

INTERNATIONAL LOW-LEVEL WASTE DISPOSAL NETWORK (DISPONET)

Terms of Reference

Project L.2.04: Strengthening capabilities for the disposal of radioactive waste

Activity 13: Develop a network of low level waste disposal centres

1. Background

Although the process of siting and development of a disposal facility has to be carried out on a case-by-case basis, proven disposal technologies for low level waste are generally available in industrialized countries. Relevant procedures have been developed for a number of sites in a stepwise approach including planning, designing, siting, safety assessment, construction and closure. Many disposal facilities worldwide are licensed and are being safely operated. In some countries facilities have been closed and are presently under active institutional control.

However, a number of Member States with less advanced radioactive waste management programmes are still lacking a repository for their radioactive waste. For these countries, achieving a safe and economic solution consistent with good international practice is often complicated by limited resources, means to effectively plan and implement disposal projects and scarce expertise in radioactive waste management.

The IAEA is proposing to focus its support for low level waste disposal via a forum (Network) for a prompt, open and efficient transfer and exchange of knowledge gained through learning from the experience of others. The Agency wishes to support organizations, either currently engaged in or actively planning for disposal programmes, through their inclusion in a network to effectively cooperate and coordinate relevant actions.

With respect to recent developments, particularly in countries initiating decommissioning of power reactors, the network deals also with very low level waste disposal; intermediate level waste disposal can also be considered, especially if the waste is managed together with low level waste.

Exchange of information on the development or the operational experience with existing facilities is expected to build credibility of the national disposal programmes of the recipient participants. The Network will also provide a forum to share approaches to specific issues such as disposal of atypical waste, e.g. graphite, radium and disused sealed sources. All will benefit from the best ideas put forward by the participants in the Network.

The Network will be basically non-commercial in developing its activities and it will focus attention on proven practices and successful practitioners. Merging more informal exchanges together with programmed actions inside the Network is expected to increase the effectiveness and efficiency of the Agency's training and development work.

2. Name

International Low-Level Waste Disposal Network (DISPONET)

3. Objectives

The Network is being established to increase efficiency in sharing international experience in the application of proven practices for disposal of low and very low level radioactive waste. In particular the IAEA intends to:

- coordinate support to organizations or Member States with less advanced disposal programmes, by making available the relevant skills, knowledge, managerial approaches and expertise from Member States with operating disposal facilities;
- organise an expanded range of training and demonstration activities with a regional or thematic focus providing hands-on, user-oriented experience and disseminating proven technologies;
- facilitate sharing and exchange knowledge and experience amongst organizations with advanced designs and disposal facilities in operation, in pursuit of good practices, identifying and treating improper past practices and assuring the longer term knowledge management in support of post closure safety and monitoring of facilities; and
- create a forum in which expert's advice and technical guidance may be provided on the Agency's programme in the area.

4. Scope

DISPONET shall address the following matters:

- Waste categories specified according to **Classification of Radioactive Waste General Safety Guide**, IAEA Safety Standards Series No. GSG-1:
 - including DSRS, low and very low level waste; intermediate level waste can also be considered, when appropriate,
 - not including uranium M&M waste and NORM (they are subject of ENVIRONET, a network for site remediation)
- Types of facilities: both surface and geological disposal, incl. borehole disposal
- The whole lifecycle of a disposal facility e.g.: planning, siting, design, safety assessment, construction, operation, closure, monitoring and institutional control
- Specific topics such as:
 - planning, technological and financial aspects
 - upgrading of existing storage/disposal facilities
 - QM & PM aspects
 - socio-economic and stakeholder issues (incl. public acceptance)
- Countries at different stages of repository development

DISPONET activities shall be coordinated both internally within IAEA (WES, TC) and externally (e.g. EC) to minimize overlapping and duplication of efforts and maximize efficient coverage of important topics.

5. Membership

- Partners (Facilitators/donors): Organizations that have demonstrated a large experience in low-level waste disposal and a record of excellence in a wide range of areas, have facilities suitable for demonstration and/or training and a willingness to share their experience through DISPONET, will be identified as "DISPONET Partners" and recognized by the Agency as "Centres of Excellence" in low level waste disposal

- Participants: Organizations that have responsibility for the disposal of low-level waste, are actively engaged in planning or implementation of disposal facilities, and who are willing to participate in the activities of DISPONET will be identified as “DISPONET Participants”.

6. Activities and Methods of Work

Activities

- Hosting by Partners of training courses, fellowships or scientific visits.
- Provision by Partners of suitably qualified and experienced individuals to support Participants by means of on-site education and training, workshops, peer reviews or other expert missions.
- Providing qualified peers amongst the Partners and Participants to support the Agency’s efforts on peer reviews and technical support.
- Provision of expertise to allow the Agency to progress its work programme in areas such as consultancy meetings, document production or Coordinated Research Projects.
- Promoting the use of fellowships, exchanges, coaching and mentoring, both on an organizational and an individual level for the transfer of knowledge and experience. This relationships may have similarities to the twinning or similar arrangements made elsewhere.
- Organising seminars/conferences on selected topics.

Methods of Work

- DISPONET works based on programme of activities determined and approved by Partners. The plan of activities, achievements of the objectives and fulfilment of the programme is be annually reviewed.
- Review meetings takes place at least once per year. Plenary meetings or sessions may be organized for all Partners and Participants as a further means of delivering DISPONET goals.
- A steering committee, representative of DISPONET, consists of Partner representatives. It meets as required, at least once yearly for an annual review meeting.
- The IAEA provides the administrative and secretariat services required by DISPONET, including meeting facilities in Vienna, maintenance of records and distribution of documents. The IAEA provides the services of a Scientific Secretary from Disposal Team of the Waste Technology Section.
- The Secretariat provides a system for the recording of meetings and other DISPONET interactions.
- The Secretariat establishes and maintains a website to provide continuity between meetings and facilitate training or exchange of good practices. The website provides a forum for exchange of ideas and information. As well, a number of other practical objectives may be served by the website, such as to highlight upcoming events, facilitate on-line publication of technical and visual information, and promote individual contacts and their interests.
- Where an organization has a demonstrated excellence in a particular topic it may be nominated to lead for DISPONET on work in that topical area. This will enhance both visibility and credibility of their activities promoting their proven technologies.

- Specialist groups may be formed under the aegis of DISPONET. These may cover topics or facility types of common interest. Where appropriate, Coordinated Research Programmes may be formed to pursue these topics.

7. Funding

The DISPONET activities are covered by the appropriate combination of the IAEA budgetary, technical cooperation, and extra budgetary resources and in-kind contributions of Partners and Participants.