**Check Against Delivery** 



# Address by the Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization

Mr. Tibor Tóth

## IAEA Ministerial Conference on Nuclear Safety

Vienna, 21 June 2011

Distinguished Ministers, Excellencies, Ladies and Gentlemen,

Your Ministerial Conference gathered here in Vienna has the solemn responsibility to ensure that the world is better prepared to deal with tragic events similar to those following the 11 March Japan earthquake. Nuclear accidents respect no borders. Mitigating and effectively responding to nuclear accidents will require us to forge the widest possible coalition. It will be up to this Conference, and to the international community at large, to draw on the hard lessons of Fukushima to strengthen nuclear safety, and devise the emergency preparedness strategies and responses required to address nuclear accidents.

I would like to address three dominant points in formulating an answer to the importance of nuclear safety:

#### First: The system of systems - Out there, tragically relevant

In its own way, the CTBTO is a disaster prevention organization – we seek to prevent the disastrous effects of nuclear weapon testing on peace and the environment. To that end, we have sought to strengthen, during the last 15 years, the norm against nuclear testing and have built a monitoring system to ensure that no nuclear explosion can escape detection.

March 11, 2011 is a tragic milestone. Given the loss of life, destruction of assets and the huge displacement of people the events in Japan need to be perceived as a reminder; there is an urgent need to mitigate the natural as well as the man-made disasters.

The verification system of the CTBTO, the International Monitoring System or IMS, has been designed to prevent the security, human, and environmental disasters of nuclear weapon testing and proliferation. Made up of 400 monitoring facilities and 250 communication assets, the system operates at the cutting edge of scientific knowledge.

It is an investment of 1 billion USD dollar building on 10,000 person years of scientific investment. While I am talking to you, more than 80% is ready to be used. Around the globe, around the clock it gathers data. Around the globe around the clock, the data are shared to 1,200 institutions in 120 countries.

And why is it being referred to as a system of systems? Because the IMS displays a range of technical components: seismic, hydro-acoustic, infrasound, radio-nuclide/noble gas,

atmospheric transport modeling. The Fukushima disaster reminded us of the dramatic relevance of each and every one of these systems. All of their boxes were ticked off: The IMS seismic stations detected the magnitude 9 earthquake and its several thousand aftershocks. Hydroacoustic stations detected the rupture forming under the sea. There were infrasound detections showing the explosions in the Fukushima nuclear power plant. Subsequent radioactivity measurements in all the particulate and noble gas stations in the northern hemisphere were made. Atmospheric transport modelling played an important role on the first day of the incident in order to predict which stations, and countries, were going to be affected by the release.

Through this network of stations the CTBTO was able to provide reliable, real time, accurate and verified data on the March 11 incident in Japan. This data was immediately made available to all CTBT States Signatories and to international actors including the International Atomic Energy Agency, the World Health Organization, the World Meteorological Organization and the UN Office of Disarmament Affairs. Therefore, the international community was able to make informed decisions.

### Second: Learn the lessons from the lessons unlearned

Some, if not many of us, remember what we were doing late April 1986 when Chernobyl happened. I was back then doing my first assignment as deputy head of a UN department and I sat through all the briefings. What went wrong? Lessons learned - never again!

Today, June 2011, here we are again. What went wrong? Lessons learned - never again!

It is now our duty to learn the lessons from the lessons of Chernobyl that were not learned. Now we know that one important lesson: We cannot just do the doable, but we have to prevent the preventable.

### Third: Over the horizon foresight

We need to resist the temptation of looking at the short term, and think more in terms of the next 10 to 20 years. We need what I call over the horizon action. Over the horizon action is based on three main pillars: the creation of new systems, the mastering of state of the art technology, and education / training of human resources. We need to be able to create a disaster response system that boasts the best and brightest minds that can push the rapidly expanding scientific frontier even further. Capacity development, education, and training are an integral part of that system. A response system that is flexible enough to employ and account for the technologies of the future through a continuous and ongoing dialogue with the scientific community and research institutions.

A review and capacity mapping of the existing global monitoring systems utilized by several organizations is needed. Institutional cooperation and specialized knowledge sharing between regional/international organizations in accordance with their respective thematic mandates need to be fostered and maximized.

The CTBTO has made available its data and expertise to all concerned actors to make informed decisions about the best course of action. The recent tragic events in Japan proved beyond doubt the true value of the international community's investment in the CTBTO's monitoring system. It also highlighted the urgent need for cooperation between sister Organizations, based on comparative advantage, synergies and efficiencies, paraphrasing the 'One United Nations' concept.

We can only afford one response. We at the CTBTO stand ready to continue our cooperation and coordination with the IAEA and other sister agencies to ensure a successful outcome of this endeavour. We owe it to our member states. We owe it to our citizens.

Thank you