## TOWARDS A WORLD FREE OF NUCLEAR WEAPONS THE CONTRIBUTION OF THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY

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Over 2,000 nuclear tests had been conducted in the world before the CTBT "the longest sought, hardest fought prize in the history of arms control" opened for signature in 1996. The Treaty that bans all nuclear explosions on Earth constituted a milestone in the history of nuclear non-proliferation and disarmament.

Eleven years later, the Treaty has not yet entered into force. Despite this, it has already **created a strong international norm**. 178 countries have signed and 144 have ratified the Treaty, including the nuclear-weapon states Russia, France and the United Kingdom. Nine countries whose ratifications are necessary for entry into force remain. These are China, Democratic People's Republic of Korea, Egypt, India, Indonesia, Islamic Republic of Iran, Israel, Pakistan and the United States of America.

The CTBT verification regime set up to make sure that no nuclear explosion goes undetected, proved its worth in October 2006 when the DPRK announced that it had conducted a nuclear test. The explosion was low yield, the international monitoring system only 60% completed, and the noble gas system only 25% completed at that time. Despite all this, the system not only successfully detected and analyzed the explosion, but also showed that its **verification** capabilities were significantly better than what had been envisaged by the Treaty negotiators in 1996.

The CTBT verification regime, together with the Safeguards regime of the IAEA, demonstrates that **nuclear activities can be monitored**.

In 2008, the CTBTO Preparatory Commission will consolidate the on-site inspection capability. This will occur with the first integrated field exercise for on-site inspections which will take place at the former Soviet nuclear test site Semipalatinsk in Kazakhstan. The build up of the noble gas detection capability that was so crucial in detecting the nuclear explosion by the DPRK in October 2006 will continue. 35 monitoring stations, many in areas in which stations are missing will be constructed. The stations in China will be integrated and several additional stations in Russia will be incorporated into the network. Stations installed in the United States, France and the United Kingdom have already reached an advanced stage. The plan is to have 90 % of the 337 monitoring facilities up and running in the next couple of years. Stable and sufficient funding levels will be required in order not to jeopardize the build-up and the operation and maintenance of the IMS.

Today, we see that the discussion on the CTBT is intensifying, not the least due to the bi-partisan effort culminating in the op-ed pieces in the *Wall Street Journal* in January 2007 and 2008. Moreover, there is progress towards universalization of the Treaty. 2008 has already seen ratifications by three additional countries: Barbados, Malaysia and Colombia. Colombia's ratification is of particular importance since it belongs to the group of countries whose ratification is necessary for entry into force. Malaysia's ratification may well have tipped the balance in the ASEAN region where now only four countries have yet to ratify the CTBT; Indonesia whose ratification is needed for entry into force being one of them. Clearly, there is a momentum going.

US leadership on the CTBT is seen by many as crucial. The WMD Commission recommended that "the United States 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." India – the only other state that has expressed opposition to the Treaty - has repeatedly said that it will not stand in the way for the Treaty's entry into force.

The CTBT is not only a measure in its own right, but also a **catalyst for progress in many** nuclear non-proliferation and disarmament processes underway and in many proposals put on the table.

- The CTBT is crucial in a world in which we see the **resurgence of nuclear energy.** More and more states are mastering the nuclear fuel cycle. The decision between nuclear energy for peaceful or for weapons purposes will become more a political and legal issue rather than one of technology and know how. Legal instruments "upstream" of the nuclear fuel cycle are facing increasing difficulties when it comes to the delineation between prohibited and permitted activities. A nuclear test provides unquestionable "downstream" proof of the intentions of a state. The CTBT thus provides the last and clearly visible barrier between the two. This legal line needs to be drawn clear and irrevocably. A CTBT in force would also be an incentive for ending the production of fissile material for weapons use, pending the entry into force of a Fissile Material Cut-Off Treaty, as well as reducing the stocks of such materials.
- The CTBT is a **strong instrument for non-proliferation**. It limits the ability of countries that do not have nuclear weapons to develop these weapons. A country that does not have the capability beforehand and builds a nuclear device will face many uncertainties with regards to the performance of the device. Uncertainty will increase when trying to make it deliverable by cruise or ballistic missile when weight is a major factor. This in turn reduces greatly the possibility of integrating nuclear weapons in military planning or strategic doctrines.
- The CTBT is also a **catalyst for nuclear disarmament**. It provides a firm legal barrier against nuclear testing, thereby curbing the development of new types and new designs of nuclear weapons. This will be essential when moving towards deeper arms reductions between Russia and the United States. It will also be essential when moving towards multilateral disarmament in a process involving all the nuclear armed states. In this context, it will be particularly important that the CTBT is a non-discriminatory instrument: the ban on testing is the same for everyone, nuclear weapon state and non-nuclear weapon state alike.
- The CTBT is a strong confidence- and security building measure. In the US-Russia strategic relationship, additional confidence would be gained if the United States were to ratify the Treaty as Russia has done. This would assist arms control measures such as dealerting, strategic and non-strategic arms reductions, and changes of strategic doctrines. The extension of the provisions of the START treaty, the completion of the SORT treaty and reductions beyond SORT would be facilitated with a CTBT in force.
- The CTBT could also **serve as a regional confidence and security building measure**. Referring to the regional situation, the WMD Commission recommended that Egypt, Iran and Israel joined other countries in the Middle East and ratified the Treaty. Such a step would be a positive catalyst for other security related issues affecting the region. The

WMD Commission also recommended signing and ratification of India and Pakistan – the only states besides the DPRK that have broken the international norm against nuclear testing since the Treaty came about in 1996. There is obviously a need to engage India and Pakistan on a range of security and arms related issues. CTBT would naturally be one of them, providing a cap on the further development of nuclear weapons and thus on the further production of weapons materials to that end. The importance of a legally-binding commitment on nuclear testing in this regional context should not be downplayed. Similarly, it has been argued by many that the CTBT is the next logical step after the present denuclearization stage is fulfilled in the deal with the DPRK. In a wider regional context, much would be gained for confidence- and security building in Asia if the continent as a whole moved towards ratification.

• A consensus agreement on the CTBT and its entry into force will be **essential if the Non-Proliferation Treaty and its current review process is to be successful.** Looking back in history to the negotiations of the NPT in the 1960s with the inclusion of the permanent nuclear test ban in the preamble of the Treaty, and to the successful review conferences of 1995 and 2000 as well as the unsuccessful ones over the years, it becomes clear that advancement on the CTBT is crucial. Progress on a CTBT in 2009 or 2010 will be a catalyst for progress on other measures necessary for the strengthening of the non-proliferation regime.

The CTBT is certainly one of the measures around which an international consensus can be built. It would be relatively easy to gather around a CTBT since it is almost universally supported. In the past four years, the number of ratifying states has increased from around 100 to 144. This CTBT family now includes all of Europe, all Nato members except one, and the vast majority of states in Latin America, Africa, and Asia and the Pacific.

Last September, ratifying and signatory states adopted a Final Declaration at the UN Conference to facilitate the entry into force of the CTBT. This consensus declaration – a rare commodity in today's arms control environment – contained strong language on the importance of entry into force and was signed on to also by the non-ratifying states China, Egypt, Iran and Israel. It underscored the international community's commitment to establishing a universal and internationally and effectively verifiable CTBT as a major instrument in the field of nuclear disarmament and non-proliferation. It is clear that a CTBT in force is a logical and necessary element of the security architecture, if today's and future nuclear non-proliferation challenges are to be addressed credibly.