# CTBT AND NPT: OPTIONS FOR U.S. POLICY

by Maurice A. Mallin

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In Geneva, negotiations are taking place over a Comprehensive Test Ban Treaty (CTBT). As stated by John D. Holum, Director of the United States Arms Control and Disarmament Agency (ACDA), the aim of these negotiations is to reach a treaty that will "bring an end to all nuclear explosions—period. No thresholds. No exceptions."<sup>2</sup>

From April 17 to May 12, 1995, a Review and Extension Conference will be held in New York to determine the fate of the nuclear Non-Proliferation Treaty (NPT). At this critical conference, participants will decide whether to extend the NPT indefinitely, for a fixed period, or for a series of fixed periods.

It is not just coincidence that critical junctures for both the NPT and a potential CTBT are appearing on the arms control landscape at the same time. Even before the NPT entered into force, these two regimes were inextricably linked by the non-nuclear weapon states (NNWS). In

the negotiations leading up to the NPT, the NNWS clearly considered a CTBT to be a critical future goal; progress toward that goal would go a long way toward encouraging the indefinite extension of the NPT.

As the NPT Extension Conference approaches, the extent of these linkages will be tested. Among the NNWS, there is general dissatisfaction with the pace at which the nuclear weapons states (NWS) are meeting their NPT obligation to pursue "nuclear disarmament." Perhaps the key criterion for meeting this objective has been a CTBT. Therefore, if a CTBT is opened for signature by the NPT Review and Extension Conference, it will promote the primary U.S. objective for the NPT—an indefinite extension. However, it is unlikely that the CTBT will be ready for signature by that time. Given the priority of a CTBT among NNWS signatories to the NPT, this failure could affect the outcome of the NPT Conference significantly. Likewise, the outcome of the NPT Conference will in turn affect future CTBT negotiations.

This article discusses the relationship between these two regimes—the CTBT and the NPT—principally from the perspective of the CTBT negotiations. Therefore, the issues at the root of this analysis are:

- what are the historical linkages between the NPT and the CTBT?
- what is the current status of the CTBT negotiations, and what are the key unresolved issues?
- if a CTBT is not ready for signature by the NPT Extension Conference, how might this affect the conference?
- how might the outcome of the NPT Extension Conference affect future CTBT negotiations?

This article examines the longterm prospects for a CTBT and focuses on three possible NPT Conference outcomes: a decision to extend the treaty indefinitely, a decision to extend the treaty for a series of fixed periods, or a decision to recess the conference in order to reconvene after specific objectives are realized. Other outcomes are possible, but these may be the most plausible. Each has different implications for a potential CTBT regime.

# CTBT AND NPT: AN HISTORIC RELATIONSHIP

The roots of the relationship between the CTBT and the NPT can be traced to the early stages of the NPT negotiations. Two analysts, who have examined the NPT negotiating record, note that a recurring issue was whether specific benchmarks should be included in the treaty, in order to gauge the progress of the NWS toward halting the arms race. They note that: "...in addressing this issue, the Non-Aligned Eight [countries participating in the negotiations] agreed on a new memorandum listing specific proposals for tangible steps to halt the arms race. These included a ban on nuclear testing."4

Ultimately, specific steps to gauge progress toward meeting disarmament obligations were *not* included in the NPT. What ultimately emerged from the negotiations is codified in Article VI, which states:

Each of the parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament[...]<sup>5</sup>

Article VI does not mention measures to gauge movement toward these objectives. But it is clear from the negotiating record that a ban on nuclear testing has been a litmus test for the NNWS since before the treaty's inception.

The NPT allowed for four review conferences leading up to the 25-year NPT Extension Conference.<sup>6</sup> The CTBT was clearly a major consideration at each of these:

- At the 1975 conference, a final declaration, reached by consensus, contained "recommendations" for a CTBT and other arms control measures aimed at fulfilling Article VI obligations. However, the conference president made clear that the NNWS "impatiently await concrete and binding results of ongoing [U.S.-Soviet arms control] negotiations....The comprehensive test ban is clearly recognized as a most decisive element in these efforts."
- In 1980, no compromise document was reached. It was the view of the non-aligned NPT members that the NWS were failing to live up to Article VI, and a CTBT was again singled out, even though substantial progress was being made in the trilateral CTBT negotiations between the United States, the Soviet Union, and Great Britain.
- In 1985, a compromise final document was realized. The non-aligned states criticized the NWS for their failure to achieve a test ban. The U.S. position was reflected in the final document language, which noted that "certain states Party 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 meeting Article VI)."
- Finally, in 1990, the review conference again broke down with the delegates unable to compromise on a final document. At this con-

ference, the NNWS, led by Miguel Marin-Bosch of Mexico, sought a direct linkage between a CTBT and the 1995 NPT Conference, which the NWS resisted. The United States and the United Kingdom suggested that alternate test restraints (such as quotas on the number of tests, and thresholds on their size) could be endorsed as useful steps, but this proved unacceptable to the NNWS.

In short, two of the four review conferences ended without a final document, at least in part due to the contentious CTBT issue.

The importance of a CTBT to the NPT was recently manifested at the Third Prepcom (September 12-16, 1994) held in preparation for the 1995 Review and Extension Conference (the fourth and final planned Prepcom occurred in January 1995, too late for inclusion in this article). At the third Prepcom, which was highly contentious in many respects, the Non-Aligned Movement (NAM) produced a document (generally referred to as "Document 13") that enumerated a number of actions that would contribute to the successful outcome of the review and extension conference of the NPT, provided "substantial progress" was made toward their realization. Prominent on this list was a CTBT:

The conclusion of a [CTBT] remains one of the highest priority objectives of the international community....a target date must be set to conclude the negotiations on CTBT prior to the 1995 NPT Review and Extension conference. The conclusion of a CTBT would decisively benefit the outcome of the said conference.<sup>9</sup>

In this document, the NAM went beyond calling for progress on a CTBT, demanding the "conclusion" of negotiations. This may prove impossible prior to the 1995 NPT Extension Conference, but it *is* possible that substantial progress will be made.

#### THE CTBT NEGOTIATIONS

# **Background and Organization**

On November 19, 1993, the First Committee of the U.N. General Assembly approved by consensus a resolution calling for CTBT negotiations. This was remarkable because none of the NWS resisted this resolution. On January 25, 1994, the Conference on Disarmament (CD) re-established its Ad Hoc Committee on a Nuclear Test Ban and agreed upon a mandate to begin CTBT negotiations.<sup>10</sup>

The CTBT negotiations currently involve 37 nations. Of these, 35 are divided into three groups, and two, China and Sweden, are independent (see Figure A above).

# CD Groupings

East Eur. States & Others	Group of 21			Western States & Others		
Bulgaria Hungary Poland Romania Russian Federation	Algeria Argentina Brazil Cuba Egypt Ethiopia India	Indonesia Iran Kenya Mexico Mongolia Morocco Myanmar	Yugoslavia Venezuela	Australia Belgium Britain Canada France Germany	Italy Japan Netherlands United States	

Figure A

The "Group of 21" consists of the non-aligned nations. In addition, there is a substantial number of non-voting observer states that participate in CD deliberations but have no vote on formal decisions. These include key states that the international community would like to see "captured" by a CTBT, including Israel, North Korea, and Iraq. Currently, the Yugoslavian seat is unfilled.

The chairman of the Ad Hoc Committee is Miguel Marin-Bosch

of Mexico, a long-time proponent of a CTBT. (Figure B below shows the organization of the Ad Hoc Committee.)

The Chair of the Ad Hoc Committee is supported by two working groups, which in turn are supported by a number of Friends of the Chair. Work on verification within the CD is centered around the Group of Scientific Experts (GSE), chaired by Ola Dahlman of Sweden. The GSE, which is developing a prototype veri-

#### Organization of Ad Hoc Committee on a Nuclear Test Ban

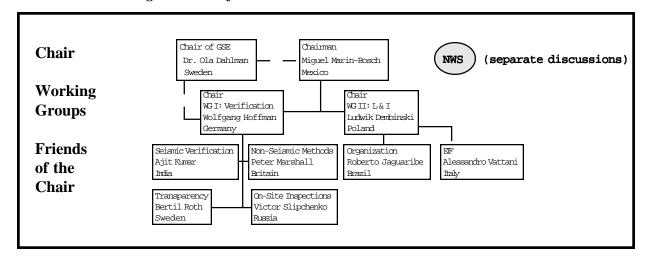


Figure B

fication system for the CTBT, works closely with Marin-Bosch and with the Working Group on Verification; however, the GSE does not answer directly to either (hence the dotted lines on Figure B).

Separate discussions are conducted by the five nuclear weapons states: the United States, Russia, the People's Republic of China, France, and Great Britain. (They are also sometimes referred to as the P-5, because of their status as permanent representatives to the U.N. Security Council.) These discussions tend to focus on CTBT scope—that is, the specific activities either permitted or prohibited by the treaty. A key U.S. objective has been to keep the NWS unified to the extent possible. Principally, this is because the United States believes that a CTBT must have the support of all five of the NWS. However, it is becoming increasingly difficult to keep the NWS together, as progress on resolving differences remains slow.

# U.S. Objectives for a CTBT and Contrasting Views

The United States places a priority on achieving a CTBT at the "earliest possible time."11 This is not, however, an endorsement of the concept that a CTBT should be concluded or opened for signature by the 1995 NPT Extension Conference. Rather, the U.S. objective is to make as much progress as possible on a CTBT by that time. This policy acknowledges that, while the United States does not endorse a direct linkage, it recognizes that many other nations do, and that "the atmosphere would be more conducive to a broad agreement to extend indefinitely and unconditionally the NPT if substantial progress has been made by then on a test ban."12

The U.S. objection to a direct linkage reflects the view that "both the Non-Proliferation Treaty and the comprehensive test ban stand on their own two feet."<sup>13</sup> In other words, neither should be held hostage to the other

A second major objective for the United States is to have a CTBT that contains robust monitoring provisions. In other words, prior to its entry into force, the CTBT must have a comprehensive monitoring regime that has a high probability of detecting and identifying an underground nuclear weapon test explosion.

Third, the United States wants a treaty that is universal—it should not only apply to the P-5, but to all nations. This objective is critical for the United States because it sees a CTBT as primarily a nonproliferation tool, throwing a roadblock into the path of nations intent on developing nuclear weapons. In addition, a universal treaty provides a means to include in the regime the three "threshold" states—Israel, India, and Pakistan.

It is useful to consider what is *not* on the U.S. list of objectives: disarmament. Broadly defined, there can be three objectives for a CTBT: to impede the proliferation of nuclear weapons; to prevent the development of new nuclear capabilities; and to facilitate the process of disarmament. The United States wholly endorses the first objective, accepts the second, but does not by any means subscribe to the third. The U.S. position was clearly stated by Ambassador Holum in August of 1994:

The dividing line for the negotiations is between development of new weapons, which should be prohibited by a comprehensive test ban, and maintenance of existing weapons, including seeing to their safety and reliability...which should be permitted under a comprehensive test ban.<sup>14</sup>

From the U.S. perspective, therefore, there is a clear line between development and disarmament. Conceivably, one way in which the latter objective could be reached is to make maintenance of current stockpiles (which relies on nuclear testing) more difficult. Over time, the risk of keeping these weapons in the stockpile increases. The U.S. position is that the treaty should *not* be designed to impede the maintenance of the current stockpile.

Thus, when Ambassador Holum stated that the United States "intends to bring an end to all nuclear explosions, period," he appeared to be advancing a formula that was designed to reject the notion of a threshold (a yield limit for allowable tests), and to permit means other than underground nuclear testing, such as hydronuclear experiments (HNEs). Such experiments would allow the United States to continuously monitor the viability of the strategic stockpile. The United States does not consider such experiments, which release only a minute amount of nuclear energy, to be "explosions."15

In contrast, many of the NNWS believe that nuclear disarmament should be the first priority of a CTBT. These contrasting perspectives are vividly seen in two documents, both produced at about the exact same point in the negotiations. One statement, dated March 15, 1994, is from an issues brief released by the U.S. Arms Control and Disarmament Agency (ACDA):

The United States believes that achievement of a CTBT will be a major step toward further constraining the spread of nuclear weapons[...]. The U.S. will continue to take appropriate steps... to ensure a high level of confidence in the safety and reliability of the U.S. nuclear deterrent.

However, a March 22 statement from the non-aligned "Group of 21" reads:

The conclusion of a CTBT is an indispensable measure to put an end to the nuclear arms race and to achieve the complete elimination of those weapons. A CTBT should not be seen merely as a non-proliferation agreement but as an agreement that can contribute to nuclear disarmament.<sup>16</sup>

This dichotomy is at the root of many of the challenges in successfully negotiating a CTBT (as well as the NPT): fundamentally different perspectives with regard to what the treaty is to achieve.

#### **Views of Other Nuclear Weapons States**

In the first year of negotiations, issues related to scope were mainly discussed in the separate NWS discussions. Figure C above shows NWS perspectives on these issues.

All five of the NWS agree that the CTBT should not be a threshold treaty, meaning that no nuclear test explosion should be permitted at any level. (This leaves aside the question of what defines a nuclear test explosion.) Similarly, none of the NWS advocates closing down its test sites—a view held by Iran, and other non-aligned states.<sup>17</sup> The view of the NWS is that maintaining a capacity to reconstitute a test program, if needed, is fully within their rights and enhances their deterrent capabilities.

However, on the third through the seventh issues given in Figure C, there is disagreement between China

NWS Views on CTBT Issues

ISSUE	U.S.	Russia	China	U.K.	France
Preparations/Test Sites	No	No	No	No	No
Threshold	No	No	No	No	No
Hydronuclear Experiments	Yes	Yes	No	Yes	Yes
Definitions	No	No	Yes	No	No
Peaceful Nuc. Explosions	No	No?	Yes	No	No
Security Assurances	No	No	Yes	No	No
No First Use	No	No	Yes	No	No
Safety Tests	No	No	No	Yes	Yes

Figure C

and the four other nuclear weapons states. For example, only China wants the following measures: hydronuclear experiments to be prohibited; a "nuclear test" to be specifically defined in the treaty; and peaceful nuclear explosions (PNEs) to be permitted.<sup>18</sup> Additionally, China is alone in suggesting that a CTBT should directly track with, and possibly incorporate, negotiations over other politically-sensitive issues, such as negative security assurances and no-first-use clauses. China's declared rationale for these positions is that a CTBT needs to be considered as one of a series of measures aimed at halting proliferation and leading to eventual nuclear disarmament. China is the only NWS to argue from a disarmament perspective.<sup>19</sup> However, China also has explicitly stated that it will not join a CTBT regime that takes effect prior to 1996, so many of these positions may prove to be delaying tactics.<sup>20</sup>

The bottom row in Figure C refers to full-scale underground nuclear tests for safety purposes. France (with some backing from the United

Kingdom) has urged that such tests be permitted—say once every five years or so—in order to ensure that stockpile safety and reliability standards are being maintained.<sup>21</sup> This is an unpopular position within the CD and points to the unique challenges associated with bringing France into a CTBT regime.

While China stands alone on many of the substantive CTBT issues, France may prove to be the ultimate obstacle to realizing a CTBT (assuming that the NNWS will not accept a CTBT that does not include all five NWS). France is an extremely reluctant partner in these negotiations, with CTBT support within the current government almost solely resting with French President Francois Mitterand. French elections are scheduled for May 1995, and the prospects of a Gaullist victory are growing (particularly in the aftermath of Jacques Delor's decision not to seek the nomination of the Social Democratic Party). Both of the leading Gaullist candidates, Eduard Balladur and Jacques Chirac, support renewed nuclear testing. How a Gaullist victory will affect France's positions in the CTBT negotiations (and in upholding Mitterand's current testing moratorium) may affect future French participation significantly.

#### **Additional Key Issues**

Beyond scope-related issues many other concerns—such as requirements for CTBT monitoring and entry into force—remain to be resolved. With regard to monitoring, it is now generally agreed that CTBT monitoring will be based on the following elements:

- seismology, which will be the core of the monitoring system, to detect and identify seismic signals released by an underground nuclear explosion;
- radionuclide measurement, to collect and measure the emission of radionuclide debris into the atmosphere;
- infrasound measurement, to detect and provide a general location of the source of atmospheric shock waves produced by the air blasts from atmospheric nuclear explosions;
- hydroacoustic measuring, which would complement the seismic system in detecting oceanic earthquakes, and serve as the primary means to identify explosions in the oceans; and
- on-site inspections, which will support the monitoring regime, and be an important confidence-building measure.<sup>22</sup>

All states recognize that the backbone of the regime will be seismology and radionuclide measurement, supported by on-site inspections. However, there is disagreement within the CD over how strict the verification regime needs to be at the time of CTBT entry into force. The United States' position is that each of the above elements must be in place at that time.<sup>23</sup> Russia and some other states have sought a more evolutionary approach, suggesting that the treaty's entry into force should not be held hostage to the realization of strict verification standards at the outset. In this view, verification can be improved over time. There are now suggestions that at the intersessionals, Russia has moved toward the U.S. position but the issue does not yet appear to be completely decided.<sup>24</sup>

Another important unresolved issue concerns CTBT entry into force; many ideas have been advocated. Based on the contents of a rolling CTBT text submitted to the U.N. General Assembly in September 1994, the challenge will be to come up with a formula that incorporates all five of the NWS (and ideally the three threshold states), without permitting any one state to hold the treaty's entry into force "hostage." No state could prevent the treaty's entry into force by opting not to join the regime. One apparently popular option is the Russian proposal to require signature from the 60-plus countries on the International Atomic Energy Agency's (IAEA) "list" of states with nuclear energy programs, or a certain percentage thereof. The idea of a percentage is useful because it prevents any state from holding the regime hostage. On the other hand, it raises the risk that key states may not join the regime.

A third major issue concerns the CTBT implementing regime. Two proposals have currency within the CD: relying primarily on the IAEA for CTBT monitoring, or establishing an independent agency specifically to support the CTBT. That new agency could be located in Vienna

and draw on the resources of the IAEA.<sup>25</sup> An independent agency might more successfully draw upon international expertise in seismology and the other necessary technologies. Moreover, the IAEA has little practical experience with CTBT verification technology requirements. However, there may be cost efficiencies with relying on the IAEA.

#### The Rolling Text

Progress on resolving many of these issues has been slow. A "vision text"—that is, a text with only a nominal number of brackets surrounding the text, and reflecting a fairly well-developed treaty—was anticipated from Chairman Marin-Bosch last year at the conclusion of the second round of CTBT negotiations. However, this was delayed due to his inability to muster support for such a text from the various CD factions. On the basis of a U.S. suggestion, a "rolling text" was compiled that was organized into three sections: unbracketed text reflecting substantial agreement; heavily bracketed text reflecting the disparate views of CTBT negotiating delegations; and a third section containing various states' position papers and working papers. The first section is nine pages long; the second, reflecting areas of difference, is about 85 pages.

A U.N. First Committee Resolution dated November 1, 1994, noted the "positive and substantial contributions to the elaboration of the rolling text."<sup>26</sup> However, the heavily bracketed second section of the rolling text suggests that progress has been slower than anticipated. It will require a major effort by key negotiating parties, or dramatic leadership on the part of a few, to move the

text forward—particularly if there is any chance of having a CTBT open for signature by the 1995 NPT Extension Conference.

The second session of CTBT negotiations began in January 1995. Intersessional CTBT negotiations were held from November 28 to December 16, 1994. At these talks, progress was reported to be slow, and, it does not appear that a CTBT will be realized by the spring conference. There are too many issues outstanding, and there is also the challenge of bringing along France and China, neither of whom want to rush the process.

# CTBT PROGRESS AND THE NPT EXTENSION CONFERENCE

From the perspective of the NNWS, the CTBT negotiations may be at any of three junctures by the April 1995 NPT Extension Conference. These can be characterized as *success*, *substantial progress*, and *movement*.

Success would connote the conclusion of a CTBT ready for signature by the April 1995 NPT Conference. It is possible, for example, that the United States might submit a vision text, to exert leadership in the negotiations, enforce the seriousness of the U.S. commitment to a CTBT, and rally support within the CD.<sup>27</sup> However, the United States would risk alienating China and France, which it does not want to do. As an alternative, Chairman Marin-Bosch could produce a vision text that has the U.S. backing; but he seems reluctant to take this step. Absent such an action by either the United States or Marin-Bosch, it is difficult to see how a treaty ready for signature could be produced prior to the Extension Conference. Nonetheless, if a vision text were introduced, it could dramatically change the tenor of the Extension Conference.

Substantial progress might entail any number of steps by the NWS that would move the CTBT along. These might include measurable progress on key divisive issues, such as verification and entry into force. Individual NWS could drop unpopular positions, such as China's current insistence on permitting PNEs. Decisions over the nature of the implementing agency could be made. The P-5 might produce a joint statement committing to a CTBT by the end of 1996. These steps might also change the tenor of the negotiations.

Movement would essentially be moderate progress from the current state of affairs, but little more than that. It is assumed that there will be some progress. The NWS recognize the importance of the CTBT to the Extension Conference, and even if a treaty cannot be realized by April, the NWS want some movement to point to. Thus, movement could be reflected by a joint statement from the NWS reaffirming their commitment to a CTBT or a joint NWS agreement on some of the less prominent (but nonetheless important) CTBT issues, such as: the composition of the executive agency responsible for CTBT implementation, the degree to which the implementing body will conduct analysis of data or rely on analyses provided by member states, or the processing of onsite inspection requests.

Moves outside of the CD could also have an impact on the April NPT Conference. For example, Presidents Clinton and Yeltsin could jointly announce an indefinite continuation of their current testing moratoria (the U.S. moratorium currently is set to expire in September 1995), the beginning of new negotiations on strategic arms reductions, or a joint statement on security assurances. A significant joint statement on nuclear policy that addressed a wide range of NNWS concerns could also prove beneficial.

In evaluating these options, it is important to recall that a CTBT will not, in and of itself, determine the fate of the NPT Extension Conference. Progress on any number of initiatives, such as a fissile material cutoff, negative and/or positive security assurances, or a no-first-use pledge, will also affect the outcome. In this context, it is probably the case that:

- Of the options described above, *success* in the CTBT negotiations will supersede in importance all of the other initiatives just mentioned. In other words, success on the CTBT combined with moderate—or even no—progress on the other issues may still result in a vote for indefinite NPT extension, given the importance of the CTBT to the NNWS.
- Substantial progress may be sufficient for procuring indefinite extension, largely because most of the NNWS perceive the NPT as overwhelmingly in their interests. The NNWS derive numerous benefits from access to nuclear technology and from the regional stability that the NPT brings. Many of the currently undecided NNWS may therefore decide that "substantial progress" is sufficient and vote for indefinite extension.
- However, anything short of *success* leaves open the possibility that many of the NNWS will argue at the Extension Conference that a vote for indefinite extension in the absence of a CTBT removes the pressure from the NWS to complete the CTBT negotia-

tions. Therefore, it may behoove the NWS to move more quickly on other issues, such as the provision of harmonized security assurances, or agreeing on a mandate for fissile material cutoff negotiations, which have long been on the NNWS agenda.

• Movement may prove problematical, particularly if no vision text is offered. Even if the NWS offer a schedule for completing the CTBT negotiations, there may be overwhelming skepticism about the prospects for keeping to the schedule. Progress on issues such as fissile material cutoff or security assurances would have to be substantial. However, the short time left before the NPT Extension Conference may make it difficult to achieve substantial progress. As a result, other options for the NPT, as discussed below, might begin to look more attractive to the NNWS.

# THE NPT REVIEW AND EXTENSION CONFERENCE

Article X.2 of the NPT states that at the 1995 NPT Review and Extension Conference, treaty signatories shall decide "whether the treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods." There is no option to terminate the NPT. A vote to extend the treaty by a single fixed period (say, two years) would risk killing the NPT, unless that fixed period was quite long—say, 50 years. But in that case, whatever short-term benefits the NNWS hoped to gain are lost, so such a vote is not likely.

The vast majority of the NNWS support the NPT and want to see it continue. From their perspective, the challenge is how best to use the 1995

Extension Conference to pressure the NWS into meeting their Article VI obligations, without posing undue risks to the NPT regime. A vote for a fixed period would be antithetical to that objective.

That leaves two options: indefinite extension or a series of fixed periods. From the NNWS perspective, some formula under the latter option may be viewed as offering the best opportunities for exerting leverage on the NWS, while still endorsing the NPT. One approach that appears to have some support among the NNWS is what George Bunn has deemed a "rolling option": the treaty would be extended for a series of fixed periods. At the end of each period, the treaty would automatically roll over into the next fixed period unless the parties decide to vote to terminate the treaty. As Bunn argues:

(this) option could include a vote by the parties in a review conference toward the end of each period on whether to stop the otherwise automatic continuation of the treaty into the next period. This would provide enforcement for the negotiations to halt the nuclear arms race and move toward nuclear disarmament.<sup>28</sup>

There are now suggestions that Venezuela is considering introducing a resolution that would be similar to Bunn's "rolling option." But, the rolling option is not without concerns. As Rebecca Johnson, a close observer of the negotiations has noted, one challenge will be to compromise on an acceptable time period for the "rolling" periods. From the perspective of the NWS:

If the fixed periods were too short, it would be likely to have the same effect as a single fixed period: destabilizing and undermining the present non-proliferation norm without the security of effective alternatives, thereby refueling the nuclear arms race.<sup>30</sup>

However, if the agreed periods were too long, the NNWS may conclude that they will lose any leverage over the NWS. But there are also questions as to how and whether specific objectives can be legally decided. Nonetheless, this option might prove attractive to the NNWS, if they refuse to support indefinite extension.

There is a third option that may also attract NNWS support: to recess the conference, until greater progress (from the NWS) is achieved. Nigerian Ambassador Isaac Ayewah, Chairman of the third Prepcom, has specifically hinted that this is a possibility.<sup>31</sup> This is a highrisk option for the NNWS. What if conditions are not met? Would the NNWS be willing to risk the NPT on the possibility that even good faith efforts on the part of the NWS could fail to result in the desired gains? There is also some question with respect to the legality of this option because recessing the conference is not specifically stated as an option in Article X.2. Nonetheless, there may be some support for a recess, particularly if the 1995 NPT Extension Conference grows acrimonious.

Thus, three options seem potential "front-runners" for the NPT Extension Conference: indefinite extension, the rolling option, and a recess. Each of these has different implications for the future of the CTBT, as well as risks for the NNWS. These are summarized in Figure D.

Nothing in the above discussion suggests that the NWS should retreat from the objective of indefinite extension. However, realizing that objective by only a slim margin could pose challenges for the long-term health of the NPT. Many of the NNWS may begin to lose confidence in the treaty, and the long-term viability of the regime could be shaken. Conversely, a "rolling option" (assuming a compromise number of years for each period, say in the 15to 20-year range, could be agreed upon), if realized by a near-consensus vote or an overwhelming majority, could reaffirm the international community's support for the NPT, provide sufficient breathing room for the NWS, and still allow the NNWS to exert leverage on the NWS. Therefore, the NWS may have to confront this question: is it better to realize indefinite extension by a slim majority or accept a reasonable compromise (the rolling option) by a large majority, or perhaps even a consensus? This may prove to be the major issue for the United States as the NPT Extension Conference nears.

# AFTER THE NPT CONFERENCE— EFFECT ON CTBT NEGOTIATIONS

It is worth considering how the three NPT outcomes just discussed may affect the future of the CTBT negotiations. No outcome can be predicted with certainty; indeed, because only a majority is needed for any option to pass, organized NNWS could conceivably push through any choice at all. This could spell trouble for attaining indefinite extension.

However, the view of the NNWS that indefinite NPT extension would irreparably inhibit future progress on a CTBT is questionable at best. Indeed, the United Kingdom has suggested that exactly the opposite is the case, supporting a type of "reverse linkage" and stating that "the prospect of indefinite extension of the NPT will be an important factor in convincing us that we can confidently move towards the conclusion of a CTBT."<sup>32</sup>

Thus, from the U.K. perspective,

achieving an indefinite extension would *facilitate* the realization of a CTBT. In any case, the United Kingdom conducts its tests at the Nevada test site and cannot resume testing unless the United States does. That is not likely to occur any time soon.

Like the United States, Russia strongly supports a CTBT and indefinite NPT extension. Accordingly, an indefinite extension would only reinforce their commitment to the CTBT negotiations. As for China, there is no reason to doubt that the Chinese will be ready to join a CTBT exactly when they claim: after they complete their current series of tests in late 1996. This formulation has little to do with how the NPT Extension Conference is resolved. Thus, the big question remains France, whose position is largely a reflection of internal French politics and concerns about their modernization requirements. In other words, France remains a question mark regardless of the outcome of the NPT Exten-

### Possible Outcomes of NPT Extension Conference

	Indefinite Extension	Rolling Option	Recess	
Summary of Option	NPT extended indefinitely regardless of progress in other fora (NWS position)	NPT extended for X number of years; automatic renewal unless there is a vote to terminate	Adjourn NPT Conference until CTBT and other objectives are realized	
Advantages (from NAM Perspective)	Secures NPT benefits, including access to nuclear energy for peaceful purposes	Provides a way to continue to pressure the NWS with respect to Article VI	Puts immediate pressure on NWS	
Risks (from NAM Perspective)	Removes pressures from NWS to negotiate CTBT	Short period could kill CTBT and other Article VI activities	Could backfire, especially if particular conditions are attached	
Likely NWS View	Best option; CTBT and NPT should not be linked anyway	May be acceptable as a compromise	Unacceptable; firm statement of support for NPT needed	

Figure D

sion Conference. If anything, French participation in future CTBT talks is likely to be encouraged by indefinite extension, rather than the opposite (indeed, France has even endorsed the British "reverse linkage").

However, future CTBT negotiations could be jeopardized if an indefinite NPT extension is achieved by only a slim majority. If certain NNWS begin to hint at withdrawing from the NPT, or even initiate such a drastic step, certain NWS may begin to rethink their participation in the CTBT negotiations. Worse, the states most likely to take such steps may be those of most concern to the NWS—for example, Iran.<sup>33</sup>

Adoption of the rolling option could prove beneficial to the CTBT talks. However, it is essential that the timeframe for the successive periods be sufficient to ensure that this outcome of the 1995 Extension Conference could only be interpreted as a strong endorsement of the NPT regime. The NWS will probably demand that each rolling period be at least 10 years, and perhaps as many as 25, in order to conclude that a strong endorsement of the NPT was achieved. Absent such an endorsement, NWS enthusiasm for a CTBT could be threatened.

Finally, with regard to a recess, it is hard to see how this outcome could be anything but damaging to the CTBT negotiations. The only way the NWS would realistically agree to this option is if all other desirable avenues were foreclosed. For example, if it appeared that the choice was this option, or a single fixed period of short duration, this would probably be chosen as the fallback position. That would imply a great deal of acrimony at the NPT Extension Conference, which would not establish a conducive atmosphere for the

CTBT talks. Worse, a recess would logically be accompanied by specific demands from the NNWS—regardless of whether they have the legal right to make such demands. This would cloud the future of the NPT regime, and could further exacerbate the challenges of negotiating a CTBT.

#### **CONCLUSION**

While the prospect for a completed CTBT text by April 1995 is dim, U.S. objectives for the NPT Review and Extension Conference may nonetheless be attainable. U.S. leadership must continue to push the CTBT process, while seriously considering other steps that would reinforce the perception (and reality) of Article VI adherence. These steps might include harmonized nuclear security assurances, agreement on a mandate for fissile material cutoff negotiations, a dramatic Clinton-Yeltsin announcement with regard to strategic arms control, or any of the number of initiatives discussed above.

The ideal outcome for the 1995 NPT Review and Extension Conference is, of course, indefinite extension, and it is sensible that the U.S. government continue to support this position and attempt to marshall support for it. In the final analysis, indefinite extension should be obtainable, assuming at least moderate movement toward a CTBT by the 1995 Extension Conference. However, whether it will prove possible to achieve that objective by consensus—or even a wide margin—is less certain. It may ultimately prove useful to consider other approaches that also endorse the NPT regime, but which may be attainable by a wide margin, or even a consensus. Some variation of the rolling option may be worth considering in that context.

- <sup>1</sup> The author would like to thank Burrus Carnahan of SAIC, Michael Wilkinson of the Stimson Center, and Rebecca Johnson of the ACRONYM Consortium for useful exchanges of views, during the time this paper was prepared.
- <sup>2</sup> Remarks of the Honorable John D. Holum, Director, United States Arms Control and Disarmament Agency, to the Conference on Disarmament, Geneva, August 4, 1994, ("Holum remarks").
- <sup>3</sup> The term nuclear weapons state (NWS) comes from the NPT, which defines an NWS as "one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967." Treaty on the Non-Proliferation of Nuclear Weapons, Article IX.3, reprinted in Arms Control and Disarmament Agency, Arms Control and Disarmament Agency (Washington, D.C., 1990), p. 98. <sup>4</sup> In George Bunn and Roland M. Timerbaev, "Nuclear Disarmament: How Much Have the Five Nuclear Powers Promised in the Non-Proliferation Treaty?" (Lawyers Alliance for World Security, et al., June 1994), p.6.
- <sup>5</sup> Treaty on the Non-Proliferation of Nuclear Weapons, Article VI, reprinted in Arms Control and Disarmament Agency, Arms Control and Disarmament Agreements, op. cit., p. 98. <sup>6</sup> Technically, the NPT required one review conference five years after treaty entry into force, and allowed for additional review conferences to be scheduled every five years, if desired by a majority of NPT signatories. NPT, Article VIII.3, in ACDA, Arms Control and Disarmament Agreements, op. cit.
- <sup>7</sup> Bunn and Timerbaev, op. cit., p. 10.
- <sup>8</sup> Final Declaration by the Third Review conference of the Parties to the Treaty on the Non-proliferation of Nuclear Weapons, September 21, 1985, quoted in Bunn and Timerbaev, op. cit., p. 11.
- <sup>9</sup> Document NPT/Conf.1995/PC.III/13, Submitted by the Indonesian Delegation to the Third NPT Preparatory Committee, September 14, 1994, "on behalf of the Group of Non-Aligned and Other States."
- <sup>10</sup> The CD is a Geneva-based, multilateral arms control negotiating forum associated with, but autonomous from, the United Nations.
- 11 Holum remarks, loc. cit.
- <sup>12</sup> Comments of U.S. Ambassador to the Conference on Disarmament Steven Ledogar, July, 1994, reprinted in "Northeast Asia Peace and Security Network Daily Report," Nautilus Pacific Research, July 25, 1994.
- 13 Holum remarks, loc. cit.
- 14 Ibid.
- <sup>15</sup> This is, however, a very contentious point within the arms control community. For a useful discussion, see Annette Schaper, "The

Problem of Definition: Just What is a Nuclear Weapon Test?" in Eric Arnett, ed., *Implementing the Comprehensive Test Ban: New Aspects of Definition, Organization, and Verification* (Published for SIPRI by Oxford University Press, December, 1994).

- <sup>16</sup> Some key elements of a Comprehensive Nuclear Test Ban Treaty, Group of 21 Working Paper CD/1252, March 22, 1994.
- <sup>17</sup> See, e.g., Rebecca Johnson, et al., A Comprehensive Test Ban: Disappointing Progress, (Geneva, The Acronym Consortium, September, 1994), Acronym Booklet #3, p. 15.
- <sup>18</sup> In the current draft Rolling Text, there is an article submitted by China that provides an exemption for peaceful nuclear explosions. No other CD member is known to support the Chinese position. The question mark by Russia is due to reports that Russia may be reconsidering their position.
- <sup>19</sup> There is currently a moratorium on nuclear testing being observed among four of the five NWS-all but China. After its October 5, 1993, nuclear weapons test, China declared: "China has all along stood for the complete prohibition and thorough destruction of nuclear weapons and a comprehensive test ban in this context." Statement of the Government of the People s Republic of China on the Question of Nuclear Testing (undated, approximately October, 1993), from the National Capital News International Desk. This statement typifies Chinese rhetoric on the role of a CTBT (leaving aside the question of why the one NWS that advocates nuclear disarmament is also the only one that continues to test nuclear weapons).
- <sup>20</sup> An interesting question is whether China would join a regime that was opened for signature by the 1995 NPT Extension Conference, but did not actually enter into force until late 1996 or later. A related question, therefore, is whether such a regime could permit testing until that time, and how that would play with the NNWS.
- <sup>21</sup> Johnson, op. cit., p. 14.
- <sup>22</sup> For a useful description of these technologies and others, see United States of America, Working Paper, *Concept for a Comprehensive Test Ban Treaty International Seismic Monitoring System*, Conference on Disarmament, June 3, 1994, CD/NTB/WP.96.
- <sup>23</sup> The U.S. position is as follows: "While acknowledging that technological progress over time should permit improvements in the quality of CTBT monitoring, the U.S. also believes that we should set high standards from the outset in order to create a more significant deterrent against those who may be tempted to try to evade detection." *Ibid.*, p. 1.
- <sup>24</sup> See, e.g., "A Summary and Assessment of Intersessional CTB Negotiations 28 November-16 December 1994," in *Nuclear Proliferation News*, No. 17 (England: Dfax project of the Farndon House Information Trust, December 20, 1994).
- 25 The idea of relying primarily on the IAEA

was first presented in a June 1993 Swedish Draft CTBT (CD/1202, CD/NTB/WP.19, June 3, 1993). A subsequent Australian draft (approximately February 1994) emphasized the idea of an independent agency. For a discussion of these alternatives, see Maurice A. Mallin, *The June, 1993 Swedish Draft Comprehensive Nuclear Test-Ban Treaty: Implications and Issues for Negotiations* (McLean, VA: Science Applications International Corporation, Center for National Security Negotiations, March, 1994).

- <sup>26</sup> U.N. First Committee Resolution, Agenda item 57: Comprehensive Test-Ban Treaty, A/C.1/49/L22, November 1, 1994.
- <sup>27</sup> Rebecca Johnson, a consultant to the AC-RONYM Consortium, has argued that such a move by the United States is possible, and could be done in a timely fashion. Rebecca Johnson, conversations with author, November 13, 1994.
- <sup>28</sup> George Bunn, Extending the Non-Proliferation Treaty: Legal Questions Faced by the Parties in 1995 (Washington, D.C.: American Society of International Law, October, 1994), p. 54.
- <sup>29</sup> Joseph Cirincione, "Third PrepCom Highlights Uncertainties: NPT Showdown Ahead," Arms Control Today (December 1994), p. 3. According to Cirincione, "Venezuela favors one 25-year extension followed by another extension conference, but most legal experts are of the opinion that the treaty only provides for one extension conference." *Ibid*, p. 5.
- <sup>30</sup> Johnson, *Disappointing Progress*, op. cit., p. 29.
- <sup>31</sup> Cirincione, *loc. cit.*, p. 6.
- <sup>32</sup> Statement by Sir Michael Weston, Leader of the Delegation of the United Kingdom of Great Britain and Northern Ireland to the Conference on Disarmament on a Comprehensive Test Ban Treaty, Tuesday, January 25, 1994, p. 2.
- 33 Iran has spoken out strongly against the NPT in general, and indefinite extension in particular. A typical Iranian statement reads as follows: "...the non-proliferation treaty is simply outdated. It belongs to a different era...The suggestion for an unconditional and indefinite extension of the NPT is deeply alarming as it implies permanent non-proliferation, eroding further on already extremely thin possibilities for nuclear disarmament." Iranian Ambassador Sirous Nasseri, Statement to the Third NPT Prepcom, reprinted in Rebecca Johnson, Strengthening the Non-Proliferation Treaty: Decisions Made, Decisions Deferred, (Geneva, The Acronym Consortium, September 1994), Acronym Booklet #4, p.