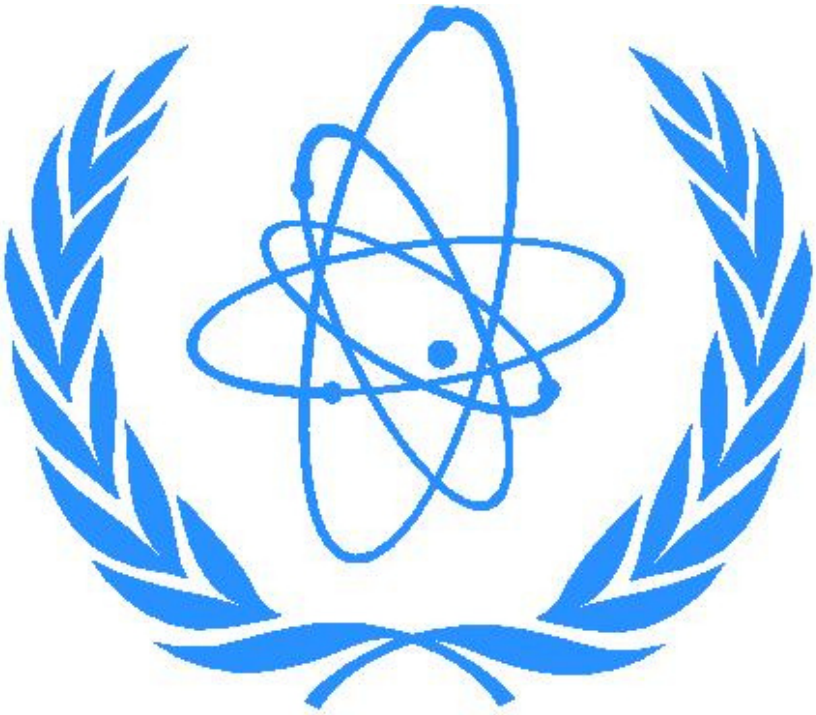
MIT MUNC

International Atomic Energy Agency (IAEA)

Background Guides



MIT Model United Nations Conference (MITMUNC) II
February 5-7, 2010
Cambridge, Massachusetts

Letter From The Chair

Dear Delegate,

It is my pleasure and honor to welcome you to the International Atomic Energy Agency at the second annual MIT Model United Nations Conference. I might be a little biased but I must say that you have chosen your committee wisely. The field of Nuclear Science is one of the newest and groundbreaking research in this field at several research institutes and organizations is slowly paving the way for an alternative source of energy for the world. Researchers and scientists from MIT too are making enormous contributions to this field and therefore it is extremely fitting that we should have an IAEA at a conference hosted by MIT.

A little about myself: I am a rising Sophomore in the Depart of Nuclear Science and Engineering and a possible German minor. My interest in the IAEA began in high school when I represented Germany in the IAEA at a Model UN conference. That interest turned into an obsession and lead to a summer in Germany and a major in Nuclear Science. The Committee will be vice chaired by Debra Slutsky who is a freshman at MIT, prospectively majoring in economics/management.

I was fortunate enough to chair the IAEA last year as well and I look forward to another exciting conference as the head of this IAEA.

I hope that we shall be able to synergize as a committee to develop unique and feasible solutions to the problems at hand. I look forward to three days of constructive debate and deliberations. Please feel free to contact me with any questions prior to the conference.

I wish you all the best for your preparations and I look forward to meeting you in person.

Best regards,

Aditi Verma

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MITMUNC 2010 IAEA Chair

Topic One:
On the Question of **Elimination of Rogue Nuclear Programs**

1. Why does this fall under the purview of the IAEA?

The IAEA works for the safe, secure and peaceful uses of nuclear science and technology. Its key roles contribute to international peace and security, and to the World's Millennium Goals for social, economic and environmental development. Three main pillars - or areas of work - underpin the mission:

- Safeguards and Verification
- Safety and Security
- Science and Technology

In order to ensure safety and security, the IAEA must ensure that nations, organizations and agencies use nuclear technologies for peaceful purposes only. Therefore the IAEA must actively engage in the elimination of rogue nuclear programs.

2. What constitutes a Rogue Nuclear Program?

For the purposes of this conference any country, agency, organization or group that unlawfully possess nuclear materials (radioactive materials or materials of a fissile or fertile nature) and is not subject to IAEA safeguards or party to the NPT or the CTBT will be deemed to constitute a Rogue Nuclear Program. This definition encompasses Terrorist groups, organizations involved in the illicit trafficking of nuclear material or technologies and nations having covert nuclear programs.

3. What can the IAEA do?

- Impose safeguard measures and conduct regular inspections
- Formulate nuclear safety plans and ensure their implementation
- Take whatever measures necessary to prevent the illicit trafficking of nuclear materials
- Negotiating and mediating situations involving Rogue Nuclear Programs
- Report suspicious activities involving nuclear technologies and materials to the United Nations Security Council which can then take concrete measures to address such a concern.
- Use the weight of the opinion of the international community to prevent a nation or group from engaging in non-peaceful activities that involve the use of nuclear materials.

This background guide will elaborate on some of the above measures that the IAEA can take. It is left to the delegate to formulate and suggest other alternative measures that the IAEA could take to promote non proliferation and elimination of Rogue Nuclear Programs.

4. Safeguards

Safeguards are activities by which the IAEA can verify that a State is living up to its international commitments not to use nuclear programmes for nuclear-weapons purposes. The global Nuclear Non-Proliferation Treaty (NPT) and other treaties against the spread of nuclear weapons entrust the IAEA as the nuclear inspectorate. Today, the IAEA safeguards nuclear material and activities under agreements with more than 140 States.

Within the world's nuclear non-proliferation regime, the IAEA's safeguards system functions as a confidence-building measure, an early warning mechanism, and the trigger that sets in motion other responses by the international community if and when the need arises.

Over the past decade, IAEA safeguards have been strengthened in key areas. Measures aim to increase the likelihood of detecting a clandestine nuclear weapons programme and to build confidence that States are abiding by their international commitments.

4.1. What verification measures are used?

Safeguards are based on assessments of the correctness and completeness of a State's declared nuclear material and nuclear-related activities. Verification measures include on-site inspections, visits, and ongoing monitoring and evaluation. Basically, two sets of measures are carried out in accordance with the type of safeguards agreements in force with a State.

- One set relates to verifying State reports of declared nuclear material and activities. These measures – authorized under NPT-type comprehensive safeguards agreements - largely are based on nuclear material accountancy, complemented by containment and surveillance techniques, such as tamper-proof seals and cameras that the IAEA installs at facilities.
- Another set adds measures to strengthen the IAEA's inspection capabilities. They include those incorporated in what is known as an "Additional Protocol" – this is a legal document complementing comprehensive safeguards agreements. The measures enable the IAEA not only to verify the non-diversion of declared nuclear material but also to provide assurances as to the absence of undeclared nuclear material and activities in a State.

4. 2. What kinds of inspections are done?

The IAEA carries out different types of on-site inspections and visits under comprehensive safeguards agreements.

- Ad hoc inspections typically are made to verify a State´s initial report of nuclear material or reports on changes thereto, and to verify the nuclear material involved in international transfers.
- Routine inspections - the type most frequently used - may be carried out according to a defined schedule or they may be of an unannounced or short-notice character. The Agency´s right to carry out routine inspections under comprehensive safeguards agreements is limited to those locations within a nuclear facility, or other locations containing nuclear material, through which nuclear material is expected to flow (strategic points).
- Special inspections may be carried out in circumstances according to defined procedures. The IAEA may carry out such inspections if it considers that information made available by the State concerned, including explanations from the State and information obtained from routine inspections, is not adequate for the Agency to fulfil its responsibilities under the safeguards agreement.
- Safeguards visits may be made to declared facilities at appropriate times during the lifecycle for verifying the safeguards relevant design information. For example, such visits may be carried out during construction to determine the completeness of the declared design information; during routine facility operations and following maintenance, to confirm that no modification was made that would allow unreported activities to take place; and during a facility decommissioning, to confirm that sensitive equipment was rendered unusable.

5. Nuclear Plans

The Agency's activities in nuclear security date back to the 1970s when the Agency began providing ad hoc training courses in physical protection. However, after 11 September 2001, it became clear that much more needed to be done to protect both nuclear and other radioactive material from malicious acts.

In March 2002, the Agency embarked on its first comprehensive programme to combat the risk of nuclear terrorism by assisting States in strengthening their nuclear security. Approved by the IAEA Board of Governors, the first three-year plan described a programme of work encompassing eight Activity Areas. The achievements of the first nuclear security plan were detailed in the Review of the Implementation of the Nuclear Security Plan of Activities: 2002–2005 which was submitted to the Board of Governors and General Conference in September 2005.

In September 2005, the Board of Governors approved a new Nuclear Security Plan covering the period 2006–2009. The new Plan builds upon the accomplishments of the first Plan, reviews the threat picture as it has evolved since the con-

figuration of the priorities and approach set in 2002, and promotes strengthened international instruments to combat nuclear terrorism. Nuclear Security Plan 2006-2009 is currently in effect.

The Nuclear Security Plan 2006–2009 covers three activity areas:

- Needs assessment, analysis and coordination
- Prevention
- Detection and response

Specifically, the new Plan prioritizes:

- providing advice concerning the implementation of binding and non-binding international instruments;
- development of guidance and documents;
- review and assessment of needs;
- providing support to States for the implementation of nuclear security recommendations; and
- outreach and information exchange through databases, conferences, workshops and fellowships.

Activities originally conceived for safeguards, and nuclear and radiation safety purposes, but which also support nuclear security objectives, are also covered in the Plan.

Furthermore, The Agency has taken steps towards consolidating States' nuclear security needs into integrated plans for nuclear security improvements and assistance. The Agency drafts, in consultation with the hosting State, the Integrated Nuclear Security Support Plan (INSSP), which is tailored to the State's specific needs on the basis of findings and recommendations from the Agency's range of nuclear security missions (INSServ, IPPAS, ITE , ISSAS, RASSIA) and supported and supplemented by other Agency information.

6. Prevention of Illicit Trafficking of Nuclear Materials

Established in 1995, the Illicit Trafficking Database (ITDB) is the IAEA´s information system on incidents of illicit trafficking and other unauthorized activities and events involving nuclear and radioactive materials. The ITDB is a unique asset helping participating States and selected international organizations in combating illicit nuclear trafficking and strengthening nuclear security. It is also an essential component of the information platform supporting the implementation of the IAEA's Nuclear Security Plan.

The ITDB facilitates the exchange of authoritative information on incidents among States. As of 1 September 2009, 107 States participate in the ITDB Programme. In some cases, non-participating Member States have provided information to the ITDB.

The scope of the ITDB information is broad. It includes, but is not limited to, incidents involving illegal trade and movement of materials across borders. The scope covers incidents involving unauthorized acquisition (e.g. through theft), supply, possession, use, transfer or disposal of nuclear and other radioactive materials, whether intentionally or unintentionally, with or without crossing international borders. The scope also covers unsuccessful or thwarted acts of the above type, the loss of materials and the discovery of uncontrolled materials.

It is recognized that many States lack the necessary technical capabilities to detect unauthorized movement of nuclear and other radioactive materials. Through nuclear security and technical cooperation programs, the Agency provides States, to a limited extent, with equipment for detection of smuggling of radioactive substances at borders. The IAEA also facilitates provision of such equipment through the bilateral support programs.

7. Current Situation

Under the terms of the NPT, which went into effect in 1970, only five countries were allowed to have nuclear weapons. The nuclear powers at that time :the United States, the Soviet Union, Britain, France, and China,agreed not to proliferate weapons technology to other countries and to work toward their own eventual nuclear disarmament. Some 190 countries ratified the treaty. But 36 years later, the world faces a problem. There are now nine nuclear weapon states, four of them outside the NPT. Several other countries that have civilian nuclear programs have the capabilities to develop military nuclear programs simply

by channeling existing civilian nuclear technology. Fortunately most of the nations with civilian nuclear programs are stable democracies and have not expressed any desire to use nuclear technology for defense purposes. However the situation with the middle eastern countries and DPRK (Democratic Peoples Republic of Korea) continues to remain unresolved.

7.1. IAEA and DPRK

IAEA inspectors at the Yongbyon nuclear facilities removed safeguards equipment and left the country on 16 April 2009, following the DPRK decision to cease all cooperation with the IAEA. The international community needs the assistance and guidance of the IAEA to address this situation.

7.2. IAEA and Iran

Iran continues to argue that it has the right to use nuclear technology for peaceful purposes and the generation of power in the face of looming energy crisis. Segments of the international community however continue to doubt Iran's motives and this was reflected in the recently passed resolution "Implementation of the NPT safeguards agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran". This resolution was adopted by the IAEA board of governors on the 27th of November 2009. This resolution can be found on the IAEA website and delegates are recommended and encouraged to read both it and Iran's response which can be found alongside.

7.3. Illicit Trafficking of Nuclear Material

From January 1993 to December 2008, a total of 336 incidents involving unauthorized possession and related criminal activities were confirmed to the ITDB. Incidents included in this category involve illegal possession, movement, or attempts to illegally trade in or use nuclear materials or radioactive sources. Fifteen incidents in this category involved high enriched uranium (HEU) and plutonium.

In addition, 421 reported incidents involved the theft or loss of nuclear or other radioactive materials and 724 cases involved other unauthorized activities, such as the unauthorized disposal of radioactive materials or discovery of "orphan sources". In the remaining 81 cases the reported information was not sufficient to determine the category of incident.

Information reported to the ITDB shows a persistent problem with the illicit trafficking in nuclear and other radioactive materials, thefts, losses, and other unauthorized activities.

USA has taken a lead in ensuring the nuclear materials globally are safeguarded. The two organizations listed below have also played a significant role.

- Cooperative Threat Reduction (CTR): The CTR program provides funding to help Russia secure materials that might be used in nuclear or chemical weapons as well as to dismantle weapons of mass destruction and their associated infrastructure in Russia.
- Global Threat Reduction Initiative (GTRI): Expanding on the success of the CTR, the GTRI will expand nuclear weapons and material securing and dismantlement activities to states outside of the former Soviet Union.

8. Questions to Consider

Delegates are requested to keep the following things in mind while doing their research and writing position papers:

- What, according to your nation, constitutes a rogue nuclear program?
- Does your nation have a civilian or military nuclear program?
- If your nation has a civilian military program, do your research reactors and power plants comply with IAEA safeguards? Are they subject to routing inspections?
- Does your country deem the inspection of its nuclear facilities as a violation of its sovereignty?
- Has your nation ever been faced by the problem of nuclear terrorism and if yes, what measures were taken to avert such a threat?

- What, in your opinion, can the IAEA do to eliminate nuclear programs?
- Does your nation believe that it is the unalienable right of every nation to have a civilian nuclear program?
- Has your country benefitted from an INSSP?
- Has your nation signed and ratified the CTBT and NPT. If not, why?
- Does your nation deem the threat from rogue nuclear programs to be immediate and worth addressing? If not, why?
- Has your country in any way assisted the IAEA in securing this threat? If yes, in what manner?
- What diplomatic relations does your country have with Iran and DPRK?
- What are your country's views on nuclear disarmament and non-proliferation?

9. References and Links

- IAEA and DPRK (a complete timeline): http://www.iaea.org/NewsCenter/Focus/IaeaDprk/fact_sheet_may2003.shtml
- Nuclear Safety information coordination and analysis: http://www-ns.iaea.org/security/coordination.htm
- IAEA safeguards: http://www.iaea.org/Publications/Factsheets/English/sg_overview.html
- IAEA and Iran: http://www.iaea.org/NewsCenter/Focus/IaeaIran/index.shtml
- Nuclear Terrorism prevention: http://www.iaea.org/NewsCenter/Features/NuclearSecurity/terrorism.html
- Illicit trafficking of nuclear material: http://www-ns.iaea.org/security/itdb.htm
- IAEA nuclear safety plan 2006-2009: http://www-ns.iaea.org/security/nsp_2009.htm

Topic Two:
On the Question of **Enforcement and Relevance of Nuclear Treaties**

The two main Nuclear treaties that are in force today are the NPT and the CTBT.

This agenda aims to explore the relevance and effectiveness of these treaties and seeks to determine how they can be better enforced and implemented to promote nuclear non-proliferation. Let us first briefly look at the framework of these treaties.

NPT

Date of adoption: 12 June 1968
Place of adoption: United Nations, New York
Date of entry into force: 5 March 1970
Depositary governments: Russian Federation, United Kingdom, United States

1. What is the NPT?

The NPT aims to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy, and to further the goal of disarmament. The Treaty establishes a safeguards system under the responsibility of the IAEA, which also plays a central role under the Treaty in areas of technology transfer for peaceful purposes.

2. IAEA and the NPT

Three decades after its entry into force in 1970, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) has nearly 190 States as Parties. Parties are preparing for the next conference, in 2005, to review the Treaty's implementation. Such Review Conferences have been held at five-year intervals since 1975, when the first one was convened in Geneva.

The IAEA is not a party to the Treaty but is entrusted with key roles and responsibilities under it. Under the NPT, the IAEA has specific roles as the international safeguards inspectorate and as a multilateral channel for transferring peaceful applications of nuclear technology:

NPT Article III: The IAEA administers international safeguards to verify that non-nuclear weapon States party to the NPT fulfill the non-proliferation commitment they have made, "with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices."

NPT Article IV: The Agency facilitates and provides a channel for endeavours aimed at "the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world."

In practical terms, the IAEA also is seen as having roles in connection with verification of nuclear-weapon-free zones and in the context of verifying ex-nuclear weapon material.

3. Problems faced in the implementation of the NPT

Several nations have either outright refused to sign and ratify the NPT or withdrawn from it after failure to meet its terms. The IAEA plays a key role in enforcing the NPT. Delegate, you are entrusted with the task of finding a way for the Agency to implement the treaty. While looking for solutions, keep in mind not only the best interests of both your own nation but also the international community at large.

3.1. India, Israel and Pakistan

Three states—India, Israel, and Pakistan—have declined to sign the treaty. India and Pakistan are confirmed nuclear powers, and Israel has a long-standing policy of deliberate ambiguity. These countries argue that the NPT creates a club of "nuclear haves" and a larger group of "nuclear have-nots" by restricting the legal possession of nuclear weapons to those states that tested them before 1967, but the treaty never explains on what ethical grounds such a distinction is valid.

India and Pakistan have publicly announced

possession of nuclear weapons and have detonated nuclear devices in tests, India having first done so in 1974 and Pakistan following suit in 1998 in response to another Indian test. India is estimated to have enough fissile material for more than 150 warheads. Pakistan reportedly has between 80 and 120 warheads according to the former head of its strategic arms division. India is one of the few countries to have a no first use policy, a pledge not to use nuclear weapons unless first attacked by an adversary using nuclear weapons. The main reason India cites for not signing the NPT and for possessing nuclear weapons is that China is one of the "nuclear haves." India's External Affairs Minister Pranab Mukherjee said during a visit to Tokyo in 2007: "If India did not sign the NPT, it is not because of its lack of commitment for non-proliferation, but because we consider NPT as a flawed treaty and it did not recognise the need for universal, non-discriminatory verification and treatment."China and India have a longstanding border dispute, including a border war in 1962.

According to leaked intelligence, Israel has been developing nuclear weapons at its Dimona site in the Negev since 1958, and many nonproliferation analysts like David Albright estimate that Israel may have stockpiled between 100 to 200 warheads using the plutonium reprocessed from Dimona. The Israeli government refuses to confirm or deny possession of nuclear weapons, although this is now regarded as an open secret after Israeli low level nuclear technician Mordechai Vanunu—later abducted and jailed by Israel—revealed the program to the British Sunday Times in 1986.

In early March 2006, India and the United States finalized a deal, having critics in both countries, to provide India with US civilian nuclear technology. Under the deal India has committed to classify 14 of its 22 nuclear power plants as being for civilian use and to place them under IAEA safeguards. Mohamed ElBaradei, the former Director General of the IAEA, welcomed the deal by calling India "an important partner in the nonproliferation regime."

3.2. North Korea (DPRK)

North Korea ratified the treaty on December 12, 1985, but gave notice of withdrawal from the treaty on January 10, 2003 following U.S. allegations that it had started an illegal enriched uranium weapons program, and the U.S. subsequently stopping fuel oil shipments under the Agreed Framework which had resolved plutonium weapons issues in 1994. The withdrawal became effective April 10, 2003 making North Korea the first state ever to withdraw from the treaty. North Korea had once before announced withdrawal, on March 12, 1993, but suspended that notice before it came into effect.

In 2007, reports from Washington suggested that the 2002 CIA reports stating that North Korea was developing an enriched uranium weapons program, which led to North Korea leaving the NPT, had overstated or misread the intelligence. On the other hand, even apart from these press allegations—which some critics worry could have been planted in order to justify the United States giving up trying to verify the dismantlement of Pyongyang's uranium program in the face of North Korean intransigence—there remains some information in the public record indicating the existence of a uranium effort. Quite apart from the fact that North Korean First Vice Minister Kang Sok Ju at one point admitted the existence of a uranium enrichment program, Pakistan's then-President Musharraf revealed that the A.Q. Khan proliferation network had provided North Korea with a number of gas centrifuges designed for uranium enrichment. Additionally, press reports have cited U.S. officials to the effect that evidence obtained in dismantling Libya's WMD programs points toward North Korea as the source for Libya's uranium hexafluoride (UF_6) -- which, if true, would mean that North Korea has a uranium conversion facility for producing feedstock for centrifuge enrichment.

3.3. Iran

Iran is a party to the NPT, but was found in non-compliance with its NPT safeguards agreement and the status of its nuclear program remains in dispute. In November 2003 former IAEA Director General Mohamed ElBaradei reported that Iran had repeatedly and over an extended period failed to meet its safeguards obligations,

including by failing to declare its uranium enrichment program. After about two years of EU3-led diplomatic efforts and Iran temporarily suspending its enrichment program, the IAEA Board of Governors, acting under Article XII.C of the IAEA Statute, found in a rare non-consensus decision with 12 abstentions that these failures constituted non-compliance with the IAEA safeguards agreement. This was reported to the UN Security Council in 2006,after which the Security Council passed a resolution demanding that Iran suspend its enrichment. Instead, Iran resumed its enrichment program.

Iran states it has a legal right to enrich uranium for peaceful purposes under the NPT, and further says that it "has constantly complied with its obligations under the NPT and the Statute of the International Atomic Energy Agency". Iran also states that its enrichment program is part of its civilian nuclear energy program, which is allowed under Article IV of the NPT. The Non-Aligned Movement has welcomed the continuing cooperation of Iran with the IAEA and reaffirmed Iran's right to the peaceful uses of nuclear technology. UN Secretary General Ban Ki-moon has welcomed the continued dialogue between Iran and the IAEA, and has called for a peaceful resolution to the issue.

4. 2010 NPT Review Conference

Ever since the NPT came into force, it has been reviewed periodically at five year intervals. The NPT review conference in 2010 aims to address the problems of non adherence to the treaty and the existence of covert nuclear programs. Delegates are encouraged to go through the links provided at the end of this guide to learn more about the plans for this review conference in 2010. Knowledge of the specifics will stand the reader in good stead.

The other important nuclear treaty is the CTBT.

CTBT

The Comprehensive Test Ban Treaty (CTBT)—described as the "longest sought and hardest fought for arms control treaty in history"—was opened for signature in September 1996. The CTBT obligates countries that sign and ratify "not to carry out any nuclear weapon test explosion or any other nuclear explosion." It provides for an extensive verification regime including an International Monitoring System (IMS) to detect nuclear explosions, a global infrastructure for satellite communications from IMS stations to an International Data Center (IDC) that processes and distributes data to State Parties, and for on-site inspections, which may be requested by any State Party to determine whether suspected cheating has occurred. To implement these verification arrangements, the treaty establishes a Comprehensive Test Ban Organization (CTBTO) located in Vienna.

5. Why is the CTBT important?

The CTBT has been seen as an essential step toward nuclear disarmament for over four decades. It bans all nuclear tests, anytime, anywhere and comprehensively. Without the CTBT, the United States, Russia, China, France, the United Kingdom, India, and Pakistan are not prohibited from conducting further underground test explosions. The effort to establish an international norm against nuclear testing must not be abandoned after the enormous effort on the part of governments and NGOs, especially when the ratifications of only thirteen states is required for Entry-Into-Force.

The Treaty is intended to stop the qualitative nuclear arms race. The CTBT does not prohibit research on nuclear weapons, including subcritical tests. But it is very difficult, if not impossible, to develop new nuclear weapons without nuclear test explosions. This explains why all Nuclear Weapons States have resisted such a treaty for over four decades. Now that an agreement on the test ban has been reached and Entry-Into-Force is within reach, the effort to establish an international norm against nuclear testing must be actively pursued. Should the CTBT not enter into force, all the enormous effort on the part of governments and NGOs would be lost.

The CTBT will prevent further horrendous health and environmental damage caused by nuclear test explosions once and for all.

The CTBTO (the organization of the CTBT and the Secretariat of the Conferences) is already making great strides to establish a wide-ranging monitoring and verification system, including an International Monitoring System and an International Data Centre, which together with national technical means and ten of thousands of civilian monitoring stations, will detect and deter would-be testers, and therefore, will build confidence between all nations that nuclear testing has stopped.

6. US ratification of the CTBT

The United States of America has the largest stockpile of nuclear weapons but has yet to ratify the CTBT. There is ongoing debate whether or not the US should ratify the CTBT.

The CTBT for the United States is conditioned on:

A: The conduct of a Science Based Stockpile Stewardship Program program to ensure a high level of confidence in the safety and reliability of nuclear weapons in the active stockpile, including the conduct of a broad range of effective and continuing experimental programs.

B: The maintenance of modern nuclear laboratory facilities and programs in theoretical and exploratory nuclear technology which will attract, retain, and ensure the continued application of our human scientific resources to those programs on which continued progress in nuclear technology depends.

C: The maintenance of the basic capability to resume nuclear test activities prohibited by the CTBT should the United States cease to be bound to adhere to this treaty.

D: Continuation of a comprehensive research and development program to improve our treaty monitoring capabilities and operations.

E: The continuing development of a broad range of intelligence gathering and analytical capabilities and operations to ensure accurate and comprehensive information on worldwide nuclear arsenals, nuclear weapons development programs, and related nuclear programs.

F: The understanding that if the President of the United States is informed by the Secretary of Defense and the Secretary of Energy (DOE) -- advised by the Nuclear Weapons Council, the Directors of DOE's nuclear weapons laboratories and the Commander of the U.S. Strategic Command -- that a high level of confidence in the safety or reliability of a nuclear weapon type which the two Secretaries consider to be critical to our nuclear deterrent could no longer be certified, the President, in consultation with Congress, would be prepared to withdraw from the CTBT under the standard "supreme national interests" clause in order to conduct whatever testing might be required.

Proponents of ratification claim that it would:

1. Establish an international norm that would push other nuclear-capable countries like North Korea, Pakistan, and India to sign.
2. Constrain worldwide nuclear proliferation by vastly limiting a country's ability to make nuclear advancements that only testing can ensure.
3. Not compromise US national security because the Science Based Stockpile Stewardship Program serves as a means for maintaining current US nuclear capabilities without physical detonation.

On 13 October 1999, the United States Senate rejected ratification of the CTBT. President Barack Obama stated during his 2008 election campaign that "As president, I will reach out to the Senate to secure the ratification of the CTBT at the earliest practical date."

7. Monitoring of the CTBT

Geophysical and other technologies are used to monitor for compliance with the Treaty: seismology, hydroacoustics, infrasound, and radionuclide monitoring. The technologies are used to monitor the underground, the waters and the atmosphere for any sign of a nuclear explosion. Statistical theories and methods are integral to CTBT monitoring providing confidence in verification

analysis. Once the Treaty enters into force, on site inspection will be provided for where concerns about compliance arise.

The Preparatory Commission for the Comprehensive Test Ban Treaty Organization (CTBTO), an international organization headquartered in Vienna, Austria, was created to build the verification regime, including establishment and provisional operation of the network of monitoring stations, the creation of an international data centre, and development of the On Site Inspection capability. The monitoring network consists of 337 facilities located all over the globe. As of September 2009, close to 250 facilities have been certified. The monitoring stations register data that is transmitted to the international data centre in Vienna for processing and analysis. The data is sent to states that have signed the Treaty.

8. Questions to Consider

- Has your nation signed and ratified both the CTBT and the NPT? If not, why?
- Does your nation believe that both these treaties are just? If not, why?
- What contributions has your nation made towards the cause of nuclear non-proliferation?
- Has your country ever conducted a nuclear explosion? If yes, why?
- What does your country wish to accomplish at the 2010 NPT review conference?
- Does your nation believe that the an arms race could be prevented in the absence of these treaties?
- What can your nation do to assist the IAEA and the UN in the implementation and enforcement of these treaties?
- Do you believe that your country would benefit if the CTBT came into force?
- Does your country wish to add to or amend either of the treaties?

9. References and Links

- Legal Framework: http://www.iaea.org/OurWork/SV/Safeguards/legal.html
- NPT (wikipedia): http://en.wikipedia.org/wiki/Nuclear_Non-Proliferation_Treaty
- NPT Text and review conferences: http://www.reachingcriticalwill.org/legal/npt/nptindex1.html
- Laying the ground for the 2010 review conference: http://www.armscontrol.org/act/2009_6/Johnson and http://www.acronym.org.uk/dd/dd91/91npt.htm
- NTI brief CTBT: http://www.nti.org/e_research/e3_9a.html
- USA and the CTBT: http://www.nti.org/e_research/e3_ctbt_united_states.html