**Keynote Address** 

## ASIA-EUROPE MEETING (ASEM) SEMINAR ON NUCLEAR SAFETY

National, Regional and International Nuclear Emergency Preparedness and Response

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- Dear Minister, ladies and gentlemen, good morning. The focus of this seminar, as well as your presence today, are testimony to your dedication to address the issues highlighted by Director-General Amano in his statement at the IAEA Ministerial Conference on Nuclear Safety, in which he called for the strengthening of the international emergency preparedness and response framework as well as the relevant systems within Member States.
- The accident at Fukushima Daiichi was a wake-up call for many. It reminded us that nuclear accidents can happen, they do happen. It further reminded us that when it comes to nuclear safety, we cannot take anything for granted. Our common goal, in the Agency as well as in the wider international community is that nuclear accidents become less and less likely. Our goal is also that, would an accident happen, all measures for minimizing its consequences would be available, exercised, and effective.
- This lesson and the IAEA mandate were the basis for the actions of the Agency during the Fukushima crisis, leading to the launch of the ambitious 12-pointAction Plan on Nuclear Safety which was adopted unanimously by our 151 Member States on 22 September 2011. This is the first time in the life of the Agency that all Member States gather, in a comprehensive program, all nuclear safety tools to strengthen the global nuclear safety framework at the national, regional and international levels
- I will not list all 12 elements, but they include agreement that all countries with nuclear power programmes should undertake so-called "stress tests" of their nuclear power plants. The Action Plan also stresses the importance of each country having a genuinely independent nuclear regulator, with adequate human and financial resources. It calls on the IAEA to strengthen its programme of expert peer reviews of the effectiveness of national regulators.
- While nuclear safety remains the responsibility of individual countries, the Agency plays a leading role in shaping a safer worldwide nuclear community with the ultimate goal of the Action Plan focused on strengthening nuclear safety worldwide.
- To this end, the Director General established a dedicated Nuclear Safety Action Team to ensure proper coordination among all stakeholders and to oversee the prompt implementation of the Action Plan. The Nuclear Safety Action Team is developing an overall strategy to implement the activities within the scope of the Action Plan. These activities take into account the involvement of Member States, the Secretariat and stakeholders.

- The success of this Action Plan in strengthening nuclear safety is dependent upon its implementation through full cooperation and participation of Member States and will require the involvement of many other stakeholders in all key areas.
- One key area in particular concerns strengthening emergency preparedness and response. IAEA's formal role in sharing of information, as resulted from decisions taken in the wake of the Chernobyl accident, was largely limited to distributing information validated by the State concerned. In an era of instant communication, the Fukushima accident demonstrated the need for a stronger role of the IAEA to meet the expectations of Member States and the Public, as well as the need for an integrated, global, world-wide emergency radiation monitoring display system. The accident demonstrated also the overall importance of the IAEA's role in response to nuclear emergencies, and the vital need to maintain and further strengthen the IAEA's Incident and Emergency System.
- Emergency planning and preparedness cannot be left to individual initiatives but must be governed by stringent well-rehearsed legal requirements, involving all relevant stakeholders, support organizations and the Government. Effective emergency response requires appropriate international framework and efficient national emergency management systems that are built on international standards and guidelines.
- Universal implementation of the IAEA Safety Standards on emergency preparedness and response at the national level is crucial. It improves preparedness and response, facilitates communication in an emergency and contributes to the harmonization of national criteria for protective actions. Currently Member States are using different - non harmonised - criteria for implementing protective actions
- I remember very vividly the questions from Member States or the Press, at the height of the crisis, about the coherence of various national recommendations for protection of the public, including for their own Nationals in Japan. I had no good answer apart from a wish and call for greater harmonisation.
- We are working with all Member States to strengthen their emergency preparedness and response mechanisms to ensure that the necessary assistance is made available promptly.
- We are also looking into ways of enhancing and making better use of RANET, the IAEA Response and Assistance Network, including expanding its rapid response capabilities. Member

States are also considering establishing national rapid response teams that could be made available internationally through RANET. We have initiated a programme for the preparation of RANET review missions and have written to all RANET National Assistance Coordinators asking them to identify their availability to host such review missions in their countries.

We are working on revising our own Agency emergency response plans and procedures to provide Member States, international organizations and the general public with timely, clear, factually correct objective and easily understandable information during a nuclear emergency. And to further engage our Member States in Emergency Preparedness and Response issues, we have launched the process of creating an Emergency Preparedness and Response Expert Group (EPREG), which will be tasked to advise the IAEA in strengthening the EPR framework and activities.

Ladies and Gentlemen,

- Several countries are planning to embark on new nuclear energy projects. This confirms our assessment at the IAEA that nuclear energy remains a valid option for many countries as they consider their future energy mix. But we must not forget that public confidence in the safety of nuclear power was badly damaged by the Fukushima Daiichi accident. In using nuclear power, all countries must ensure the highest level of transparency and openness in communicating with all stakeholders. Dialogue and communication will be important between government and local communities, between the IAEA and individual Member States, and among countries themselves, so that nuclear power can be used safely, securely and sustainably.
- An International Experts Meeting focusing on Enhancing Transparency and Communication Effectiveness in the Event of a Nuclear or Radiological Emergency is to be held in Vienna, starting next Monday. The meeting will analyse at expert level, all relevant aspects for enhancing transparency and effectiveness in communications during a nuclear or radiological emergency, in light of the Fukushima Daiichi nuclear accident, and to identify lessons learned and best practices for improving information dissemination. The topics to be covered include challenges in enhancing transparency in public communications during a nuclear or radiological emergency and will include case studies from national regulators, operators and inter-agency responses in support of effective public communication.
- We have been working with Member States to draft additional guidance on the application of the International Nuclear and Radiological Event Scale (INES) as a communication tool during severe

emergencies; this guidance will be reviewed by the INES National Officers at their technical meeting in July 2012.

- It is encouraging to see that this seminar has structured a working session dedicated to managing communication and public information in a crisis. Few circumstances test an organization's reputation or competency as severely as a crisis. During emergencies, providing accurate and timely public information is one of the primary functions of any organization.
- Since 1999, the IAEA has provided the Emergency Preparedness Review (EPREV) service to independently appraise preparedness for a radiation incident or emergency in Member States, with more than 20 missions conducted.
- An EPREV provides an opportunity for a Member State to have its emergency preparedness and response programme and capabilities independently assessed and evaluated against international standards. Such an independent assessment is often useful to identify in an objective, unbiased manner the areas where improvements may be required. As a secondary benefit, an EPREV allows information on best practices from the host country to be made available to other Member States.
- We have recently reviewed the effectiveness of the EPREV peer review service and produced a report, EPREV Highlights 2004–2011 An Evaluation of the EPREV Missions to Improve Effectiveness of the Future Missions. This report will be made available to Member States and its findings, highlighting lessons learned from EPREV Missions, will also be presented at a workshop later this month. One of the objectives of this workshop is to review the effectiveness of the EPREV peer reviews and collect feedback on their impact.
- The Chinese expression for crisis, wei ji, is a combination of two words: danger and opportunity. While no country would willingly submit itself to the dangers inherent in a crisis, those who have endured and withstood crisis understand that experience and knowledge can come out of adversity; the experience gained in response to the Fukushima accident provides valuable input for enhancing and harmonizing the emergency preparedness and response framework at all levels: facility, local, national, regional and international.

## **Concluding Remarks**

 To conclude, I would like to emphasize three key points: The first is the need for continued focus on international cooperation, especially providing support for new entrants in building capacity and expertise to prevent serious accidents. The second, in the wake of Japan's nuclear crisis is the vital importance of **emergency preparedness and response** in national and international safety infrastructures in order to mitigate the impacts of accidents should they occur. And the third is the **strong commitment to and leadership for safety and security** in ensuring that robust national safety and security infrastructures are in place worldwide, with effective and independent regulatory bodies, and strong safety and security management, leadership and culture.

- I believe that nuclear power plants have already become safer as a result of the measures taken –as outlined in the Action Plan on Nuclear Safety, as well as those taken in the States themselves since the Fukushima Daiichi accident. Safety will continue to improve, but we must avoid complacency at all costs.
- Quite often, I am asked how we can reconcile the terms of the statute of the IAEA: promoting nuclear energy and ensuring safety. The answer is that for those States that decide to use nuclear energy, our job is to help them do it in a safe, secure and sustainable way. Our job is to develop and make available standards and guides whose implementation will allow considering accidents as a remote possibility. Our job is not to forget this remote possibility, but develop and promote standards for preparing and exercising towards this remote possibility.
- If the existing scientific knowledge that such an accident could happen had been considered, then the height of the wall to prevent against Tsunami might have been higher, measures to manage a severe accident would have been foreseen and the staff trained for such a severe accident, and response capabilities might have been better prepared.

Dear Minister, Ladies and Gentlemen,

- I believe this Asia-Europe Meeting Seminar is an excellent platform in which to exchange views among policymakers and operational experts from governments and international organisations as well as experiences on best practices on national, regional and international emergency preparedness and response to nuclear accidents. I wish you a productive three days.
- Thank you for your attention.