

# **Elevating the Profile of the CTBT in the NPT Context: A Rationale and Recommendations from the Next Generation**

by

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## ***Introduction***

Throughout its history, nuclear testing has been regarded as a key step on the path toward nuclear proliferation. As a result, efforts to ban the testing of nuclear weapons and to stop both the horizontal and vertical spread of nuclear weapons have been pursued in parallel with one another for more than six decades. This paper traces the evolution of this relationship and examines how the banning of all types of nuclear testing continues to advance the objectives and commitments of the global nonproliferation regime. We find that the Comprehensive Nuclear Test Ban Treaty (CTBT) and the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) were conceived of in the same spirit: to strengthen the nonproliferation regime and advance disarmament initiatives. To date, both Treaties continue to form the backbone of the global nonproliferation order and are, therefore, mutually reinforcing. The symbiotic relationship between these two instruments is codified in the preamble to the NPT itself. As a result, a key element of discourse is missing from nonproliferation and disarmament debates in the NPT context if the importance of the CTBT is deemphasized, minimized, or absent. Likewise, a fundamental rationale for the entry into force of the CTBT—to curb nuclear testing in advancing

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nuclear disarmament and nonproliferation—lacks urgency if the Treaty is divorced from the NPT.

In light of these assertions, we argue that the Comprehensive Nuclear Test Ban Treaty (CTBT), which opened for signature in 1996 but has yet to be ratified, should occupy a place of prominence during the 2020 NPT review cycle. On the basis of this finding, we examine the outcomes of past NPT Review Conferences to identify places where the CTBT could appear in PrepCom and RevCon documents and statements during the 2020 review cycle. We also propose new and creative places where these two Treaties reinforce one another, and we make recommendations for ways to raise the profile of the CTBT more generally in the context of the NPT.

### **The History of Test Bans and the NPT: Shared Origins**

Attempts to negotiate a nuclear test ban, which predate negotiations of a treaty on the nonproliferation of nuclear weapons, began as early as 1954, when Indian Prime Minister Jawaharlal Nehru issued calls for a moratorium on nuclear testing.<sup>2</sup> While the United States, the United Kingdom, France, Belgium, and others<sup>3</sup> initially opposed these efforts, in 1958, US President Dwight D. Eisenhower proposed to Soviet Premier Nikolai Bulganin the convening of a group of experts to discuss the cessation of nuclear testing. The months that followed saw widespread support for the banning of nuclear testing in an effort to limit not only vertical but

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<sup>2</sup> Pierce Corden, “Timeline of the CTBT’s Evolution,” *The Nonproliferation Review* Vol. 23, Nos. 3-4, pp. 259

<sup>3</sup> *Foreign Relations of the United States, 1952-1954*, United Nations Affairs, Volume III, eds. William Slany and Ralph Goodwin (Washington: Government Printing Office, 1979), Document 962  
<<https://history.state.gov/historicaldocuments/frus1952-54v03/d962>>

also horizontal proliferation. In the First Committee of the UN General Assembly, for example, the Irish delegation proposed an amendment to a Seventeen-Power draft resolution on nuclear testing, which urged the parties involved in the negotiations not to “supply other States with nuclear weapons while these negotiations are taking place and during the period of any suspension of tests that may result therefrom” and “all States which are not now producing nuclear weapons to refrain from undertaking their manufacture while these negotiations are taking place and during the period of any suspension of tests that may result therefrom.”<sup>4</sup> While the amendment was not adopted, these early attempts to link the suspension of testing with nonproliferation were taken up in subsequent statements and documents. For example, in a statement on the final report of the activities of the Group of Experts in Geneva, President Eisenhower expressed his support for suspending the testing of nuclear weapons so long as “satisfactory progress is being made in reaching agreement on and implementing major and substantial arms control measures.”<sup>5</sup> Although these activities did not lead to a treaty prohibiting nuclear testing, they nevertheless served to link—in a multilateral setting—the relationship between the banning of testing, nuclear nonproliferation, and progress toward disarmament.

This connection was further solidified when US President John F. Kennedy resumed efforts to outlaw nuclear tests in an attempt to “check the spiraling arms race in one of its most dangerous areas” and to deal effectively with “the further spread of nuclear arms”<sup>6</sup> in 1963.

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<sup>4</sup> Document A/3974\* and ADD 1 AND 2: Report of the First Committee, November 3-4, 1958, pp. 25  
<[https://disarmament-library.un.org/UNODA/Library.nsf/8da0c852f0be800d85257965007adb3/13942a8e68f8e8f585257eb40062682b/\\$FILE/A-3974%20and%20Add1-2.pdf](https://disarmament-library.un.org/UNODA/Library.nsf/8da0c852f0be800d85257965007adb3/13942a8e68f8e8f585257eb40062682b/$FILE/A-3974%20and%20Add1-2.pdf)>

<sup>5</sup> William Gehron, “History of Political and Technical Developments of the Negotiations from October 31, 1958, to August 22, 1960,” *The Department of State Bulletin* September 29, 1960, p. 2  
<<https://babel.hathitrust.org/cgi/pt?id=umn.31951d03597107x;view=1up;seq=4>>

<sup>6</sup> John F. Kennedy. “Press Copy of American University Speech,” June 10, 1963  
<<https://research.archives.gov/id/193862>>

Only months later, the U.S., Soviet Union, and United Kingdom signed the Partial Test Ban Treaty (PTBT) in Moscow, marking the first international legal constraint on nuclear weapons by restricting nuclear testing to underground locations. As a modest nonproliferation and disarmament measure, it served as a stepping stone to the Treaty on the Nonproliferation of Nuclear Weapons, on which negotiations began nearly simultaneously in the 18-Nation Disarmament Conference in 1962. Widespread adherence to the PTBT demonstrated a deep, international commitment to nonproliferation, while the willingness of the superpowers to place controls on their nuclear arsenals revealed a greater receptivity to disarmament. Opened for signature in 1968, the NPT would pay tribute to the first nuclear test ban treaty, recalling language from the PTBT's preamble and expressing, in its own preamble, the determination of the signatories to continue negotiations for the "discontinuance of all test explosions of nuclear weapons for all time." Although the goal of finalizing a CTBT does not constitute a binding obligation under the NPT, it is a clear declaration of intent--one that was drawn directly from the PTBT.

Owing to this linkage, many States Parties viewed the negotiation of a comprehensive test ban as a barometer for the fulfillment of Article VI of the Nonproliferation Treaty during that Treaty's early history.<sup>7</sup> As a result, prolonged failure to advance a CTB generated significant friction in the first NPT review conferences, often preventing the adoption of a consensus final document. Stalled talks on a CTB, for example, cast a pall over the 1975 Review Conference, where, in the section of the Final Document reviewing Article VI of the Treaty, States Parties

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<sup>7</sup> Charles Van Doren, "Prognosis for the Fourth NPT Review Conference," *Arms Control Today*, Vol. 20, No 5 (June 1990), pp. 19

were eventually able to agree only to call upon the Nuclear Weapons States to “limit their underground tests to a minimum.”<sup>8</sup> In the 1980 Review Conference, the impact of the testing issue was even greater, as the recent breakdown of trilateral CTB deliberations contributed to the failure to reach consensus on a final document. The Director General of the IAEA at the time, Sigvard Eklund, underscored the mutual dependence between the NPT and CTB, lamenting that,

The non-proliferation regime can only survive on the tripod of the Nonproliferation Treaty, effective international safeguards, and a comprehensive nuclear test ban treaty. The vital third leg is still missing as it was five years ago.<sup>9</sup>

Five years later, and still unable to come to agreement on the issue of testing, States Parties resorted to summarizing the disagreements over the negotiation of a comprehensive test ban.<sup>10</sup>

Reflecting this impasse, the 1985 Final Declaration notes that, “certain States Parties to the Treaty, while committed to the goal of an effectively verifiable Comprehensive Nuclear Test Ban Treaty, considered deep and verifiable reductions in existing arsenals of nuclear weapons as the highest priority in the process of pursuing the objectives of Article VI.”<sup>11</sup> Four years later, a 1989 NAM summit highlighted how deep the divisions between States Parties had become over the test ban issue. Members of the Non-Aligned Movement declared that a CTB was “absolutely essential for the preservation of the nonproliferation regime embodied in the Nonproliferation

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<sup>8</sup> Bruce Unger, “The Nuclear Non-Proliferation Treaty Review Conference: An Unsuccessful Attempt to Stem the Tide, *World Affairs* Vol. 139, No. 2 (Fall 1976), p. 98

<sup>9</sup> Glenn T. Seaborg and Benjamin S. Loeb, *Stemming the Tide: Arms Control in the Johnson Years* (Lexington: Lexington Books, 1987), pp., 385

<sup>10</sup> Charles Van Doren, “Prognosis for the Fourth NPT Review Conference,” *Arms Control Today*, Vol. 20, No 5 (June 1990), pp. 19

<sup>11</sup> 1985 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. 1 (NPT/CONF.III/64/I)

<<https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/assets/WMD/Nuclear/pdf/finaldocs/1985%20-%20Geneva%20-%20NPT%20Review%20Conference%20-%20Final%20Document%20Part%20I.pdf>>

Treaty,”<sup>12</sup> a perspective that was rejected by the P5 during the 1990 Review Conference. When the Mexican delegation proposed linking the negotiation of a CTBT with the upcoming 1995 Review Conference, some members of the P5 were only able to agree to a series of restraints on testing short of a comprehensive ban. Unsurprisingly, the inability of States Parties to resolve these differences again contributed to the failure of that Conference to achieve a consensus Final Document.<sup>13</sup>

### ***The CTBT and Fulfillment of Article VI***

The 1995 Review and Extension Conference differed in obvious ways from previous Review Conferences, as it represented a critical juncture for the nonproliferation regime. Importantly, it also provided a window onto the mutually dependent relationship between the comprehensive banning of testing and the NPT. The determination of States Parties to extend the NPT indefinitely allowed the Conference to agree to a series of time-bound measures of import to the “full realization and effective implementation of article VI,” including the “completion by the Conference on Disarmament of the negotiations on a universal and internationally and effectively verifiable Comprehensive Nuclear-Test-Ban Treaty no later than 1996.”<sup>14</sup> The NPT

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<sup>12</sup> As quoted in Tom Zamora, “LTBT Amendment Conference to Continue, but No Test Ban in Sight,” *Arms Control Today*, March 1991, pp. 14

<sup>13</sup> “NPT CTBT Timeline,” CTBTO

<<https://www.ctbto.org/specials/npt-revcon-2015/npt-ctbt-timeline/?textonly=1>>; see also “A verifiable test ban treaty: The CTBT’s role in NPT credibility,” Acronym Institute for Disarmament Diplomacy: 2010 and Beyond: NPT Briefing 7, 2010.

<sup>14</sup> 1995 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Decision 2: Principles and Objectives for Nuclear Non-Proliferation and Disarmament (NPT/CONF.1995/32 (Part 1), Annex)

<<http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/GENERAL-DOCS/outcome1995-2.pdf>>

was indefinitely extended without a vote, and the CTBT was opened for signature one year later by the date specified in the final document.<sup>15</sup> This linkage codified the relationship between the CTBT and the objectives of the NPT, agreed upon by States Parties of all regional and political stripes.

As a result of this linkage, progress on the CTBT's entry into force has continued to be a yardstick by which the status of the NPT is measured. For example, the adoption of a consensus final document in 2000 was possible in part because the United States agreed to include positive language about the CTBT in the text.<sup>16</sup> Highlighting the salience of this linkage, the first measure of the 13 Practical Steps toward nuclear disarmament negotiated by the Conference was the bringing into force of the Comprehensive Test Ban Treaty. In 2005, conversely, the apparent unwillingness of the new Bush administration to seek the ratification of the CTBT, as well as the inability of several P5 Member States to affirm their commitment to the 13 Practical Steps, resulted in the failure of that Review Conference to generate an agreed final document.<sup>17</sup> In 2010, with a new American administration in place that made nonproliferation a priority,<sup>18</sup> States Parties were able to affirm the

essential role of the Comprehensive Nuclear-Test-Ban Treaty within the nuclear disarmament and non-proliferation regime and that, by achieving the cessation of all nuclear weapon test explosion and all other nuclear explosions, by constraining the development and qualitative improvement of nuclear weapons and ending the

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<sup>15</sup> Susan Welsh. "Delegate perspectives on the 1995 NPT review and extension conference," *The Nonproliferation Review* 2, No. 3 (Spring-Summer 1995), pp. 2

<sup>16</sup> Carlton Stoiber, "The Evolution of NPT Review Conference Final Documents, 1975-2000," *The Nonproliferation Review* (Fall-Winter 2003), pp. 141

<sup>17</sup> Sharon Squassoni. "Grading Progress on 13 Steps Toward Disarmament," *Carnegie Endowment for International Peace: Policy Outlook* 2009, pp. 2 <[http://carnegieendowment.org/files/13\\_steps.pdf](http://carnegieendowment.org/files/13_steps.pdf)>

<sup>18</sup> Rebecca Johnson, "Assessing the 2010 NPT Review Conference," *Bulletin of the Atomic Scientists* 66 No. 4 (2010), pp. 2.

development of new types of nuclear weapons, the Treaty combats both horizontal and vertical proliferation.<sup>19</sup>

A corresponding agreed 64-point action plan negotiated by the Conference included five specific steps emphasizing the importance of the early ratification of the CTBT to achieving nonproliferation and disarmament objectives.

Following the success of the 2010 review cycle, expectations for the 2015 RevCon were cautiously high. However, while the rise of support for the Humanitarian Impact of Nuclear Weapons initiative and concerns over the fulfillment of Article VI obligations threatened to divide States Parties on the issue of disarmament, it was a failure to agree on language relating to the Middle East Zone Free of Nuclear Weapons which eventually prevented the adoption of a consensus final document.<sup>20</sup> While this outcome is unfortunate for many reasons, the 2015 Review Conference nevertheless saw more references to the CTBT than in 2010. This suggests that the CTBT may again have the potential to serve as an area of agreement between States Parties with otherwise disparate viewpoints during the 2020 review cycle.<sup>21</sup> Operating on this premise, the remainder of this report is devoted to exploring four ways to heighten the profile of the CTBT in the NPT context.

### ***Recommendation 1: Examine and Build Upon Past Review Conference Documents***

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<sup>19</sup> 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. 1 (NPT/CONF.2010/50), paragraph 83

<sup>20</sup> For the most comprehensive assessment of the 2015 NPT Review Conference published to date, please see: William Potter. "The Unfulfilled Promise of the 2015 NPT Review Conference," *Survival* 58, No. 1, pp. 151-178.

<sup>21</sup> William Potter. "The Unfulfilled Promise of the 2015 NPT Review Conference," *Survival* 58, No. 1, pp. 172



An examination of the numerous references to the CTBT in the 2015 Draft Final Document reveals both near-repeats of language from previous final documents and additional, strengthened reference to the CTBT. These should not become wasted opportunities to raise the salience of the CTBT in the context of the NPT during the 2020 review cycle. States Parties should reexamine these references to the Treaty and see how they could be updated during the 2020 review cycle. One particular example of such language appears in Paragraph 154(15) of the 2015 draft, which both reaffirms Actions 10-14 of the 64-point action plan agreed to in 2010 relating to the CTBT and incorporates additional language regarding the humanitarian impact of nuclear testing to add urgency to the need to ratify this Treaty. In the current review cycle, States Parties could further strengthen this language by referencing the 20th anniversary of the opening for signature of the CTBT to heighten the need for expediency in achieving its entry into force.

Another significant reference to the CTBT in the 2015 Draft Final Document appears in Paragraph 169, the section relating to the conference on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction. In subsection xi of this paragraph, the draft document invites the attendance of international organizations including the CTBTO in the conference as observers and welcomes its support in the implementation of the 1995 Resolution on the Middle East. This language bears repeating in the 2020 review cycle and could be updated to reference specifically the on-site inspection exercise coordinated by the Organization in Jordan in 2014 in helping to advance the creation of such a Zone.<sup>22</sup>

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<sup>22</sup> The connection between the On-Site Inspection Exercise and the establishment of the Middle East zone free of nuclear weapons and all other weapons of mass destruction has been raised by Mohamad Al Momani, Jordanian Minister of State for Media Affairs (see “Largest-Ever CTBT On-Site Inspection Exercise Begins in Jordan,” CTBTO Press Release, Vienna/Amman, November 10, 2014

Beyond these explicit references to the CTBT, there are other areas of the 2015 Draft Final Document which could reference the Treaty but do not. These are areas that present an opportunity to further elevate the profile of the CTBT in an NPT context and highlight the intertwined nature of these two fundamental nonproliferation and disarmament measures. Much of this language reaffirms the commitment of States Parties to halt the vertical proliferation of nuclear weapons in keeping with their Article VI obligations. These include, for example, Paragraph 132, which notes, “concerns expressed by non-nuclear weapons States regarding programs for the development of advanced new types of nuclear weapons as well as the qualitative improvement of existing weapons systems.” Reference could be made in this paragraph to the role of the CTBT in constraining the development of new types of nuclear weapons and the importance of its early ratification; language to this effect could recall the historical relevance of banning testing in achieving nuclear disarmament that is referenced in the preamble to the NPT itself.

Outside of the 2015 Draft Final Document, the Conference should reexamine the 2000 and 2010 Final Documents to identify and reaffirm agreed steps toward disarmament and nonproliferation objectives that have the potential to achieve consensus today. These steps previously received the unanimous support of the Conference; as such, if they are updated to emphasize the importance of the CTBT, this language may be more likely to appear in a 2020 Final Document than entirely new language. One such example comes from Action 5(d) of the 2010 Final Document, which states that the nuclear weapons States should “Discuss policies that

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<https://www.ctbto.org/press-centre/press-releases/2014/largest-ever-ctbt-on-site-inspection-exercise-begins-in-jordan/>)

could prevent the use of nuclear weapons and eventually lead to their elimination, lessen the danger of nuclear war and contribute to the non-proliferation and disarmament of nuclear weapons.” During the current review cycle, the Conference could urge the nuclear weapon States to report on their progress toward ratifying the CTBT, including activities related to their IMS facilities. This would serve both to increase transparency and also to raise the salience of the CTBT in advancing disarmament in this forum.

Another example comes from Action 9 of the 2010 Final Document, which encourages the establishment of nuclear-weapon-free zone treaties, as well as the ratification of their relevant protocols. Because the Central Asia Nuclear-Weapon-Free Zone Treaty, the Africa Nuclear Weapon Free Zone Treaty, and the South Pacific Nuclear Free Zone Treaty each reference either the PTBT or the CTBT, they are especially important legal instruments that support efforts to ban nuclear testing worldwide. In this light, during the 2020 review cycle, the Conference could reiterate its call for the ratification of the protocols of these treaties and the establishment of additional nuclear-weapon-free zones while also highlighting their importance in advancing the entry into force of the CTBT.

***Recommendation 2: Emphasize the Importance of the IMS to the NPT and International Security***

Looking beyond the language of previous Review Conferences, there are several other opportunities to highlight the CTBT in the NPT context that have not been explored in past review cycles. One in particular relates to the significance of the International Monitoring System—the backbone of the verification regime of the CTBT—to the objectives of the NPT.

The International Monitoring System (IMS) consists of 337 facilities which monitor for any sign of nuclear explosions anywhere in the world and collect a large variety of data, ranging from seismic monitoring, radionuclide sampling, hydroacoustic data, and infrasound. These stations operate in 89 countries around the world and transmit data to the International Data Centre located in Vienna, Austria, which processes and shares data amongst member states. The system provides prompt alerts for both natural and manmade events, which include nuclear testing. Countries that host IMS stations can enter into a formal agreement with the CTBTO through a facility agreement, which ensures that the host state commits relevant national institutions to facilitate the installation, operation, and maintenance of the facilities. This commitment is binding even before the CTBT's entry into force, and facility agreements must be concluded with each of the 89 States hosting IMS facilities, according to the Treaty. Thus far, 41 such agreements have entered into force, representing around 50% of all IMS facilities.

The final stage of the CTBT verification regime is on-site inspections, which can verify, based on IMS data, whether or not a nuclear test has been conducted. However, CTBT provisions on on-site inspections cannot be enforced until the CTBT itself has been ratified. Nevertheless, the IMS has already demonstrated its unique utility in detecting both military and civilian events,<sup>23</sup> representing an important contribution to the nuclear nonproliferation regime of which the NPT is the cornerstone. With regard to military events, IMS stations have provided significant data corresponding to each DPRK nuclear test; for example, the test conducted on 9 September 2016 was picked up by approximately 100 IMS stations, and CTBTO analysts

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<sup>23</sup> 58th Regular Session of the General Conference of the International Atomic Energy Agency, Vienna, 22-26 September 2014, Address by Mr. Oleg Rozhkov on behalf of Mr. Lassina Zerbo  
<<https://www.iaea.org/sites/default/files/ctbto.pdf>>

estimated the magnitude and location of the test shortly thereafter. These data were immediately shared to all Member States, illustrating the value of the IMS not only in detecting nuclear tests but also in providing valuable insight on their yield and characteristics. These contributions make the IMS system invaluable as a technical means to maintaining the integrity of the NPT in conjunction with IAEA safeguards, particularly with regard to Article II of the Treaty, which commits each non-nuclear weapons State “not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.” This relationship should be highlighted during the 2020 NPT review cycle.

In the realm of peaceful nuclear energy, the IMS also acts as an early warning system for natural disasters, which have significant implications for nuclear safety. For example, each of the IMS’ 140 seismic stations that were operational at the time detected the 2011 earthquake that caused the tsunami which resulted in the Fukushima Daiichi nuclear accident.<sup>24</sup> More than 35 radionuclide stations detected radioactive particles and noble gases that were released into the atmosphere as a result. These outcomes demonstrate the value of the IMS in assessing damage from nuclear accidents and ensuring the safety of those in its vicinity.<sup>25</sup> Owing to the importance placed on enhancing nuclear safety in the 2010 64-point action plan, this contribution should be highlighted in the 2020 NPT review cycle.

On a political level, the establishment of IMS monitoring facilities, including the conclusion of facility agreements between States Parties and the CTBTO, can also be seen as a

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<sup>24</sup> “One Year After Fukushima: The CTBTO’s Contributions,” CTBTO Press Release, March 9, 2012  
<<https://www.ctbto.org/verification-regime/the-11-march-japan-disaster/one-year-after-fukushimathe-ctbtos-contributions/>>

<sup>25</sup> “Fukushima-Related Measurements by the CTBTO,” CTBTO Press Release, April 13, 2011  
<<https://www.ctbto.org/press-centre/highlights/2011/fukushima-related-measurements-by-the-ctbto/>>

demonstration of commitment in good faith to the NPT. For example, NWS can sign and ratify facility agreements as a demonstrable step toward fulfilling their obligations under Article VI of the NPT. Additionally, the IMS system serves as a mechanism to engage both NPT States Parties and non-NPT states on disarmament issues in a constructive way. For example, Israel, which is not party to the NPT, hosts certified IMS facilities. In this regard, continued engagement through facility agreements will build capacity and confidence across regional and political groupings and can serve as a channel between NPT States Parties and nuclear weapons possessor states outside of that Treaty in advancing the entry into force of the CTBT. Doing so represents a step toward the fulfillment of Action 10 of the 2010 NPT Final Document, which underscores the special responsibility of nuclear weapon States to “encourage Annex 2 countries, in particular those which have not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons and continue to operate unguarded nuclear facilities, to sign and ratify.”

On the basis of these findings, the 2020 NPT review conference should emphasize the utility of the IMS in monitoring nuclear weapons tests and other natural events in the fulfillment of NPT obligations. It should also highlight the potential of the CTBTO to serve as a forum for engaging with non-NPT states, especially those that are nuclear possessor states, in advancing the objectives both of CTBT entry into force and disarmament, as emphasized under the NPT. Last, the Conference should emphasize the importance of signing IMS facility agreements as a sign of good faith toward fulfilling the obligations set out in the NPT and as a confidence-building measure. Each of these proposals has the potential to garner multilateral

support, which will be of particular import in overcoming divides between States Parties during the 2020 review cycle.

***Recommendation 3: Emphasize the Importance of the CTBT to Disarmament and Nonproliferation Education during the 2020 Review Cycle***

Another area in which the importance of the CTBTO should be emphasized during the 2020 NPT review cycle is through its role in advancing disarmament and nonproliferation education (DNPE). The importance of DNPE is well established in the UN context: on October 18, 2000, Mexico introduced General Assembly resolution 55/33 E, which proposed a study on nonproliferation and disarmament education. The resolution resulted from a proposal that had been created and unanimously agreed to by the Secretary-General's Advisory Board on Disarmament Matters. The purpose of the study was to

defin[e] contemporary forms of disarmament and non-proliferation education and training and assess the current situation of such education and training at various instructional levels. It would also recommend ways to promote education and training in disarmament and non-proliferation, examine ways to use new pedagogical methods, recommend ways for the organizations of the United Nations system to coordinate their efforts in disarmament and non-proliferation education and devise ways to introduce this type of education and training in post-conflict situations.<sup>26</sup>

The study was completed in two years and submitted to the UNGA First Committee on October 9, 2002. It provided 34 recommendations for action designed to promote disarmament education as an integral part of peace education. Since this time, the UN Secretary-General has submitted seven reports that review the implementation of the recommendations made in the original study and propose new opportunities to promote DNPE.

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<sup>26</sup> Summary of A/57/124 <<https://www.un.org/disarmament/topics/education/>>

In the context of the NPT, the importance of DNP education is less well-established but has nevertheless garnered wide-reaching support: the 2010 Review Conference Final Document was the first to highlight the importance of education; in Paragraph 96 under Article VI of the Review of the operation of the Treaty, “the Conference underscores the importance of disarmament and non-proliferation education as a useful and effective means to advance the goals of the Treaty in support of achieving a world without nuclear weapons.”<sup>27</sup> The 2015 NPT Review Conference Draft Final Document also referenced the importance of the education of “younger and future generations...on all topics related to nuclear disarmament and nonproliferation.”<sup>28</sup> While NPT States Parties have been encouraged to implement the recommendations of the UN Study on Disarmament and Nonproliferation Education,<sup>29</sup> specific proposals for how to do so have not appeared in NPT final documents. As such, the need for a coordinated effort among NPT States Parties to build capacity among the next generation has been recognized, but it has not yet been sufficiently addressed.

As highlighted in the Secretary-General’s most recent review of the 2002 UN study, the CTBTO advances disarmament and nonproliferation education in singular ways, including through activities that enable the technical, scientific, and diplomatic communities to learn from each other. The Organization has a significant impact in this regard by providing training courses on understanding the role and objectives of the National Data Centre (NDC)’s

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<sup>27</sup> 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. 1 (NPT/CONF.2010/50)

<sup>28</sup> 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Draft Final Document, Vol. 1 (NPT/CONF.2015/R.3)

<<http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/revcon2015/documents/DraftFinalDocument.pdf>>

<sup>29</sup> William Potter, Patricia Lewis, Gaukhar Mukhatzhanova, and Miles Pomper. *The 2010 NPT Review Conference: Deconstructing Consensus* (Monterey, California: Center for Nonproliferation Studies, 2010) pp. 10



capacity-building and verification regime. CTBTO professionals utilize practical, hands-on training to help course participants develop the knowledge and skills to access, utilize, and analyze IMS data. These activities help to establish and reinforce an international verification culture and to support the implementation and integration of nuclear nonproliferation, safety, and security policies globally.

The CTBTO further expanded its contributions to DNPE by launching the CTBTO Youth Group (CYG) in February 2016, a unique forum for engaging youth from around the world in nonproliferation and disarmament issues that empowers them to make real contributions to international security. The CYG supports the next generation in deepening and deploying its understanding of nonproliferation and disarmament topics through a wide range of projects. Their activities have enabled them to undertake their own independent research on nonproliferation and disarmament issues, to discuss these topics with other burgeoning experts in the field, and to share their research with the current generation of experts in a wide range of settings.

The more than 150 current CYG members have identified specific objectives in their undertakings, which include the need to “revitalize the discussion around the CTBT among decision-makers, academia, students, expert society and media...[and to] build a basis for knowledge transfer to the younger generation.”<sup>30</sup> Not only are these goals directly consistent with the CTBTO’s ongoing efforts to advance the entry into force of the Treaty, but they also embody the DNPE objectives outlined in the 2010 NPT Final Document and the 2015 Draft Final Document. Moreover, in pursuit of these activities, the CTBTO and the members of the CYG

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<sup>30</sup> CTBTO Youth Group Homepage <<https://youthgroup.ctbto.org/youth-group-homepage/>>

have contributed to imparting “knowledge and skills to empower individuals to make their contribution, as national and world citizens, to the achievement of general and complete disarmament under effective international control.” This is the central purpose of disarmament and nonproliferation education as expressed in the original 2002 study.<sup>31</sup>

In light of the demonstrated multilateral recognition of education as a way to advance the disarmament and nonproliferation agendas,<sup>32</sup> the contributions of the CTBTO in translating this support into action should be recognized during the 2020 review cycle. The CTBTO should be referenced explicitly for advancing the efforts of the next generation in undertaking research and outreach activities toward the entry into force of the Treaty. Doing so would draw attention to the Organization’s innovative approach in this regard while raising awareness about the existence of the CYG, its accomplishments, and its future objectives. The CYG and its publications, presentations, and growing membership serve as important examples of youth-driven DNPE activities that have been completed under the mentorship of experts in the field. As new challenges continue to confront DNP experts across the world, those experts must continue to develop and mentor the youth who will one day take their place and continue their work. The CTBTO, with the CYG, has created a model for knowledge transfer and capacity building that should be recognized and supported in the NPT context.

***Recommendation 4: Increase the Role of Women in Disarmament and Nonproliferation Discourse***

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<sup>31</sup> A/57/124 <<http://www.undocs.org/A/57/124>>

<sup>32</sup> William Potter, Patricia Lewis, Gaukhar Mukhatzhanova, and Miles Pomper. *The 2010 NPT Review Conference: Deconstructing Consensus* (Monterey, California: Center for Nonproliferation Studies, 2010)

In addition to the need for innovative approaches to disarmament and nonproliferation education, it is also critical to bring additional voices into discourse on these topics. While there is a clear linkage between human security, sustainable development, and nonproliferation and disarmament, one critical correlation between peace and arms control is often overlooked in this regard: the role and contribution of women. Women bring a unique perspective to international security issues, but because they continue to be a minority in this field, they have had disproportionately less opportunity to impact the discourse on this topic than men. Because nuclear weapons affect everyone on the planet, however, it is essential that each individual regardless of gender have the necessary agency to decide his or her future. It is therefore vital to identify concrete mechanisms that will give women, particularly those in the next generation, access to the spaces where they can make their perspectives heard. The contributions of women in this regard are essential to resolving complex questions relating to nuclear weapons, as the nuanced and creative approach they require must necessarily come from diverse individuals with different viewpoints and experiences. Thus, any discussion on elevating the status of the CTBT in the 2020 NPT review process needs to be intrinsically tied with the importance of creating a gender-equitable space in both the CTBT and NPT.

In pursuit of this objective, it is important to reflect the ways in which women have already been a driving force in all the areas of the CTBTO. As of 2016, 110 of the CTBTO's 256 staff members (43 percent) are women. A large number of women especially have been on the front lines of detecting nuclear tests and monitoring huge volumes of data collected by the International Monitoring System (IMS). Strong evidence of women's pivotal role has led the

Executive Secretary of the CTBTO Lassina Zerbo to commend women's invaluable contribution in the buildup and sustainment of the CTBTO's verification regime:

[Women at the CTBTO] brave the elements in the world's remotest corners to build and maintain our monitoring stations, they work long hours to screen vast amounts of data for suspicious events, and they develop new methods of analysis and management practices. My sincere appreciation and thanks go to all of them, for without them we could not have become what we are to-day: the world's center of verification excellence.<sup>33</sup>

In addition to the ways in which the CTBTO has recognized and elevated the role of women in its work, the Organization's mission also has significant implications for addressing the gendered impact of nuclear weapons. The CTBTO has been instrumental in raising global awareness about the adverse effects of nuclear testing and the resultant need to comprehensively ban this practice. Nuclear testing and women have a uniquely challenging relationship, and this aspect of the Organization's activities is therefore of particular import to addressing this link. Myriad studies showcase the humanitarian impact of nuclear weapons and nuclear weapons testing affect women and men differently. A 2014 UNIDIR study, for example, highlights that women are biologically more vulnerable to health effects of ionizing radiation than men. This study also demonstrates that the social effects of nuclear weapons are gendered. As a result, women are often the ones most affected in relation to psychological health, displacement, social stigma and discrimination by nuclear weapons.<sup>34</sup> In this regard, in fulfilling its mission to bring about the end of nuclear testing, the CTBTO is also making a substantial contribution to bettering the lives of women around the world.

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<sup>33</sup> "International Women's Day 2016," CTBTO Press Release

<<https://www.ctbto.org/press-centre/highlights/2016/international-womens-day-2016/?textonly=1>>

<sup>34</sup> Anne Guro Dimmen, *Gendered Impacts: The humanitarian impacts of nuclear weapons from a gender perspective* Vienna Conference Series No. 5 (Vienna, Austria: ILPI UNIDIR, 2014),

<<http://nwp.ilpi.org/wp-content/uploads/2014/12/No-5-Gendered-impacts.pdf>>

The CTBTO's effort to raise the salience of women's contribution in nonproliferation is noteworthy. It also fits well into the larger discourse on recognizing and encouraging women's greater participation in nonproliferation and disarmament that has been repeatedly emphasized in the UN context over the past decade. The 2010 General Assembly Resolution 65/69 on "Women, disarmament, non-proliferation, and arms control" was the first resolution to be adopted by the UN General Assembly's First Committee on Disarmament and International Security on this topic.<sup>35</sup> This resolution addressed the impact of disarmament and arms control on human rights from a gender perspective. Subsequently, Resolutions 67/48 of December 3, 2012, 68/33 of December 5, 2013, and 69/61 of December 2, 2014 have each called for the full and meaningful participation of women in sustainable peace and security and recognized the role of women in disarmament, nonproliferation and arms control. As preambular paragraph 7 of Resolution 69/61 states:

... the role of women in disarmament, non-proliferation and arms control should be further developed and in particular the need to facilitate the participation and representation of women in policymaking, planning and implementation processes related to disarmament, non-proliferation and arms control;

These UN resolutions reveal the growing need for nonproliferation and disarmament issues to be addressed from multiple angles. As the UN Member States have acknowledged, it is not enough to attempt to address the arms control from local, national, regional and international levels; these challenges must also be approached from the perspective of gender. Bolstering voices of women along with men on nonproliferation and disarmament issues can provide greater legitimacy to a gender-based approach to sustainable development, peace and security.

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<sup>35</sup> A/Res/65/69 <[http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/65/69](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/65/69)>

On this basis, it is crucial that language in the NPT—a centerpiece of international nuclear nonproliferation and disarmament efforts—likewise highlights and recognizes the efforts and instrumental work of women in nonproliferation and disarmament, including through the mission and activities of the CTBTO.

There is a genuine case to accord high priority to issues of women and peace and security in both the CTBT and NPT contexts. Despite international agreement on the importance of women’s participation in decision-making, there is a gender imbalance in multilateral arms control forums. Reports indicate that men continue to be heavily over-represented while women are underrepresented. The meetings of the parties to the NPT and the First Committee showcase a clear gender imbalance. For example, of 693 diplomats registered for the First Committee meeting in 2015, around 70 percent were men and 30 percent (29.7 percent) were women. Similarly, at the NPT Review Conference in 2015, 901 of the 1226 registered diplomats were men (73.5 percent) and 325 women (26.5 percent).<sup>36</sup>

This heavily skewed underrepresentation of women in global nonproliferation and disarmament creates urgency for change during the 2020 NPT Review Conference. Clearly one of the first steps is to ensure a push towards an equitable representation of women in the NPT review process. To this end, the Conference should develop a roadmap that will give shape to the UN resolutions on women and disarmament, which would call upon all states to empower women through capacity-building efforts, to provide funding, and to design women-centric programs to assist states in promoting the role of women.

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<sup>36</sup> John Borrie, et al. *Gender, Development and Nuclear Weapons: Shared goals, shared concerns* (Geneva, Switzerland: International Law Policy Institute, UNIDIR, 2016), <http://www.unidir.org/files/publications/pdfs/gender-development-and-nuclear-weapons-en-659.pdf>

A second step is to emphasize the importance of investing in disarmament and nonproliferation education that changes the dominant discourse on gender and security. As the 2006 Weapons of Mass Destruction Commission, chaired by Hans Blix, former Director of the International Atomic Energy Agency, concluded, women

have rightly observed that armament policies and the use of armed force have often been influenced by misguided ideas about masculinity and strength. An understanding of and emancipation from this traditional perspective might help to remove some of the hurdles on the road to disarmament and non-proliferation.<sup>37</sup>

In 2017, there is no place for orthodox views on “masculinity and strength” to influence arms control. Instead, to break gridlocks in disarmament efforts, women’s concerns and voices should be strengthened. In order to change the status quo of relegating women to the fringes of decision-making on nonproliferation and disarmament issues, it is necessary to invest in DNPE efforts that up-end this paradigm and engages women, particularly those in the next generation. Female students and young professionals in the field of security today are the leaders of tomorrow. It is important to cultivate the next generation of women leaders who will not only be key to decision making on nonproliferation and disarmament but also will be at the forefront of the both the CTBT and NPT.

Under the aegis of Dr. Zerbo, the CTBTO has already made an important contribution in support of this population: The CYG has drawn a huge number of women Youth Group members, and a large proportion of CTBT Youth Group members at the Middlebury Institute in Monterey—working in tandem with the CTBTO—are female students and young professionals working under the guidance of Dr. William C. Potter. While these are small steps in a positive

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<sup>37</sup> Summary of Weapons of Mass Destruction Commission (9 July 2006), <<http://reachingcriticalwill.org/news/newsletters-archive/561-9-july-2006>>

direction, the global nonproliferation order needs to take note that the underrepresentation of women in security does not reflect the winds of change. As Rose Goettemoeller, a leading voice to champion rebuilding American support for the CTBT opined while walking the cold hard ground at the Trinity test site in New Mexico, "...how far we have come, but how far we still need to go..."<sup>38</sup> Continuing to engage women in both the CTBT and NPT contexts will be critical to achieving the objectives of both of these Treaties.

### **Conclusion:**

While far from comprehensive, the areas highlighted here represent ways to raise the profile of the CTBT and to emphasize its relationship with the NPT during the 2020 review cycle. As we have demonstrated, it is necessary first to examine and build upon past Review Conference documents in order to reinforce agreed language that emphasizes the CTBT. It will also be important to demonstrate the intertwined nature of the NPT and the CTBT as two treaties fundamental to disarmament, as this relationship underscores the necessity for the entry into force of the CTBT. It will also be critical to emphasize the role of the IMS in relation to the NPT in enhancing nuclear safety, and to highlight the value of both the technology within the IMS and its increasing robustness in advancing disarmament and nonproliferation among nuclear weapons States, non-nuclear weapons States, and nuclear weapon possessor states. The role of the CTBTO in DNP education, and the undertakings of its youth branch, the CYG, are consistent with the longstanding goals of furthering NPD education stated by both the UN and in the (Draft)

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<sup>38</sup> "20 Years Later: The United States and the Future of the CTBT," Transcript, Stimson-ACA Event, September 13, 2016 <<https://www.armscontrol.org/print/7644>>



Final Documents of multiple NPT Review Conferences. This contribution should be recognized during the 2020 Review Cycle. During the review cycle, it will also be essential to recognize the important role played by women in the CTBTO. The Review Conference should create a roadmap to give shape to UN Resolutions 65/69, 67/48, 68/33 and 69/61 to promote women in all spheres of decision-making on nonproliferation and disarmament. Our hope is that, by highlighting the ways in which the profile of the CTBT can be both elevated and further linked to the NPT in the 2020 review cycle, the Treaty can move that much closer towards entry into force.