

The Comprehensive Nuclear-Test-Ban-Treaty at the United Nations in New York. The Treaty was photographed on the occasion of the signature ceremony on 25 September 2018 when Tuvalu signed the CTBT.

# The CTBT: rebuilding trust in the multilateral nuclear regime

BY CTBTO EDITORIAL TEAM <sup>1</sup>

The year 2020 marks the 75th anniversary of the bombings of Hiroshima and Nagasaki, and the 50th anniversary of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Yet since the last NPT Review Conference in 2015, the multilateral non-proliferation and disarmament framework has suffered a series of shocks and is facing serious challenges to its credibility and integrity.

The international community is increasingly split on the importance and value of a norms-based order rooted in negotiated treaties and agreements. Trust in the disarmament and non-proliferation regime is at a low point, with analysts pointing to a lack of implementation of past decisions and commitments as a factor contributing to a credibility deficit in the multilateral process. Some observers say we are witnessing an erosion or even destruction of treaty-based arms control.

<sup>1</sup> The overall views and conclusions expressed in this article by the CTBTO Editorial Team do not necessarily represent the views of individual experts quoted.

The key agreements and treaties, which resulted from careful and expert technical negotiations, are the foundations of the multilateral non-proliferation regime that consolidates global norms of behaviour. They are bulwarks against the proliferation of nuclear weapons, and enhance confidence and trust in the multipolar system of states.

In the words of former Russian Ambassador Grigory Berdennikov: **“The whole history of international relations is a witness to the fact that there is no alternative to treaty-based relations among nations, and arms control is no exception.”**

One of these prime initiatives is the Comprehensive Nuclear-Test-Ban Treaty (CTBT). Ahead of the postponed 2020 NPT Review Conference, experts interviewed for Spectrum agree that the CTBT remains a significant mechanism that can continue to build confidence and trust in the nuclear non-proliferation framework through the proven value of its robust global verification regime.

Former UN High Representative for Disarmament Affairs Angela Kane sees a shift away from multilateralism within the international system: **“What is missing these days—and what I have seen over the course of my life and my career – was that there was always a strong support of multilateralism and global action. There are countries that have now stepped back from such a global view. When you look at how treaties that have been agreed to are being signed and ratified, the pace is very slow. That was not the case in earlier years, earlier decades. I find it regrettable that this worldwide view that we are all in this together has been eroded by saying ‘My country comes first, I do not wish to be in a community of states which binds me by giving me certain restrictions on how I wish to act.’”**

Sérgio Duarte, president of the 2005 NPT Review Conference and

a former UN High Representative for Disarmament Affairs, also stresses the importance of reviving a multilateral approach: **“Over the past 50 years the NPT has been largely successful in containing the number of States that possess nuclear means of destruction. Today, however, the credibility of the regime is shaken as a result of the lack of progress in nuclear disarmament and the apparent willingness of the nuclear-weapon states to retain their arsenals in perpetuity. The most pressing challenge is to restore confidence in the multilateral process.”**

#### **VERIFIABILITY BUILDS TRUST: THE CTBT AS CONFIDENCE-BUILDER**

In arms control and non-proliferation agreements, verifiability builds trust between parties – particularly between adversaries. A robust verification regime is an essential element of a credible arms control agreement, providing reassurance that states are implementing their commitments. This is particularly important during times of heightened geo-political tensions and in an era of eroding trust between states.

Verification regimes proved their worth during the height of the bipolar Cold War between two hostile adversaries. We are now operating in a complex multipolar system of states characterized by high levels of mistrust and strategic competition, where the traditional arms control architecture is crumbling and treaty-based norms are being questioned. This is a world which requires solid elements of verifiable reassurance.

The CTBT has a verification regime that is second to none, monitoring the globe continuously for any sign of a nuclear test. In the current, hostile geopolitical environment, this robust and proven verification regime provides impartial confidence to member states, and to the international community at large. The reassurance that the CTBT fosters has grown as its verification regime has

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been built up following the establishment of the CTBTO in 1997. Today, some 300 International Monitoring System (IMS) installations around the globe are sending data to the International Data Centre (IDC) in Vienna, from where the information is shared with member states. The system has accurately detected and characterized all six nuclear tests by the DPRK.

Patricia Lewis, Director of the International Security Programme at Chatham House in London, says: **“The CTBT is one of the most important treaties in the field of nuclear disarmament and non-proliferation. The fact that, 24 years after its negotiation, it has not yet entered into force is a peculiar situation and a source of shame for the international community.”**

**“The IMS, which is established to verify the Treaty once it comes into force, has already proven itself to be an important facility for many countries for earthquake prediction and tsunami warnings. I think that the IMS is a valuable resource for all – one that goes way beyond the CTBT verification task. The IMS has surpassed expectations in its ability to create a global network of detectors that monitor the land, sea and air for nuclear explosions and has contributed to international security already by detecting and analysing the nuclear tests conducted by North Korea.”**

Indeed, the CTBT can serve as a confidence-building measure to support the denuclearization of the Korean Peninsula. Executive Secretary Lassina Zerbo has made clear that the CTBTO is ready to make its assets and expertise available to contribute to denuclearization efforts, if member states ask it to do so.

Within the NPT review process, the CTBT and the work of the CTBTO should be a unifying issue, one common denominator that states can agree support for. At the 2019 NPT Preparatory Committee for the 2020 Review Conference, the vast majority of NPT States Parties expressed their support for the CTBT, whether through national statements or association with regional statements, or through the submission of and association with official working papers. More than 70 states made direct references to the CTBT in their national statements, most of which expressly called for the Treaty's entry into force and universalization. Several working papers, with the endorsement of more than 150 countries all together, were submitted expressing support for the CTBT. Perhaps states can be unified in promoting one joint working paper or statement in support of the CTBT, drawing together all such statements of support.

Angela Kane highlights the potential role of the CTBT in bringing together diverging views on pathways to disarmament: **"One of the ways it [the divide] can be bridged is by looking at not only the nuclear weapons, but by looking at supportive measures. The supportive measure foremost in my mind is the CTBT."**

Kane says she is 'very encouraged' by a proposal last November by Kazakhstan's First President Nursultan Nazarbayev to establish a Global Alliance of Leaders for a Nuclear-Free World to advance the nuclear non-proliferation and disarmament agenda. Calling this an 'excellent initiative', she said it

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could promote further signatures and ratifications of the CTBT, particularly by the eight remaining Annex 2 countries whose ratification is required for it to come into force.

Chilean diplomat Hellmut Lagos argues that cross-regional, issue-based groupings can be key vehicles in promoting the CTBT's entry into force: **"A good example of this is the Non Proliferation and Disarmament Initiative (NPDII) that has published op-eds including this issue. These groups can also organize joint demarches to the capitals of Annex 2 states and work together for the Article XIV Conferences on Facilitating Entry into Force of the CTBT."**

#### **THE CTBT: EMBODYING SCIENCE DIPLOMACY**

The CTBT is also one of the greatest examples of the nexus between science and diplomacy. It was the work of scientists that made the negotiation of the CTBT possible, by proving that a comprehensive, zero-yield nuclear test ban could be verified. With ever escalating tensions, science helps us to identify concrete steps that can bring opposing views together. The language of science is universal and can reach beyond political differences and help build trust and understanding. Science is borderless, able to cut across countries, communities

and individuals that are otherwise separated by conflict or mistrust.

As a technical international organization, the work of the CTBTO provides reliable information to member states in support of international security. The IMS is a true feat of science and diplomacy: a technological network located worldwide that provides impartial information to member states and scientists to catch signs of nuclear explosions, and which can also yield a range of civil and scientific benefits. Through formal tsunami warning agreements, IMS data are being made available to support national authorities in 16 countries to issue fast, accurate public tsunami alerts. IMS data can help to track radionuclides after civil nuclear accidents, to monitor climate, and to support a wide range of other scientific research. Patricia Lewis says science diplomacy is "one of the best initiatives to come out of the CTBTO's work in recent years": **"The role of scientists is vital in finding the solutions to our problems. Not all of those solutions are about science and technology but, for diplomats to find new avenues, they have to understand the science behind the issues and, for scientists to contribute, they have to understand diplomacy. I have seen many occasions when both communities work effectively together for the good of humanity and the environment. I am particularly delighted with the young scientists that I have met at CTBTO Science and Technology conferences from all over the world. They are the future, and that gives me hope."**

In addition to its biennial Science and Technology conferences, the CTBTO has launched a series of Science Diplomacy Symposia. The third of these, originally scheduled for March 2020, now looks set to go ahead in November. In addition to examining the lessons that can be learned from the CTBT, the Symposia aim to stimulate creative thinking about possible political, legal and



Analysts viewing data at the CTBTO/PTS Operations Centre (COPC) which is an integrated facility with state-of-the-art technology equipment for monitoring and supporting IMS, IDC and OSI operations of the verification regime.

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diplomatic solutions among diplomats, practitioners, policymakers, academics and the next generation to the challenges facing the Treaty. Experts interviewed here also highlighted the important role that education can play, both in helping to build empathy and trust in the nuclear non-proliferation regime, and in promoting the CTBT. Bruno Tertrais, deputy director of the French think-tank Fondation pour la recherche stratégique (FRS), says: **“I have a very modest view of what think-tankers can do in these matters. But I do think that we can have a role in ensuring that the best**

arguments in favour of the Treaty and the organization are made by non-governmental analysts and are heard by as many constituencies as possible in as many countries as possible.”

Hellmut Lagos also emphasizes that education is vital in promoting the entry into force of the CTBT and attaining the ratification of the final eight Annex 2 states: **“When we talk about the catastrophic humanitarian consequences of any use of nuclear weapons, we should also consider the use through nuclear weapon testing. There is not enough dissemination of this issue, which would change the perceptions and motivate the citizens of those states. Only then it will become an important political priority for governments.”** The restoration of credibility in the nuclear non-proliferation and arms control regime is a long-term goal that will require steady and consistent layering of commitment by the international community – nuclear-weapon states and non-nuclear-weapon states

alike. The CTBT is a mechanism that not only fosters confidence and trust in the nuclear non-proliferation framework, with the proven value of its robust global verification regime, but can actually help restore trust in the broader nuclear policy landscape.

When states parties gather for the delayed 2020 NPT Review Conference, the CTBT can and should be one issue on which they can seek some agreement as a basis for further progress. Positive action on the CTBT would provide the progress that we need to see in the NPT review cycle at this time of disillusionment, and build confidence and trust in the broader non-proliferation regime.

Given that CTBT verification is up and running with its state-of-the-art IMS, supporting a de-facto global moratorium on nuclear tests, entry into force is the most effective disarmament measure within the grasp of the international community.