



The Ploughshares Monitor

Autumn 2007, volume 28, no. 3

The Comprehensive Test Ban Treaty

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The North Korean test of 9 October 2006 illustrated, as did earlier Indian and Pakistani tests, the inadequacy of unilaterally declared moratoria on nuclear testing and the critical importance of finally ratifying the Comprehensive Test Ban Treaty (CTBT), the negotiation of which was a landmark achievement of the post-Cold War era.

The following article is based on Ernie Regehr's presentation to the Pugwash 50th-Anniversary workshop, "Revitalizing Nuclear Disarmament," which took place in Pugwash, Nova Scotia, 5-7 July 2007.

Ratification status

The CTBT Organization (CTBTO) reports that, as of 28 August 2007,

- 177 states have signed the Treaty;
- 139 have ratified it; and
- 34 of 44 Annex II states (states in possession of military and/or civilian nuclear technologies when the treaty was negotiated) have ratified it.

Ratification by all 44 Annex II states is required. Of the 10 which have yet to ratify, the US and China, which have both signed, are the only two acknowledged nuclear weapon states (NWS). None of the states outside the NPT (India, Israel, Pakistan, and North Korea) have ratified (and, of those, only Israel has signed). Colombia, Egypt, Indonesia, and Iran have all signed but not ratified.

Progress toward entry into force

Chinese ratification is linked to their perception of US nuclear weapons policies, which at the moment do not incline China to move forward. Under the current Administration, the US itself is not inclined in that direction, even though expert opinion is heavily weighted toward the view that the Treaty's entry into force would be to the strategic advantage of the United States. Some advocates of a continuing and enhanced US nuclear weapons arsenal support the CTBT on the ground that it "would freeze a U.S. advantage in nuclear

weaponry and that the stockpile stewardship program can maintain U.S. weapons without testing” (Medalia 2007, p. 30).

In a presentation to an Article VI forum “Responding to the Challenges to the NPT,” held by the Middle Powers Initiative in September 2006, Jaap Ramaker, the Special Representative to promote ratification, said: “Ratification of the CTBT [by the six holdout states in the Middle East, and North and South Asia] is in one way or the other tied to wider regional security issues. This complicates matters, and certainly limits severely whatever I as a Special Representative could do to move matters forward.”

Ratification by Middle Eastern holdouts will likely have to be in concert, which in turn requires substantial changes in regional security dynamics. At the 2005 entry-into-force conference, Egypt linked its support for the CTBT to Israel’s accession to the NPT and called for “the achievement of the universality of both the NPT and the CTBT together” (Kimball 2005). While coordinated accession to the Treaty may also be the path for South Asia, the international community has a particular opportunity to help India understand that ratification of the CTBT could advance efforts to win international support for its civilian nuclear programs.

Because the 10 Annex II holdout states represent a startlingly diverse range of interests, hopes that all will ratify — and thus for the early entry into force of the treaty — must unfortunately remain modest.

Support for the CTBTO

The purpose of the Comprehensive Test Ban Treaty Organization is to facilitate the implementation of the Treaty, such as the establishment of the verification regime, which includes the International Monitoring System (IMS). The CTBTO (2007) reports that it is currently short US\$24-million to meet its 2007 budget of US\$110-million. The United States has accumulated arrears of US\$28-million (which, the Nukes of Hazard blog [2007] points out, is about two-and-a-half hours of spending on the Iraq war). Other countries, including Argentina, Brazil, Colombia, and Iran, are also behind in their payments.

OneWorld.net U.S. (2007) offers a helpful summary of the funding issue and the case for bringing it up-to-date:

As the appropriations process moves forward in Congress, one line item should not be missed: funds for the Comprehensive Test Ban Treaty Organization (CTBTO), an international organization that detects nuclear explosions. The U.S. currently owes \$28.3 million in back dues to the organization. Absent these funds, the CTBTO will be unable to complete its critical monitoring system.

- The World Is Safer Without Nuclear Testing. Our failure to make timely payments threatens to cripple the international monitoring system of the CTBTO, unravel the global nonproliferation web, and make the world less safe.

- A Good Investment in Security. The monitoring system offers access to sensitive information that the U.S. can't attain on its own. The U.S. intelligence community also values the system because it can catch small, hard-to-detect nuclear events.
- U.S. Leadership Needed. We must support this critical tool if we hope to marshal global efforts to meet serious nuclear challenges.

In March a group of organizations (FCNL 2007) called on the US to restore full funding for an organization whose monitoring efforts directly serve the security interests of the United States:

It is tragic that the U.S. is underfunding the CTBTO as the danger of Iran's nuclear program grows and as the IMS [International Monitoring System] succeeded in providing valuable information about North Korea's October 9, 2006 test explosion. Over 10 seismic stations in the IMS detected the blast, which was well below 1 kiloton in yield. In addition, one of the network's 10 experimental "noble gas" monitoring stations detected trace amounts of radioactive material unique to nuclear explosions. The station, which is located in Canada's Northwest Territories, detected spikes in xenon gas readings on late October, which, on the basis of atmospheric modeling, provided further confirmation to the United States and other governments that the Pyongyang's test was nuclear and not simply a chemical explosion.

US voting rights in the CTBTO Preparatory Commission have been suspended since 1 January 2007, although in practice, the PrepCom takes decisions by consensus rather than votes. A federal report (US 2007, p. 40) points out that the underfunding stems from a US policy decision: "Since the United States does not seek ratification and entry-into-force of the CTBT, none of the funds will support Preparatory Commission activities that are not related to the IMS."

Canadian analyst George MacLean (2002) has argued that since all of the foundational elements of the CTBT depend on its verification capacity — "a commitment to a testing moratorium; technical exchange and assistance for states parties; effective and universal verification and monitoring; and confidence-building among members of the Organization" — it is possible for the CTBTO to carry out its core work without entry into force, but instead with further strengthening and development of the monitoring system and related facilities.

In its major report, *Weapons of Terror*, The Weapons of Mass Destruction Commission (2006) described the CTBT as a key and urgent disarmament measure.

Recommendation 28 (p. 108):

All states that have not already done so should sign and ratify the Comprehensive Nuclear-Test-Ban Treaty unconditionally and without delay. The United States, which has not ratified the treaty, should reconsider its position and proceed to ratify the treaty, recognizing that its ratification would trigger other required ratifications and be a step towards the treaty's entry into force. Pending entry into

force, all states with nuclear weapons should continue to refrain from nuclear testing. Also, the 2007 conference of Comprehensive Nuclear-Test-Ban Treaty signatories should address the possibility of a provisional entry into force of the treaty.

Recommendation 29 (p. 108):

All signatories should provide financial, political and technical support for the continued development and operation of the verification regime, including the International Monitoring System, the International Data Centre and the secretariat, so that the CTBTO is ready to monitor and verify compliance with the treaty when it enters into force. They should pledge to maintain their respective stations and continue to transmit data on a national basis under all circumstances.

Next steps

The above recommendations are essentially a call to the international community to comply with the objectives it has itself defined. Now governments and civil society need to explore ways to intensify political and diplomatic pressure in support of these goals.

- States that have ratified the Treaty should make it clear that they are committed to pursuing significant punitive measures against states that violate the global norm against testing that the CTBT represents.
- There must be persistent diplomatic engagement by “friends of the CTBT” as well as regional organizations and regional groupings to encourage Annex II holdouts to ratify the Treaty, and also to encourage compliance by other states that have not signed it.
- It is important to offer technical assistance to holdout and non-signatory states.
- Financial and technical support for the CTBTO and the IMS are critically important, as the operation of the monitoring system represents the de facto entry into force of significant elements of the Treaty.
- There should also be explorations of regional or bilateral testing moratoria that could then be converted into joint accessions to the Treaty.

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