

Facilitating knowledge transfer between advanced and early-stage programmes: IAEA's Roadmap for Implementing a Geological Repository Programme

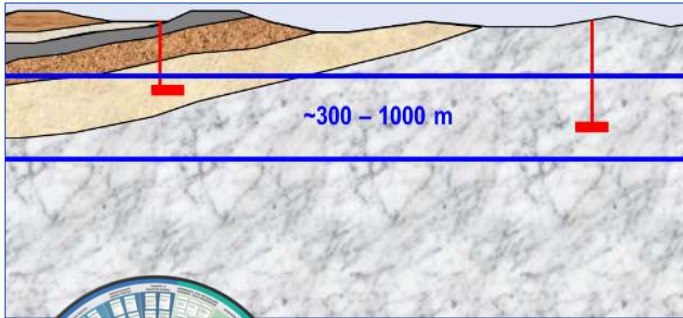
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Introduction

The IAEA publication, *Roadmap for implementing a geological repository programme*, provides a roadmap for the step by step development and implementation of a geological disposal programme consistent with international safety standards and best experience. This roadmap and companion course supports Member States with new programmes or those entering a different phase.

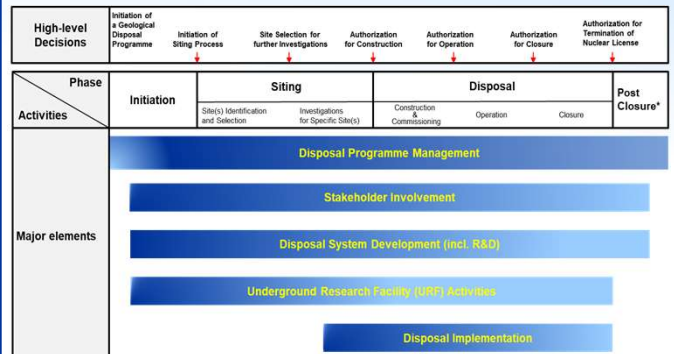


The IAEA has a mature set of safety standards and guidance on the safety of geological disposal. Feasibility studies, site specific safety cases and operational experience have strengthened confidence in the safety of geological disposal. The existence of numerous potentially suitable repository sites in a variety of host rocks (sedimentary, salt, granite, tuff) is also well established and documented.

The **International Atomic Energy Agency (IAEA)** is the world's foremost forum for scientific and technical cooperation in the peaceful use of nuclear technology. Established by the United Nations as an independent organization in 1957, the IAEA serves 175 Member States¹. Under Article III (3) the Agency is authorized to foster the exchange of scientific and technical information on peaceful uses of atomic energy.

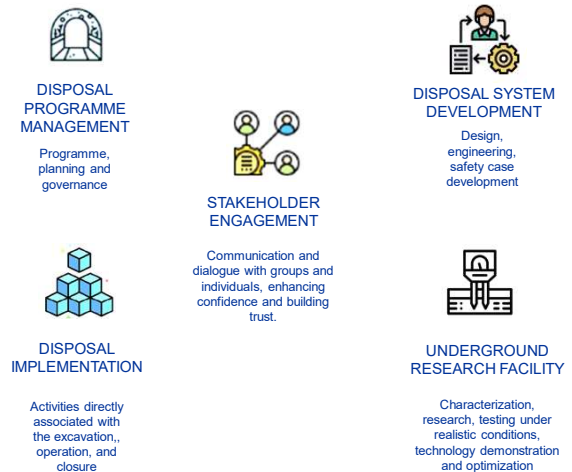
The IAEA would like to record its appreciation for the contribution of experts and organizations from 25 Member States to this publication.

IAEA Roadmap to a geological repository



*Responsibility may be transferred from the WMO to another organization.

Major work elements of the Roadmap

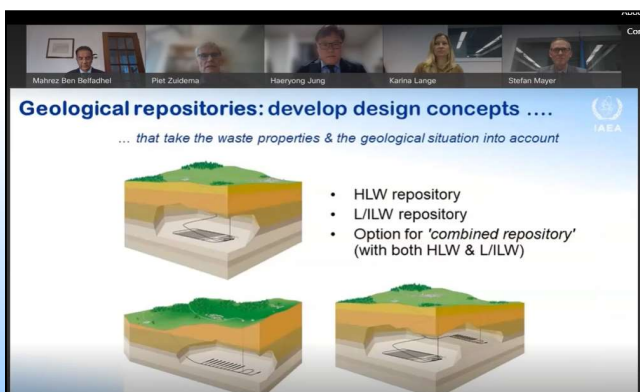


Deliverables along the Roadmap

The activities and deliverables for each phase of a geological repository programme are listed and described in the Roadmap with a view of how they support decision making in proceeding to the next phase.

Phase	Initiation	Siting	Disposal
Element	Initiation	Site(s) Identification and Selection	Investigation for Specific Site(s)
Disposal Programme Management	<ul style="list-style-type: none"> Programme plans, strategies Programme requirements Quality management system Costing and procurement procedures Database and archive Readiness evaluation for siting 	<ul style="list-style-type: none"> Site(s) recommendation Updated programme plans, strategies Programme requirements for safety and industrial safety Updated quality management system for site identification Occupational health and safety and environment plans Updated cost estimate 	<ul style="list-style-type: none"> Investigation for construction Updated programme plans, strategies Programme requirements for construction licence Safeguards plan for construction Community safety and emergency response plan Updated cost estimate, procurement, legal Updated quality management
		Excavation and Commissioning	Licence application for operation
		Updated programme plans, strategies <td>Updated programme plans, strategies </td>	Updated programme plans, strategies
		Programme requirements for operations <td>Safeguards for operations </td>	Safeguards for operations
		Updated quality management system for site identification <td>Updated community safety and emergency response plan </td>	Updated community safety and emergency response plan
		Occupational health and safety and environment plans <td>Updated cost estimate, procurement, legal </td>	Updated cost estimate, procurement, legal
		Updated cost estimate <td>Updated quality management </td>	Updated quality management

IAEA 'Roadmap to a DGR' training course



The IAEA's *Roadmap to a deep geological repository (DGR)* course provides information on major phases in a DGR programme, key management and technical activities to be undertaken (as well as their inter-dependencies) and the basis for high-level decision-making. This provides insight into how the IAEA generic roadmap might be adapted to address specific situation in each Member State.

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