



CTBTO EXECUTIVE SECRETARY LASSINA ZERBO SPEAKING AT THE 2015 NUCLEAR NON-PROLIFERATION TREATY (NPT) REVIEW CONFERENCE, UN HEADQUARTERS, NEW YORK, USA, 29 APRIL 2015. (CREDIT: UN PHOTO/ESKINDER DEBEBE)



CTBTO EXECUTIVE SECRETARY LASSINA ZERBO (CENTRE) FROM BURKINA FASO WITH THE PRESIDENT OF THE ECONOMIC COMMUNITY OF WEST AFRICAN STATES, KADRÉ DÉSIRÉ OUEDRAOGO (RIGHT), OPERATIONS CENTRE OF THE INTERNATIONAL DATA CENTRE (IDC), CTBTO, VIENNA, AUSTRIA, APRIL 2015. FAR LEFT: RANDY BELL, DIRECTOR, IDC DIVISION; FAR RIGHT: PATRICK GRECARD, SPECIAL ASSISTANT TO THE EXECUTIVE SECRETARY.

“... As we prepare for the 19th anniversary of the adoption of the CTBT, the African Group stresses the importance of achieving universal adherence to this instrument, bearing in mind the special responsibilities of nuclear-weapon States in this regard and to encourage the remaining Annex 2 States, in particular nuclear-weapon States to sign and ratify the CTBT without further delay, in order to allow its entry into force. The achievement of such an objective will contribute to the process of nuclear disarmament and in bringing us to a significant step of realizing the objective of NPT.”

Ambassador U. Joy Ogwu from Nigeria delivering a statement on behalf of the Africa Group at the Nuclear Non-Proliferation Treaty (NPT) Review Conference, New York, USA, April 2015.

African States participate actively in the work of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO). Several representatives of African States have presided over the CTBTO’s executive body. These include the very first Chairperson from South Africa from 1996 to 1997, two from Algeria in 1999 and 2005, and one from Namibia in 2010.

Leading the CTBT entry-into-force process

Morocco together with France presided over the 2009 Conference on Facilitating the Entry into Force of

The CTBT

The 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans all nuclear explosions. By mid-2015, 183 States had signed and 164 had also ratified the Treaty. Of the 44 nuclear technology holding States whose ratification is needed for the Treaty’s entry into force, eight have yet to ratify: China, Egypt, India, Iran, Israel, North Korea, Pakistan and the United States. India, North Korea and Pakistan have also yet to sign the Treaty.

the CTBT (also known as the Article XIV conference) in New York. Both countries led the entry-into-force process from 2009 to 2011, when Taïb Fassi Fihri, the Foreign Minister of Morocco, reported that: “Over the last two years, Morocco and France have undertaken a number of official steps at the multilateral, regional and bilateral level to accelerate the ratification process of the CTBT.”

Regional security

Africa’s active participation in the work of the CTBTO is a reflection of the continent’s continuing efforts to promote regional and international security. In 1963, African leaders adopted a resolution on “General Disarmament”, expressing their support for



AMBASSADOR SELMA ASHIPALA-MUSAVYI OF NAMIBIA, CHAIRPERSON OF THE CTBTO IN 2010.

a nuclear-weapon-free world. This commitment was re-affirmed by the African Nuclear-Weapon-Free Zone Treaty (Pelindaba Treaty) when it opened for signature in 1996 - see 'African Nuclear-Weapon-Free Zone' on page 4 for more information. The creation of the African Union in July 2002 further strengthened Africa's commitment to regional and international peace and stability. African leaders recognized that security is a prerequisite for sustainable economic development and human welfare.

Africa's nuclear history

The African continent's own history in the area of nuclear testing and the development of nuclear weapons has led to the active engagement of African States in nuclear non-proliferation and disarmament

"This Treaty which commits each State to refrain from conducting a nuclear test explosion or any other kind of nuclear explosion and to prevent any explosion of this type anywhere under its jurisdiction or control will, without question, contribute to nuclear disarmament and the non-proliferation of such weapons around the world."

Basile Ikouébé, Minister of Foreign Affairs and Cooperation of the Republic of the Congo, at the CTBT Ministerial Meeting, New York, USA, 26 September 2014 (translated from French).



STUDENTS FROM MALI IN LEIPZIG, THEN EAST GERMANY, PROTESTING AGAINST THE FIRST FRENCH NUCLEAR TEST ON 13 FEBRUARY 1960.

issues. On 13 February 1960, France detonated its first nuclear device at Reggane in the Sahara desert in Algeria. This atmospheric explosion was followed by three more at the same location. From 1961 to 1966, France conducted a series of 13 underground nuclear explosions at its test site at the Hoggar Mountains near In Ekker, in the Algerian Sahara.

South Africa – former nuclear weapons possessor

At the southern end of the continent, a nuclear weapons development programme took shape between the 1960s and 1980s. During this time, South Africa developed a small arsenal of six nuclear bombs.

Towards the end of apartheid in 1990, South Africa voluntarily renounced and dismantled its nuclear weapons programme. All nuclear devices were

The CTBTO

The Vienna-based Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) is tasked with building up and maintaining the CTBT verification regime. It also promotes signatures and ratifications of the Treaty.



RADIONUCLIDE STATION RN43 IN NOUAKCHOTT, MAURITANIA.



INFRASOUND STATION IS19 IN DJIBOUTI, DJIBOUTI.

destroyed. Shortly after in 1991, South Africa acceded to the NPT as a non-nuclear weapon State.

African Nuclear-Weapon-Free Zone

The Pelindaba Treaty, establishing the African Nuclear-Weapon-Free Zone, came into effect on 15 July 2009 when Burundi ratified the treaty. It was the 28th State to do so, thus meeting the treaty's requirements for entry into force. This makes the African continent the world's most recent nuclear-weapon-free zone and the largest in terms of countries and size. The entire southern hemisphere is now an area free of nuclear weapons.

The French nuclear tests in the Algerian desert in the 1960s triggered the first initiative towards creating a nuclear-weapon-free zone in Africa. In 1961, the United Nations General Assembly endorsed it by adopting a resolution calling for a zone free of nuclear weapons in Africa. South Africa's renouncement and dismantling of its nuclear weapons and its accession to the NPT provided the necessary

“We want to see a synergy between the CTBT and the Pelindaba Treaty, because they augment each other. We have decided that Africa will be a nuclear-weapon-free zone and that is what the CTBT is seeking to do on a global scale.”

Ambassador Selma Ashipala-Musavyi of Namibia, Chairperson of the CTBTO in 2010.

momentum for the Treaty to be finalized. The Treaty is named after Pelindaba, where South Africa developed its nuclear weapons programme and hosts a nuclear research centre.

Benefits of the CTBT

A State gains a number of political benefits when signing and ratifying the CTBT. It subscribes to an important norm in the field of nuclear non-proliferation and disarmament. A CTBTO Member State joins forces with other like-minded States that have committed themselves to rid the world of nuclear weapons.

There are also wide-ranging technical benefits for CTBTO Member States. Technology is transferred to a State, for example, through the building of monitoring facilities on its territory. The availability of CTBTO monitoring data and analysis reports contribute to capacity-building as well as to scientific research and technological advances. Moreover, CTBTO data can help disaster mitigation efforts, in particular for tsunami early warning and aviation safety.

Only nationals of CTBT Signatory States may work in the organization. As of mid-2015, roughly 40 of around 250 staff members at the CTBTO came from Africa. Since August 2013, the organization has been headed by Lassina Zerbo (Burkina Faso). Prior



OVER 600 SCIENTISTS FROM AROUND THE WORLD ATTENDED THE 2013 CTBT: SCIENCE AND TECHNOLOGY CONFERENCE IN VIENNA, AUSTRIA, JUNE 2013. THE CONFERENCE TAKES PLACE EVERY TWO YEARS.



CTBTO STAFF MEMBER MISRAK FISSEHA INSTALLING THE NDC CAPACITY BUILDING SYSTEM AT THE NIGERIAN ATOMIC ENERGY COMMISSION, ABUJA, NIGERIA, SEPTEMBER 2013.

“Even the least developed African country is entitled to receive the same monitoring data as the world's most developed country. This makes the CTBT the most democratic treaty in the world.”

CTBTO Executive Secretary Lassina Zerbo, during his keynote speech to mark Africa Day, Berlin, Germany, 25 May 2014.

to this, Zerbo served as the Director of the CTBTO’s International Data Centre Division from February 2004 to July 2013.

National capacity-building

Of the 51 African Member States, over 30 have designated their respective National Authorities to liaise with the CTBTO and with other Member States. The National Authority leads a country’s efforts in the implementation of the Treaty.

Around 35 African States have established their National Data Centres (NDC) as the direct national counterparts for receiving CTBTO monitoring data and analysis reports. The CTBTO helps to build and develop capacities, particularly in developing countries. It supports the establishment of NDCs by providing equipment and software as well as training NDC staff.

Beyond this technical training, the CTBTO also offers several live lectures and online courses under the auspices of the integrated Capacity Development Initiative covering the political, legal and technological aspects of the Treaty and its verification regime.

The CTBTO also offers a wide range of technical workshops and training programmes in

The CTBT verification regime

A global network of 337 facilities constantly scans the Earth for evidence of a nuclear blast.

Seismic, infrasound and hydroacoustic stations listen for signs of a nuclear explosion underground, in the air and underwater, while radionuclide and noble gas stations sniff the air for radioactivity. All monitoring data are sent to the CTBTO’s headquarters in Vienna for processing and analysis. Findings are shared with Member States in near real time. Once the Treaty is in force, Member States will be able to request inspectors to collect evidence on the ground if monitoring data and their analysis indicate that a nuclear explosion might have taken place in violation of the Treaty.

the various verification-related fields for station operators, NDC staff and technical experts. Several African countries have hosted such training activities in the past.

Monitoring stations in Africa

Africa plays a key role in the CTBT verification regime as it is the region with the largest number of States hosting monitoring facilities. Once complete, there will be 38 monitoring facilities located in 24 African States. Of these stations, 30 are already up and running. South Africa hosts five monitoring facilities – more than any other country in Africa. In addition to hosting stations, Cameroon, Cape Verde, Central African Republic, Kenya, Mauritania, Namibia, Niger, Senegal, South Africa, Tanzania,

Tunisia, Uganda, and Zambia have also concluded Facility Agreements with the CTBTO to regulate all related legal, technical and logistical aspects.

“To build peace and safeguard itself against the threats posed by the most devastating kind of weapons, the world needs Africa’s participation. In turn, to protect itself against the misuse of its territory and resources, Africa needs the legal arrangements and technical mechanisms offered by the non-proliferation and disarmament regime – of which the CTBT is an integral part.”

CTBTO Executive Secretary Lassina Zerbo speaking at a national seminar on the CTBT, Luanda, Angola, October 2013. Angola subsequently ratified the CTBT on 20 March 2015.



PARTICIPANTS AND CTBTO STAFF AT THE NATIONAL DATA CENTRE DEVELOPMENT WORKSHOP, OUGADDOUGOU, BURKINA FASO, DECEMBER 2013.

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