Capacity Building: Concept, Definition and Methodology for Self Assessment

TM on Human Resources Roadmap and Capacity Building for New and Expanding Nuclear Power Programmes

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Capacity Building

- **Member States with NPPs** and **those embarking to strengthen, develop, maintain and implement their capacity building programmes**
  - Programme includes education at the national, regional and international levels
  - Programmes to cover all the nuclear safety related areas, including safe operation, emergency preparedness and response and regulatory effectiveness
  - Member States incorporate lessons learned from Fukushima Daiichi accident into their nuclear power programme infrastructure
Member States with NPPs and those embarking to strengthen, develop, maintain and implement their capacity building programmes (cont.)

- Programme uses existing capacity building infrastructures
- Expected outcome is to continuously ensure sufficient and competent human resources necessary to assume their responsibility

- IAEA to assist as requested
The term capacity building emerged in the lexicon of international development during the 1990s.

Today, “capacity building” is included in the programs of most international organizations.

Wide usage of the term has resulted in controversy over its true meaning.

Need to define capacity building within the context of each organization.
Capacity Building: Definition

A **systematic** and **integrated** approach to develop and **continuously** improve governmental, organizational and individual **competences** and **capabilities** necessary for achieving safe, secure and sustainable nuclear power programme.
Education & Training

Important element of building competence and key in the Agency’s efforts

Key Factors

• Educational Infrastructure
• Governmental and organisational level
• Curriculum Development
• Training Needs Assessment
• Time variable (adapt knowledge needs to the market development, aging and policy factors)
Human Resource Development

- Focus on developing guidance and support on HR related activities and processes
- Already doing extensive work with Newcomer countries, especially in area of ‘Workforce Planning’ and Training
- Current activities, Modelling Tool, identification of Training Infrastructure needs and new guidance of staffing of 1st NPP
- E-learning Packages
- Road Map HR
(Nuclear) Knowledge Management

- Developing and implementing methodologies and guidance documents for NKM,
- Facilitating sustainable nuclear education, training and information exchange,
- Providing NKM related products and services (e.g. NKM Assist Visits, ICoP).
- Nuclear Energy Management School for young specialists.
- Regional and National TC Projects
- KM Assist Visits in 2013 (Malaysia, UAE, Philippines and Thailand)
Global Nuclear Safety and Security Network (GNSSN)

Regional Networks

• Asian Nuclear Safety Network (ANSN)
• Arab Network for Nuclear Regulators (ANNuR)
• Forum of Nuclear Regulatory Bodies in Africa (FNRBA)
• Ibero-American Nuclear and Radiation Safety Network (FORO)
• Asian Network for Education in Nuclear Technology (ANENT)
• Latin-American Network for Education in Nuclear Technology (LANENT)
• AFRA Network for Education in Nuclear Science and Technology (AFRA-NEST)
• RegNet (Regulators Network)
Approach for the Self-Assessment of National Capacity Building

1. - What is needed?
2. - What is available and adequate to meet the needs?
3. - What is not available or needs improvement in order to meet the needs?
4. - How can the deficiencies be remedied?

Role of Government and Role of Organizations

Area I: Education and Training
Area II: Human Resources Development
Area III: Knowledge Management
Area IV: Knowledge Networks
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Post Fukushima Completed Action Plan

Task

Over **30 Training Classes** and **Workshops** on topics such as;
- National Workforce Planning
- Systematic Approach to Training
- Human Resource Management for Regulatory Bodies

Over **20 Technical and Committee Meetings** on topics such as;
- Establishing, Developing and Maintaining Capacity Building in Member States
- Implementation of E-Learning Platforms for Nuclear Education and Training
Post Fukushima Completed Action Plan
Task (contd.)

Development & Implementation of:

• ETRES (Education and Training Review Service)
• Methodology for Self-Assessment of the Capacity Building
• Draft Safety Report Guidance Document on Managing Regulatory Body Competence

Missions to Member States to help them in Self-Assessment of Capacity Building Activities Based on the Guidance Document
Helpful Links

IAEA support to National Capacity Building (CB) It is recommended to conduct global self-assessment of CB and define a National Action Plan on CB encompassing the strategies on Education and Training.

http://www-ns.iaea.org/coordination/capacity-building.asp?s=110&l=111

Methodology for Self-assessment of Capacity Building in Member States with Nuclear Power Programmes and Those Planning to Embark on Such a Programme


Contact person: s.mallick@iaea.org

Note: CB consists of 4- legs: Education and Training, Human Resources, Development, Knowledge Management and Knowledge Networks

Strategic Approach to Education and Training (E&T) .Under the umbrella of CB, It is recommended to read and commit to implement the strategies in E&T both, in Radiation and Nuclear Safety. Strategies can be found at:

Strategy in Radiation, Waste and Transport Safety


Contact person j.wheatly@iaea.org, a.luciani@iaea.org
Strategy in Nuclear Installations Safety


Contact person a.nicic@iaea.org, m.moracho@iaea.org, m.zimmermann@iaea.org

Specific Resources for Education and Training in Radiation safety. It recommended to use the training materials and courses for building your own in house training in Radiation safety

http://www-ns.iaea.org/training/rw/default.asp?s=9&l=89,

Educational and training material

Education and Training Appraisals (EduTA)
Newsletters
Helpful Links

Specific Resources for Education & Training in Nuclear Installation Safety
It is recommended to use the training materials and courses for building your own in
house training in Nuclear Installation Safety

Fundamentals and basic professional training courses (BPTC)

Safety Standards Training

Regulatory Body Training (NPPs)

SARCoN

Online Video Presentations

Knowledge and experience sharing workshops

Training tools and Networking

Research Reactors

Helpful Links

Countries developing the **first Nuclear Power Programme.** It is recommended to develop safety infrastructure


Conduct self-assessment of safety infrastructure


And use the Safety Packages

**Basic Professional Training Course in Nuclear Safety**
Module 1 - Governmental, Legal and Regulatory Framework for Safety
Module 2 - Human Resources Development
Module 3 - Leadership and Management for Safety
Module 4 - Radiation Protection
Module 5 - Site Survey, Site Selection & Site Evaluation
Module 6 - Safety of Radioactive Waste, Spent Fuel and Decommissioning
Module 7 - Emergency Preparedness and Response
Module 8 - External Support Organizations and Contractors
Module 9 - Safety in Design, Safety Assessment and Research for Safety
Module 10 - Transport Safety
Module 11 - Interaction with Nuclear Security
Conclusion

- Capacity building Umbrella
- Four Elements of CB
- Roles of the government and the organization
- Self Assessment and Benchmarking
- Target Assistance
- Member States are responsible for CB in their respective States – Agency is only a facilitator
- International Conference on Human Resource Development for Nuclear Power Programmes: Building and Sustaining Capacity
Thank you for your attention