

## TERMS OF REFERENCE

### **Network of Excellence for Supporting the Use of Instrumentation and Control (I&C) Technologies in the Safe and Effective Operation of Nuclear Power Plants (NE-ICT)**

#### 1. MISSION STATEMENT

*“To improve communication and co-operation among international experts in the I&C area and thus further support existing activities and the initiation of new activities in the area of Nuclear Power Plant I&C”*

#### 2. OBJECTIVES OF THE NETWORK

The high-level objectives of the NE-ICT are to facilitate communication within the network and provide a more effective method to exchange information, knowledge and ideas, by:

- Providing a means by which members are able to exchange their expertise, lessons learned and sharing best practices on the design, licensing, installation, operation and maintenance of I&C systems in NPPs;
- Highlighting the outstanding open I&C issues related to NPPs;
- Providing a repository of relevant material;
- Serving as a pool of expertise for the IAEA or personnel from the network’s member organisations;
- Providing a means by which members are able to review, comment and resolve issues related to the production of materials, such as technical documents, training course materials and other publications;
- Informing the network of state-of-the-art developments in I&C.

The objectives of the network are however flexible, they will be reviewed to meet the needs of its members and may evolve with time.

#### 3. SCOPE

The network will address several technical topics which can be modified and updated based on new activities, requirements and interests of the members. Examples of technical topic areas include:

- Implementing and licensing digital I&C equipment in safety systems;
- Reliability assessment of the digital I&C systems - hardware and software;
- I&C systems’ failures scenarios;
- On-line health monitoring of plant systems, structures and components (including I&C equipment).

The network aims at building on a large pool of international subject matter experts, including the IAEA Technical Working Group on Nuclear Power Plant Instrumentation and Control (TWG-NPPIC). In particular, the recommendations that will originate from the TWG will be an input to network’s discussion topics and forum. Similarly, the network may identify new topics that can be of interest to the TWG.

The nature of the network is flexible and such that its objectives, content and structure may change with time.

## 4. METHOD OF WORK

### 4.1. Overview

The network is part of the IAEA CONNECT (Connecting the Network of Networks for Enhanced Communications and Training) platform. The network will be accessible via the Internet. In order to sign up to the network, the individuals will have to register online, provide basic information on their experience and express their interest in certain technical areas. This could be used by co-ordinators of activities to support the identification of suitable participants for a specific activity and may grant access to information accordingly. A formal registration process will be provided through an on-line link.

Every member of the network will be treated equally in terms of ability to participate in network activities.

### 4.2. Roles and Responsibilities

Within the network there will be individuals identified as having particular roles and responsibilities to support key functions of the network.

#### 4.2.1. *NE-ICT Network Coordinator*

The NE-ICT Coordinator will oversee the development of the network and will, in addition, liaison with other networks within the IAEA. This role will be filled by an IAEA staff member responsible for managing access permissions and the general operation of the NE-ICT network hosted on the CONNECT platform. His/her responsibilities will include:

- Coordinating the implementation and progress of the NE-ICT network in line with other IAEA networks;
- Creating and managing content in compliance with the CONNECT Code of Conduct;
- Reviewing materials;
- Maintaining events calendar;
- Updating links and publications;
- Supervising forum topics/discussions and recognize the need to create/ update technical topical areas;
- Approving any changes made to the overall structure of the NE-ICT in consultation with the network members;
- Managing the publicly accessible information related to the NE-ICT, including maintenance of the content;
- Identifying ‘hot topics’ that the network members may be interested in;
- Identifying experts who could add value to the network and invite them to join it, in order to provide the critical mass of members required to encourage the success of the network;
- Accepting/rejecting new users, maintaining user log and permissions;
- Identifying and managing the moderators, including replacements;
- Resolving user issues (e.g. complaints about the site, dealing with member identified problems with postings, issues with other members);

- Officially warning and expelling members who violate the Code of Conduct of the network;
- Submitting violations to the CONNECT Administrator.

#### 4.2.2. *NE-ICT Moderators*

A way to encourage users to participate in the network is providing access to answers quickly and efficiently from knowledgeable and credible individuals. For this reason, technical topic areas will have Moderators who will ensure that valuable and active dialogue is carried forward.

The responsibilities of the Moderators are:

- To proactively encourage participation in the network;
- To be responsible for the structure of the content available in his or her NE-ICT area;
- To support in managing the publicly accessible information related to the network group, including maintenance of the content;
- To moderate and monitor network discussion groups and material uploads;
- To update the network with relevant news items;
- To manage queries and requests;
- To monitor the industry for ‘hot topics’;
- To assist in answering other members’ questions and help identify and retain experts to assist in moderating certain discussion topics.

#### 4.2.3. *Members*

The expectation for each member of the NE-ICT is that they will:

- Participate in the activities of the NE-ICT;
- Provide information when requested;
- Promote the activities of the NE-ICT;
- Recommend suitable members to join the network;
- Adhere to the code of conduct of the NE-ICT;
- Distribute information within their national networks, as appropriate.

The network membership is intended for the international pool of experts who work and share common interests identified in the technical topic areas. The members of the network should express interest and initiative to actively participate in the network activities. The members of the network are expected to be associated with one or more of the following:

- Nuclear utilities;
- Regulatory bodies;
- Academic institutes;
- Research and technical support organisations;
- Vendors;
- Independent consultants;
- Appropriate sections in IAEA;
- International organisations in the NPP I&C field, e.g. IEC, NEA, JRC.

Members from other institutions and organizations may be included in the network, if these members are identified as experts in specific technical topic areas or their membership will be beneficial to the network.

### **4.3. Use of the Network**

The information shared on the NE-ICT network is open to all members. It is contributors' responsibility to define their terms of use for the material uploaded or shared by them.

The present document (ToR) is explicitly developed for the NE-ICT network. However, the reader is also referred to the overall CONNECT Platform Governance document, which supports the activities of the network and is available to all members prior to joining the network. All policies and rules such as the Network Code of Conduct, Copyrights and Intellectual Property, Managing Content and Revising Materials, Terms of Reference for Moderators, etc., described in the Governance document are applicable to the NE-ICT network, too.

CONNECT has a common Content Disclaimer that information on the network may not be accurate and should not be relied upon by the members, in order not to risk any legal liability.