Knowledge Management and Networking Activities of IAEA

Huang Wei
Director, NEPIK, IAEA
March 1, 2018, Brussels
A Glimpse of IAEA

Inter-governmental Organization within UN system, established in 1957 by “Atom For Peace”.
New motto of “Atom For Peace and Development” since 2016
Mandate

“The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose”
2018–2019 Programme and Budget at a Glance

2018 Total Resources at a Glance
(in million euros at 2018 prices)

- Operational Regular Budget, €362.5, 65%
- TC Programme, €97.8, 18%
- Operational Unfunded, €75.8, 14%
- Capital Unfunded, €11.8, 2%
- Capital Regular Budget, €8.1, 1%
Objectives:

- Provide scientific and technical support to Member States through provision of service, guidance and advice; facilitating discussion; and dissemination of data, information, and knowledge;

- Design and deliver training and help interested Member States to build capacity and to develop infrastructure necessary for managing a nuclear power and fuel cycle programme in a safe, secured and sustainable manner.

**Major Program-1**

- **NEPIK, MP 1.3** with 4 sub-programs; Operational in March, 2016 after GC(58) resolution; Capacity building and knowledge management;
NKM Programmes

- Increased awareness and understanding of risks and challenges of KM in nuclear sector around 2000;
- Initiated by GC(44) resolution in 2000 and endorsed by GC(46) resolution in 2002;
- New sub-program added in 2002-2003 cycle (Maintenance of Knowledge in Nuclear Science and Technology);
- Cross-cutting nature recognized and embedded components in all major program;
- Activities focusing on guidance, education and training, and preservation of nuclear knowledge.
Priority of NKM

Six priority areas are recommended for immediate attention by the Agency:

a. Integrating existing nuclear data and information bases (including those in Member States) in the form of an easily accessible “Nuclear Knowledge Portal”.

b. Promoting networking of institutions for nuclear education and training in Member States in co-ordination with existing activities.

c. Developing guidance documents on the preservation of nuclear knowledge.

d. Implementing targeted preservation of knowledge projects.

e. Designing and implementing outreach activities to improve the general knowledge in society of the benefits of nuclear science, technology and applications.

f. Facilitating the development of curricula for internationally accepted higher university degrees on “nuclear technology”, e.g. by networking universities.
NKM Activities

Networks

NEM and NKM Schools

KM Asist visits

Digital Repositories

E-learning

Education
NKM Publication

Publications

- 2017: Knowledge Loss Risk Management in Nuclear Organizations
- 2016: Development of Knowledge Portals for Nuclear Power Plants
- 2016: Knowledge Management for Nuclear Research and Development Organizations
- 2016: Nuclear Accident Knowledge Taxonomy
- 2016: Knowledge Management and Its Implementation in Nuclear Organizations
- 2013: The Impact of Knowledge Management Practices on NPP Organizational Performance – Results:
Cyber Learning Platform for Network Education and Training (CLP4NET)

Utilizing e-learning technologies and methods to make nuclear knowledge more broadly available in a modern, effective and efficient manner

Cyber Learning Platform for Network Education and Training (CLP4NET) is an online platform that allows users to find educational resources easily and contains a learning environment to support instructor-led courses and disseminate e-learning self-study resources to a wider audience. The use of the IAEA's platform is provided as a cost-free service to all of the IAEA and its cooperation partners.

- **Self-directed Learning Management System**
  - Making self-learning materials available online to a wider audience
  - Click the logos below to visit the websites of Nuclear Education Networks

- **Instructor-led Learning Management System**
  - To support and enhance instructor-led training courses for closed groups of participants

- **Integrated Database on Education and Training**
  - Finding educational resources and opportunities easily, using an advanced search

![Graph showing the number of users from March 2014 to January 2018](chart.png)

As of January 2018:

- **Self-directed (Open) LMS**
  - 7727

- **Instructor-led (Protected) LMS**
  - 13741

CLP4NET | Copyright © 2010 onwards, IAEA. All rights reserved. | Disclaimer | Follow the IAEA | twitter | facebook | youtube

[IAEA Logo]

[CLP4NET Logo]
Deliver and assist in educational programmes

- **Nuclear Energy Management School**, 2-week program targeted at junior and mid-career professional in nuclear sector for future leadership;
- **Nuclear Knowledge Management School**, one week certified course on specialized training in development and implementation of KM program in nuclear organization;
- **INMA - International Nuclear Management Academy**, IAEA-facilitated masters programme in Nuclear Technology Management).

Since 1st NKM school in ICTP in 2004, 17 NKMs(ICTP and 3 MS) conducted, over 620 trainees.
Since 1st NEM school in ICTP in 2010, 21 NEMs(ICTP and 5 MS) conducted, over 720 trainees.
INMA : 2 member; 6 peer review, 10 assist visit.
Partnership

IAEA NKM Section

- SCK CEN
- STAR-NET
- U of Pavia
- CNEA
- GAEC
- NETEC
- Man U
- KAERI
- ENEN
- CEA
- UNENE
- ROSATOM
- U of Tokyo
- MEPhi U
IAEA-fostered Networking

- **2010** LANENT
- **2013** AFRA-NEST
- **2015** STAR-NET
- **2017** Renewed Collaboration Agreement

**Key Collaboration Agreements:**
- **2004** First Collaboration Agreement
- **2009** PA
- **2010** LANENT
- **2013** PA
- **2013** AFRA-NEST
- **2015** STAR-NET

**Networks:**
- ANENT
- STAR-NET
- LANENT
- AFRA-NEST
ENEN and IAEA

2009 PA

PRACTICAL ARRANGEMENTS
BETWEEN
THE INTERNATIONAL ATOMIC ENERGY AGENCY
AND
THE EUROPEAN NUCLEAR EDUCATION NETWORK ASSOCIATION
TO SUPPORT THE ASIAN NETWORK FOR EDUCATION IN NUCLEAR TECHNOLOGY (ASNET)

This Practical Arrangement aims to enhance the interaction between the International Atomic Energy Agency (IAEA) and the European Nuclear Education Network Association (ENEN) in support of the ASNET, with a focus on strengthening cooperation in the field of nuclear education.

The arrangement facilitates the exchange of information and expertise, and supports the development of capacity-building activities in nuclear education.

2013 PA, Renewal in 2016

EMSNE 2017 EVENT

PRACTICAL ARRANGEMENTS
BETWEEN
THE INTERNATIONAL ATOMIC ENERGY AGENCY
AND
EUROPEAN NUCLEAR EDUCATION NETWORK ASSOCIATION
ON
COOPERATION IN THE AREA OF REGIONAL NETWORKING
FOR
RESEARCH, EDUCATION, TRAINING, AND OUTREACH
IN
NUCLEAR SCIENCE AND TECHNOLOGY

2013 PA, Renewal in 2016
Knowledge management is a key to ensure safe, secured and sustainable development of peaceful uses of nuclear energy;

NKM issues and challenges are observed and should be addressed in a collective manner globally, including networking;

More cooperative opportunities between IAEA and ENEN are foreseen and can be reflected in the process of PA renewal.
Thank you!