

## JRC SCIENCE AND POLICY REPORTS

# Radioactive Waste Management Stakeholders Map in the European Union – Corrigendum

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#### **Abstract**

The present document is a corrigendum to the report 'Radioactive Waste Management Stakeholders Map in the European Union'. The sections about Czech Republic, Slovenia and United Kingdom have been updated with more recent information.

## JRC SCIENCE AND POLICY REPORTS

# Radioactive Waste Management Stakeholders Map in the European Union – Corrigendum



#### **Czech Republic**



#### Radioactive waste management facilities

#### Current:

- Dukovany: largest low- and intermediate-level short-lived waste repository adjacent to the nuclear power plants. It is used for diposal of waste produced during the operation of Dukovany and Temelín nuclear power plant. At the Dukovany nuclear power plant site there is also a storage facility for spent fuel in operation since 1997.
- Richard: centralized repository for institutional LILW. It is situated in the vicinity of the town of Litoměřice, in the complex of the former limestone mine Richard II. Since 1964 so-called institutional radioactive waste has been disposed there.



#### Main organisations involved in radioactive waste management

Policy/legislation actors	Ministry of Industry and Trade www.mpo.cz Ministry of Finance www.mfcr.cz Ministry of Environment www.mcp.cz			
Implementing organisation	SÚRAO Radioactive Waste Repository Autority			
Regulatory authorities				
Regulatory authorities	State Office for Nuclear Safety, SÚJB www.sujb.cz Czech Mining Office http://www.cbusbs.cz			
Scientific research	Ústav Jaderného Vyzkumu Rez A.S, Nuclear Research Institute (NRI) www.ujv.cz Academy of Sciences of the Czech Republic www.cas.cz			
Non-governmental	The Green Circle (national association of NGOs)			
organisations (NGOs)	Czech Nuclear Society www.csvts.cz			
	Czech Radiological Society www.crs.cz			
Nuclear industry	CEZ www.cez.cz			
Local community	Dukovany local council www.obecdukovany.cz Temelín local council			

The Czech Government defines the radioactive waste management policy and strategy and guarantees safety of radioactive waste disposal. The state organisation SÚRAO was established by the Ministry of Trade and Industry in 1997 as a fully state controlled organisation. SÚRAO operates the existing low- and intermediate-level waste repositories and is responsible for the development of deep geological repository for disposal of HLW and spent fuel. Activities of SÚRAO are financed from the Nuclear Account, a fund which is created from levies of waste generators for the waste disposal and is managed by the Ministry of Finance. Additionally, SÚRAO has submitted to the Ministry of Environment applications for non-invasive investigation in potentially suitable areas for the deep geological repository in seven municipalities (SÚRAO, 2014).

CEZ is the main company that operates the nuclear power plants of Dukovany and Temelín. CEZ is fully responsible for storage and management of its radioactive waste at its premises, until it is handed over to SÚRAO.

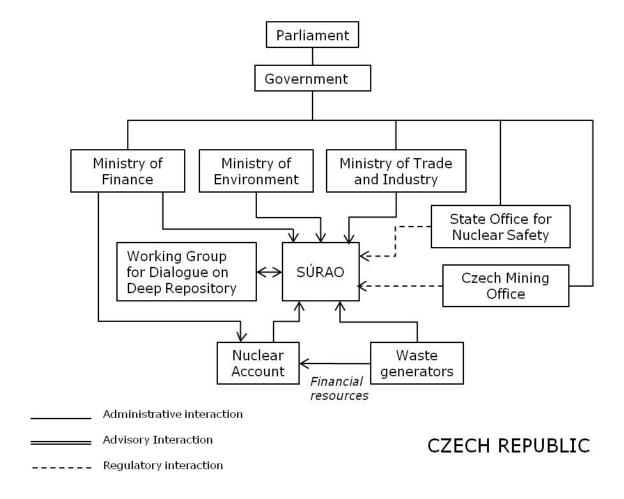
The State Office for Nuclear Safety (SÚJB) is responsible for nuclear safety and radiation protection supervision as well as for the development of legal regulations in the field of nuclear energy use and radioactive waste management. SÚJB reports directly to cabinet.

The Czech Mining Office approves the construction and operation of repositories and supervises activities connected with radioactive waste management in these repositories, from the point of view of mining regulations.

An interesting initiative in Czech Republic is the Working Group for Dialogue on Deep Repository established after the ARGONA EC funded project in June 2010, to bring together all stakeholders in the field of radioactive management to discuss in a "safe space" (Sumberova and Vojtechova, 2011). SÚRAO initiated this Working Group to "strengthen the transparent process of site selection for geological disposal" (Svacina and Konopásek, 2012). The Working Group was established with the support of the

Ministry of Industry and Trade and in cooperation with the Ministry of Environment. The working group brings together representatives of municipalities in the areas proposed as suitable for further research, representatives of the government (Ministry of Industry and Trade and Ministry of Environment) and parliament, SÚRAO, SÚJB, local and national NGOs (like Calla and the Environmental Law Service). A sociologist from the Czech Academy of Sciences chairs the group. The working group has organised a number of events, like round table discussions, seminars and public debates.

#### **Stakeholders interactions**





#### **Slovenia**



#### Radioactive waste management facilities

#### Current:

 Dol pri Ljubljani (Brinje): central storage facility for low and intermediate level institutional waste, short- and long-lived, situated near Research Reactor Center.

#### Planned:

 Krško: repository for low and intermediate level short-lived waste, situated near NPP Krško.



#### Main organisations involved in radioactive waste management

Policy/legislation actors	Ministry responsible for energy, currently Ministry of Infrastructure – Energy Directorate; <a href="http://www.mzi.gov.si/">http://www.mzi.gov.si/</a> Ministry responsible for environment, curently Ministry of Environment and Spatial Planning; Slovenian Nuclear Safety Administration; <a href="http://www.mop.gov.si/">http://www.mop.gov.si/</a> Ministry of Health; <a href="http://www.mop.gov.si/">www.mz.gov.si/</a>
Advisory body	Radiation and Nuclear Safety Council
Implementing organisation	ARAO – Agency for Radwaste Management; www.arao.si
Regulatory authorities	Slovenian Nuclear Safety Administration; <a href="https://www.ursjv.gov.si">www.ursjv.gov.si</a> Slovenian Radiation Protection Adminsitration: <a href="https://www.uvps.gov.si">www.uvps.gov.si</a>
Scientific research	Jozef Stefan Institute – Reactor Center; www.rcp.ijs.si
Non-governmental organisations (NGOs)	Slovenian Nuclear Society; <a href="www.nss.si">www.nss.si</a> Greenpeace Slovenia; <a href="www.greenpeace.org/slovenia/si">www.greenpeace.org/slovenia/si</a> Focus - Association for Sustainable Development; <a href="www.focus.si">www.focus.si</a>
Nuclear industry	Nuclear Power Plant Krško; <u>www.nek.si</u> GEN energija d.o.o.; <u>www.gen-energija.si</u>
Local level	Municipality Krško; <u>www.krsko.si</u> Municipality Dol pri Ljubljani; <u>www.dol.si</u>

Radioactive waste management is subject to the authority of competent ministry of energy, nuclear safety is subject to the authority of competent ministry of the environment and radiation protection is subject to the authority of competent ministry of health.

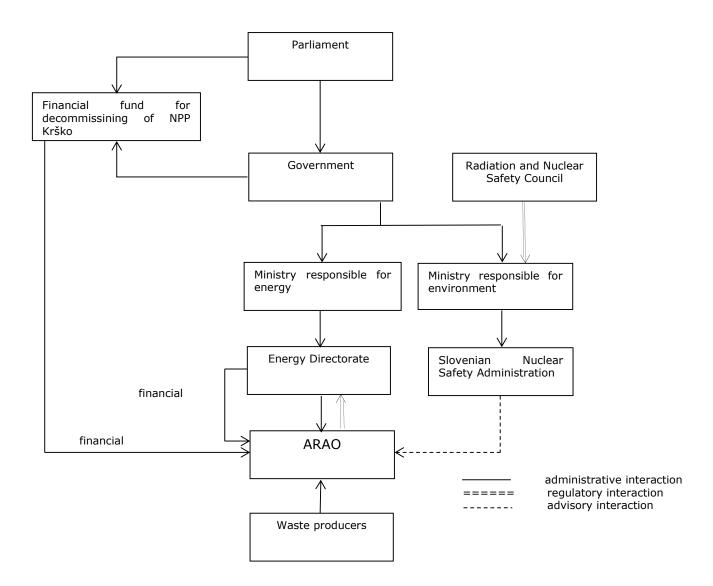
ARAO was founded in 1991 by Slovenian government. It is a public non-profit company responsible for providing the service of radioactive waste management as a public utility, it is authorized for siting and construction of LILW repository and provides required technical assistance to the government regarding issues of radioactive waste management and decommissioning of NPP Krško.

ARAO is performing collection, transport, conditioning and storage of institutional radioactive waste and orphan sources. Management of operational radioactive waste and spent fuel from NPP Krško before disposal is the responsibility of NPP Krško. ARAO will perform the disposal of radioactive waste after commissioning of the radioactive waste repository. According to the Agreement between the Government of the Republic of Croatia and The Government of the Republic of Slovenia on Regulation of Status and Other Legal relations Regarding the Investment, Use and Dismantling of Nuclear Power Plant Krško both countries should try to find a common solution for final disposal of radioactive waste and spent fuel From NPP Krško.

The activities of ARAO are broadly defined by National Program of Radioactive Waste management and NPP Krško Decommissioning Program. The activities are financed by national budget, fees paid by waste producers for collecting the waste and the Financial Fund for Decommissioning of NPP Krško. The Fund was established in 1994 and is under control of the Parliament and the Government.

ARAO activities are licenced and supervised by the Nuclear Safety Administration. Radiation protection aspects of workers and working environment are controlled by Radiation Protection Administration. Physical protection of nuclear installations, Central Storage Facility included, are supervised by Ministry of the Interior – Police and Security Directorate.

#### **Stakeholder Interactions**



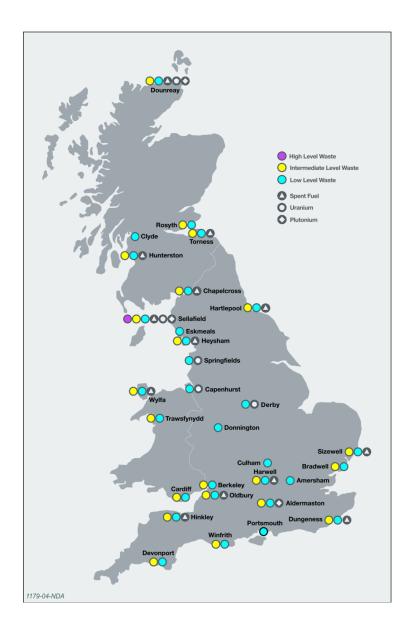
**SLOVENIA** 



### **United Kingdom**



### Radioactive waste management facilities



In July 2014 the UK Government published a renewed process for siting a Geological Disposal Facility (GDF), a White Paper entitled 'Implementing Geological Disposal' <a href="https://www.gov.uk/government/publications/implementing-geological-disposal">https://www.gov.uk/government/publications/implementing-geological-disposal</a>. This paper was informed by the siting process that operated since 2008, and its subsequent review, including a Call for Evidence and formal public consultation, which took place in 2013. It updates (and replaces in England and Northern Ireland) the 2008 White Paper Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal Disposal by the UK Government and the devolved administrations of Wales and Northern Ireland. The 2014 White Paper, 'Implementing Geological Disposal' <a href="https://www.gov.uk/government/publications/managing-radioactive-waste-safely-a-framework-for-implementing-geological-disposal">https://www.gov.uk/government/publications/managing-radioactive-waste-safely-a-framework-for-implementing-geological-disposal</a>, outlines an approach based on working with interested communities, beginning with two years of actions overseen by Government and intended to address issues that the public and stakeholders have told Government are important. An overview of the background to the UK process can be found in the 2014 White Paper.

The UK Government remains committed to geological disposal as the right policy for the long-term, safe and secure management of higher activity radioactive waste. The UK Government also remains committed to a voluntarist approach based on working with communities that are willing to participate in the siting process.

#### Main organisations involved in radioactive waste management

Policy/legislation actors	Department of Energy and Climate Change (DECC) www.decc.gov.uk		
Advisory bodies	Committee on Radioactive Waste Management (CoRWM) https://www.gov.uk/government/organisations/committee-on-radioactive-waste-management		
GDF Implementing organisation	Radioactive Waste Management (RWM) http://www.nda.gov.uk/rwm/		
Other Governmental bodies dealing with radioactive waste	Nuclear Decommissioning Authority (NDA) www.nda.gov.uk Low Level Waste Repository (LLWR) www.llwrsite.com International Nuclear Services Limited (INS) www.internationalnuclearservices.com/		

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https://www.gov.uk/government/publications/implementing-geological-disposal

Regulatory authorities	Office for Nuclear Regulation (ONR) www.onr.org.uk Environment Agency www.environment-agency.gov.uk Natural Resources Wales www.naturalresourceswales.gov.uk Scottish Environment Protection Agency(SEPA) www.sepa.org.uk Northern Ireland Environment Agency http://www.doeni.gov.uk/index.htm
Scientific research	RWM Science & Technology Plan www.nda.gov.uk/publication/science-and-technology-plan- ndarwm121/ UK Research Councils www.rcuk.ac.uk British Geological Survey (BGS) www.bgs.ac.uk A number of universities and science establishments are also involve in this area of research such as The Royal Society www.royalsociety.org and the Geological Society of London www.geolsoc.org.uk
Non-governmental organisations (NGOs)	Nuclear Waste Advisory Associates (NWAA) www.nuclearwasteadvisory.co.uk
Industry	Nuclear Industry Association NIA www.niauk.org Sellafield Limited www.sellafieldsites.com British Energy plc www.british-energy.com Magnox Ltd www.magnoxsites.co.uk Direct Rail Services www.directrailservices.com/ Dounreay Site Restoration Limited www.dounreay.com/ Research Sites Restoration Ltd www.research-sites.com/
Local community	No local community is currently involved in the process.  Nuclear Legacy Advisory Forum (NuLeAF) a Special Interest Group of the Local Government Association www.nuleaf.org.uk/

DECC is the lead department of the UK Government for managing the use of radioactive and nuclear substances and for disposal of radioactive waste.

The Nuclear Decommissioning Authority (NDA) was created through the Energy Act 2004. NDA is responsible for implementing the UK Government policy on the long-term management of nuclear waste, including the decommissioning and clean-up of the civil public sector nuclear sites.

Radioactive Waste Management (RWM) is a wholly owned subsidiary of the NDA and is identified by DECC as the developer for a Geological Disposal Facility (GDF). RWM

will implement the policy outlined in the White Paper, and is responsible for implementing geological disposal.

The Environment Agency (EA) provides advice and regulatory comment to government, the NDA, local authorities and the public. The Environment Agency is the leading public body for protecting and improving the environment in England carrying out Government's environmental policy. In Wales it is Natural Resources Wales and the Scottish Environment Protection Agency (SEPA) is Scotland's environmental regulator, and their main role is to protect and improve the environment. The strategic objective of Northern Ireland's Environment Agency (NIEA) is to create prosperity and well-being through Environment and Heritage excellence.

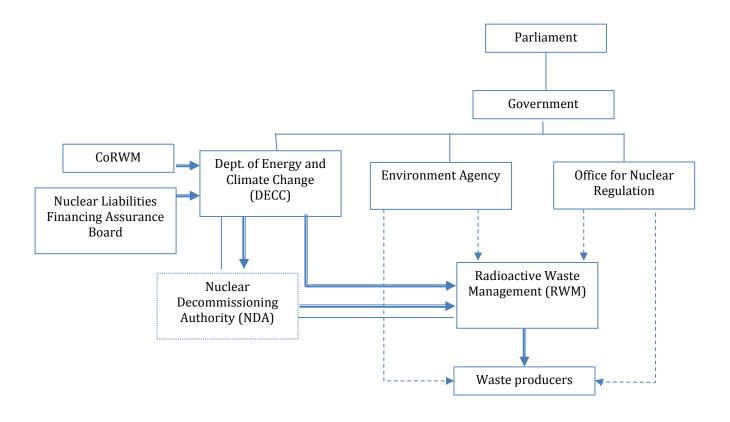
The Office for Nuclear Regulation (ONR) independently regulates nuclear safety and security at nuclear licensed sites in the UK. ONR ensure that the nuclear industry controls its hazards effectively, has a culture of continuous improvement and maintains high standards. ONR sets out site licence conditions that each licensee must comply with in different ways; such as, with a safety case to meet a stage in the plant's life, or with arrangements and procedures to meet a license condition. The conditions set out the general safety requirements to deal with the risks on a nuclear site.

The relevant national environmental regulators will only allow a GDF to be built, operated and closed if they are satisfied that it will meet their demanding regulatory requirements. These requirements implement the protection standards established nationally and internationally.

CoRWM is an advisory non-departmental public body of the DECC which was set up by the UK Government in November 2003. CoRWM provides independent scrutiny and advice to the UK Government on the long-term management of high-level radioactive waste. CoRWM is formed of 12 members who are experts in different aspects of radioactive waste management. They are appointed by, and report to, Parliament.

NuLeAF is a special interest group of the Local Government Association that represents local government on nuclear legacy management and takes an active part in consultations and debates on radioactive waste issues. Their remit encompasses all aspects of the management of the UK's nuclear waste legacy, including spent nuclear fuel and waste management from prospective new nuclear generating capacity.

#### Stakeholders' interactions



Administrative
Advisory
Regulatory

UNITED KINGDOM

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