Opening Address

2010 International Conference on Challenges Faced by Technical and Scientific Support Organizations (TSO) in Enhancing Nuclear Safety and Security.

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INTERNATIONAL ATOMIC ENERGY AGENCY

Welcome and Introduction

Good morning Vice Minister Matsushita, Mr. Repussard, conference President and Director General of IRSN, Mr. Sogabe, President of JNES, Mr. Terasaka, Director of NISA, Mr. Lacoste, President of ASN, distinguished guests and colleagues. On behalf of Director General Yukiya Amano and the Secretariat of the IAEA, I am very pleased to welcome you to the 2010 International Conference on Challenges Faced by Technical and Scientific Support Organizations (TSO) in Enhancing Nuclear Safety and Security.

I do not think there is a coined definition of TSOs, it is true also that the meaning of the letter S varies indeed, from Support, to Scientific, going through Safety...and why not Security?

So, it may be easier to say what they do.

- TSOs provide the necessary scientific approaches and support to the authorities, the regulators, and even sometime to the public, in the development of nuclear safety and security. They are present in the International Convention on Nuclear Safety, even if somewhat subliminally, through the objective : to achieve and maintain a high level of nuclear safety worldwide through the enhancement of national measures and international co-operation including, where appropriate, safety-related technical co-operation. The Global Nuclear Safety and Security Framework (GNSSF) now operational, is the international framework for achieving and maintaining this high level of safety and security at nuclear facilities and activities around the world. This framework is meant to answer some of the needs relevant to the challenges faced by TSOs.

Tokyo Conference Objectives

Let us refer back to the first TSO conference in France.

In 2007, many of you attended the first *International Conference on the Challenges Faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety* held in Aix-en-Provence, (a City close to my heart, where I started my career some years ago...). This conference provided an opportunity to TSOs from different countries and other organizations and experts to discuss and develop a common understanding of the responsibilities, needs and opportunities of TSOs. Further, senior regulators, TSO leaders and other stakeholders at this conference concluded that better visibility and clearer understanding of the role of TSOs in the enhancement of nuclear safety was needed. In this respect and as a follow up to that conclusion, this second conference in Tokyo seeks to achieve these objectives:

 To develop a common understanding of the responsibilities, needs and opportunities of TSOs;

- To promote International Cooperation and Networking between TSOs;
- To foster capacity building through the use of TSOs in those countries embarking, or those with limited as well as extensive experience, in nuclear power programmes.

What has been achieved?

Among the main achievements realized so far I would like to stress:

- The 1st TSO conference recommended that IAEA should facilitate the establishment or enhancement of networks on a regional and an international level. A big step forward has recently been made by establishing and making available the Global Nuclear Safety and Security Network (GNSSN) to the professionals and the public. We must still keep in mind that we still have to establish a global network for the TSOs. More details on this global network will be covered on Thursday under topical issue 4. All interested Member States and International organizations are invited to use this platform for active cooperation and dissemination of knowledge, experience and lessons learned.
- Since 2007, IAEA has taken the initiative to address Member States concerns with respect to the roles and activities of TSOs as detailed in the draft guide "External expert support on safety

issues" (DS429) — that will soon be sent to Member States for 120 days to comment.

What are the actual challenges to a TSO?

• The global energy world is experiencing a period of dynamic changes. The introduction of new nuclear power plants in newcomer countries, the expansion of existing nuclear power programmes and the wider use of radioactive sources and ionizing radiation, in general highlight the need for continued and improved international cooperation, strengthened capacity building and infrastructure development and knowledge networking to address the associated challenges.

Among these challenges we are facing:

As new regulatory authorities are being established, their need for support appears to be growing, and the draft guide *"External expert support on safety issues"* (DS429) will help them in this purview. However, without a good scientific basis, safety cannot find its roots. The reality is that it takes longer to develop the education, research and training system in physics, chemistry, mechanics, and in safety, than to draft an atomic law. Existing TSOs, their networks, will need to organise themselves to answer this crucial need. The good news is that they have already started, and that we, at the IAEA, shall continue to lend all our support to their efforts.

- The IAEA Guide on "*Establishing the Safety Infrastructure for a Nuclear Power Programme*" (*DS424*) provides guidance on how to apply the IAEA Safety Standards in the development of a nuclear power programme. This Guide has successfully been approved this month by the Commission on Safety Standards and will soon be published.
- In addition to new NPPs, long term operation (LTO) and ageing management are growing issues in many nuclear power plants. The number of NPPs eligible for an extension of their operating life is increasing and hence the LTO issue is becoming very significant and deserves to be systematically addressed and integrated in all aspects relevant to safety and security. Here also science and research are needed in support to the licensing extension process.
- The coexistence of different NPP-designs with different levels of safety and security features will raise the question of how to reduce the safety and security gap between NPPs designed in the past century, and still operating, and those being built or foreseen today and that may well operate into the 22nd century.
- Improving the long term management of radioactive and nuclear materials. The "Code of Conduct on the Safety and Security of Radioactive Sources" —supported by many countries, helps Member States to achieve and maintain a high level of safety and security of radioactive sources. It also helps to prevent

unauthorized access and helps to mitigate, or minimize, the radiological consequences of any accident or malicious acts.

• To meet the issues I mentioned, it is important that the global TSO community work toward helping Regulatory Bodies establish and maintain adequate safety and security infrastructures and build technical capacity so they do not fall behind this rapid development of nuclear technology. Further, TSOs will need to work with so-called newcomers and with those expanding their nuclear energy programme to bring them their scientific, safety and security experience. They will be instrumental in helping to ensure the establishment of the necessary scientific and technical safety and security knowledge and capacity, which is an integral part of the regulatory processes.

Your challenges this week:

- At this conference, we need to seize this opportunity to share ideas, advance the current TSO body of knowledge, and network with each other on a national, regional and global scale.
- It is vitally important that we make the most of the time we invest in this week's programme. There are urgent needs for us to identify and take concrete international actions to meet today's emerging challenges to further enable the safe, secure, peaceful use of nuclear and radiation technologies throughout the world.

- Also, let me take this opportunity to sincerely thank the Government of Japan for hosting this very important event through the Japanese Nuclear Energy Safety Organization, JNES and for making excellent arrangements for its success. My sincere thanks and appreciation go to Jacques Repussard, the President of the Conference, together with the Scientific Secretaries, conference secretariat and the Programme Committee, for its hard work in putting this excellent programme together.
- The success of this International Conference will in no small way depend on your active participation this week and also on your continued support and involvement in the implementation of the conclusion and recommendations that will result from it.

I enthusiastically look forward to the presentations and discussions we will have during the coming days. I wish you all a successful conference.