Abstract

A Comprehensive Ban on Nuclear Testing has been a goal for decades with formal negotiations commencing in January of 1994. The most contentious issues are agreement on the scope of the treaty and the nature and scope of the proposed International Monitoring System. Further issues of concern are on-site inspection and entry-into-force. Without important compromises, it seems unlikely that the treaty will be ready for signature before the end of 1996; however, all of the nuclear weapons states have stated that they will be prepared to sign a Comprehensive Test Ban Treaty by that time. Thus we continue to be hopeful that a successful treaty will be completed.
A Comprehensive Ban on Nuclear Testing has been the subject of discussion, debate, and at times, negotiation for decades. But with the end of the Cold War, and the resulting change in political climate, this elusive goal at last appears to be within our grasp. Early in 1993, circumstances favoring the completion of a CTBT were evident: France, Russia, the United Kingdom, and the U.S. had unilaterally declared moratoria on their nuclear testing programs; the U.S. had passed legislation calling for the completion of a CTBT by the end of 1996; a U.N. resolution calling for the negotiation of a multilaterally verifiable CTBT was unanimously adopted, and all the "Nuclear Weapon States" as well as Israel, Pakistan, and India (the nuclear capable states that are not party to the NPT) were prepared to join in the negotiation of a CTBT at the Conference on Disarmament.

Formal negotiation of the CTBT began in January of 1994 at the Conference on Disarmament (CD) in Geneva. The CD has 38 member states and some 50 observer nations. As of this summer, the CD has published the third version of the "rolling" treaty text which is slowly evolving into what will become the final treaty document. In the negotiation there are some areas where there are few disputes and the treaty language is largely agreed. However, there are four significant areas where there are fundamental differences of opinion among the states. These areas which will require particular attention and significant compromises by some states are: the scope of the treaty, the International Monitoring System, On-Site Inspection provisions, and the mechanism for Entry-Into-Force.

The area most important to the achievement of a treaty is agreement on the scope of the treaty. By scope we mean the set of prohibitions or requirements which are the basic reason for the treaty. Resolving this issue will require agreement on what is generally understood to be a nuclear test (even if this is not explicitly stated in the treaty) and whether certain activities will be excluded from the general prohibition (for example some ICF experiments may be considered by certain states to be nuclear explosions but they may agree that it should not be considered within the scope of the treaty). Alternatively, the treaty might simply be silent allowing countries some latitude in interpretation (for example the conduct of hydronuclear experiments could be approached this way). However, even if the treaty itself does not spell out in detail what will be allowed for "activities not prohibited" (ANP), there will certainly be a sensitivity among the nuclear weapon states that such activities are conducted within agreed limits to ensure that asymmetries in the capability for long-term maintenance of stockpiles and nuclear deterrent do not develop. Thus, if there are ANTP, verification of these activities among the five nuclear weapon states may be required. This could be expensive, and intrusive. There are ideas on approaches to such verification or confidence building measures, but they must be worked out by a consensus within the Nuclear Weapon States. This could add another significant aspect to the final resolution of the treaty.

The second important area is nearer to the interests of the participants of this symposium and involves the nature and scope of the proposed International Monitoring System (IMS). Again there are a spectrum of positions taken by states participating in the negotiation that range from a token IMS to a comprehensive system with the best possible capabilities. At the one extreme are countries who feel that the political commitment of a CTBT is all that is required. For them, the
debate over verification only slows the process of completing the treaty, and in their view the Partial Test Ban Treat (PTBT) (also called the Limited Test Ban Treaty [LTBT]) worked well for some 30 years without a verification system other than the NTM of the U.S. and Russia so why waste time and resources on an IMS for the CTBT. At the other extreme one of the P-5 has proposed a more comprehensive international monitoring system, that would give the international community access to monitoring capabilities similar to those of the U.S. and Russia. However, the cost of such a system seems to be higher than the international community is willing to pay. The largest segment of the CD seems to be focusing on a system of modest capability that would fulfill the mandate of an internationally-verifiable treaty. Of the current negotiating problems the definition of the IMS is the least likely to derail the treaty negotiations, but it is an area that will require significant technical work to finalize the treaty text. Resolution of some of the remaining issues of the IMS is unlikely without some significant compromises on the part of the U.S.

The third hot topic area is that of On-Site Inspections (OSI). For the U.S. there are two sides to this issue. First, we would like to be able to conduct inspections at any location where we have a concern about compliance with the CTBT. On the other hand, we want to be able to limit the potential for inspection at our sensitive military and defense R&D installations. These opposing viewpoints have led the U.S. to propose a compromise position between these extremes. China, France, and Israel have clearly chosen in favor of protection of their sensitive military and defense R&D installations over the right to unimpeded access for OSI. Several other influential countries including Germany and Australia are promoting a presumption of access with some limitations following a "managed access" approach similar to that of the Chemical Weapons Convention (CWC). This conflict between the right of access for OSI and the right to protect sensitive information unrelated to the treaty will result in some sort of compromise using "managed access" provisions or restricted zones. Some delegations have advocated adoption of the challenge inspection provisions of the CWC as the approach to OSI. However, several states had reservations about the intrusiveness of the challenge inspection regime of the CWC at the time of its negotiation. The work at the CWC PrepCom has only heightened their concerns about challenge OSI and created a backlash against the CWC approach for the CTBT. The technical work on OSI has been limited to date in the negotiation. There is a substantial amount of technical input on OSI that still needs to be considered before this issue will be reduced to simply finishing the treaty text.

The fourth sticky issue concerns provisions for Entry-Into-Force (EIF) of the treaty. The EIF provision will define which countries and/or how many countries will have to complete their legislative process (ratification by the Senate in the U.S.) to accept the provisions of the treaty before the treaty will actually enter into force. For the CWC EIF is defined as ratification of the treaty by 65 states (the CWC is still waiting for ratification by about 30 additional states, the U.S. included, to achieve EIF). The issues for the CTBT CIF are much more difficult as most states want all of the nuclear weapon states to have ratified the treaty before it enters into force. Some states have clearly stated that they will insist on the nuclear threshold states, India, Pakistan and Israel, having ratified the treaty as a condition for EIF. Other states such as India and Pakistan are unlikely to accept EIF of the treaty unless their regional rivals have also ratified the treaty. The U.S. has proposed a provisional acceptance of the treaty (similar in nature to the EIF provisions of the Treaty of Tlatelolco, the South American Nuclear Free Zone Agreement) as a way to achieve EIF for those states that have ratified the treaty while other states complete their legislative process as a way to move forward. But no matter what the approach, this process of defining which states must have ratified the treaty before EIF will take time and artful negotiation to reach a formula acceptable to all participating states.

Finally, there is an interplay between these final three issues. In the push to achieve the CTBT as soon as possible there will be a desire to minimize the negotiation of details of the IMS and OSI and leave the resolution of such details to a Preparatory Commission that will become responsible to prepare for implementation of the treaty after EIF. If the CWC PrepCom is an
example of how this works, one could expect lengthy debates and strong differences of opinion in the PrepCom on the details of operations and equipment for OSI; what constitutes the required operational capabilities of the IMS; and the schedule for deployment of sensors and equipment for the IMS. If the current U.S. position holds sway (all IMS stations are owned and operated by the host country) the initial operational capabilities of the IMS could be subject to manipulation by states not installing equipment or dedicating resources in a timely fashion to delay EIF. Thus, the requirements for EIF could become hostage to completion of the required PrepCom work.

The above litany would seem very pessimistic and often when one works very hard to achieve a particular goal it is only the obstacles that stick out in one's mind rather than all the positive progress. There has been much progress on the CTBT and the prospects for a signed and ratified CTBT are still good. Without some important compromises, it seems unlikely that the treaty will be ready for signature before the end of 1996. However, all of the nuclear weapon states have clearly stated that they will be prepared to sign a CTBT by the end of 1996. Thus, the work of this group continues to be vital to the successful negotiation of the treaty, the work of the PrepCom that will follow, and ultimately to the operation of the treaty verification regime.