INTERNATIONAL EXPERTS' MEETING ON STRENGTHENING RESEARCH AND DEVELOPMENT EFFECTIVENESS IN THE LIGHT OF THE ACCIDENT AT THE FUKUSHIMA DAIICHI NUCLEAR POWER PLANT

DDG Opening Remarks

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INTERNATIONAL ATOMIC ENERGY AGENCY

Distinguished Delegates, Dear Colleagues, Ladies and Gentlemen,

A very Good Morning!

Let me welcome you all to and express our gratitude for your participation in great numbers in this **8th International Experts' Meeting** (IEM), dedicated to **Strengthening Research and Development Effectiveness in Light of the Fukushima Daiichi Accident**. As you know, this meeting is organized within the framework of the IAEA Action Plan on Nuclear Safety, and in cooperation with the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development.

First, I would like to express my sincere appreciation to the Chair, Bismark Tyobeka. As you may know, Bismark worked at my Department, the IAEA Department of Nuclear Energy; so welcome back! And thank you for accepting the responsibility to steer the meeting. Let me also thank his Co-Chair, Mr. Brian Sharon.

We are very pleased to see that this meeting has attracted such a high level of interest. We have more than 150 experts from 38 Member States and five international organizations here. This clearly reflects the importance the international nuclear community attaches to research and development activities. It also shows the continued commitment towards the implementation of the IAEA Nuclear Safety Action Plan.

I am the newest Deputy Director General at the Agency. I head the Department of Nuclear Energy, which assists the Member States on the technology side of the nuclear energy. Obviously, Fukushima was a serious reminder to all of us, but having worked in power reactors for most of my professional life, I cannot stress enough the importance of research and development (R&D) for the nuclear field.

This meeting again shows how inseparable technology is from safety. Nuclear power is a very high tech field. Actually, it combines many high tech fields. And like all such technologies, its future is very much dependent on renewing and advancing itself. And this can only be done through innovation and strong R&D efforts.

The IAEA supports its Member States that have, or decide to include, the nuclear option in their energy mix. We are here for you not only for the safe, secure, responsible and sustainable operation, but also for continuous improvement and development of the nuclear power technology.

This IEM is important for both the Member States and the IAEA Secretariat. It will allow us to take stock of the current status of R&D activities in Member States and to discuss future directions of R&D to prevent and mitigate severe accidents.

The Fukushima Daiichi accident highlighted several areas where our knowledge and understanding of issues associated with severe accidents could be strengthened. For example, unexpected events such as hydrogen explosions occurred in reactor buildings and instruments indicated incorrect values during the accident.

So, after the accident, many Member States and international organizations launched new R&D activities to look into such issues. For instance, some looked into improving severe accident analysis codes and Probabilistic Safety Assessment methodology. Some research focussed on source term calculation and radioactive material release and transport. There are many other topics on which we will hear this week from our able speakers.

In short, now is the right time to understand where the R&D activities so far brought us, and then evaluate whether we have improved our technical measures for preventing and mitigating severe accidents. It is the right time to improve and further develop technologies that more efficiently cope with severe accidents.

Obviously we will not solve all the puzzles at a meeting like this. But this IEM serves a key purpose: This is the venue for you to exchange information on these R&D activities. This is where we can further strengthen international collaboration among Member States and international organizations. Also, this is where we will clearly hear what Member States need, and thus guide us on specific areas where we should put more focus on.

Let me please remind you that the IAEA Secretariat, with the guidance and advice from its Member States, is prepared to launch projects that will *both* need *and* strengthen international collaboration. These may come in the form of coordinated research projects, technical meetings or other activities dedicated to severe accident prevention and mitigation. Let me give you an example: With the direction from our Member States, in 2014, the Agency ran more than 100 coordinated research projects. More than a quarter of these were related to nuclear energy. The Agency's CRPs involved about 1,500 research institutions from across the world. And we spent only about 7 million Euros on them. In other words, this is value for money, for what the Member States get at the end.

Of course many Member States have their own very elaborate programmes in R&D. I only want to underline that there are many ways of implementing R&D and that the Agency plays a key role in assisting the global nuclear community.

In that sense, I am sure your discussions, concrete examples, fresh ideas will take us further, and will help clarify how the IAEA, the OECD NEA,, and Member States can make R&D more effective.

I thank the chair, the co-chair, speakers, panellists, authors of posters and of course to all participants. Only your active involvement can make this meeting a success.

I now hand over to my colleague, DDG for Nuclear Safety and Security, Mr Denis Flory.