ASEAN and nuclear disarmament

Nuclear non-proliferation and disarmament are central themes of the security policy of ASEAN, the Association of Southeast Asian Nations. The ten ASEAN countries are also promoting nuclear disarmament as members of the Non-Aligned Movement (NAM). In 2009, NAM underscored “the significance of achieving universal adherence to the Comprehensive Nuclear-Test-Ban Treaty (CTBT), including by all nuclear-weapon States, which should ... contribute to the process of nuclear disarmament.”

All ASEAN States are parties to the Nuclear Non-Proliferation Treaty (NPT). The NPT aims to prevent the spread of nuclear weapons and weapons technology, and to further the goal of nuclear disarmament. It also promotes international cooperation in the peaceful uses of nuclear energy.

The ten ASEAN countries are all Member States of the Preparatory Commission for the Comprehensive Nuclear–Test–Ban Treaty Organization (CTBTO). They all signed the CTBT early on, some on the very first day that it opened for signature on 24 September 1996. But four have yet to ratify the Treaty: Brunei Darussalam, Indonesia, Myanmar and Thailand. Indonesia’s ratification is particularly important as it is one of those States whose ratification is required for the Treaty’s entry into force.

“Ratification by especially ASEAN States would send a powerful message to those remaining nuclear technology holding States that need to ratify the Treaty for it to enter into force.”

Tibor Tóth, CTBTO Executive Secretary, Manila, Philippines, February 2010
Southeast Asia Nuclear–Weapon–Free Zone

The ASEAN States also make up the Southeast Asia Nuclear–Weapon–Free Zone (SEANWFZ).

Under the SEANWFZ Treaty, known as the Bangkok Treaty, the ASEAN countries commit themselves to refrain from developing, manufacturing, acquiring or testing nuclear weapons. CTBT ratification by all ASEAN countries would thus reconfirm the goals of the Bangkok Treaty.

“We also declared our support for the Comprehensive Test Ban Treaty, and welcomed the declared intention of the United States to ratify the treaty. We urged all states to ratify the treaty and facilitate its early entry into force.”

Joint statement of ASEAN States and the United States at their first summit meeting in November 2009 in Singapore.

The SEANWFZ is one of six nuclear–weapon–free zones and was established in December 1995 when

The CTBT

The 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans all nuclear explosions. As of February 2010, over 180 States had signed and over 150 had also ratified the Treaty. Of the 44 nuclear technology holding States whose ratification is needed for the Treaty’s entry into force, nine have yet to ratify: China, Egypt, Indonesia, India, Iran, Israel, North Korea, Pakistan and the United States. India, North Korea and Pakistan have also yet to sign the Treaty.

all but one ASEAN State (Brunei Darussalam) participated in the 2009 conference to facilitate the entry into force of the CTBT. In the final declaration hold-out States were called on to sign and ratify the CTBT without delay.

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“Indonesia has long been an advocate of a strict ban on all nuclear tests—the very objective of the Treaty. We hold the firm view that the qualitative development of all nuclear weapons must stop, and therefore seek universal adherence to the CTBT, first and foremost by all nuclear weapons states that would make an excellent first step towards a world of zero nuclear weapons.” Marty Natalegawa, Permanent Representative of Indonesia to the United Nations, at the 2009 entry-into-force conference.

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countries join forces in a large family of like-minded States that have committed themselves to ridding the world of nuclear weapons.

There are also wide-ranging technical benefits for CTBTO Member States. Technology is transferred to States through the building of International Monitoring System (IMS) stations on their territories. The availability of monitoring data and International Data Centre (IDC) analysis reports contributes to capacity-building as well as to scientific and technological research.

“The CTBT is a potent instrument for disarmament that can stop the qualitative development of nuclear weapons... the moment has come to aim for the early entry into force of the treaty.” — Alberto Romulo, Secretary of Foreign Affairs of the Philippines, at the 2009 Entry-into-Force Conference.

“IT IS UNDENIABLE THAT THE TREATY IS A BIG STEP TOWARDS THE ULTIMATE GOAL OF THE TOTAL ELIMINATION OF NUCLEAR WEAPONS.” — Hoang Chi Trung, Permanent Representative of Vietnam to the United Nations, at the 2009 Entry-into-Force Conference.

National capacity-building

All but one (Singapore) of the ASEAN States designated their respective National Authorities to liaise with the CTBTO. The National Authority leads a country’s efforts in the implementation of the Treaty. Five ASEAN States – Indonesia, Malaysia, Philippines, Thailand and Viet Nam – have established National Data Centres (NDC), which are the direct counterparts for receiving monitoring data and analysis reports from the IDC. NDCs may also take on the function of sending monitoring data from IMS stations to the IDC.

“The [CTBT] is another key instrument for the international community to reach the goal of a nuclear weapon free world. As a Signatory State, Thailand fully supports the universality of the Treaty and calls for the remaining 9 Annex II states to become party to the Treaty so as to put a definitive end to nuclear weapon testing. On our part, we are taking necessary steps towards our ratification of the Treaty.”

Siriporn Chaimongkol, Minister Counsellor, Thailand, at UNGA First Committee 2009

The CTBTO

The Vienna-based Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) is tasked with building up the CTBT verification regime so that it will be fully operational when the Treaty enters into force. It is also tasked with promoting signatures and ratifications of the Treaty.
Participants at a workshop in Bangkok, Thailand, in November 2009, highly valued the contribution of CTBT monitoring data to tsunami warning efforts in their countries.

Representatives from ten South and Southeast Asian states participated at this workshop on capacity building.

in Vienna. The CTBTO invites States to attend workshops on a variety of subjects including CTBT ratification procedures, national implementation of the CTBT, information sharing and national capacity-building. Such workshops took place in Malaysia in 2003 and 2006, the Philippines in 2007, and in Thailand in 2009.

There is also a wide range of technical training programmes in various verification-related fields for monitoring station operators, National Data Centre staff and technical experts. Upon returning to their national facilities, IMS and IDC-trained station operators and staff from National Data Centres contribute to enhancing their countries’ scientific capacities. Indonesia, Malaysia, the Philippines, Thailand and Viet Nam have participated repeatedly in CTBTO training courses. Brunei, Cambodia, Laos and Myanmar are yet to make full use of these opportunities.

**ASEAN**

The Association of Southeast Asian Nations is a regional political and economic organization. It was established on 8 August 1967 by Indonesia, Malaysia, the Philippines, Singapore and Thailand. Brunei Darussalam joined in 1984, Viet Nam in 1995, Laos and Myanmar in 1997 and Cambodia in 1999.

ASEAN aims to accelerate economic growth, social progress and cultural development in its Member States and to promote regional peace and stability.
Monitoring stations in ASEAN States

The ten ASEAN countries are home to 12 IMS facilities – nine seismic stations and three radionuclide stations. One radionuclide station – RN65 in Chiang Mai, Thailand – will be equipped with noble gas detection technology. Of these 12 stations, ten are already certified and send data to the IDC. The latest station to be integrated fully into the IMS is the auxiliary seismic station AS41 in Jayapura, Indonesia, which was certified in December 2009. Two stations are under construction: AS42 in Soron, Irian Jaya, Indonesia, and the radionuclide station in Chiang Mai.

Tsunami warning efforts

ASEAN States were among the countries worst hit by the 2004 tsunami disaster in the Indian Ocean. Hundreds of thousands of people perished and coastal regions were devastated. The catastrophe triggered an initiative in cooperation with UNESCO’s Intergovernmental Oceanographic Commission to explore how CTBT verification data could be used for tsunami warning purposes. The CTBTO has been sending monitoring data to a number of tsunami warning centres in the Indo-Pacific region since November 2006.

CTBTO contributes monitoring data

At the regional CTBTO workshop on capacity building in Bangkok, Thailand, in November 2009, participants from Indonesia, Thailand, Malaysia and other ASEAN countries highly valued the

The CTBT verification regime

A global network of over 300 stations, the International Monitoring System, constantly scans the earth for evidence of a nuclear blast.

Seismic, infrasound and hydroacoustic stations listen for signs of a nuclear explosion in the ground, the air and under water, while radionuclide and noble gas stations sniff the air for radioactivity. All monitoring data are sent to the CTBTO’s International Data Centre, in Vienna, for processing and analysis. Findings are shared with Member States in real time. Once the Treaty is in force, Member States can request on-site inspections if they suspect that a nuclear explosion has taken place in violation of the Treaty.
contribution of CTBT monitoring data for tsunami warning purposes. As of February 2010, the CTBTO shared monitoring data from over 30 monitoring stations with tsunami warning centres in Indonesia, the Philippines and Thailand. Negotiations with other countries in the region are ongoing.

The main advantage of contributing CTBT verification data to tsunami warning lies in the speed of data transmission. It takes only 30 seconds for monitoring data on potential tsunami–generating earthquakes to reach the warning centres in the region, providing vital lead time to activate alert measures. At the workshop in Bangkok in 2009, representatives reported significant improvements in their respective national tsunami warning efforts. Additional seismic stations, tidal gauges and buoy stations throughout the region monitor seismic activities and ocean movements. Officials from Indonesia, Malaysia, the Philippines and Thailand shared information about the installation or improvement of communication channels to disseminate timely tsunami warning in coastal regions. They confirmed that the sharing of near real–time data by the CTBTO with tsunami warning institutions in their respective countries is central to early warning.

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<tr>
<th>Country</th>
<th>Signature</th>
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<tr>
<td>Brunei Darussalam</td>
<td>22 January 1997</td>
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<td>Cambodia</td>
<td>26 September 1996</td>
<td>10 November 2000</td>
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<td>Indonesia</td>
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<td>Myanmar</td>
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<td>Singapore</td>
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<td>Viet Nam</td>
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