

IAEA CONNECT: Connecting the Network of Networks for Enhanced Communication and Training – 15143

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ABSTRACT

To further support the exchange of information and cooperation in the management of radioactive waste, decommissioning and environmental remediation, a new tool has been developed and was officially launched in October 2014: The IAEA CONNECT platform. This paper describes the platform, including its objectives, principles, participation/audience, methods of work, Governance document, current available networks and features, and explains the context it was developed in, as well as the reasons behind its creation.

INTRODUCTION

Since 2001, the IAEA has developed the concept of “networks” to facilitate the sharing and exchange of knowledge and experience amongst organizations involved in radioactive waste management and the decommissioning of nuclear facilities based on the . The networks are intended to channel support from Member States (MS) with well-developed programmes to organizations in Member States with nascent or otherwise less well-developed programmes. Network participants include government agencies and private organizations charged with responsibility for managing radioactive wastes and for regulating the management of such wastes; research organizations, universities and non-governmental organizations (with their MS support) may also be represented. Networks are highly effective mechanisms that leverage the collective resources of the community of participants. However, with the growth of the existing IAEA waste management networks has come a proportional increase in the numbers and sophistication of requests for assistance and services. Recent successes with the Waste Technology Networks have resulted in expanded interest across the Agency in the methods and tools of these networks. To permit the IAEA to respond and to take advantage of the increased sources of expertise available in the networks and to assist the IAEA Member States to gain access to suitable tools, protocols and channels to facilitate effective communication between the participants are required. The large number of requests for each of the functionalities contained in the platform, have coming from both those Member States with developed and those with developing programmes, provides evidence of the widespread interest in the platform.

The idea was, therefore, to develop the concept of a “Network of Networks”. To expedite increased connectivity we have also investigated the use of internet-based solutions that have now been developed to the point where they could significantly respond to the growing requirements of enhanced communications and also provide for much more effective delivery of education and training. CONNECT stands for Connecting the Network of Networks for Enhanced Communications and Training and the term CONNECT connotes both the “Network of Networks” and the web-platform which serves it. The latter is essentially a professional networking system that provides a gateway for interconnecting existing and planned IAEA Networks, increasing the participation of individuals and organizations involved in them, and

making available additional sources of information which complement existing training, all cost free to the Member States.

The CONNECT project is funded by the IAEA Technical Cooperation Department and the platform prototype ceded by Sandia National Laboratories have been enhanced with the support of the European Commission, that also has funded the development of the currently available radioactive waste management eLearning modules.

DESCRIPTION

CONNECT is a SharePoint web-based collaboration platform hosted by the IAEA and managed currently by the Waste Technology Section. It provides each interested IAEA Network with a site inside the platform where the professionals in the nuclear area, members/participants of these networks, can exchange information and knowledge in a safe and timely manner. CONNECT, therefore, is a closed platform with access allowed only through participation in a given network hosted on the platform.

Objective

The objective of this platform is to coordinate support to organizations or Member States with less advanced programmes, by making available the relevant skills, knowledge, managerial approaches and expertise from Member States with operational experience in the field of interest, and to assist with capacity building by facilitating the sharing and exchange of knowledge and experience amongst organizations with advanced programmes, formulation and spreading of proven practices, identifying and treating improper past practices and assuring the long term knowledge management and also making use of e-learning materials.

Principles

CONNECT runs based on the following principles:

1. Every network pledges to use the CONNECT platform to its fullest potential, to promote collaboration, communication, sharing and learning, for the benefit of the Member States of the IAEA and the enhancement of human capabilities around the world.
2. The CONNECT platform is committed to using the most suitable approaches to moving forward the objectives of each network.
3. Information stored in the CONNECT platform is “open”, i.e. visible to all users, to the maximum degree possible. For example, it is possible that information developed collaboratively within a defined working group be made more widely available upon completion, at the Network Coordinator’s discretion.
4. It is the contributors’ responsibility to define their terms of use (licence) for their uploaded materials, if needed.

5. The CONNECT platform supports an international community of professionals. Participation in the platform is subject to approval and monitoring by the IAEA. Interactions between the CONNECT platform users are expected to be cordial, objective and constructive.

6. As far as possible, the CONNECT platform and its networks are intended to be self-governing. Where actual or planned activities of one network can impact another, relative to the CONNECT platform, and there is lack of consensus between networks, the issue is to be taken to the CONNECT Governance Board.

Participation

CONNECT is designed to serve individuals (users) belonging to organizations associated with the IAEA Networks (network participants/members). Individuals seeking to participate in CONNECT will be required to first join one of its associated networks. In general, such participation requires the participant to be (a) professionally engaged with an organization belonging to one of the networks and (b) personally willing and able to contribute professionally to the work of the network in which he/she is enrolled.

The work of the networks is essentially “non-commercial”, and while individuals from private, commercial organizations are not excluded from joining one of the IAEA Networks, their activities are expected to be consistent with the objectives and non-commercial nature of the networks.

A formal registration process is provided through an on-line link available on the CONNECT landing page (<http://connect.iaea.org/sites/connect/Pages/default.aspx>). In principle, CONNECT is accessible from anywhere in the world. In order to sign up to the network, individuals will have to register online, provide explicit information on their experience and express their interest in joining. This information can be used by coordinators of activities to support the identification of suitable participants for a specific activity.

Methods of Work

CONNECT has a formal code of conduct, which is available to all participants prior to joining the network. The basic elements of this code of conduct require users to:

- Users must respect other users at all times (i.e., ideas, but not people, may be challenged)
- Obscene, abusive, or otherwise inappropriate comments or postings will not be tolerated
- Users cannot engage in any intellectual property infringement or copyright violation while utilizing the platform
- Users cannot engage in any harassing and/or defamatory conduct
- Users cannot use the network tools to conduct direct sales advertisement or promotion of their organizations’ activities / products / services
- Spamming is prohibited
- Users may not use the email addresses or other personal details of any Users found on this

site for unauthorized uses, such as spamming or mass emailing, marketing, etc.

The CONNECT Governance document includes mechanisms for “reporting” infringement of the code of conduct, responsibilities of the IAEA to respond to such reports, and actions that may be taken.

The Governance Document

The Governance document for CONNECT is a set of rules that applies to the shared resources, outlining the arrangements for the administration, maintenance, and support of the CONNECT platform. These arrangements are the responsibility of an internal IAEA CONNECT “Governance Board”. This document identifies, for the Governance Board, who is responsible for what areas of the system. Furthermore it establishes rules for its appropriate usage.

This governance document helps ensure that the system is managed and used in accordance with its designed intent to prevent it from becoming unmanageable. The management of the enterprise-wide system involves a Governance Board to craft rules and procedures for the use of the system. It also assumes a team from the Division of Information Technology –MTIT to manage the routine operational tasks that keep the system running.

The Governance Board (GB) is a team who jointly oversees the activities on the CONNECT platform. The Board supports the daily functioning of the system and resolve issues of common concern across all networks. This team is composed by the Nuclear Energy Department’s Program Coordinator, the Network Coordinators, a Technical Support (IT) and technical Cooperation Department representatives and the CONNECT Coordinator. The GB has the power to decide upon developments of the CONNECT platform and to develop, maintain and apply common administrative procedures, and collectively determine rules, common formats, and acceptable uses of the system. It provides a unified, centrally governed approach to the CONNECT platform. This Board is the authority for all architectural, design, and development decisions, including all policies and procedures created for the platform. There are members with voting and non-voting rights.

Networks/Communities of Practices on CONNECT

Currently there are 11 networks/communities of practices on CONNECT and 2 others are facing preparation to join the platform. The 11 networks available are not all in the radioactive waste management, decommissioning and environmental remediation fields. As the platform was being developed, other areas within the IAEA showed interest in utilizing this type of tool and have also contributed to its shape. These are:



bDN –beta-Delayed Neutron Emission



LABONET – International Network of Laboratories for Nuclear Waste Characterization



CGULS – Coordination Group for Uranium Legacy Sites



MSN – Management System Network of Excellence



DISPNET – International Low Level Waste Disposal Network



NKM – Nuclear Knowledge Management Network



ENVIRONET – Network of Environmental Management and Remediation



SFM – International Network on Spent Fuel Management



ICT – Instrumentation and Control Technologies



URF – Underground research facilities Network



IDN – International Decommissioning Network

CONNECT Features

The different networks can chose to make available on their respective sites the features they believe will be beneficial to its participants/members, as the sites are customized to fit the needs of each individual network. “To have an impact, network information must be simplified but meaningful on both an individual and a group level. Various software tools help here, both in data collection and representation of information.”[4]

The features available on CONNECT are:

1. *Wiki* like database: a collection of concise summaries/articles (i.e. “lessons learned”) from completed activities in a prescribed format documenting the nature of the challenge, approach taken and lessons learned. Users can add/edit articles to the wikis, in fact, it is expected that the majority of content will be produced by the users.
2. *e-Learning*: nuclear education and training, on demand videos, and archived presentations and seminars. The eLearning modules cover the Radioactive Waste Management areas with initial materials already available in the area of disposal (Fig. 1). The curriculum was developed by a

team of internal experts from the Waste Technology Section in cooperation with the Waste Safety Section. The purpose of this specific type of training material is to make available more specific information on topical areas, following the IAEA guidelines and good practices. The intention is also to use these courses as evaluation tools for the selection of nominees sent to IAEA training courses and workshops, to assist in matching the most appropriate professionals sent by the Member States to the right events.

3. *Expert search function*: a search capability that permits individuals to find relevant contacts with specific expertise with a minimum of effort, to find reliable information and to efficiently contribute their knowledge and skills to problem solving through the networks. This capability searches throughout the whole platform, therefore, the search is not limited within a network site, although it is possible to refine the search.
4. *User profiles*: the system automatically generates a user profile with the information used when registering to the network site. The profile can later be edited by the users providing a complete professional profile of his/her background and technical interests, current challenges, and successful experiences. The *My Profile* page, how it is called, also allows communication without the use of emails by using a feed/comment field.
5. *Discussion forums*: they can be organized under topics and are available also under sub-sites.
6. *Library of different media*: these include documents, presentations, videos, software tools, glossaries, images and others.
7. *Other resources*: includes calendar of meetings and events, alerts, surveys, training courses, webinars, co-operative document production, and online meeting workspaces.

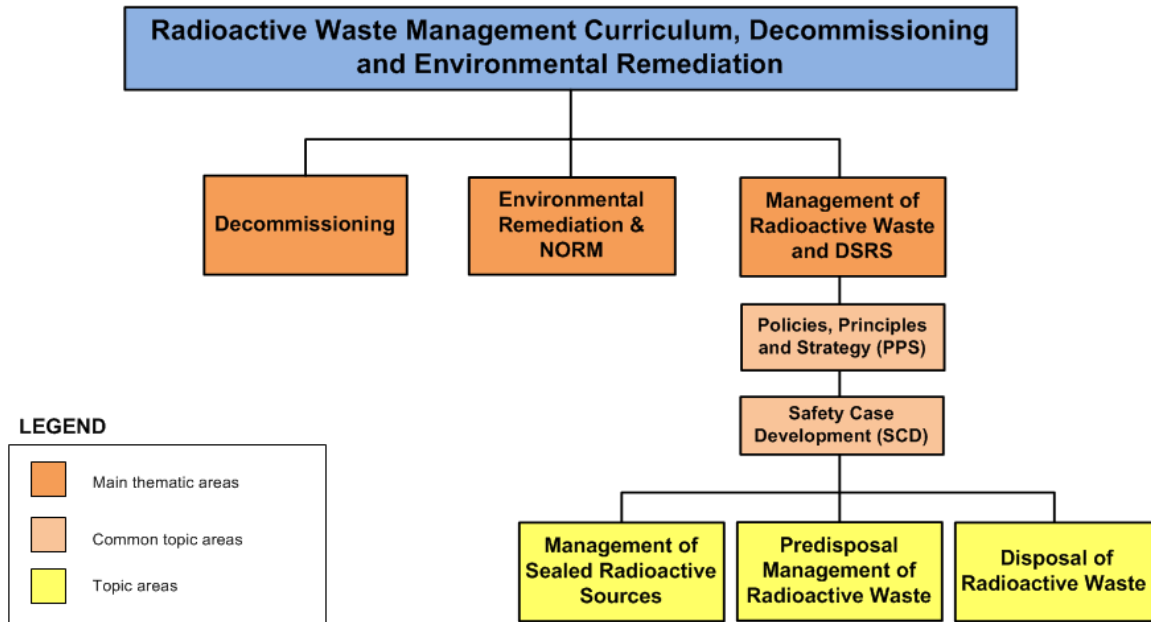


Fig. 1 Radioactive Waste Management, Decommissioning and Environmental remediation Curriculum

CONCLUSIONS

CONNECT provides a common platform suitable for use by all IAEA Networks with similar needs, objectives, activities, and methods of work. Although initially focused on meeting the needs of the existing networks based in the Nuclear Energy Department (NE), CONNECT has expended its work to attend also other IAEA departments such as Nuclear Applications and Nuclear Safety and Security.

CONNECT is believed to be a promising tool to provide enhanced capabilities and capacity in Member States by facilitating the exchange of expertise and knowledge through the use of internet-based technologies and to develop the multimedia content of the networks for distance training including both activities structured in accordance with formal curricula as well as less-formal “how to” training.

Over time, it is expected that the services of CONNECT will become self-supporting and will expand to become the standard “way of doing business” for the Agency around the world, as its functions replace less efficient and less effective training and assistance with direct support amongst the participants of all IAEA Networks.

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