

CTBT: Science and Technology 2015 Conference

Message by the Executive Secretary of the Comprehensive Nuclear-Test-Ban Treaty Organization

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Minister Pandor,
Secretary-General Linhart,
Director General Amano
Director General Üzümcü
Director General Li
Excellencies,
Distinguished scientists,
Ladies and gentlemen,

It gives me great pleasure to welcome you to the *CTBT*: Science and Technology Conference 2015. This is now the fifth such conference. And, having served as Project Executive for the conferences in 2011 and 2013, this is my first as Executive Secretary. I am delighted to see so many familiar faces here from previous conferences, going right back to "Synergies with Science" in 2006.

Many of you have heard me say again and again that I am passionate about this Organization and its role. Looking around the room, I feel that I am in the company of many who share this passion: a passion for science in the service of peace. It gives me hope for the future of our children that the best and brightest scientists of our time have come together to perfect the detection of the bomb, instead of working to perfect the bomb itself.

SnT2015 is poised to break all records. With nearly 1110 registered participants, over 550 abstracts, it is the largest such conference to date. But the SnT process is not about quantity, it's all about adding quality to our work.

And the track record in this respect is impressive. To name just a few of the important developments that have originated from these conferences and are being integrated into our procedures:

- Machine learning methods to improve automatic data processing: Network Processing Vertically Integrated Seismic Analysis, short NET-VISA,
- Self-calibrating infrasound sensors and infrasound network performance monitoring tools,
- High resolution beta-gamma coincidence spectrometry
- the list continues

The issue of mitigating the effects of radioxenon emissions from medical isotope production was a hot topic at past SnT conferences, and I am pleased to report that following the Workshop on Signatures of Medical and Industrial Isotope Production in Brussels last month, we now have 10 companies that have signed a pledge to cooperate with us on this important issue.

This conference will also profit from the recent conclusion of the *Integrated Field Exercise IFE14* in Jordan. IFE14 was the most ambitious and comprehensive on-site inspection exercise to date, with 15 of the 17 on-site inspection techniques deployed under challenging conditions and in a scientifically credible and realistic scenario.

For the first time at a SnT conference, we are also offering an event for academics interested in CTBT education to identify ways to integrate Treaty-related topics into existing policy or science-based academic curricula and to develop educational resources to further this objective. The 2015 Academic Forum on "Strenghening the CTBT through Academic Engagement" will take place on Friday 26 June and I look forward to hearing all about the ensuing discussions.

I used to be a scientist. These days I am more of a diplomat or a politician. The longer I carry out my role as Executive Secretary, the more obvious it becomes to me how closely interconnected both realms are – even if scientists and diplomats don't always speak the same language.

Last month I addressed the *Nuclear Non-Proliferation Treaty Review Conference* in New York. As you know, the conference failed to agree on a final document. However, the support for the CTBT and its verification regime came across loud and clear, being voiced strongly over 100 times by different delegations. In my statement to the Review Conference, I stressed

that a legally binding test ban represents one key area where all NPT States Parties were already in agreement. At the same time, I reminded delegates that mere words of support without real action would not suffice to bring the CTBT into force.

In this context, I am encouraged to see scientists from most of the remaining Annex 2 States here today. It is encouraging to see that where diplomacy seems stalled, science perseveres and moves forward regardless of political or diplomatic differences. Every opportunity to create conditions for increased trust and mutual understanding must be seized if we are to free the world of the nuclear threat. We are sure that you can bring the message to decision-makers in your home countries that the CTBT is verifiable and that its entry into force would significantly strengthen the disarmament and non-proliferation regime and reduce the risk of the unthinkable becoming a reality.

I am also immensely grateful for the support we enjoy from CTBT Member States. To me, this is yet more proof of our success. Many of our gains are due to the technical and financial support of our Members. In recent years, we have benefitted from the generous voluntary contributions of Austria, Japan, Sweden, Norway, the United States, and the European Union.

The resources that Member States continue to invest in our system secure an immense return on investment since the CTBT's monitoring facilities, at 90% completion, are already at the service of the international community to support national security needs, foster regional stability and re-enforce non-discriminatory and participatory verification.

And an even more tangible return on our Member States investment: the daily monitoring of an active and evolving Earth, and making the data collected freely available to science to improve understanding on climate change, tsunami warning, disaster mitigation, as well as a wide range of different civil applications. I very much look forward to hearing presentations and seeing posters on the newest developments in this field over the coming days.

Recent disasters such as the devastating earthquake in Nepal in April remind us again and again of the importance of advancing and improving our understanding of the Earth's processes in the service of humanity.

Among the many elements of this year's Conference that I look forward to, I wish to highlight in particular our keynote speakers this morning: Naledi Pandor, Minister of Science and Technology of South Africa, Ahmet Üzümcü, Director-General of the *Organisation for the Prohibition of Chemical Weapons (and Nobel Peace Prize 2013)* and Lord Browne, former Secretary of State for Defence of the United Kingdom, Vice-Chairman of the *Nuclear Threat Initiative* and member of the *Group of Eminent Persons* for the CTBT.

The afternoon will continue with eminent speakers who will kindly share with us their breadth of experience and expertise. Frank Klotz, Under-Secretary for Nuclear Security and

NNSA Administrator, USA and Robin Grimes, Chief Scientific Adviser to the Foreign and Commonwealth Office, UK will discuss collaboration on Nuclear Test Monitoring Science.

The need for a collaborative approach to global security issues will be further explored by representatives of the World Economic Forum Global Agenda Council on Nuclear Security and key figures of world affairs in a discussion on how to enhance Governmental, Industry and Scientific Engagement on Nuclear Non-proliferation and Disarmament.

Tomorrow, among other things, I look forward to hearing from another member of the Group of Eminent Persons: former U.S. Secretary of Defense William Perry who will speak on the panel discussion "Citizen Networks: The Promise of Technological Innovation." This discussion includes representatives from Stanford University and the Silicon Valley community and looks at the tremendous opportunity that new and emerging technologies can play in overcoming the broader global challenges of nuclear security. In today's highly complex, interconnected world, all nuclear threats must be considered in a holistic way. A comprehensive approach to nuclear security will ensure that no significant advocate or useful tool is excluded from addressing these threats.

Finally, allow me to thank Secretary-General Michael Linhart, who is representing our host country here today. Secretary-General, please accept my heartfelt appreciation for the generous financial support offered by the *Federal Ministry for Europe, Integration and Foreign Affairs* of Austria to this conference.

I look forward to fruitful and successful deliberations and declare SnT2015 for open.