# OPENING REMARKS FOR INTERNATIONAL CONFERENCE ON HUMAN RESOURCE DEVELOPMENT FOR NUCLEAR POWER PROGRAMMES: BUILDING AND SUSTAINING CAPACITY

# **VIENNA**

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(Note: Board Room C - 14:00 to 15:30)

Good morning ladies and gentlemen, distinguished delegates and fellow colleagues

I am pleased to welcome you to this International Conference on Human Resource Development for Nuclear Power Programmes: Building and sustaining Capacity.

This conference will continue the tradition established by preceding conferences in this area, in particular the one held in Abu Dhabi in 2010. Capacity building is a major first step in the process of ensuring suitably qualified human resources that are ready to assume the responsibility for a safe, secure and sustainable nuclear power programme. The importance of capacity building was underlined in the IAEA Action Plan on Nuclear Safety (2011), where one of the actions calls upon Member States "to strengthen, develop, maintain and implement their capacity building programmes". Also, the critical role of human resources and capacity building in developing and maintaining nuclear infrastructure was reiterated by subsequent International Experts' Meetings related to the IAEA Action Plan on Nuclear Safety. Similarly, IAEA Nuclear Security Plans stress the importance of nuclear security education and training for member-state capacity-building, and outline relevant activities for the future. This conference will focus on global challenges of capacity building, human resource development (HRD), education and training, nuclear knowledge management and establishing/maintaining knowledge networks.

Let me speak for a few moments on the action itself. "Capacity building" – as mentioned in the Action Plan on Nuclear Safety, is directed at Member States with nuclear programmes and at those that are planning to embark on them. However, it is not a new activity either in Member States or in the Agency. The Agency through its education & training, human resource development, knowledge management and knowledge networks activities have been focusing on this for many years. We have prepared and delivered comprehensive training packages and human resource development programmes in Member States for building capacity in all areas related to nuclear power programmes.

Today, I would also like to report very briefly on our activities on this important action related to each of the major sessions of this conference.

# **Nuclear Safety**

On the safety side, we have prepared a "Strategic Approach to Education and Training in Nuclear Safety 2013-2020" which is in line with and supports the IAEA Action Plan on Nuclear Safety. I would like to mention our activities specifically related to support the efforts of Member States to strengthen the technical and managerial competencies of their Regulatory Bodies:

- 1. the development of guidelines for the "Systematic Assessment of the Regulatory Competence Needs (SARCoN)" for identifying gaps in the competencies of regulatory bodies to perform their functions and in their related training needs. A software tool to facilitate the application of SARCoN has been made available to Member States;
- 2. the publication of a Safety Report (No. 79) on "Managing Regulatory Body Competence";.
- 3. the on-going revisions of the Textbook and Workbook on Regulatory Control of Nuclear Power Plants and the Basic Professional Training Course on Nuclear Safety;
- 4. the development of packages of exemplary training material, based on the IAEA safety standards and practical case studies, to support workshops and expert missions tailored to the needs of regulatory bodies of countries embarking on nuclear power programmes; and
- 5. the new safety services called "Education and Training Peer Review Service" (ETRES) and the "Safety Assessment Advisory Programme" which utilizes the "Safety Assessment Education and Training (SAET) Programme.

## Radiation, transport and waste safety

In the areas of radiation, transport and waste safety, we already have a very well established "Strategic Approach to Education and Training in Radiation, Transport and Waste Safety until 2020", that calls upon Member States to develop national strategies for education and training in this area. The related Education and Training Appraisal Service (EduTA) has been already provided to 14 IAEA Member States.

#### **EPR**

Here I would also like to mention another of our achievements linked to our Response and Assistance NETwork (RANET): the "Designation of the IAEA RANET Capacity Building Centre" (RANET CBC). This project officially commenced in December 2012, following the signing of the Practical Arrangements between the IAEA and the Japan Ministry of Foreign Affairs under the Memorandum of Cooperation between the IAEA and the Fukushima Prefecture (FP). Since then a number of workshops has been conducted in this centre.

## **Nuclear Security**

Our nuclear security education and training programmes are equally well developed. As in safety, human resource development is critical for States to develop, sustain and advance their national nuclear security regimes. We work hard to make sure that people have the right knowledge and capabilities. Our nuclear security education and training activities are thus geared towards a diverse audience from nuclear regulators, facility operators, and customs officers — to police and border forces, academic instructors, students, and staff at research institutions.

In pursuit of this goal, the IAEA has made several important advances in its nuclear security education and training programmes, including inter alia:

- 1. The development and implementation of a comprehensive training programme, offered to member-states in a variety of disciplines covering all aspects of nuclear security. Between 2010 and 2014, we have implemented more than 300 national, regional and international training courses based on documents and recommendations in the Nuclear Security Series. These documents have been developed in conjunction with our Member States, and as such represent internationally accepted standards.
- 2. The development of a model Master of Science academic curriculum based on the IAEA's Nuclear Security Series No. 12 entitled "Educational Programme in Nuclear Security", jointly with a large group of international experts, and the creation in 2010 of the International Nuclear Security Education Network (INSEN). A growing number of universities and departments offer new programmes or courses in nuclear security, using the materials developed by INSEN experts and institutions, including a consortium of EU universities, offering a pilot Master of Science degree programme which was inaugurated by the Director General last year. Other universities are following this lead.
- 3. The establishment of the International Network of Nuclear Security Training and Support Centers (NSSC), which helps to ensure sustainable nuclear security by acting as a resource base to facilitate national training and providing *Technical Support Services* for the life cycle equipment management and *Scientific Support Services* for detection of and response to nuclear security events. Some 50 States have established such centers or have plans to do so. The IAEA coordinates the activities of the NSSC network with a view to strengthening nuclear security training and support services as a cornerstone of national, regional, and international capacity building activities.

The value of this work and the importance of capacity building for nuclear security was recognized in the Ministerial Declaration adopted at the International Conference on Nuclear Security that we organized last year in Vienna, as well as by our Member States through IAEA General Conference Resolutions and other international fora—such as the 2014 Nuclear Security Summit in The Hague.

# **Knowledge Networks**

Finally, we have active knowledge networks under the GNSSN, our Global Nuclear Safety and Security Network. These networks include global networks such as the International Regulatory Network (RegNet), the Technical and Scientific Support Organization Forum (TSOF) and the Global Safety Assessment Network (GSAN). It includes regional networks such as the Asian Nuclear Safety Network (ANSN), the Arab Network of Nuclear Regulators (ANNuR), the Forum of Nuclear Regulatory Bodies in Africa (FNRBA) and the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies (FORO); and also thematic networks such as the Regulatory Cooperation Forum (RCF), the Forum for Senior Regulators of CANDU Reactors, the WWER Regulators' Forum and the Control of Sources Network (CSN).

The Global Nuclear Safety and Security Network (GNSSN) is an inclusive concept that links, complements and brings together all existing networks and initiatives and is recognized as instrumental in harmonizing approaches and adopting best practices to achieve sustainable nuclear safety and security infrastructures. Since 2011, over 300 capacity building activities were implemented under the GNSSN framework gathering more than 2000 experts from 109 of our Member States. The impact in Member States with nuclear power programme and in those embarking on one, should be significant. We also have activities geared towards the management of safety knowledge. The capacity building concept helps to bring all these activities under one umbrella in a coordinated and integrated manner.

# Conclusion

To conclude, I would like to thank all the delegates for their participation in this conference and urge you to participate actively in its deliberation. I wish you a very successful conference and now hand over to my colleague DDG Alexander Bychkov, head of the Department of Nuclear Energy.

Thank you