



Brussels, 24 November 2022

A first step towards the deep disposal of high-level and/or long-lived radioactive waste in Belgium

On 22 November 2022, a Royal Decree was published in the Belgian Official Gazette as the first regulatory act to formally establish a national policy for the safe and responsible long-term management of high-level and/or long-lived radioactive waste in Belgium. It ratifies the decision in principle of deep disposal on Belgian territory, as recommended by ONDRAF/NIRAS, and lays the foundations for establishing the implementation procedures at a later stage and within a clear framework. These will be determined step-by-step in a participatory, transparent, and phased decision-making process that will lead to the selection of the implementation site(s). Belgium is thus taking responsibility and making every effort to avoid passing on undue stresses to future generations.

"The choice of deep disposal is fundamental in enabling ONDRAF/NIRAS to completely fulfil its public service mission. A broad societal debate will be held in 2023 to define the main areas of the decision-making process that will accompany the implementation of deep disposal and to confirm or modify the decision to carry out deep disposal in Belgium as a safe management solution within the framework of the reversibility of the decision," says Marc Demarche, Director General of ONDRAF/NIRAS.

The long-term management of radioactive waste is a societal challenge that concerns all of us. Some of this waste, known as "high-level and/or long-lived" waste, comes from the production of electricity in nuclear power plants, from research and from other nuclear and medical applications.

Deep disposal

High-level and/or long-lived waste requires a final destination in which it will be isolated for much longer than in any construction that humans have ever built. Like all countries with a long-term management policy for this type of waste, Belgium is now choosing deep disposal, also known as geological disposal. Only by disposing of this waste in a stable and adequate geological layer will we be able to confine and isolate it completely from the population and the environment for hundreds of thousands of years. This will protect them from the dangers that may result from certain future changes to the earth's surface,

the climate or our society. After 50 years of research, scientists agree on this point, both in Belgium and abroad.

Societal debate

The decision in principle in favour of deep disposal is the very first step in a process that should lead to one or more sites where a deep disposal facility can be established. This process will take several decades and involve a series of decisions, the last of which will be the selection of one or more disposal sites. Each decision is subject to reconsideration in order to take into account all the relevant developments in scientific progress and technological innovations, as well as societal values.

In 2023, the King Baudouin Foundation will hold a public debate with institutional stakeholders, academics and experts, as well as with civil society organisations and the population, with a special focus on the younger generation. This debate will determine how the decision in principle on deep disposal can be translated into practice. This will include answering the following questions: What are the next decisions to be made? Who prepares these decisions and how? What are the technical, financial and societal criteria for reversing a decision? How will the site(s) be selected? What are the technical, societal and safety requirements for building a disposal facility? How can we control this facility and possibly retrieve the waste? Are there any variants for deep disposal? These are all specific questions that will be addressed during this public debate.

The societal debate should therefore lead ONDRAF/NIRAS to propose to the government the second part of the national policy, which will focus on the decision-making process. In addition, if necessary it will also serve to confirm or modify the choice of deep disposal on Belgian territory.

What is ONDRAF/NIRAS?

Since its creation in 1980, ONDRAF/NIRAS, the Belgian Agency for Radioactive Waste and Enriched Fissile Materials, has been responsible for all radioactive waste in Belgium. The organisation's mission is to effectively protect the public and the environment from the potential hazards of radioactive waste.
