IAEA MINISTERIAL CONFERENCE ON NUCLEAR SAFETY

INTRODUCTORY STATEMENT

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INTERNATIONAL ATOMIC ENERGY AGENCY

Mr President, Distinguished Ministers, Ladies and Gentlemen,

This Ministerial Conference is the first high-level global gathering on nuclear safety since the Fukushima Daiichi accident in Japan. We have a very important task before us, which is to pave the way for a post-Fukushima nuclear safety framework, based on lessons learned from that accident. This Conference is crucial for the future of nuclear power.

The presence of so many ministers and over one thousand participants shows how seriously the IAEA Member States take nuclear safety. The eyes of the world will be upon us in the next few days.

Public confidence in the safety of nuclear power has been badly shaken. However, nuclear power will remain important for many countries, so it is imperative that the most stringent safety measures are implemented everywhere. This is also true for countries opting to phase out their nuclear power programmes, whose plants will continue to operate for many years. We need to respond urgently to the public anxiety caused by the accident, while maintaining a firm long-term commitment to continuously improving nuclear safety. "Business as usual" is not an option.

Nuclear accidents respect no borders, so an international approach to nuclear safety is essential. The IAEA is the global body which you, our Member States, have created to help ensure that the most robust international nuclear safety framework is established, implemented and continuously updated.

Mr President,

The IAEA has been working at full stretch since the Fukushima Daiichi accident on 11 March, serving as the international focal point for assistance, information—sharing and follow-up. Our Incident and Emergency Centre went

into action right after the accident, working around the clock to share authenticated and verified information with Member States and to advise Japan. A few days after the accident, I went to Japan to meet Prime Minister Kan. My message was that Japan could count on the sympathy and support of the international community, but also that it needed to recognise the great anxiety throughout the world and to demonstrate the highest transparency in its handling of the accident.

On my return to Vienna, I convened a meeting of the IAEA Board of Governors and dispatched a number of expert teams to Japan. Their goal was to assist in areas such as radiological monitoring, food safety and analysis of the situation at the plant. These missions also enabled the Agency to provide independent and factual reports to Member States. More recently, an IAEA International Fact-Finding Expert Mission undertook a 10-day mission to Japan. The team leader, Dr Weightman, will present the Mission's report to you this afternoon.

Since the crisis began, we have worked closely with our key partners in the UN system. In fact, this has been a good example of the UN "one house" approach at work. I thank Secretary-General Ban Ki-moon for his keen interest in nuclear safety.

Mr President,

I would like to make some concrete proposals which, I believe, could contribute to establishing a realistic and enhanced post-Fukushima nuclear safety framework. I have focused on five main areas.

First, we need to strengthen IAEA Safety Standards and to ensure that they are universally applied.

IAEA Safety Standards are an internationally agreed benchmark for what constitutes a high level of safety for protecting people and the environment from harmful effects of radiation. In the light of Fukushima Daiichi, safety standards relevant to the accident, in particular those pertaining to multiple severe hazards such as tsunamis and earthquakes, should be reviewed. Other issues that need to be addressed include effective preparedness for prolonged power blackouts, the assured availability of water for cooling, special protection for plants with multiple reactors, and the cooling of spent fuel under severe accident conditions.

I am therefore asking the IAEA's Commission on Safety Standards to review the relevant standards and to report within 12 months, with recommendations for strengthening them.

Implementation is the key. Even the best safety standards are useless unless they are actually implemented. I urge all Member States to make a firm commitment to apply IAEA Safety Standards in practice.

<u>Second</u>, we need to systematically and regularly review the safety of all nuclear power plants. These assessments should be conducted nationally by Member States, but additional review by the IAEA is essential to add credibility and transparency and make the process more effective.

In the light of the Fukushima Daiichi accident, thorough and transparent national risk assessments should be made of all nuclear power plants in the world. They should focus on safety margins against extreme natural hazards, such as earthquakes, tsunamis and floods. This could be done within 12 to 18 months. If problems are found, appropriate action should be taken. Following discussions with some Member States, the Agency has started developing a common risk assessment methodology for all countries to use.

National assessments are the starting points, but they should be followed by IAEA international expert peer reviews. We provide reviews in three main areas, namely, the operational safety of a country's nuclear power plants, its emergency preparedness, and the effectiveness of its regulatory system. I propose that countries with nuclear power should agree to systematic, periodic peer reviews by the IAEA.

IAEA review of every one of the world's 440 operating nuclear reactors in just a few years is not a realistic proposition. I therefore propose a system based on random selection. For example, with some reinforcement of its present capabilities, the Agency could conduct an international safety review of one nuclear power plant in ten throughout the world over, say, a three year period. The knowledge that any plant could be subject to review would give operators an additional incentive to implement the highest safety standards. This system could be introduced without the need to formally amend existing legal instruments, simply by Member States giving their prior consent to peer review of all of their nuclear power plants. We should aim to start these new arrangements within 12 to 18 months.

The reports and recommendation of peer review missions should be made available to all IAEA Member States and there must also be follow-up missions to ensure that recommendations are implemented.

Mr President,

My third point concerns national regulatory bodies, which play a crucial role in ensuring nuclear safety.

All countries should ensure that their regulatory bodies are as effective as possible. Regulators must be genuinely independent, adequately funded, and staffed by well-trained personnel.

The IAEA offers *Integrated Regulatory Review Service* missions that can help Member States to assess their regulatory frameworks to make them more effective and efficient. I encourage Member States to make full use of these. In the case of Japan, I would like a new regulatory review mission to take place in 2012 as a follow-up to the 2007 mission.

Fourth, we need to strengthen the global emergency preparedness and response system.

Mechanisms for responding to and managing a nuclear incident need to be enhanced, both within countries and at the regional and international levels. Practical measures could include operators pooling resources to establish stockpiles of emergency equipment such as mobile diesel generators, which could be quickly delivered to a nuclear plant hit by a total power blackout. For our part, the IAEA would be prepared to establish an international register of special technical expertise – in robotics or fire-fighting, for example – which it could offer to a country which suffers an accident.

National accident response teams, which already exist in some countries, should be established in all states with nuclear power programmes. Regional arrangements are also essential. I will propose, through the IAEA Response and Assistance Network RANET, that mechanisms be examined for establishing regional emergency response arrangements.

Additional gains could be obtained by effective implementation of relevant international instruments such as the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. The Agency's role as coordinator of the Joint Radiation Emergency Management Plan of the International Organizations can be strengthened. I believe that all relevant organizations should co-sponsor the Joint Plan.

Mr President,

My *fifth* and last point concerns the Agency's role in receiving and disseminating information.

The information provided by the Agency to Member States after the Fukushima Daiichi accident served as a useful reference point. However, at present, our role in the case of an accident is largely limited to distributing information validated by the country concerned to all other Member States. I suggest that our information-sharing function should be expanded to include providing analysis and possible scenarios on how a crisis might develop and the associated radiological impact. We could either develop our own capacity or make arrangements with collaborating institutes.

The International Nuclear and Radiological Event Scale (INES), which classifies incidents on a seven-point scale, is an important communication and information tool, developed jointly by the IAEA and the OECD Nuclear Energy Agency. Unfortunately, the INES rating proved to be an ineffective communication tool in the case of the Fukushima Daiichi accident. I am asking the INES Advisory Committee to consider ways in which the scale might be improved.

Mr President,

Nuclear safety will remain the responsibility of States, but the IAEA will play the lead role in shaping a safer nuclear future throughout the world. The Agency is the only international organization with expertise in all aspects of nuclear energy and nuclear safety.

If we are to do the job you expect of us, appropriate funding is essential. I know many countries face financial difficulties and have problems agreeing to higher contributions to the IAEA budget. However, in order to meet sharply

increased requirements for assistance in all areas of nuclear safety – such as regular peer reviews – we need to consider new and innovative ways of funding, alongside traditional approaches.

Mr President, Distinguished Ministers, Ladies and Gentlemen,

The Fukushima Daiichi accident is one of the most serious and complex disasters which human beings have ever had to deal with. It has had an enormous impact on Japan and on the whole world. Nevertheless, valuable lessons will be learned which will strengthen nuclear safety everywhere. I greatly appreciate the considerable efforts being made throughout the world to ensure that the right lessons are quickly learned. I welcome Japan's proposal to host an international follow-up conference together with the IAEA in the latter half of 2012 so that its first-hand experience of dealing with this major disaster can be shared for the benefit of all countries.

Follow-up to the accident will be a long-term process but we must not lose our sense of urgency. Many concrete measures could be introduced by the end of 2012, while others will require more time. The coming months will be crucial for taking immediate remedial measures and for laying a solid foundation for the future.

The IAEA is committed to playing a central role in this process, on the basis of the conclusions of this Conference, advice from the Agency's International Nuclear Safety Group and decisions to be taken by our Board of Governors and General Conference. Progress on implementation should be reviewed at the 2012 IAEA General Conference.

Public expectations for this Conference are high. All of us have a responsibility to meet those expectations. Together, we must ensure that the

Vienna Ministerial Conference on Nuclear Safety is remembered as heralding a new era in which nuclear technology is as safe as is humanly possible.

I sincerely thank you all for the help, encouragement and sympathy provided to me and to the Agency during this difficult time.