

CHECK AGAINST DELIVERY

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

**Mr. Tibor Tóth**

**“The CTBTO: Enhancing Security through Education”  
Nagasaki, 10<sup>th</sup> August 2012**

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Mayor Taue,  
Ambassador Muto,  
Professor Takeuchi,  
Excellencies,  
Ladies and Gentlemen,

The initiative of the MFA of Japan and the UNU to convene this international Forum on Disarmament and Non-Proliferation Education is most welcome. This Forum continues in Japan’s long tradition that believes that education is imperative to promote disarmament and non-proliferation, and achieving a world without nuclear weapons. A conviction that has gained a wide following. During the 2010 NPT Review Conference, 41 countries co-sponsored Japan’s statement calling for the promotion of education for disarmament and non-proliferation.

Today, there is little doubt that ridding the world of nuclear weapons must be grounded in empowering the world citizen, particularly the younger generations, to make their contribution to disarmament and non-proliferation.

The enhanced interaction between UN agencies with academics and practitioners can only have a win-win outcome. Education has a critical role in economic and social development, which in turn, serves as a foundation for world peace. Aligning institutions of education with the work of United Nations in the areas of security, disarmament, human rights, sustainability and conflict resolution must be our long-term goal. Drawing on the rich contributions of academia, and employing from the pool of highly trained and qualified young minds is requisite for the fulfilment of the mandates of both the United Nations and academic institutions the world over.

There have been several calls to institutionalize this organic relationship. In the UN Secretary-General's 2002 report on disarmament and non-proliferation education, great importance was placed on the role of international organizations in the development of nuclear disarmament and non-proliferation education strategies. The International Commission on Nuclear Non-Proliferation and Disarmament (ICNPD) which issued its report in 2010, recommended a major renewed emphasis on formal education and training about nuclear disarmament and related issues, as well as the need for more specialized courses on nuclear related issues—from the scientific and technical to the strategic. In November 2010, the UNSG launched his global Academic Impact initiative, which acknowledges the critical role of higher education in economic and social development and as a foundation for world peace.

The CTBTO firmly believes in the synergy between diplomacy, academia, research and education on the one hand, and the practice of disarmament and

non-proliferation on the other. The CTBT, the CTBTO and its three pillared verification system are very much the product of the close interaction and association between diplomacy, academia, and science and technology. The CTBT could only have come into existence through the belief that a test ban could be adequately verified. The challenge of designing, building and operating the verification system was the centre of the debate about an international arrangement banning nuclear test explosions. Today, at 85% readiness, it is an unprecedented one billion dollar verification system operating at the cutting edge of science and technology. It builds on 10,000 person years of scientific investment. In other words, the CTBTO is the epitome of disarmament and non-proliferation instruments; it offers unique opportunities for scientific and technological innovation; it aspires to be the ultimate disarmament and non-proliferation education and training organization in the world.

Excellencies,  
Ladies and Gentlemen,

One year after the Great East Japan Earthquake disaster, demand for nuclear energy in the world remains unchanged. As nuclear capabilities spread, proliferation and security dangers follow, including nuclear terrorism. According to the IAEA, there are 116 reactors in operation in Asia today. 40 plants are under construction. 94 more plants are planned. This is the inescapable reality. The world has to address the safety, security, and non-proliferation concerns of this new reality.

The CTBT is a pillar of the nuclear non-proliferation and disarmament regime. During the last 10 years, we managed to all but silence nuclear weapon tests. Since the CTBT was adopted in 1996, the genie has virtually

been pushed back into the bottle. Instead of the 400 explosions a decade that we witnessed since 1945, there were only two tests. Two test explosions by North Korea. Two too many. Until we seal the bottle, until we bring the Treaty into force, none of us can feel safe. The entry into force of the CTBT provides a firm legal barrier against nuclear testing, thereby curbing the development of new types and designs of nuclear weapons. The CTBT provides a clear-cut “insurance policy” to the international community by verifying the absence of nuclear testing.

In its own way, the CTBTO is also 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 was 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 IMS is a system of systems. 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 components. 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 predicting which

stations, and countries, were going to be affected by the release. These predictions were 95% accurate.

The CTBTO works at the intersection of two challenges: Nuclear weapons which are the most destructive devices mankind has created; and complex disasters, which are the most dangerous forces nature or human error can unleash. The Treaty and the Organisation and its staff provide solutions to face these challenges. Solutions based on knowledge, and through the use of the best technologies. We have to empower the organisation, and we have to empower all countries, all institutions, and the new generation to make the best of what we can offer.

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 on-going dialogue with the scientific community and research institutions.

There is an urgency to invest in the next generation of disarmament and non-proliferation specialists by increasing the awareness and understanding of the international non-proliferation framework. This urgency is a key driver of the Commission's capacity development initiative, which was launched in October 2010.

The Capacity Development Initiative was launched with the objective of training and educating the next generation of experts on the CTBT. The capacity development strategy is based on the recognition that building and maintaining the necessary capacity to deal with the technical, scientific, political, and legal challenges facing the multilateral non-proliferation and disarmament regime is of critical importance. In addition, political support for non-proliferation and disarmament over the long term is contingent upon expanding the number of stakeholders with the opportunity to participate on an equal footing in the implementation of multilaterally established regimes. As a core element of the international nuclear non-proliferation and disarmament regime, the CTBT has an important role to play in strengthening verification capacities across the whole range of multilateral arrangements.

We are doing it as a globally sharing organisation; everyone gets everything we have. The CTBTO produces and shares global public goods, goods of outlawing explosions and mitigating disasters. These public goods belong to all countries, all institutions and they belong to all humankind. These public goods can most efficiently be produced on a global scale through a globally sharing organisation like ours. It is bringing together mass education combined with a wide alliance of international organisations and academia, hopefully the business community as well.

In 2012 we hope to train more than 1000 experts, including up to 300 women, which is the size of our organisation. We are bringing together all these ingredients through innovative mobile platforms, including internet based platforms like the iTunes University. We have already trained 500 diplomats, practitioners and experts, and students in the Intensive Policy Course which was held in Vienna 2 weeks ago.

In order to broaden the scope of the capacity development initiative, we are in the process of building a network of global partnerships, including States, disarmament and non-proliferation organizations and arrangements, universities, research institutes, non-governmental organizations, corporations and individuals with expertise and interest in verification science and technology. So far we have secured a number of prestigious partnerships. We look forward to increased interest and participation.

Ladies and Gentlemen

The road to Zero requires the widest possible coalitions and that's where the NWS, NNWS, IGOs, NGOs and broader academic community and civil society need to cooperate.

But the international community needs to decide the direction it wants to take. Are we serious about our calls for nuclear disarmament and non-proliferation? Are we willing to work on realizing the vision of a world free of all nuclear weapons? Are we willing to make the needed human, scientific and technological investments? I believe we are at a crossroads. Windows of opportunity don't remain open indefinitely.

Thank you