

Advancing the CTBT and Defending the *De Facto* Nuclear Test Moratorium

Civil Society Statement to the 13th Article XIV Conference
on Facilitating Entry into Force of the CTBT

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Since the conclusion of the 1996 [Comprehensive Nuclear-Test-Ban Treaty](#) (CTBT), which has been signed by 187 countries, nuclear testing has become taboo.

All CTBT states parties agree that the treaty prohibits “any nuclear weapons test explosion, or any other nuclear explosion,” no matter what the yield. The CTBT Organization operates a fully functional International Monitoring System (IMS) to detect and deter cheating.

Most nuclear-armed states that have not signed or not ratified the CTBT, including India, Israel, and Pakistan, are currently observing nuclear testing moratoria. Even though the Democratic People’s Republic of Korea (DPRK) announced in January 2020 it “will no longer observe its self-imposed moratorium on nuclear testing,” it has not yet resumed nuclear testing.

Though it has not yet formally entered into force, the CTBT is one of the most successful and valuable agreements in the long history of nuclear nonproliferation, arms control, and disarmament. Without the option to conduct nuclear tests, it is more difficult, although not impossible, to develop, prove, and field new warhead designs.

Civil society friends of the CTBT welcome the governmental support for the CTBT that is evident at this assembly.

But now, after 13 such meetings, it is clear to us that new and more energetic strategies must be considered not only to advance the treaty, but to strengthen the *de facto* norm against testing.

Like other critical nuclear risk reduction, nonproliferation, and arms control agreements, the CTBT is under threat due to inattention and worsening relations between nuclear-armed adversaries.

In recent years, the possessors of the largest nuclear arsenals have launched nuclear weapons modernization programs, some are pursuing new nuclear weapons designs, and some are increasing the size and diversity of their arsenals. Military activities and subcritical experiments at former test sites continue. There has been no serious consideration of ratification of the CTBT by any of the remaining Annex 2 states in several years.

With these challenges in mind, states parties cannot afford to simply express rhetorical support. They must do more through more energetic, higher-level bilateral and multilateral diplomacy through this Article XIV process, at the UN General Assembly, the Security Council, and beyond.

As representatives of civil society, we offer the following observations and recommendations for all states parties to consider and pursue.

1. Energetic Diplomacy Focused on the Eight Hold-Out States

We welcome recent efforts to secure ratifications from several additional states. But it is now time for this conference and each CTBT state party to focus on new and creative approaches to overcome the stubborn intransigence of the eight remaining Annex 2 “hold-out” states—China, DPRK, Egypt, India, Iran, Israel, Pakistan, and the United States—which have deprived the international community, and themselves, of the full security benefits of the treaty and its extensive verification system.

While ratifications by individual hold-out states might stimulate other hold-out states to follow suit, there is no reason for any state to make its ratification dependent upon another state’s ratification, as the treaty becomes binding for all only when all hold-out states have ratified.

If the states parties at this conference are serious about securing entry into force, they will need to devote more significant and higher-level diplomatic pressure in the capitals of all eight CTBT hold-out states to move them to sign and/or ratify the treaty.

- **The People’s Republic of China:** Since halting nuclear testing and signing the CTBT in 1996, China’s leaders and officials have consistently expressed their support for the CTBT, but they have failed to follow through with ratification. Chinese leadership is important and overdue. The government’s explanation for delaying formal consideration of its ratification of the treaty is no longer serious or credible. We call on China to finally initiate the process for ratification of the treaty without further delay or excuses.
- **The United States:** After some senior Trump administration officials [callously discussed in 2020 that the United States should resume nuclear testing](#) for the first time since 1992 to try to intimidate Russia and China, the Biden administration made it clear in 2021 that the United States supports the CTBT “and is committed to work to achieve its entry into force.”

We welcome these statements of support, but unfortunately, the Biden administration has, so far, done nothing to pursue the kind of outreach and education campaign that will be necessary to secure the advice and consent for ratification by the U.S. Senate. Given that the United States has not conducted a nuclear test explosion in more than 30 years and has no technical, military, or political reason to resume testing, the national security case for ratification and strengthening the barriers against testing by others is even stronger than when it was [last considered by the Senate in 1999](#).

One salient issue that will need to be addressed to secure U.S. ratification is the recent U.S. State Department charge that “during the 1995–2018 timeframe, Russia probably conducted nuclear weapons-related tests” at its former test site at Novaya Zemlya. The assessment provides no evidence of the charge and does not claim the Russian activities were militarily significant. Russia, which has signed and ratified the CTBT, has vigorously denied the charge and repeatedly pointed to the failure of the United States to ratify the treaty.

The United States, China, and Russia, all CTBT signatories, all continue to engage in weapons-related activities at their former nuclear testing sites. Although the

IMS is operational and far more effective than originally envisioned, very low-yield nuclear test explosions can still be difficult to detect without on-site monitoring equipment or inspections, which will not be in place until **after** entry into force.

To address concerns about clandestine activities at former test sites, states parties should explore the development of voluntary confidence-building measures designed to detect and deter possible low-level, clandestine nuclear testing.

In a positive move, [in June](#) National Nuclear Security Administrator, Jill Hruby, announced that her agency is "open to working with others to develop a regime that would allow reciprocal observation with radiation detection equipment at each other's subcritical experiments to allow confirmation that the experiment was consistent with the CTBT."

We urge all CTBT states parties, especially those with active nuclear test sites, to engage in this important technical dialogue to improve capabilities to ensure compliance before and after the treaty's entry into force.

- **The Russian Federation:** More than thirty years ago, citizen activists and independence leaders in Kazakhstan forced the Russian leadership to halt nuclear testing. In the years that followed, Russia actively supported the negotiation of the CTBT and it ratified the treaty.

Now, unfortunately, there are credible [reports](#) that senior Russian officials have been discussing the option of "unratifying" the CTBT in order to achieve symmetry with the United States in all areas of nuclear policy, but no official decisions have been made.

Such a move would be self-defeating and would sabotage the CTBT regime. Contrary to perceptions of extremists in Moscow, "un-ratification" would not in any way create leverage for Russia vis-a-vis "the collective West." Instead, it would undermine Russia's already shaky nuclear nonproliferation standing, alienate nonnuclear weapon states, and damage the broader nuclear nonproliferation system.

Recall that in 2016, Russia joined the United States, China, and other members of the UN Security Council in support of [Resolution 2310](#), which reaffirms support for the CTBT, and Russia joined a statement from its permanent five members pledging they would not take any action that would "defeat the object or purpose of the treaty."

According to an [August 29 report by the news outlet RBC](#), a Russian Foreign Ministry official said that as for the possibility of Russia withdrawing its ratification, the official said that the option "is not under consideration at the moment."

We strongly urge Russia to formally reaffirm its full support for the CTBT and to work constructively with other friends of the CTBT to urge the remaining hold-out states to sign and/or ratify the treaty without delay and work in collaboration with other states parties to engage in talks to develop voluntary confidence-building measures to ensure that ongoing experiments at former nuclear test sites are consistent with the CTBT.

- **India and Pakistan:** Since their destabilizing tit-for-tat nuclear detonations in 1998, India and Pakistan have refused to reconsider the CTBT even though neither country has expressed an interest in, nor technical justification for, renewing nuclear testing. UN Security Council Resolution 1172 paragraph 13 "urges India and Pakistan ... to become Parties to the ... Comprehensive Nuclear Test Ban Treaty without delay and without conditions."

India and/or Pakistan could advance the cause of nuclear disarmament, enhance their national security and nonproliferation reputations, and ease concerns about a

resumption of nuclear testing, by converting their unilateral test moratoria into legally binding commitments through the CTBT.

- **The Middle East:** Ratification of the CTBT by Egypt, Iran, and nuclear-armed Israel—all of which must ratify to trigger CTBT entry into force—and Saudi Arabia would reduce nuclear weapons-related security concerns in the region. It would also help create the conditions necessary to achieve their common, stated goal of a weapons of mass destruction free zone in the Middle East. A goal of the co-chairs of the Article XIV process should be to approach each of these governments to gain a clearer understanding regarding the circumstances that would allow each to join the CTBT.
- **The DPRK:** Pyongyang's push to build-up its nuclear weapons capabilities represents another threat to the norm against nuclear testing. Although Chairman Kim Jong Un has green-lighted further ballistic missile testing and fissile material production, he has not ordered the resumption of nuclear testing since he announced a unilateral nuclear test moratorium in the spring of 2018. However, the closure of the DPRK's test site has still not been verified, and the DPRK has not made a legally binding commitment to halt nuclear test explosions by signing and ratifying the CTBT.

All CTBT signatory states should underscore, in multilateral and bilateral fora and in meetings with the government in Pyongyang, that signature and ratification of the treaty would represent a significant step toward denuclearization and help create the conditions for peace and normalization of relations.

In particular, we call upon the leadership of China and Russia, which maintain ties to the DPRK, to press Chairman Kim to reaffirm the DPRK's nuclear test moratorium and, as former CTBTO Executive Secretary [Lassina Zerbo proposed in 2018](#), urge him to sign the CTBT like all the other major nuclear powers have done, and close the Punggye-ri Nuclear Test Site under international supervision.

2. Addressing the Human Cost of Nuclear Testing

Since 1945, there have been [2,056 nuclear weapons test explosions](#). Of that total, the United States detonated some 1,030 test explosions and the Russian Federation detonated 715.

The CTBT and the *de facto* global nuclear testing moratoria help reduce further health and environmental injury from further nuclear weapons testing. CTBT states parties have a moral, and in some cases, a legal obligation to provide health monitoring, health care, and other forms of assistance to those impacted by nuclear weapons test explosions.

Hundreds of thousands of people have died and millions more have [suffered](#)—and continue to suffer—from illnesses directly related to the radioactive fallout from nuclear detonations in the southwestern and western United States, islands in the Pacific, in Australia, western China, Algeria, across Russia, in eastern Kazakhstan, India, Pakistan, the DPRK, and elsewhere.

For example, in Kazakhstan, where the Soviet Union conducted more than 450 nuclear test detonations, including 116 in the atmosphere, the Kazakh government estimates more than 1.5 million people were harmed and it is clear that many continue to suffer the effects of these detonations.

Fallout from U.S. atmospheric nuclear blasts at the Nevada Test Site may have caused 10,000 to 75,000 thyroid cancers in the United States, according to a 1990 National Cancer Institute study. A [new study, released](#) in July by Princeton University researchers, shows that the fallout from the 1945 Trinity test reached 46 states, Canada, and Mexico within 10 days of detonation. The study also reanalyzed fallout from all 93 aboveground U.S. atomic tests in Nevada and suggests that earlier official assessments underestimated the scope of the contamination, which reached all regions of the continental United States and points beyond.

In the Marshall Islands, where the United States detonated massive above ground nuclear tests in the 1940s and 1950s, the scale of damage from nuclear testing was immense. The 67 U.S. atmospheric nuclear weapons tests—23 at Bikini Atoll and 44 at Enewetak Atoll—spewed radioactivity over the entirety of the Marshall Islands and produced a total explosive power of 108.5 megatons (TNT equivalent). That was about 100 times the total yield of all atmospheric tests conducted at the Nevada Test Site.

Today, the United States and the Republic of the Marshall Islands are negotiating the terms of a new Compact of Free Association that obligates the United States to help address the damage caused by past nuclear testing.

We [join others in urging](#) the Biden administration to agree to provide the necessary financial and technical support for long term environmental remediation programs, expansion access to health care especially as it relates to treatment related to illnesses associated with radiation exposure, and for building independent capacity to monitor, assess, and address environmental and health needs of the Marshallese in the years to come.

[An independent 2021 scientific investigation](#) using information from declassified French military archives re-evaluated the estimations of the doses of radioactivity received by the civilian population of so-called French Polynesia after the six most contaminating French atmospheric tests. The study found that France’s atomic energy commission calculations of the maximum dose received by the local inhabitants were between twice to ten times lower than the updated estimates. We urge all CTBT states parties (particularly nuclear-armed states) to:

- Support further scientific research on the health and environmental effects of nuclear testing, and provide financial support for health monitoring and health care programs for populations affected by nuclear testing; and
- Cooperate with states parties to the Treaty on the Prohibition of Nuclear Weapons (TPNW) as they begin to fulfill their legal responsibilities under that treaty to provide assistance and environmental remediation to those people and regions affected by nuclear weapon use and testing. We also encourage [those CTBT states parties](#) that have not already done so to sign and ratify the TPNW, which reinforces the CTBT's prohibition on nuclear testing.

Bottom Line

More than a quarter century since they were established, the CTBT and the CTBTO enjoy broad support and have been highly successful. But we cannot take the treaty, the IMS, or the *de facto* global nuclear test moratorium for granted.

Now is the time to act to reinforce the treaty and the global norm against nuclear testing, which is important for the achievement of nuclear disarmament.

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