raise awareness about the need for a DGR. In **Switzerland**, where intense public involvement activities were required, SFOE and the regional conferences began arranging online and hybrid meetings as soon as possible. In **Spain**, an escape room at El Cabril was turned into a “virtual escape box” (see box for details).

Positive aspects

Many countries emphasised the positive aspects of teleconference meetings, mostly because connecting with people can be much easier. For example, no meeting venues or travel were needed to allow people to meet.

Belgium underlined the fact that teleconferencing enabled a more precise and intense schedule, avoiding delays related to travel. **Hungary, Italy** and **Spain** noted that the need to collect written contributions increased the overall amount of information exchanged. **Japan** and **France** said that some teleconferencing platforms offered the opportunity to easily split the discussion into small groups. **Norway** said that meetings designed mostly to send out information, and where interaction was not a key component, worked well. It also seemed that barriers to attend meetings were lower when participants could join from home.

Switzerland noted that the switch from in-person meetings to hybrid or online discussions worked well, but only because of the advanced stage of the process there. The relevant stakeholders on a local, regional and national level had already established working relationships when the pandemic started.

Negative aspects

Respondents to the questionnaire widely acknowledged that losing the opportunity to meet stakeholders in person caused a potential loss in terms of mutual confidence. Most reported that the feeling of trust and the opportunities to foster dialogue were not the same during the pandemic as in previous years.

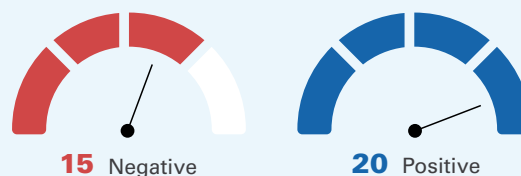
In **Japan**, participation to public meetings decreased and some of them had to be cancelled as a result. **Hungary** also noted that people often found it difficult to focus during online presentations, pointing out that “they were ‘online’ but the mind was somewhere else.”

In **Italy**, with higher numbers of stakeholders involved, feedback on a national workshop noted that the allotted time for presentations was not sufficient.

Belgium noted that the impossibility to hold in-person meetings and be present in the communities made it difficult to engage with new stakeholders, as opposed to people who were already involved in discussions with the WMO.

Several countries also noted that the amount of news dedicated to the evolving pandemic reduced the time left to talk about topics like radioactive waste and available solutions, hence limiting the ability to reach key audiences in this way.

Number of positive and negative practical aspects reported in the questionnaires regarding teleconference meetings



Audiences

Many countries noted that virtual public meetings have created a divide between older and younger people, with the latter usually more comfortable using online technologies.

Among these countries we find **Belgium** and **Switzerland**, where partnerships’ members are often older people. **Hungary** noted as well that many of the stakeholders they were interacting with were older people who were not familiar with the Internet and more accustomed to printed material. **Switzerland** noted that older people experienced difficulties at the beginning but caught up over time. In **Hungary** and **Canada**, some remote communities including First Nations have unreliable Internet access. This issue was in some circumstances addressed by providing better tools to access the Internet, creating an opportunity from a difficult situation. A similar benefit was underlined by **Norway**, which noted an increase in the number of employees able to use tools for information sharing.

France noted that teleconference meetings made it possible to attract participants that were usually underrepresented (or not present at all) in in-person public meetings, such as younger people and people with child care issues.

Permanent changes

This topic is one of the main focuses of the survey, which was conducted at a time when many organisations were experiencing fewer pandemic restrictions and a return to “normality” was beginning.

Belgium and **Canada** said online meetings were best used to share information rather than to make decisions, noting again that this may be very helpful when meeting over long distances. In **Hungary**, online competitions organised among students during the pandemic turned out to be a permanent innovation. In **Japan** and in **Spain**, online lectures and workshops will continue, as they proved to be very effective.

Norway, Switzerland and **France** noted they are pursuing opportunities to find a good balance by continuing to adopt hybrid or fully remote meetings when appropriate. **France** noted that hybrid meetings made it possible to broaden the meetings’ audience as non-governmental organisations in particular do not always have the time and funds to travel to Paris, where most meetings are taking place. Therefore, keeping a virtual option open allows for a more diverse participation.

General sentiment about teleconference meetings



Most countries reported a balanced sentiment regarding teleconference meetings. Hungary is the only one describing a mostly negative sentiment on teleconference meetings, while Canada and Italy expressed positive views.

Switzerland noted that the use of such meetings has decreased over time. Hybrid meetings hardly take place anymore (as of early 2023), but some meetings are still organised online.

Another big change that is expected to be permanent is the opportunity for employees to work from home, which in countries like **Italy** was not common before the pandemic.

Non-permanent changes

Many countries like **Italy, Hungary, Japan, Spain** and **Switzerland** underlined the necessity of resuming site visits and public meetings in person, especially for building and maintaining trust among stakeholders and for facilitating shared decision-making. Some countries, like **Belgium**, also noted they are going to arrange fewer online workshops.

Internal challenges

The need to quickly improve virtual communication tools and practices during the pandemic was widely acknowledged, with some exceptions, like **Canada's** AECL, where employees were already well set up to work remotely.

In **Belgium**, an information technology (IT) team was created to help a lot of people deal with the new working context. In **Japan**, an IT specialist organised within a few weeks access to tools

allowing all employees to work from home. **Spain** also noted the importance of the work of IT specialists in supporting remote access. In **France**, the necessity of working remotely became an opportunity as it helped gather communication teams from different sites. In countries like **Italy**, restrictions in accessing the headquarters created issues.

In **Switzerland**, there was a lack of access to video conferencing software and hardware and the use of both was not common for most stakeholders involved. The result was a phase of adaption and small delays in the intermediate steps, but no overall delay, of the site selection procedure.

Tools and practices

Most countries highlighted the importance of different online platforms for teleconference meetings, describing in some circumstances the pros and cons of each.

Some countries, like **Canada**, mentioned a need to help staff in dealing with the difficulties brought on by the pandemic that was addressed in part through adding various forms of fun social activities in the everyday usage of professional tools. **Spain** included the children of staff in solidarity activities to strengthen the human aspects of working life. Multiple opportunities for sharing helped significantly, but **France** underlined also the risk of over solicitation.

Canada: “Virtual home visits” from NWMO

In Canada, the NWMO adopted a new approach during the prolonged pandemic lockdowns to replace some of the engagement and relationship building that had been underway with residents of a potential host community for a deep geological repository for used nuclear fuel. An important part of the organisation's engagement programme is spending time with individuals in potential host communities to share information and answer questions about the project. When pandemic restrictions made that impossible, the NWMO team began to offer “virtual home visits” in the community. They scheduled times with individual families who were interested in learning about the project to have informal conversations while sharing a meal together. Since they couldn't meet in person, they ordered dinner to be delivered to the family in time for their meeting, and then had the discussion online using teleconference platforms while they all enjoyed their meal together.

France: Live interactive webinars organised by Andra

Before the pandemic, regular meetings and debates had been organised for the public. A Facebook live event had been held once but it was not customary to organise live exchanges on the Internet.

In the spring of 2020 a first web conference was held entitled: “Should we be afraid to live next to a radioactive waste disposal facility?” where any Internet user could connect and ask questions live. Many other webinars were then organised during the pandemic, including one live from the underground laboratory galleries.

Since then, numerous consultation meetings regarding the DGR project consultation roadmap have been held online and they continue today. The crisis of the pandemic has been a driving force for innovation.

Andra's employees as well were invited to film themselves with their smartphones and react to the question “How does it feel to be confined like radioactive waste?” Their answers were posted on Andra's social media. It was a way of putting into words what affected them all and of showing that they were still linked to a collective and common mission.

Spain: A virtual escape box set up by Enresa

In the years preceding the pandemic, the communications department of Enresa in El Cabril conceived an escape box addressed to teenagers (mainly high school students), where they needed to join forces to resolve in a fixed amount of time different problems and questions related to radioactivity and radioactive waste. The purpose was to engage younger stakeholders and inform them of matters related to radioactivity and radioactive waste management. The game was conceived as a variation of an “escape room” in which the participants were given a box they had to open. The game was very positively assessed by the students. At that time, escape rooms were very popular in Spain, especially for those between the ages of 12 and 18.

When the pandemic began, in-person meetings could not be held. The decision was made to convert the escape boxes into virtual escape boxes. It worked as an online appointment, making use of Skype. Connection details were provided to the students. The gaming paraphernalia (printed cards with questions, etc.) was adapted and provided to the participants in advance. Participants were guided online by a contractor through a series of problem-resolution exercises focusing on radioactivity and waste. This was considered a good solution to continue this activity. The feedback received from users was very positive.

The games have since fully returned to their original in-person format, now under the name “Explora El Cabril”, and conceived as a quiz show with maps and measuring instruments.