

## **Achieving Entry Into Force of the CTBT**

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The Comprehensive Nuclear Test Ban Treaty (CTBT) is the longest-sought and hardest fought objective in the field of nuclear arms control and nonproliferation. The CTBT ban on nuclear explosion impedes the development of advanced, *new* types of nuclear warheads, thereby reducing dangerous nuclear arms competition. The CTBT has widespread international support. It has been signed by 174 states and ratified by 120, including three of the five nuclear weapon states.

Entry into force of the CTBT is also fundamental to the long-term viability of the Nuclear Non-Proliferation Treaty, which was extended indefinitely in 1995 largely on the basis of the commitment of the United States and the other major nuclear weapons powers to conclude the CTBT. The "importance and urgency of signatures and ratifications, without delay and without conditions to achieve the early entry into force of the Comprehensive Nuclear Test Ban Treaty, " as well as support for the continuation of the global test moratorium, was reaffirmed at the 2000 NPT Review Conference.

Today however, a relatively small but important set of CTBT rogues stand in the way. The failure of the U.S. Senate to give its advice and consent for ratification in 1999, the current administration's opposition to the treaty, and the reluctance of 10 other key states to approve the treaty means that the formal entry into force of the treaty is still years away.

Nevertheless, the CTBT has reinforced the 13 year-old U.S. test moratorium and helped to bring about the *de facto* global nuclear test moratorium which exists today. In the absence of a requirement for a new nuclear warhead, a defect in an existing weapon that cannot be addressed without resuming

testing, and the perception that clandestine nuclear testing has occurred, the seven states that have conducted nuclear test explosions are not likely going to do so again.

This is especially true given the significant domestic and international opposition to testing and the likelihood that additional states would resume testing in response.

But to alter the current stalemate on the CTBT, there must be renewed leadership on Capitol Hill for the reconsideration and ratification of the CTBT. This leadership is not there at the moment. There is the outside chance that positive action on the test ban by China or by India and Pakistan might serve as a catalyst for action, but it is vital that key U.S. Senators help put the treaty back on the map through hearings, work with their colleagues, and through exchanges with technical experts and allied governments.

To keep the chances of entry into force alive, it is vital the international community not abandon the objective and that key governments continue to press publicly and privately for the CTBT at every opportunity, including the 2005 NPT Rev Con.

**NPT 2005 and Beyond:** Given these factors, it is essential that representatives at the Review Conference press for CTBT entry into force, the continuation of the test moratorium, and support for the CTBTO in the final conference document. If, as expected, some states oppose the inclusion of these (or other important disarmament and nonproliferation) elements in the document, then a consensus document will not be possible, and so be it. There is no value and much to lose, if states were to decide not to reiterate support for the treaty, the test ban, and the treaty organization simply for the sake of reaching agreement on a final conference document.

Improving the prospects for CTBT entry into force depend upon:

- Maintaining international pressure on key CTBT hold-out states to join the treaty regime, beginning with a reiteration of support for the treaty at the NPT Review Conference;
- Maintaining the U.S. test moratorium and improving the likelihood that the U.S. will reconsider the ratification of the CTBT;
- blocking new nuclear weapons research and development that could lead to the renewal of nuclear testing;
- effectively maintaining the U.S. nuclear arsenal in the absence of nuclear test explosions;
- maintaining political and financial support for the CTBT Organization Preparatory Commission work to complete the treaty's International Monitoring System and on-site inspection capabilities;
- improving national and international monitoring and transparency measures to better detect and deter possible clandestine nuclear testing.

Allow me to describe in greater detail the current state of play on each of these matters.

### **1. Maintaining the U.S. test moratorium and reconsideration of the CTBT**

Shortly after taking office the senior Bush officials announced they would not ask the Senate to reconsider the CTBT. Since 2001, the United States has voted "no" on UN resolutions supporting entry into force of the CTBT and the White House has boycotted the international conferences of states parties to promote the treaty's entry into force.

The administration has tried to deflect domestic and international criticism of this policy by insisting that there are no immediate plans to resume testing. But at the same time, the Bush team has considered or pursued a series of moves that could erode the technical and legal barriers blocking the resumption of testing.

In early 2001, Undersecretary of State for Intl. Security and Arms Control, John Bolton, sought a legal analysis on whether the President could unilaterally withdraw the CTBT from the Senate, thus killing any chance it might be reconsidered. The legal brief he received judged that only the Senate has the authority to discharge the treaty from the executive calendar and that a majority vote was required to do so. It is likely that a majority of the Senate would oppose such an action.

Meanwhile, as reported by *The New York Times* in May 2002, officials from the Office of the Secretary of Defense circulated a memorandum in January 2002 that proposed that President Bush repudiate the United States 1996 signature on the CTBT, which, under a common understanding of international law, still bars it from conducting nuclear test explosions. Officials at the National Security Council, then preoccupied with the war in Afghanistan and other matters, chose not to schedule a meeting to consider the proposal.

## **2. New nuclear weapons research and development**

The Bush administration has also initiated new nuclear weapons research on the basis of the erroneous notion that new nuclear weapons capabilities are useful and necessary to fulfill future U.S. military needs. If this research on new nuclear warhead types advance into the development phase, the next step could be a proposal to conduct a series of proof-tests to confirm the designs and induct them into the arsenal.

The Pentagon's January 2002 Nuclear Posture Review (NPR) calls for the development of new nuclear weapons capabilities to provide a wider range of options to defeat "hardened and deeply buried targets" and chemical and biological threats. That year, the President asked Congress for \$15.5 million for fiscal 2003 for research on a robust nuclear earth penetrator, or RNEP.

The following year, the Bush administration proposed that Congress should repeal a ten-year old law prohibiting research leading to development of

new, low-yield nuclear weapons. The administration requested another \$15 million for research on the RNEP and an additional \$6 million for research on new nuclear weapon designs. Congress narrowly approved the repeal and the research monies, but stipulated that work beyond the research phase for any new type or modified type of nuclear warhead would require explicit congressional authorization.

The Bush administration narrowly won approval for these programs on the basis of the argument that they only wanted to conduct research on these weapons.

Last year, the administration has upped its budget request for fiscal year 2005 funding for research on the Robust Nuclear Earth Penetrator (RNEP) to \$27 million and has outlined a five year spending plan for research and development on RNEP that would cost at least \$485 million. In the fiscal year 2005 budget request, the administration sought an additional \$9 million to fund "advanced concepts" for new types of nuclear weapons.

The good news is that support for these proposals is steadily eroding. In mid-2004, an amendment to the defense authorization bill offered in the House that would have transferred the RNEP monies to conventional munitions research lost by only ten votes: 214-204. And, as you know, Congressional appropriators, led by Ohio Republican David Hobson, cut monies for RNEP research and transferred monies for "advanced concepts" research to maintenance work on existing warheads.

However, the Bush administration will likely renew its request for authorization and appropriation of funding for research on the RNEP and there will be another battle over the fate of this destabilizing program in the coming year. With sustained NGO work and leadership from our allies on Capitol Hill, I would predict that Congress will not support or fund the research on modified or new nuclear weapons in the coming year. Support for actual development of new nuclear weapons will be even more difficult for the administration to win.

### **3. Maintaining the U.S. nuclear arsenal in the absence of test explosions**

Though the Energy Department has determined each year for the last decade that the U.S. nuclear arsenal remains safe and reliable without nuclear testing, critics of the test ban like Dale Klein, the executive chairman of the Nuclear Weapons Council, claim that "as time goes on there will likely have to be some tests performed beyond the small scale" to address possible aging problems in the nuclear stockpile.

The administration has sought and, until last year, won funding from Congress to improve the "readiness" of the test site to reduce the amount of time it takes to carry out a technically significant nuclear test explosion from the current 24-36 months requirement established in 1993 to 18 months over a three year period.

In October 2002, the former director of the Nuclear Weapons Council suggested in a memorandum that the nuclear weapons laboratories "readdress the value of a low-yield [nuclear explosive] testing program." They have. In 2003, in a secret meeting in Omaha, dozens of executive branch officials debated this question and others related to the future of the nuclear weapons stockpile.

The good news is that the group decided there is no reason to resume nuclear testing for such purposes. The reason is simple. As the July 2002 National Academy of Sciences panel, reported, the U.S. "has the technical capabilities to maintain confidence in the safety and reliability of its existing nuclear-weapon stockpile under [a test ban], provided that adequate resources are made available to the Department of Energy's nuclear-weapon complex and are properly focused on this task."

According to the National Academy panel, which included three former lab directors, age-related defects mainly related to non-nuclear components can

be expected, but nuclear test explosions "are not needed to discover these problems and is not likely to be needed to address them." Rather, the panel says, the key to the stewardship of the arsenal is a rigorous stockpile surveillance program, the ability to remanufacture nuclear components to original specifications, minimizing changes to existing warheads, and non-explosive testing and repair of non-nuclear components.

Doing so will require that Congress and the Energy Department focus its stockpile stewardship program on these more important activities and not waste resources on other, less relevant projects. While other large-scale experimental facilities like the National Ignition Facility or the Dual Axis Hydro Test facility may be useful, their completion and operational success is not essential to the maintenance of the existing arsenal.

#### **4. Support for the CTBT Organization and Entry Into Force**

Most Bush administration officials, even those who do not support CTBT ratification, recognize that the United States benefits from monitoring capabilities that are currently only available through the IMS-including monitoring stations in Russia, China, and other sensitive locations that the United States would otherwise not be able to access. As a result, the U.S. has continued to pay the majority of its annual contribution to the CTBTO.

However, in 2001, the administration also decided to suspend U.S. technical and financial support for short-notice, on site inspections available only under the test ban treaty. The move has made it even more difficult for the Secretariat of the CTBTO Prep Com to collect annual dues owed to the organization by several key states.

While support for the CTBT remains strong, continued financing for a verification system for a treaty that many fear may never formally enter into force will be a major challenge. In addition, the CTBTO Provisional Technical Secretariat's work is vulnerable to cuts in the United States' contribution to the effort, which comprises some 20% of the organization's annual budget.

This coming year for instance, it is quite possible that the U.S. contribution will be cut due to across the board budget reductions in Washington.

## **5. Securing Additional Signatures and Ratifications**

As the United States has dithered on the CTBT, much of the rest of the world has been working to build the treaty's monitoring and verification system and accelerate the treaty's entry into force. The strong support for the treaty by U.S. allies and the ratification of the treaty by Russia and other states has moderated what might have been an even more damaging U.S. test ban policy and has increased pressure on other CTBT hold out states.

The May 1998 nuclear blasts by India and Pakistan not only set back the drive for the CTBT but also made its value even more obvious. The two states have refused to sign the CTBT because they are concerned that the test ban would cap their nuclear ambitions. Both governments are under pressure from their nuclear laboratories to conduct further tests, and lack of progress on nuclear restraint measures in South Asia could increase political pressure in India and Pakistan to conduct further test explosions to perfect new types of warheads, including two-stage thermonuclear weapons. But both are also aware of the strength of international opinion supporting the norm that the CTBT has begun to establish against testing. The two countries declared voluntary moratoria on testing shortly after the tests and should be pressed to formalize this arrangement and, in effect, join the CTBT.

Other states with nuclear weapons or nuclear weapons ambitions that have not ratified, including Iran, Israel, North Korea, should do so to prove that they have no nuclear weapons ambitions or interest in improving existing capabilities. Ratification of the CTBT by Tehran would be especially useful in providing the "objective guarantees" about the peaceful nature of its nuclear program.

One of the most visible and important signs of this support came in the statements issued by leading foreign ministers in September 2002 and September 2004 at the United Nations. Reaffirming the hope for a treaty that



"would contribute to systematic and progressive reduction of nuclear weapons...as a major instrument in the field of nuclear disarmament and nonproliferation," they said in 2002, and they called on all states who are holding out on signing and/or ratifying to do so to ensure the treaty's timely entry into force.

In 2004, the countries that have already ratified the CTBT called on Netherlands Ambassador Jaap Ramaker, the former chairman of the CTBT talks in Geneva, to serve as a liaison between those countries that have ratified the treaty and those that have not done so.

## **6. Improving monitoring and transparency measures**

Ongoing activities at the U.S., Russian, and Chinese test sites, primarily in the form of subcritical nuclear experiments, may breed allegations that Russia or China are conducting surreptitious nuclear test explosions. In fact, in the spring of 2002, U.S. intelligence officials briefed Congress that they believe that Russia may have conducted supercritical nuclear experiments at the Novaya Zemlya test site. While this assessment was based on limited information and was technically-flawed, it reveals the risks of operating in a climate of opacity and suspicion.

Additional test site transparency initiatives could address future uncertainties and clear up erroneous allegations. In fact, in 2001, Russia proposed "additional verification measures for nuclear test ranges going far beyond treaty provisions," but neither the United States nor Russia have seriously pursued this concept.

## **Conclusion**

The CTBT has been and remains a vital part of a comprehensive approach to global security dangers. Realizing the CTBT requires a substantial shift in attitudes about the value of the test ban and new nuclear weapons in the White House and the Senate, as well as effecting changes in government

policy in India, Pakistan, China, and Israel. We must be patient and persevere. In the meantime, measures must be undertaken to uphold nuclear testing moratoria and secure the ratifications necessary for CTBT entry into force:

- The international community should urge the 11 states preventing entry into force to sign or ratify the CTBT without conditions or reservations. States-parties to the CTBT should continue to work together systematically to send high-level groups of emissaries to key countries that have not yet signed or ratified the treaty in order to facilitate and encourage their support for the CTBT.
- The leaders and the governments of the 11 remaining CTBT hold-out states should reconsider and recommit themselves to the ratification of the CTBT. In the meantime, they should maintain their nuclear testing moratoria, fully support the work of the CTBTO Preparatory Commission, and announce that they will refrain from the pursuit of new types of nuclear weapons, which requires testing to validate the weapons' integrity.
- Each signatory should provide adequate financial, political, and technical support for the continued development and operation of the CTBTO so that the International Data Center, the International Monitoring System, and the executive secretariat are available and ready to monitor and verify compliance when the CTBT enters into force. States should also support the timely establishment of an effective verification system, open access to data, and the development of procedures for effective and timely on-site inspections.
- Until the CTBT enters into force, the nuclear-weapon states with active test sites should voluntarily agree to periodic inspections of their test sites by observers on behalf of the CTBTO and signatory states to increase confidence that clandestine nuclear testing has not occurred. They should also agree to avoid activities at their test sites that might be mistaken for nuclear weapon test preparations, such as subcritical experiments.

The CTBT alone will not stop proliferation, but further nuclear proliferation cannot be checked without the CTBT's entry into force. We still have a lot of work to do.

### **The Value of the CTBT**

The Comprehensive Test Ban Treaty (CTBT) has long-been a centerpiece of the international disarmament and non-proliferation agenda since the 1950s. By banning all nuclear weapon test explosions, the CTBT impedes the development of advanced, *new* types of nuclear warheads, thereby reducing dangerous nuclear arms competition between the existing nuclear-capable states.

Although crude nuclear devices can be produced without testing, a nuclear warhead design small enough to be delivered by missiles would require nuclear test explosions to certify its integrity. While a proliferator could conceivably build a simple warhead design, it could not demonstrate its capability or prove the deterrent's reliability without nuclear test explosions.

The CTBT's far-reaching nuclear test monitoring provisions, including an international monitoring system (IMS), confidence-building measures, and short-notice on-site inspections, will help detect and deter nuclear test explosions. The IMS is augmented by thousands of civilian seismic stations worldwide, which can also be used to alert the world about any nuclear explosion, as well as contribute to emergency earthquake and tsunami warning efforts.

However, the full-scale implementation of this system depends on the treaty's entry into force. While some countries possess powerful national intelligence capabilities that bolster the CTBT's monitoring and verification system, most do not. The treaty's integrated system provides additional confidence and transparency by combining technical and intelligence resources so that states can probe questionable activities and deter potential treaty violations.

—Daryl Kimball