Statement on behalf of Dr Lassina Zerbo

Executive Secretary

Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization

Delivered by Mr José Rosemberg, Senior Liaison Officer

Exchange with the High Representative for Disarmament Affairs and other high-level officials in the field of arms control and disarmament

UN First Committee

11 October 2017

Excellencies,
Ladies and Gentlemen,
Mr Chairman,

On behalf of Executive Secretary Lassina Zerbo, allow me to first congratulate you, Mr Chairman, on your election as chair of the First Committee of the 72nd session of the United Nations General Assembly. I also wish to also express Dr Zerbo's appreciation to the High Representative for Disarmament Affairs for convening this important exchange.

I am particularly pleased to address the Committee on the theme of "The implications of emerging technological developments on disarmament and non-proliferation". The Comprehensive Nuclear-Test-Ban Treaty (CTBT) and its verification regime are built on scientific and technological progress and cooperation.

One reason that it took until the 1990s for the Treaty to be negotiated was lack of agreement in earlier decades on the technologies and techniques to monitor and detect nuclear explosions under a comprehensive test ban. But years of painstaking work by the ad-hoc Group of Scientific Experts (GSE) paved the way for the worldwide International Monitoring System (IMS) network now in place, which now constantly transmits data to the International Data Centre in Vienna.

What we should take from this is that emerging technological developments can be approached in a positive, and not just a negative, light where disarmament and non-proliferation are concerned. The key is to find a means for channelling knowledge and research in the right direction.

In essence, the members of the GSE – who came from countries across the then-Cold War divide – educated each other on the four technologies that are the backbone of the IMS: seismic, hydroacoustic, infrasound, and radionuclide.

While seismic monitoring was already quite a mature technological process twenty years ago when CTBT verification was being established, the other three were at an earlier stage. In fact, the CTBTO has played a significant role in advancing global knowledge of how to access and make use of data from these technologies.

Our verification regime continues to be informed by scientific progress. Through ongoing meetings of our Working Group on Verification, and through our series of biennial Science and Technology Conferences (SnT), we keep abreast of the latest developments in monitoring technologies.
The SnT Conferences in particular connect us with cutting-edge research in the academic and practitioner communities, and have helped advance alternative applications of our verification regime, such as in the areas of tsunami early warning and even climate monitoring.

All of this keeps us nimble, as well as confident in our ability to provide accurate and reliable data to CTBT States Signatories in the event of a potential nuclear explosion.

Let me share with you our most recent experience of this. Early in the morning on 3 September 2017, the IMS picked up an unusual seismic event in the Democratic People’s Republic of Korea (DPRK). 36 seismic stations contributed to the initial automated detection, while over 130 seismic stations were used in the reviewed analysis carried out by CTBTO analysts. We even had two hydroacoustic stations and one infrasound station that detected signals associated with the event.

We measured the explosion at a magnitude of 6.1. This is estimated to be several times the size of any previous test conducted by the DPRK. While our role is to provide States with the data needed to draw their own conclusions, subsequent analysis did appear to lend credence to the country’s claim that it had successfully tested a two-stage thermonuclear weapon.

A weapon of this power would be more than ten times stronger than the bomb that destroyed the city of Hiroshima in a matter of seconds.

It is clear that nuclear testing drives proliferation both horizontally — spreading nuclear weapon capabilities from country to country — and vertically, as in the observed advances in the North Korean nuclear weapons programme. This is why putting an end to nuclear test explosions is so important.

Understandably, there is great nervousness about what might happen next. There have been claims that an atmospheric test is under consideration — this would be the first anywhere on the planet since 1980. The consequences of such an action could be very grim indeed.

A couple of weeks ago, on Saturday 23 September, this nervousness translated into uncertainty when two further seismic events were detected in North Korea. While the seismic signals were unusual, CTBTO analysts quickly deduced that the events were unlikely to be man-made.

So where do we go from here? It is clear that everything must be done to prevent the current crisis from spiralling out of control. What is needed is a peaceful settlement of differences through dialogue and negotiation.

In identifying a way forward, a nuclear test moratorium and eventual ratification of the CTBT should be part of any long-term solution.

The CTBTO and its science-based verification regime can provide independent, trustworthy verification of a DPRK commitment to halt its nuclear testing programme. In this way, the CTBT can play a key role in de-escalating the conflict even before its entry into force.

Mr. Chairman,

This leads me to reiterate the point that the CTBT — while in many respects operational — is not yet in force. This is despite the fact that the Treaty now has 183 States Signatories, 166 of which have completed their ratification procedures.

We all share the goal of a world free of nuclear weapons — even if there are different views on how to reach it. However, we should remember that we do not yet have a nuclear-test free world. Yet this objective — a vital concrete step towards nuclear disarmament — is within reach.

National and international security objectives are simply better secured in a world without nuclear testing. And the CTBT provides the legal and operational framework for achieving that nuclear test free world.
At the CTBTO, we have done our part to provide States with trust and confidence in the Treaty and its verification regime as an effective measure for nuclear disarmament and non-proliferation. We now urgently need Member States of the United Nations to make CTBT entry into force a top priority.

Doing so will require both leadership and political resolve. But history has shown it can be done.

We need to muster both the spirit of technological cooperation that drove the Group of Scientific Experts and the spirit of political cooperation that led to the negotiation of the CTBT.

We need to move together to finally end nuclear testing and secure the full benefits of the CTBT verification regime. This is the most practical and achievable step all United Nations Member States can take toward a world free from the threat of nuclear weapons.

I look forward to an interesting discussion.

Thank you.