CTBT Science and Technology Conference 2019

Statement by Ms. Izumi Nakamitsu, High Representative for Disarmament Affairs at the High-Level Panel:

“CTBT: Science and Technology in a Changing World”

Hofburg Palace, Vienna
24 June 2019
Executive Secretary Mr. Zerbo,
Former Secretary-General Mr. Ban,
Fellow Panelists,
Excellencies,
Ladies and Gentlemen,

At the outset, I would like to thank the CTBTO for the invitation to speak today. The world is witnessing a technological revolution through which an unparalleled convergence in scientific and technological innovations are changing almost every aspect of people’s daily lives. Communications, logistics, manufacturing and, yes, war and peace-making have all been, and will continue to be, revolutionized in our lifetimes.

It is, of course, critical to ensure that the ramifications of revolutionary developments are understood, that unintended vulnerabilities are addressed, and that science and technology are used in ways that benefit humankind and in accordance with international law and the UN Charter.

In my role as High representative for Disarmament Affairs, I am often required to call for action to mitigate potentially negative consequences of technological innovation. These include addressing concerns about lethal autonomous weapons systems; ensuring outer space remains a domain of peace and development; and creating a cyberspace that is both stable and secure.

As an international community we spend much time focusing on potentially negative consequences of science and technology. What we can and should be doing is increasing our efforts to highlight and maximize the benefits of science and technology for international peace and security, particularly in the realm of nuclear non-proliferation and disarmament.

For that reason, I very much welcome the CTBTO’s initiative in organizing this annual event.

The CTBTO is also a leader when it comes to using technology in our field. With the vast amounts of data it continually processes, the International Monitoring System (IMS) is a prime candidate for the application of advanced data processing techniques. I applaud the CTBTO for having taken the initiative to implement software that uses state of the art machine learning and artificial intelligence to complement the established analysis tools.
The use of machine learning and artificial intelligence increases the quality of the data and analysis provided to states. This, in turn, strengthens confidence in the IMS and in the nuclear non-proliferation regime more generally.

This forward-leaning approach to the latest technological advances should be replicated across the entire disarmament and non-proliferation spectrum. In harnessing the benefits of science and technology we may find answers to problems that had hitherto been considered unsolvable.

One area that is a prime candidate in this respect is nuclear disarmament verification. At the recent Group of Governmental Experts on Nuclear Disarmament Verification, a number of experts identified the identification of applicable technologies as one area requiring further attention. This is an area in which science and technology can help reduce uncertainty and build confidence between states, thus enabling progress towards disarmament.

How machine learning, data capture and analysis, sensor technology, distributed ledger technology and secure communications can enhance verification should be explored.

I have been particularly interested by how academics and think tanks have been able to contribute to discussions related to nuclear weapons by drawing conclusions from commercially available space-based imaging, “geo-location” of official photographs, and social media and crowd-sourcing. Such innovative, independent verification contributions by non-governmental actors would have been unthinkable just a few years ago.

As far as we have come, more work remains to be done in this regard.

Science and technology have the potential to make great contributions to nuclear disarmament and non-proliferation. As important as it is to carefully consider and take steps to mitigate the negative consequences of technological advances, it is also incumbent on us to exploit such advances to strengthen the existing non-proliferation regime and to enable progress towards disarmament.

This conference brings together academics, practitioners, diplomats and international civil servants in a forum that promotes multi-stakeholder dialogue. In this field, perhaps more than any other, it is essential to look beyond our own silos and I hope it can be repeated in other disarmament and non-proliferation fora. During the recent public launch of the Report of the High-level Panel on Digital Cooperation, Secretary-General Guterres talked about the
importance of more inclusive multilateralism in the 21st century, where our policy discussions will be able to benefit from perspectives of diverse stakeholders. Innovation, creativity and dynamism are born in energetic discussions such as the ones you are having at this Conference.

I look forward to the interesting discussions this week.

I thank you.