Fukui International Meeting on Human Resources Development for Nuclear Energy in Asia

IAEA Human Resource Development Programs

Pal Vincze
IAEA
Section Head, Nuclear Power Engineering Section
p.vincze@iaea.org





IAEA HRD PROGRAMs

- Providing support for operating, expanding and newcomer countries
- Significant efforts on developing HRD Roadmap and Workforce Planning for newcomer countries
- Post Fukushima focus on Capacity Building, especially Education and Training



KEY CHALLENGE FOR HUMAN RESOURCES

- Key challenge is to achieve initial competence, and then sustainability, of Human Resources to support a nuclear power programme
- Requires the coordination, and cooperation, of all national stakeholders (government, education sector, industry, international bodies)



IAEA HUMAN RESOURCES 'ROADMAP'

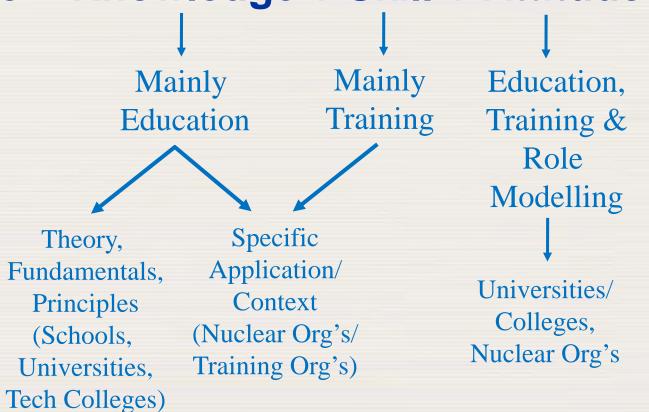
There are three main steps to achieving sustainable competence in Human Resources for any programme:

- 1. Developing the necessary Human Resources Infrastructure
- 2. Building Capacity
- 3. Developing and sustaining competence



COMPETENCE

Competence = Knowledge + Skill + Attitudes





BRM/Japan/HR

05/03/2013

1. HUMAN RESOURCES INFRASTRUCTURE

- Secondary (and primary) education system with strong maths and sciences components, to prepare for, and stimulate interest in, Engineering careers – Member State responsibility
- Technical/Vocational schools to create good skilled artisans/technicians in different engineering and technical disciplines – Member State responsibility



apan/HR 05/03/2013

1. HUMAN RESOURCES INFRASTRUCTURE

- University programmes for (nuclear) Engineering and Science professional staff (and allied professions e.g. Chemistry, Business, Finance, Human Resources, etc.) – IAEA has developed model curriculum and offers 'Assist Visits', for international benchmarking
- Creating 'Outreach' programmes to engage students in nuclear programmes and stimulate career interest
 - IAEA working with several MS to develop Outreach programmes with local schools



2. CAPACITY BUILDING

IAEA developed Selfassessment Methodology for Capacity Building developed to assist Member States in assessing the health of their CB programs, consistent with Nuclear Safety Action Plan





3. BUILDING & SUSTAINING COMPETENCE



WORKFORCE PLANNING:

"The systematic identification and analysis of what an organization/nation is going to need in terms of the numbers, type, and quality of workforce to achieve its objectives."

Identifies the steps that should be taken to get the <u>right number</u> of the <u>right people</u> in the right place at the right time.



IAEA FOCUS ON WORKFORCE PLANNING

- Addressing the Workforce requirements for each of the three phases focusing on 3 main organisational entities identified as having specific responsibilities within the "Milestones" document:
 - NEPIO
 - Regulatory Body
 - Operating Organisation
- Focus especially on Phases I & II, recognising that Vendor(s) may provide significant assistance for Operating Organisation during Phase III.

(IAEA NE Series Report (NG-T-3.10) Workforce Planning for New Nuclear Power Programmes Feb 2011)

IAEA GUIDANCE & SUPPORT

- IAEA NE Series Report (NG-T-3.10) "Workforce Planning for New Nuclear Power Programmes", Feb 2011
- New document under development to give 'working level' guidance on staffing 1st NPP
- Workforce Planning Workshops offered in cooperation with TC Department at National and Regional level, tailored to meet MS' specific needs
- Review service to assist in evaluating national HR strategies and Plans
- Development of e-learning courses for newcomer countries



IAEA GUIDANCE & SUPPORT (cont'd)

- Nuclear Power Human Resources (NPHR) Modelling Tool developed:
 - Originally developed by LANL and donated to IAEA by US Government
 - Generic model for a nuclear workforce, including Education system,
 Regulatory Body, Construction workforce, and Operating staff
 - Training provided by IAEA to enable MS to tailor model to their own national situation
 - 1st training course held in April 2012, next in Q2 2013
 - Priority given to 'advanced' newcomer countries.
- Meeting on Cooperation on HRD among Embarking and Experienced Countries, 4 – 6 June 2013, in Vienna
- Meeting on HR Roadmap 1-4 Oct 2013, in Vienna



THANK YOU - ANY QUESTIONS?

