Area survey and site screening

Domain Insight 6.1.2

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Overview

The siting process of finding and confirming a suitable site for a construction of a deep geological repository (DGR) generally consists of four main stages. It starts with a conceptual planning stage and continues with an area survey and site screening stage, followed by site investigation and characterisation stage and finishes with site selection and confirmation stage. The entire process is complex the different stages are interconnected; therefore, good planning is essential for successful implementation. In the conceptual planning stage not only the overall plan for the site selection process is prepared but also important decisions related to the siting process are taken and guidelines for the following siting stages are developed.

Concerning the area survey and site screening stage, in conceptual planning stage the decision on the site selection approach is taken[1], criteria for assessing the suitability of potential areas and site(s) are developed and other relevant details like areas/regions to be screened, sources of information and data to be used etc. are defined.

The main goal of an area survey is to screen large areas or regions (preferably the entire country) by desk studies that are based on available data and information to narrow the number and the size of search areas with a potential to host a DGR down to one or few areas with several potentially suitable sites for preliminary investigations. The screening is mainly based on exclusionary criteria and, if available, also preferential (avoidance and suitability) criteria can be used. The exclusionary criteria are mainly related to long-term safety of a repository while preferential criteria consider also construction and operational suitability and socio-political factors. Typical criteria used at this stage are seismicity, volcanic activity, flooding, tsunami, rock fall, presence of natural resources, also proximity to big cities, lack of existing transport infrastructure, areas of special cultural, scientific or ecological interest, etc. [1, 2, 3].

Areas or potential sites within these areas that do not pass the exclusionary criteria are screened out from further consideration. By using the avoidance and suitability criteria the number of remaining areas with potential sites can be further reduced. After several screening rounds a relatively small number of areas with prospective sites remains for site investigations in the next site selection stage [1, 2]. However, this approach assumes that the archived data and information on the areas and sites and literature search are sufficient for a fair comparison between the areas and sites and for performing progressive screening. If not, more detailed desk studies and additional data obtained by limited field investigations and measures might be needed.

Keywords

Siting, site selection process, site screening, area survey, desk studies, exclusionary criteria, avoidance criteria, suitability criteria, site investigation

Key Acronyms

DGR – deep geological repository

TVO – Teollisuuden Voima Oyj, a Finnish nuclear power company

[1] Generally, there are two different siting approaches or strategies. The first one is Site Screening Approach which is also used as a basis for describing this Domain Insight. Another option for siting approach is Designated Site Approach. If this approach is chosen one or more sites are preselected based on specific characteristics (e.g., vicinity of existing nuclear facility, volunteered site or another favourable characteristic). In this case a wider area survey stage is skipped [2].

SKB – Svensk Kärnbränslehantering Aktiebolag, the Swedish Nuclear Fuel and Waste Management Company

RD&D – Research, Development & Demonstration

BGS – British Geological Survey

1 Typical overall goals and activities in the domain of Area survey and site screening

This section provides the overall goal for this domain, extracted from the EURAD Roadmap goals breakdown structure (GBS). This is supplemented by typical activities, according to phase of implementation, needed to achieve the domain goal. Activities are generic and are common to most geological disposal programmes.

Domain Goal	
6.1.2 Identify areas that may contain suitable sites by using the developed screening guidelines (area survey and site screening).	
Phase 1: Programme Initiation	Following the site selection plan developed in the conceptual planning stage [4] collect all geological, environmental and socio-economic data and information from available sources that are relevant for area survey and site screening. Identify eventual gaps or insufficient information and data that could cause difficulties during area survey and consider possible ways of acquiring additional data if needed. Consider what actions related to public information and stakeholder engagement are foreseen and planned in this stage and adequately organise activities to keep relevant stakeholders, public and local communities properly informed. By using the agreed exclusionary (if possible, also avoidance and suitability) criteria perform first round of screening (preferably nation-wide) of large areas and assess their potential to host a geological repository. Based on the results of this screening exclude unsuitable areas or parts of these areas to reduce the number and the size of search areas. Apply additional screening on the remaining areas using more detailed desk studies and identify potentially promising sites to host a repository within these areas. By repeating the screening as many times as needed and by comparison of search areas against adopted criteria perform further screening out of search areas and/or sites within these areas until the number of areas and/or prospective sites to host a repository becomes feasible and consistent with the plan. Identify sites, if any, for which the existing data were insufficient to evaluate their potential suitability. Consider if additional effort to get missing data and information (eventually also with limited field survey) on these sites are meaningful and act accordingly. Document all results of the screening including the data and information that were used for this purpose and their sources. Make sure that the report will be sufficiently detailed to pass all relevant information to the next phase.
Phase 2: DGR Site Identification	Make sure that the results of the screening with all corresponding data and explanations are transferred to the next phase to ensure proper interpretation and use of the

	results. Particularly when during the area survey and site screening process the criteria were changed or modified be aware that these changes have to be well documented and explained. Pay attention that the results of area survey and site screening are properly communicated to all relevant stakeholders and general public to avoid any misunderstandings or misinterpretations.
Phase 3: DGR Site Characterisation	/
Phase 4: DGR Construction	/
Phase 5: DGR Operation and Closure	/

2 Contribution to generic safety functions and implementation goals

This section describes how the Area survey and site screening planning (and its associated information, data, and knowledge) contributes to high-level disposal system requirements using EURAD Roadmap Generic Safety and Implementation Goals (see, Domain 7.1.1 Safety Requirements). It further illustrates in a generic way, how such safety functions and implementation goals are fulfilled. It is recognised that the various national disposal programmes adopt different approaches to how disposal system requirements are specified and organised. Each programme must develop its own requirements, to suit national boundary conditions (national regulations, different spent fuel types, different packaging concept options, different host rock environment, etc.). The generic safety functions and implementation goals developed by EURAD and used below are therefore a guide to programmes on the broad types of requirements that are considered, and are not specific or derived from one programme, or for one specific disposal concept.

2.1 Features, characteristics, or properties of Area survey and site screening that contribute to achieving long-term safety of the disposal system

2.1.1 Primary goals - relied upon for achieving long-term safety of the disposal system

Area survey and site screening primary goal: isolation of waste

In the site selection process one of the primary goals is to find a site for a disposal facility that will ensure isolation of waste from people and biosphere for many thousands or millions of years into the future. The site should be in a stable geological formation and at an appropriate depth that is unlikely to be disturbed by human activities, erosion processes or climate changes now or in the future. This goal should already be pursued at the area survey and site screening stage by applying criteria that exclude from site selection areas and sites that are likely to be disturbed by human activities (presence of natural resources) or geomorphological processes (e.g., erosion, glaciation).

Area survey and site screening primary goal: external stability

Long-term stability of the site with respect to external events and environmental evolution is of primary importance for the long-term safety of the disposal system. The DGR site should not be significantly affected by external disturbances like tectonics and climate change. When siting the DGR, the geological formations that could be exposed to large seismic events should be avoided. Therefore, already in area

survey and site screening stage areas or sites with a risk of major seismic activity should be excluded from further consideration.

2.2 Features, characteristics, or properties of Area survey and site screening that contribute to achieving feasible implementation of geological disposal

2.2.1 Primary goals – relied upon for achieving feasible implementation of geological disposal

Area survey and site screening primary goal: to achieve public and local acceptance of the selected site

The siting process is the first and the most challenging step in establishing a DGR. Public support to the process and participation of potential hosting communities in the site selection have been recognised as essential precondition for achieving local acceptance of the selected site, therefore a proper stakeholder engagement has to be considered and adequately addressed in the siting process from the very beginning.

Depending on the adopted plan for public information and stakeholder engagement, first communication activities and contacts with local communities and other stakeholders may be scheduled already during the area survey and site screening stage or even before. Actually, the information obtained by screening and area survey is important information when starting communication and consultation with the public and local communities as it provides the basis for discussions with communities and other stakeholders. Establishing transparent communication and engagement of stakeholders already in this early stage helps to build confidence in the site selection process and to achieve public and local acceptance of the selected site.

2.2.2 Secondary goal – acknowledged but not relied upon for achieving feasible implementation of geological disposal

Area survey and site screening secondary goal: to make the siting process more manageable and to optimise the use of resources

Selection of the site for a DGR is complex and long-lasting process that should be planned and implemented rationally to reach the final goal in feasible time and with available resources. To achieve this goal some optimisation is necessary when evaluating suitability of potential areas and sites nation-wide. Area survey and site screening stage is intended to reduce the size of the territory that needs to be more thoroughly investigated in later stages by using pre-determined exclusionary criteria and already existing data on search areas. This approach allows the site selection process to focus on areas and sites with a greater potential of suitability for hosting a DGR. This makes the process easier to manage, reduces the extent and type of site investigations in later stages and thus contributes to more optimal use of resources.

3 International examples of Area survey and site screening

Regardless of the siting approach, some form of area survey and site screening has been undertaken or is planned in almost all countries that are looking for a DGR site. However, the extent of the area survey as well as screening approach vary from country to country depending on their policy and strategy, conceptual plan for site selection and specific national conditions and circumstances. In some countries area survey and site screening is performed nation-wide, in which case the entire territory of the country is screened to assess potential for hosting a DGR, others may decide to perform it only in specific pre-selected regions or areas.

In the last decades, the role and way of using the outcomes of area survey and site screening have also changed, mainly due to more open and inclusive site selection processes with stronger involvement of

local communities. The results of an area survey and site screening may no longer be used only to narrow down the number and size of search areas for further investigations prior to establish contacts and communication with local communities, but to also provide initial information on geological potential of a particular area or region for hosting a DGR that is used then as a basis for discussions and consultations with communities that expressed interest to participate in the process. Some examples of already implemented or planned area survey and site screening stages are presented below.

Finland

The site selection process for a DGR in Finland from its very beginning to its successful completion and selection of the Okliluoto site in Eurajoki municipality for hosting a repository is briefly presented in Domain Insight 6.1.1 [4]. Here, the initial stage of this process - site identification surveys, to select sites for preliminary investigations – which corresponds to area survey and site screening stage, is described in more details. It is an example of a real nation-wide screening process performed in several steps with the intention to narrow down the search area to several potential sites. First surveys started in 1983 and were concluded in 1985.

The initial screening was based on satellite photos and aeromagnetic and gravimetric maps, sometimes also visits to selected areas were made to allow more accurate comparative assessments of search areas. The main criteria used in this initial screening were related to fracturing and faulting patterns as criteria like seismicity, erosion or topography are less important in Finland. The screening therefore focused on the large-scale pattern of faults and fracture zones within the basement rocks with the intention to identify large, tectonically stable blocks of the rock, bounded by large fracture zones. These were target areas. As a result, 327 such areas, most of them between 100 and 200 km^2 large, were identified.

In the next step, additional criteria were applied to reduce the number and size of the target areas. The environmental criteria like groundwater-controlled areas, population density and preservation areas were used as exclusionary criteria and availability of transport links and small number of landowners as preferential criteria. As a result, 162 target areas remained in the process.

With additional more detailed geological studies and field checking, the number of target areas was further reduced to 61. Then, within these 61 areas with new interpretation of aerial photos and topographic maps and more detailed classification of fractured zones, 134 smaller sub-areas (5 – 10 km^2) were selected for further investigation. With additional geological and environmental analysis this number of sub-areas was reduced to 101 potential investigation areas that was in 1986 submitted to authorities for evaluation. After this evaluation, 84 investigation areas remained. In 1987, after a consultation process with affected communities, TVO, the operator of the Olkiluoto power plant, which conducted the site selection process, selected 5 areas for preliminary site investigations.

Sources: [5]

Sweden

In 2011, SKB, the Swedish Nuclear Fuel and Waste Management Company, completed the selection of a site for final repository for spent nuclear fuel and submitted an application for its construction to the authorities. This comes after several decades of research, geological surveys, technology development and open and transparent dialogue with various stakeholders.

The whole process that has led to the repository site started already in the 1970s with various geological studies and investigations. The main goal of these early studies was to gather geological knowledge of the Swedish bedrock and to find out what properties of the rock can provide safe disposal of spent nuclear fuel. Although the official siting project for a DGR was initiated only in 1991, these early studies and RD&D activities provided a good basis for this project.

Geological studies were conducted nation-wide, exploring different geological environments. Based on a set of pre-determined criteria and by using aerial photos and geological maps, a large number of

possible areas were identified for more detailed investigations. The following criteria were used for this purpose:

- flat bedrock topography,
- low fracture frequency on exposed rock surfaces,
- widely spaced major fracture zones,
- uniform composition and structure of the rock mass,
- areas with low seismic activity,
- documented low water flow rate in the rock mass.

Studies also included field visits and simple geological mapping. In a next step, SKB selected 10 areas in different parts of the country with identified good potential for siting a repository for more comprehensive investigations with drillings. These investigations triggered considerable local resistance and SKB decided to stop these activities and changed the approach to the siting by putting more emphasis on communication and dialogue with local communities.

In 1992, SKB established communication with all municipalities in Sweden and invited them to allow feasibility studies in their municipalities without any future commitment of hosting a repository. Between 1992 and 2000t, intensive discussions on feasibility studies were conducted with around 20 municipalities, and in eight municipalities they were really conducted. Feasibility studies focused on geology and were looking for areas with bedrock that could be suitable for a repository. They were based on the existing data and information; no drilling was conducted. Technical, environmental and societal conditions were also explored, based on the following questions:

- What are general prospects for siting a repository in the municipality?
- Where are suitable sites for a repository with reference to geoscientific and societal conditions?
- How can future waste transportation to the DGR be arranged?
- What are the most important environmental and safety issues?
- What are possible consequences, positive and negative, for the environment, the economy, tourism and other business enterprise in the municipality and in the region?

The first two feasibility studies were completed in two municipalities in the north of Sweden that showed interest in this project and agreed to conduct feasibility studies. Although the results of this study were promising, both municipalities decided after a local referendum not to participate in further process.

After that, SKB decided to focus on existing nuclear municipalities. Between 1995 and 1999, six additional feasibility studies were performed in six municipalities and in 2000, SKB publicly announced three sites in three municipalities for detailed site investigation.

Sources: [6], [7]

UK

After two unsuccessful site selection processes in the 1980s and 1990s, the UK Government published a policy paper in 2018 that set out an updated framework for the long-term management of higher activity radioactive waste through implementing geological disposal[2], which introduced the consent-based approach to finding a suitable site for a geological disposal facility within a willing host community. The policy paper also provided the context for the siting process and the basis for planning and the regulatory framework.

The new consent-based site selection process with increased role of local communities also requires some adjustments of different stages in the process including the area survey and site screening stage. The main objective of the screening in the new process is to provide high-level of geological information

[2] https://www.gov.uk/government/publications/implementing-geological-disposal-working-with-communities-long-term-management-of-higher-activity-radioactive-waste

relevant for the safety of a DGR that is needed for initial discussions with communities who may decide to participate in the siting process.

For the purpose of national geological screening, the territory of England, Wales and Northern Ireland was divided into 13 geological regions and the screening was performed separately for each region. By screening the existing information on rock type, structure, groundwater, natural processes and natural resources, areas were identified where rocks with the appropriate geological attributes can be found.

For screening the British Geological Survey (BGS) primarily used publicly available information from geological mapping, geophysical surveys and boreholes, historical records from mines, studies of earthquakes and past glaciations, and data from environment agencies.

At the end of the screening, 13 Technical Information Reports were prepared and published at the BGS website. In addition to these reports, which are mainly intended for readers with geological background, summary reports on geological attributes for each region were also produced intended for a wider audience. These reports provide an assessment of the geology in each region from a perspective of safety of a DGR. For the assessment of whether an area is suitable for a DGR or not, further work is needed. This step is made only if the community expresses its interest in proceeding with the siting process. In this case additional desk studies follow, incorporating detailed local information. If the results are favourable and the area shows the potential to host a repository in agreement with the community site investigations may be initiated.

Sources: [8], [9], [10]

4 Critical background information

The section highlights specific components, key information, processes, data or challenges that have a high impact or are considered most critical for implementing geological disposal, with respect to the domain of Area survey and site screening.

Conceptual plan of the site selection process

An overall conceptual plan of the site selection process provides a logical framework for the area survey and site screening stage [4]. The conceptual plan defines main stages in the siting process and their goals. For the area survey and site screening stage it defines the approach and key decision points. It specifies *what, how and why* will be performed during the area survey and site screening stage and what outcomes are expected and needed for the next stage. It also addresses plans for stakeholder involvement and public communication and information activities during different siting stages and other socio-political issues. If the conceptual plan of the site selection process is not in place, neither the approach nor the requirements for the area survey and site screening are clear.

Screening criteria

Area survey and site screening can be performed if criteria for assessing the suitability of search areas or sites for hosting a DGR have been developed and agreed to. These criteria are expected to be determined in the conceptual planning stage. At first, screening is based on exclusionary criteria. In the following screening steps as well as avoidance and suitability criteria may be used.

Data

Area survey and site screening is based on desk studies involving a review of existing information on natural environment in these areas. Good knowledge and data on the geology and properties of the rock are therefore essential for an area survey. At this stage, existing and publicly available information is used. This information is usually collected by geological mapping and geophysical surveys and also from various historical records from mines, different boreholes, from studies of earthquakes and others. If this information is scarce, it makes the area survey very challenging. Sometimes it can be performed only if additional data are collected by field investigations in a specific area or site.

Integrated information, data or knowledge (from other domains) that impacts understanding of Area survey and site screening

The area survey and site screening stage in the siting process is strongly linked to the Theme 1 on Programme management. Together with the conceptual plan for the site selection [4], it should follow the national policy and plan for radioactive waste and spent fuel management (see 1.1, Programme Planning) that defines a nuclear fuel cycle strategy, high-level goals and broad timetable for implementing radioactive waste management activities. Theme 1 also covers the aspect of public information and a process for public participation (see 1.1.3, Public information and participation) which is relevant and important also for the area survey and site screening stage.
The area survey and site screening is also linked to the Theme 4 on Geoscience where geological information for site selection is assembled.

5 Maturity of knowledge and technology

This section provides an indication of the relative maturity of information, data and knowledge for disposal of Area survey and site screening. It includes the latest developments for the most promising advances including innovations at lower levels of technical maturity where ongoing RD&D and industrialization activities continue.

5.1 Advancement of safety case

After the conceptual plan of a siting process is developed and criteria for assessing the suitability of potential site(s) are identified, the site selection process continues with an area survey and site screening stage. This is the starting point for intensive collection of information, data and knowledge relevant for the site selection process, at this stage primarily from the existing archives and other available studies and sources. As preliminary disposal concepts are also being designed in parallel and first preliminary safety assessments are being performed, which require specific data and information, it is important that these needs are already considered in the area survey and site screening stage. Otherwise, it can easily happen that some relevant data is not collected. The collected data and information also need to be updated after each area survey and site screening iteration.

5.2 Optimisation challenges and innovations

Optimisation in area survey and site screening can be related to the extent of area survey itself (nation-wide or only in some pre-selected areas or regions), to the iterative process of site screening (how many iterations and how far to reduce the number and size of search areas), and also to the area survey itself (should it be based only on existing public data or should it include also additional resources and studies, field visits and, in specific cases, some field investigations). The decision depends on the individual country and its siting approach and specific conditions. However, it is important to note that each of these possibilities for optimisation has its positive aspects but also drawbacks. Therefore, the decision on this must be thoroughly considered and justified not to lead to the opposite outcome as expected.

A new, innovative approach to the area survey and site screening that has been developed in last decades is related to the use of its outcomes. This is primarily due to more open and inclusive site selection processes with stronger involvement of local communities from a very early stage of the site selection process. Therefore, the results of area survey and site screening are no longer used only to narrow down the number and size of search areas for further investigations prior to establish contacts and communication with local communities, but also to provide basis for discussions and consultations with communities that expressed interest to participate in the process.

5.3 Past and ongoing (RD&D) projects

Past (RD&D) Projects:

- ARGONA Project: Suggested Guidelines for Transparency and Participation in Nuclear Waste Management Programmes, 2010, https://igdtp.eu/documents/, https://cordis.europa.eu/project/rcn/106449_en.html
- IGD-TP SecIGD2 Project: RD&D Planning Towards Geological Disposal of Radioactive Waste, 2015, https://igdtp.eu/documents/, https://cordis.europa.eu/project/rcn/106449_en.html

Ongoing (RD&D) Projects:

- EURAD, ROUTES, 2019-2024, https://www.ejp-eurad.eu/
- EURAD, UMAN, 2019-2024, https://www.ejp-eurad.eu/
- EURAD, KM12 Guidance, PLANMAN Guide – RD&D Planning - Radioactive Waste Management (RW disposal), Guide for in Early-Stage Programmes and Small Inventory´s Programmes, Deliverable 12.1, under review
- IAEA, Roadmap for implementing a geological repository programme, in preparation

5.4 Lessons learnt

Area survey and site screening in consent-based or volunteer site selection process

Unless the country decides for a designated siting approach, the site selection process usually starts with area survey and site screening stage. In this stage, a first broad assessment of potential suitability of the geological environment for a DGR is made based solely on existing data and information. It is a relatively simple and efficient way to identify and exclude unsuitable areas and narrow down the search areas to a manageable size and number. By progressive screening of the remaining areas and sites it may result in few promising sites with a potential to host a repository. The suitability of these sites is then confirmed with further detailed site investigations.

However, in the last decades, with the increasing participation of local communities and other stakeholders in the decision-making process, the site selection process has also become more open and inclusive. Many site selection processes today are based on volunteer participation of local communities. In these processes, the role and the way of using the results of area survey and site screening also changed.

In some countries, all communities are invited to participate in the process without previous preliminary area survey and assessment of potential suitability of geological environment. The process including some sort of area survey and site screening starts only after their voluntary agreement to participate.

In some other cases, by area survey and site screening first technical and geological feasibility to host a geological repository is assessed and later those designated communities with favourable characteristics are invited to participate in the site selection process.

Or the results of area survey and site screening are used to provide initial information on geological potential of particular area or region for hosting a DGR and then are used as a basis for discussions and consultations with communities that expressed interest to participate in the process.

Communication and public information

Open and transparent site selection process with stakeholder participation is nowadays a prerequisite for successful completion of the process. In the conceptual planning stage, the initial plan for public information and stakeholder engagement is developed and relevant stakeholders are identified.

Although the area survey and site screening stage, based primarily on desk-studies and existing data and information, may not seem particularly challenging from perspective of public information and communication, it is important that it is adjusted to the way the outcomes of area survey and site screening are planned to be used. Particularly when the area survey and site screening are used to narrow down the size and number of search areas and sites, it must be carefully communicated what

has been excluded as unsuitable based on exclusionary criteria and what has been screened out from further consideration based on preferential criteria (or even not considered due to insufficient data). It may happen that none of the preferred sites identified as potentially suitable for hosting a DGR in the first round of an area survey and site screening stage is confirmed in continuation of the process (either due to geological factors or public unacceptance). In this case, another round of site screening may be applied and additional potentially suitable sites (not considered in the first round) recommended for site investigation. However, if initial information on how and on what basis the first group of potentially suitable sites was selected and how the second group of sites was identified has not been communicated clearly and timely, this may create misunderstanding and distrust, leading to a loss of public confidence in the process.

6 Uncertainties

Uncertainty due to geological data

As discussed in section 4, the phase of area survey and site screening uses publicly available information and data on the geology and properties of the rock in the search areas. Availability of data is not evenly distributed across the country and regions. In some regions or areas more data exist then in others. Due to this for some areas it may be difficult to assess their potential suitability to host a DGR or, even worse, some areas may be excluded from further consideration based on poor evidence and insufficient knowledge.

7 Guidance, Training, Communities of Practice and Capabilities

This section provides links to resources, organisations and networks that can help connect people with people, focussed on the domain of Area survey and site screening.

Guidance
P. Ormai, et al (2022): Guidance and Guide-like documents on Geological Disposal of SNF, HLW and Long-lived Waste - Contribution to the EURAD Roadmap Gap Analyses, Deliverable 12.7, EURAD website https://www.ejp-eurad.eu/publications
Trainings
EURAD Training Course on Safety Case Development and Review, https://www.ejp-eurad.eu/events/eurad-training-course-safety-case, https://euradschool.eu/safety-case-development-and-review-training-course-recording/ *EURAD Training course on Uncertainty Management, https://euradschool.eu/event/eurad-training-course-on-uncertainty-management/*
Active communities of practice and networks
IGD-TP https://igdtp.eu/ *SITEX.Network https://www.sitex.network/* *EURADScience (no website yet)* *ENSREG https://www.ensreg.eu/*
Capabilities (Competences and infrastructure)
NEA IGSC https://www.oecd-nea.org/jcms/pl_29043/integration-group-for-the-safety-case-igsc

8 Further reading, external Links and references

8.1 Further Reading

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- IAEA, Factors Affecting Public and Political Acceptance for the Implementation of Geological Disposal, IAEA-TECDOC-1566, 2007
- IAEA, Planning And Design Considerations For Geological Repository Programmes of Radioactive Waste, IAEA-TECDOC-1755, 2014
- NDA, Geological Disposal - Overview of International Siting Process 2017, November 2017, Report no. NDA/RWM/157

8.2 External Links

- Nuclear Communicator's Toolbox, IAEA, https://www.iaea.org/resources/nuclear-communicators-toolbox
- COWAM2, EC, https://cordis.europa.eu/project/id/508856
- COWAM in Practice, EC, https://cordis.europa.eu/project/id/36455
- InSOTEC, EC, https://cordis.europa.eu/project/id/269906
- IGSC, https://www.oecd-nea.org/jcms/pl_29043/integration-group-for-the-safety-case-igsc
- Forum on Stakeholder Confidence (FSC), NEA, https://www.oecd-nea.org/jcms/pl_26865/forum-on-stakeholder-confidence-fsc

8.3 References

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7. NDA Report no. NDA/RWM/157, Geological Disposal – Overview of international siting processes 2017, November 2017
8. Nuclear Waste Services, Site Evaluation, How we will evaluate sites in England, 2022
9. Nuclear Waste Services, Guidance: National Geological Screening for a GDF, https://www.gov.uk/guidance/about-national-geological-screening-ngs, 2018
10. Nuclear Waste Services, Guidance: National Geological Screening for a GDF - further reading https://www.gov.uk/guidance/national-geological-screening-for-a-gdf-further-reading, 2018

End of document.