

Honorable Delegates,

I am honored to have the opportunity to welcome you to SRMUN XVI and the General Assembly 1st Committee! My name is Tara Gilliland, and I am currently a first year graduate student at the University of Kansas. I graduated from Berry College in April 2005, and I am currently working on a Master's Degree in Autism and Asperger's Syndrome. While this is the focus of my future career, my second passion is international relations and government.

The General Assembly 1st Committee's mission is to approach disarmament and international security issues using perspectives from across the world, including NGO and regional organization input. Bodies such as the Security Council sometimes receive more media attention about the decisions they make, but GA 1st is a venue where all countries and groups together can address security issues that affect our world. We have selected topics which cover issues in security and disarmament that affect a majority of nations. We have chosen topics at the forefront of security issues which respond to many of the current events across the globe. These topics are:

- I. Combating Bioterrorism: Follow-up to the 5th Review Conference of the BWC
- II. Assessing the Security of Transnational Human and Goods Transportation
- III. Establishing a Nuclear-Free Zone in Region of the Middle East

The background guide we have prepared provides a starting point for your research, and the committee directives should give direction to your preparation. In addition to resources used in the background guides, it is important to examine the reaction of nations to current events encompassed in the topics.

Each delegation is required to submit a position paper. A full explanation on the format for these papers can be found on www.srmun.org, but as a general rule, the paper should be no more than two pages, single spaced in Times New Roman. **The position paper should be sent to Laura Merrell, Deputy-Director General (srmunddg@yahoo.com), no later than October 29 at 11:59 PM.** Please continue to check the SRMUN website for updates regarding the conference and this committee.

Laura and I are resources that are available to you. If you have any questions regarding your work within this committee, please do not hesitate to contact one of us.

Again, on behalf of SRMUN XVI, I welcome you to our conference and wish you all the best of luck. I greatly look forward to meeting and working with you in November.

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History of the General Assembly First Committee

The United Nations is responsible for discussing a wide range of topics, and one of the principle deliberative bodies is the General Assembly (GA). The UN has its roots as an idea originating from discussions between China, the Soviet Union, the United Kingdom and the United States during the autumn of 1944 at Dumbarton Oaks.¹ At this point in history, the global community was in the midst of the Second World War and looking for options to oppose the threats of the Axis Powers. On October 24, 1945, the UN officially came into existence.² The GA was created as a global forum in which all member states of the UN are represented. The General Assembly has six standing committees that specialize in six general topic areas that the GA addresses. The six standing committees are established by Chapter IV, Article 22 of the *UN Charter*³ and, according to Rule 98 of the *Rules of Procedure of the General Assembly*. They deal with the topic areas of: Disarmament & International Security; Economic & Finance; Social, Humanitarian, & Cultural; Special Political & Decolonization; Administrative & Budgetary; and Legal.⁴ The General Assembly First Committee considers questions relating to disarmament and international security.⁵

Throughout the history of its existence, the GA First Committee has played a fundamental role in shaping discussions of issues regarding disarmament and international security. Its importance is underlined by its ability to serve as an international forum for discussions on these issues, some of which have been: the balance of power between the entities of the *Warsaw Pact* and the North Atlantic Treaty Organization; the dissolution of the Cold War; the formation of the *Treaty on the Non-Proliferation of Nuclear Weapons* (NPT); and more recently, the debate over the *Comprehensive Nuclear-Test-Ban Treaty* (CTBT).⁶ The GA First Committee also collaborates closely with other UN System organizations such as the Department for Disarmament Affairs (DDA) and the Conference on Disarmament to receive technical and substantive assistance when debating these topics.⁷

The UN System emphasizes cooperation and the free exchange of information between fellow agencies and bodies to facilitate debate on topics like this which require high technical knowledge. Instead of receiving information from outside organizations, the GA First also provides expert advice, in the form of lectures, to fellows that are part of the United Nations Programme of Fellowship on Disarmament, which was established by the GA in 1978. The aim of the program is “the training and specialization of national officials in more Member States, particularly in the developing countries, and to enable them to participate more effectively in international deliberating and negotiating fora.”⁸ Fellows are selected via nomination from Member States, and the DDA selects approximately 25-28 people to participate in a 10-12 week program that is divided into three segments.⁹ In the third segment, the fellows are given lectures by GA First Committee delegates on current agenda items facing the Committee.¹⁰ By helping to teach these fellows the details and technical information required to understand the field of disarmament and international security, the GA First Committee is also helping more officials become more effective and informed debaters in this topic area.

The GA First Committee is comprised of all 191 Member States of the United Nations, of which each has one vote.¹¹ When the UN was formed, there was great emphasis placed on underlining the concept that each country, no matter how large and powerful or how small and insignificant, had an equally weighted opinion on the decisions the global body rendered. The substantive decisions of the Committee are, similar to the GA Plenary, typically passed by a simple majority of the Member States voting.¹²

¹ “History of the UN.” United Nations. 2000. <http://www.un.org/aboutun/history.htm>

² Ibid.

³ *Charter of the United Nations*. The United Nations. June 26, 1945.

⁴ A/520/Rev.15/Amend.2. *Rules of Procedure of the General Assembly*. United Nations General Assembly.

⁵ *Charter of the United Nations*. The United Nations. June 26, 1945.

⁶ Bhaskar Menon. “Disarmament – a Basic Guide.” United Nations. 2001. <http://www.un.org/spanish/Depts/dda/guide.pdf>

⁷ “Department for Disarmament Affairs.” UN Department for Disarmament Affairs. <http://disarmament2.un.org/dda-activities.htm>

⁸ “Disarmament Fellowship.” United Nations. 2002. <http://disarmament2.un.org/fellowship.htm>

⁹ Ibid.

¹⁰ Ibid.

¹¹ “The General Assembly: what it is, what it does?” United Nations.

<http://www.un.org/geninfo/faq/briefingpapers/briefing2a.htm>

¹² Ibid.

The decisions of the GA First Committee are not legally binding, but they do carry the influence of global opinion and the moral weight of the international community.¹³ While the GA First Committee does not impose the use of force upon nations,¹⁴ it serves as an integral discussion forum for both referring and receiving disarmament and security issues from the Security Council. Consequently, the substantive output and suggestions of the GA First Committee are made in the form of resolutions to the GA and may include recommendations to be passed on to the Security Council.

At its most recent meeting, the 59th Session, the GA First Committee discussed issues which included: reduction of military budgets; general and complete disarmament; the risk of nuclear proliferation in the Middle East; and the strengthening of security in the Mediterranean region.¹⁵ Moreover, the ongoing discussions over the NPT and CTBT, among other topic items, indicate the continuous goal of the GA First Committee to seek solutions for complete disarmament in order to achieve global peace.

¹³ “Background Information.” United Nations. <http://www.un.org/ga/57/about.htm>

¹⁴ Ibid.

¹⁵ A/C.1/59/1. *Allocation of agenda items to the First Committee*. United Nations General Assembly.

I. Combating Bioterrorism: Follow-up to the 5th Review Conference of the BWC

"I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones."

-Albert Einstein

Biological terrorism, or bioterrorism, has been brought to the forefront of the public eye in recent years by not only the September 11, 2001, attacks but also the dissemination of anthrax in American mail and the purported threat that Iraq, among other states, possessed biological weapons. Biological weapons are toxic or bacteriological agents used to intentionally harm or destroy living organisms.¹⁶ The words "toxic" and "toxin" are originally derived from the ancient Greek term "toxikon pharmakon," literally meaning "arrow poison."¹⁷ Although biological weapons have generally not experienced large-scale use throughout history, the isolated events that have occurred so far have shown their potent lethal qualities and unpredictability.¹⁸ The use of biological weapons, nevertheless, is not a new concept in warfare; their use has been employed by militaries throughout history as a constant and lethal method to effectively incapacitate enemy forces.¹⁹

It is important to recognize the differences between biological and chemical weapons. The Biological Weapons Convention defines a biological weapon as "microbial or other biological agents, are naturally occurring microorganisms (virus, bacteria, fungus) or toxins that can cause death or disease in a targeted population."²⁰ Biological weapons are most often bacteria, viruses or poisons which are already present in areas around the world. These organisms become weapons when they are distributed intentionally to large populations in an attempt to harm.²¹ In contrast, chemical weapons are not biologically based elements, but lab created chemicals which cause adverse reactions in humans. The official definition of a chemical weapons is "(a) Toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes; (b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices; (c) Any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b) - Chemical Weapons Convention, Article II (I)."²² These types of weapons include things such as Agent Orange and nerve gas. Therefore, the distinction between biological and chemical weapons is the elements which are used to create the harmful agents, whether they are biologically or chemically based.

Biological weapons are a tremendous threat for a variety of reasons. First, the low production costs involved in creating biological weapons allows for great amounts of the agent to be distributed. Conventional weapons cost around \$800 per casualty to create and manufacture. In contrast, biological weapons cost roughly \$1 per casualty to develop.²³ Second, the nature of the organisms used enables the bacteria or virus to be weaponized easily. One example of this is the bacterium that causes Anthrax, *Bacillus anthracis*. This bacterium is able to be preserved for long periods of time as a dry power, and can also infect victims through air exposure.²⁴ Third, many of the most threatening organisms have a latent period before symptoms appear while a victim is still contagious. The latency period also prevents doctors from being able to diagnose a cause of many diseases. The toxin *aflatoxin* induces liver

¹⁶ Steve Bowman. "Biological Weapons." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 2.

¹⁷ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 18.

¹⁸ Steve Bowman. "Biological Weapons." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 3.

¹⁹ Guy B. Roberts. "Arms Control without Arms Control: The Failure of the Biological Weapons Convention Protocol and a New Paradigm for Fighting the Threat of Biological Weapons." USAF Institute for National Security Studies. March 2003. <http://permanent.access.gpo.gov/websites/dodandmilitaryjournals/www.usafa.af.mil/inss/ocp/ocp49.pdf>

²⁰ "Biological Weapons Convention." UN Department for Disarmament Affairs. 2002. <http://disarmament2.un.org/wmd/bwc/>

²¹ DR Arora, et al. *Biological warfare: Bioterrorism*. Indian J Med Microbiol. 2002.

²² "Glossary of Terms." Global Partnership Program. Foreign Affairs Canada. August 20, 2005. http://www.dfait-maeci.gc.ca/foreign_policy/global_partnership/glossary-en.asp

²³ DR Arora, et al. *Biological warfare: Bioterrorism*. Indian J Med Microbiol. 2002..

²⁴ Ibid.

cancer in patients. However, it is extremely difficult for physicians to determine if and when the cancer was intentionally caused.²⁵

A History of Biological Weapons Use

Polluting the water supplies of enemies was a crucial tactic in early warfare because water was vital to an army's survival.²⁶ It has been suggested that, as early as 600 B.C., the Assyrians used rye ergot, while the Athenian master tactician Solon used the cathartic herb hellebore, or skunk cabbage, to taint the water supplies of their enemies.²⁷ Another very popular method of contaminating enemy water stores was via the use of fomites, which are items of filth and contagion, like decaying carcasses and cadavers.²⁸ In 1346, a Muslim Tatar army led by the De Mussis used fomites as biological weapons when they catapulted their plague-infested corpses over the walls of Kaffa during a siege, initiating the bubonic plague and enabling them to successfully conquer the Crimean city.²⁹ A few centuries later during the French and Indian War, the British documented instances where blankets from a smallpox hospital were distributed to Native Americans in hopes that it would "serve to extirpate [the] execrable race."³⁰ The Native Americans, who were occupying Fort Carillon and suspected by the British to be French allies, soon experienced an epidemic of smallpox, becoming weak enough to allow the British to easily overwhelm and gain control of the fort.³¹ As history progresses, biological weapons and tactics also evolve, becoming more sophisticated in correlation with improvements in technologies.

During the years of World War I, for example, the Germans exploited microbiological techniques to sabotage Allied reserves of livestock and grain with bacteria known to cause anthrax and glanders.³² From 1932 until the end of World War II in 1945, the Japanese operated biological warfare research facilities in Manchuria, located in Northern China, where prisoners of war were purposely infected with pathogens which caused diseases such as anthrax, meningitis, cholera and the bubonic plague.³³ They also bombarded several Chinese cities with biological agents, causing sporadic outbreaks of anthrax and bubonic plague.³⁴ The Japanese further discovered a highly successful method to introduce pathogens into the field via flea spraying.³⁵ The fleas protected the bacterial agents from degradation in the atmosphere, and it was reported that one of the Japanese flea breeding facilities could, at one point, manage to produce around 135 million fleas every 3-4 months.³⁶

Germany also possessed a biological weapons development program during World War II, but a threat never materialized because the entire campaign was poorly coordinated.³⁷ Allied forces, however, became informed of the possibility that the Germans had biological weapons for offensive attacks and thus developed their own bioweapons in response.³⁸ The British worked swiftly to develop an anthrax bomb (N-bomb) to use against human personnel

²⁵ Ibid.

²⁶ British Medical Association. *Biotechnology, weapons and humanity*. Australia: Harwood Academic Publishers. 1999, p. 10.

²⁷ Guy B. Roberts. "Arms Control without Arms Control: The Failure of the Biological Weapons Convention Protocol and a New Paradigm for Fighting the Threat of Biological Weapons." USAF Institute for National Security Studies. March 2003. <http://permanent.access.gpo.gov/websites/dodandmilitaryjournals/www.usafa.af.mil/inss/ocp/ocp49.pdf>.

²⁸ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999.

²⁹ Guy B. Roberts. "Arms Control without Arms Control: The Failure of the Biological Weapons Convention Protocol and a New Paradigm for Fighting the Threat of Biological Weapons." USAF Institute for National Security Studies. March 2003. <http://permanent.access.gpo.gov/websites/dodandmilitaryjournals/www.usafa.af.mil/inss/ocp/ocp49.pdf>

³⁰ British Medical Association. *Biotechnology, weapons and humanity*. Australia: Harwood Academic Publishers. 1999.

³¹ Terry N. Mayer. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 35.

³² Ibid.

³³ Ibid., pp. 20-21.

³⁴ Guy B. Roberts. "Arms Control without Arms Control: The Failure of the Biological Weapons Convention Protocol and a New Paradigm for Fighting the Threat of Biological Weapons." USAF Institute for National Security Studies. March 2003. <http://permanent.access.gpo.gov/websites/dodandmilitaryjournals/www.usafa.af.mil/inss/ocp/ocp49.pdf>

³⁵ Julian Perry Robinson. *The Problem of Chemical and Biological Warfare: The Rise of CB Weapons*. Vol. 1. Stockholm: Almqvist & Wiksell. 1971, p. 115.

³⁶ Ibid.

³⁷ British Medical Association. *Biotechnology, weapons and humanity*. Australia: Harwood Academic Publishers. 1999, p. 17.

³⁸ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 22.

and tested it on Guinard Island, off the Scottish coast.³⁹ Large dispersions of *B. anthracis* and its subsequent infection of livestock on the island caused the British to stop the program due to excessive contamination.⁴⁰ Guinard Island was even considered off-limits and effectively contaminated with active anthrax spores until decontamination was performed in 1986 using formaldehyde and salt water.⁴¹

One of the most ambitious and productive endeavours in biological weapons research was the program instituted by the United States of America in 1942 as a defensive response to statements made in the Soviet Union.⁴² At a pilot plant at its primary research facility in Fort Detrick, Maryland, the Americans filled nearly 5000 bombs with anthrax spores, despite never using any of them.⁴³ The program reached its apex in August 1945 with almost 4000 employees, both military and civilian.⁴⁴ The Korean War served as a period of expansion for biological weapons production as new technologies emerged, such as large-scale fermentation, concentration, storage and weaponization of biological agents.⁴⁵ During the Cold War, however, little documented evidence exists that corroborates accusations that biological weapons were used by either the Soviet Union or United States.⁴⁶ One unsubstantiated allegation by the United States is that, from 1975-1981, Soviet forces widely used tricothecene mycotoxins in Laos, Kampuchea and Afghanistan.⁴⁷ Tricothecene mycotoxins, also known under the code name "Yellow Rain," are inhibitors of protein and DNA synthesis.⁴⁸ Without the production of new proteins, individual cells begin to die, and eventually the entire body is harmed.⁴⁹ Also in the 1970s, a toxic castor bean extract, ricin, was used as a biological weapon by the KGB and Bulgarian secret service for assassinations.⁵⁰ The ricin was filled in 1.7 mm diameter pellets and sealed with wax that melted at body temperature.⁵¹ These pellets were shot out of spring-powered devices disguised to look like umbrellas and, to date, this weapon has been responsible for at least eight credited assassinations.⁵²

Recently, the threat of bioweapons has still concerned national governments and militaries. Prior to the Persian Gulf War, American intelligence sources suggested that Iraq had pursued a very ambitious biological weapons development program.⁵³ As a result, approximately 150,000 American troops were administered a vaccine to prevent against the effects of anthrax, while 8000 additional soldiers received a dose of an investigational botulinum toxoid vaccine.⁵⁴ It would later be revealed after the conflict that Iraq did, in fact, produce and stockpile biological

³⁹ British Medical Association. *Biotechnology, weapons and humanity*. Australia: Harwood Academic Publishers. 1999, p. 19.

⁴⁰ Terry N. Mayer. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 36.

⁴¹ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 22.

⁴² Terry N. Mayer. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 36.

⁴³ Guy B. Roberts. "Arms Control without Arms Control: The Failure of the Biological Weapons Convention Protocol and a New Paradigm for Fighting the Threat of Biological Weapons." USAF Institute for National Security Studies. March 2003. <http://permanent.access.gpo.gov/websites/dodandmilitaryjournals/www.usafa.af.mil/inss/ocp/ocp49.pdf>

⁴⁴ Julian Perry Robinson. *The Problem of Chemical and Biological Warfare: The Rise of CB Weapons*. Vol. 1. Stockholm: Almqvist & Wiksell. 1971, p. 120.

⁴⁵ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 23.

⁴⁶ Terry N. Mayer. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 37.

⁴⁷ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 27.

⁴⁸ Ibid.

⁴⁹ "Facts about Ricin." *Centers For Disease Control and Prevention*. August 20, 2005. <http://www.bt.cdc.gov/agent/ricin/facts.asp>

⁵⁰ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 30.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Terry N. Mayer. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 39.

⁵⁴ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 32.

agents.⁵⁵ The very threat of potent strains of bacteria being used as weapons caused the American military to take bold measures to ensure the ultimate safety of their troops.⁵⁶ That very threat still causes anxiety today, and with massive advances in technology and medical research, there are now an unprecedented number of biological and toxic agents that can be used as lethal vectors against humans.

Additionally, it is still possible for non-state sponsored terrorist cells and other groups to obtain materials and facilities to produce their own stocks of biological weapons. An early example of terrorist use of biological weapons comes from September 1984 when the Rajneeshee cult contaminated salad bars in ten Oregon restaurants with the salmonella poisoning, causing more than 750 people to fall ill.⁵⁷ Following the March 1995 attack on the Tokyo subway using the chemical nerve gas Sarin, it was revealed that the Aum Shinrikyo cult was also responsible for having an emergent biological weapons development program in place and it was conducting research on anthrax, botulinum toxing (botox), and Q fever.⁵⁸ Subsequent reports also revealed that the cult had sent members to Zaire in 1992, most likely to obtain strains of the Ebola virus to be used as a weapon.⁵⁹ It is becoming increasingly difficult to keep up with developing vaccines against the toxic effects of the bacteria used in biological weapons. Therefore, it has become an international aim of scientists and diplomats to prevent biological weapons from being developed and deployed, much like the contention against both nuclear and chemical weapons.

The Biological Weapons Convention History and Current Situation

Following World War I, there were high hopes among the international community to commit to both international cooperation that would lead to an end to conflict and complete disarmament.⁶⁰ In 1925, at an international conference on arms trade supervision, the United States introduced a proposal based on chemical warfare provisions outlined in the *Washington Treaty of 1922*.⁶¹ Poland insisted that provisions be included that would ban biological warfare, and the resulting document was adopted as the *Geneva Protocol of 1925*.⁶² As of June 2000, there were 132 States party to the Protocol, excluding Taiwan but including all five permanent Member States of the UN Security Council, as well as one signatory State.⁶³ This agreement remained the only protocol involving biological weapons until approximately three decades ago, when States and diplomats searched for an equitable solution to augment the *Geneva Protocol of 1925*.⁶⁴ U.S. President Richard M. Nixon provided a catalyst that would fuel the movement to reassess the issue of biological weapons when he ordered the American bioweapons development program to be shut down and dismantled in 1969.⁶⁵ What resulted, in 1972, from years of protracted efforts was the Biological Weapons Convention (BWC).⁶⁶ The BWC, which entered into force on March 26, 1975, is the first multilateral treaty that banned the production and application of an entire category of weapons.⁶⁷ However, it lacked a formal verification process, thus vastly limiting its overall effectiveness.⁶⁸

⁵⁵ Guy B. Roberts. "Arms Control without Arms Control: The Failure of the Biological Weapons Convention Protocol and a New Paradigm for Fighting the Threat of Biological Weapons." USAF Institute for National Security Studies. March 2003. <http://permanent.access.gpo.gov/websites/dodandmilitaryjournals/www.usafa.af.mil/inss/ocp/ocp49.pdf>.

⁵⁶ Terry N. Mayer. "The Biological Weapon: A Poor Nation's Weapon of Mass Destruction." *Biological Weapons: A Primer*. Ed. by Steve Bowman. New York: Novinka Books. 2001, p. 39.

⁵⁷ British Medical Association. *Biotechnology, weapons and humanity*. Australia: Harwood Academic Publishers. 1999, p. 31.

⁵⁸ George W. Christopher, et al. "Biological Warfare: A Historical Perspective." *Biological Weapons: Limiting the Threat*. Ed. by Joshua Lederberg. Cambridge, Massachusetts: The MIT Press. 1999, p. 33.

⁵⁹ Ibid.

⁶⁰ Jozef Goldblat. *The Problem of Chemical and Biological Warfare: CB Disarmament Negotiations, 1920-1970*. Vol. 4. Stockholm: Almqvist & Wiksell. 1971, p. 18.

⁶¹ Ibid.

⁶² British Medical Association. *Biotechnology, weapons and humanity*. Australia: Harwood Academic Publishers. 1999, p. 14.

⁶³ "The 1925 Geneva Protocol." The Harvard Sussex Program on CBW Armament and Arms Limitation. January 31, 2001. <http://fas-www.harvard.edu/~hsp/geneva.html>

⁶⁴ "Biological Weapons Convention." UN Department for Disarmament Affairs. 2002. <http://disarmament2.un.org/wmd/bwc/>

⁶⁵ Christopher J. Davis. "Nuclear Blindness: An Overview of the Biological Weapons Program of the Former Soviet Union and Iraq. July 1, 1999. <http://www.cdc.gov/ncidod/EID/vol5no4/davis.htm>

⁶⁶ Ibid.

⁶⁷ Prepared Statement by Elisha D. Harris before the Subcommittee on International Security, Proliferation and Federal Services. February 12, 2002. Available at: <http://www.cissm.umd.edu/documents/nonprolif.htm>

⁶⁸ "History of the Biological Weapons Convention." NTI. http://www.nti.org/e_research/e3_28b.html

Article XII within the original BWC calls for a review conference to be held every five years, ensuring that the convention is remaining relevant and useful.⁶⁹ To date, there have been five review conferences. The Second Review conference simply encouraged increased data exchanged between the member states, particularly related to outbreaks of infectious diseases, along with the prevalence of those diseases.⁷⁰ An Ad Hoc committee was formed to create the protocol for implementation of the data exchange. The Gulf War and the threats from Saddam Hussein to utilize biological weapons in that war took a front seat to the work done at the Conference.⁷¹ In 1991 at the Third Review Conference of the States Parties to the BWC, the need to fortify the BWC was acknowledged and a group of government experts (VEREX) was formed to analyse verification measures from a technical standpoint.⁷² The Third Conference also expanded the data exchange, which would not include past biological weapon activity in the nation and a list of vaccination producing facilities.

In 1996, the Fourth Review Conference was held and requested that VEREX complete a draft of a monitoring process to be discussed at the Fifth Review Conference in 2001.⁷³ Just four months before the 2001 Review Conference was to begin, however, the Ad Hoc committee failed to agree on a usable verification protocol.⁷⁴ The United States provided an alternative protocol to the Ad Hoc committee's proposal, which included two types of verification measures.⁷⁵ The first included more traditional monitoring practices which would utilize trained inspectors to investigate "suspicious outbreaks" and allegations of biological weapon development. The second measure would use bilateral consultations to alleviate the concerns of member states, with nations opening up their facilities to voluntary inspections.⁷⁶

The BWC was devised in order to ensure that nations do not develop, produce, stockpile or acquire biological weaponry as defined in the convention. Due to the nature of biological weapon agents, however, it is extremely difficult to verify that the member states are complying with the convention they signed. One reason verification is so difficult is that the materials that would be used to develop a biological weapons program are the same materials necessary for a well developed pharmaceutical industry.⁷⁷ Also, nations which employ large vaccination and medical research programs have large amounts of bacteria, virus and toxic agents in order to perform research on possible cures and vaccinations for the diseases.⁷⁸

One of the largest problems facing a verification process is the lack of cooperation from the pharmaceutical and biological research industry.⁷⁹ Large pharmaceutical firms are reluctant to provide information to a verification program due to the competitive nature of the industry and the potential compromising of their own intellectual property.⁸⁰ Several groups of scientists and pharmaceutical firms have issued opinions on the state of a verification regime for the BWC. The Federation of American Scientists is involved in their own Chemical and Biological Weapons Project which currently consists of an advisory panel of experts who are overseeing the Biosecurity Education for Biology Researchers project. This project is designed to provide background on the biological weapons issue, current international laws, information on biological terrorism and biological security, along with a forum for discussion and analysis of research and its implications for human security.⁸¹

Another group of pharmaceutical and biological research experts issued an opinion on the United States proposal for a verification system. This opinion included criticism at the "voluntary searches" supported by the US.⁸² The

⁶⁹ "Biological Weapons Convention." UN Department for Disarmament Affairs. 2002. <http://disarmament2.un.org/wmd/bwc/>

⁷⁰ Chris Dishman. *Difficulty Verifying BW Producers*. Center for Defense Information. August 25, 2005.

⁷¹ "Chemical and Biological Weapons Site." CDI. <http://www.cdi.org/issues/cbw/bwc.html>

⁷² Ibid.

⁷³ Chris Dishman. *Difficulty Verifying BW Producers*. Center for Defense Information. August 25, 2005.

⁷⁴ "Chemical and Biological Weapons Site." CDI. <http://www.cdi.org/issues/cbw/bwc.html>

⁷⁵ The Henry L. Stimson Center. "The Chemical and Biological Weapons Nonproliferation and Response Project. January 21, 2005. <http://www.stimson.org/cbw/pdf/CTS-ExecSumm.pdf>

⁷⁶ Ibid.

⁷⁷ Chris Dishman. *Difficulty Verifying BW Producers*. Center for Defense Information. August 25, 2005.

⁷⁸ "Chemical and Biological Weapons Site." CDI. <http://www.cdi.org/issues/cbw/bwc.html>

⁷⁹ Chris Dishman. *Difficulty Verifying BW Producers*. Center for Defense Information. August 25, 2005.

⁸⁰ Ibid.

⁸¹ "Chemical and Biological Weapons Site." CDI. <http://www.cdi.org/issues/cbw/bwc.html>

⁸² The Henry L. Stimson Center. "The Chemical and Biological Weapons Nonproliferation and Response Project. January 21, 2005. <http://www.stimson.org/cbw/pdf/CTS-ExecSumm.pdf>

experts suggested that the US proposal would be ineffective because organizations could easily clean up any evidence of a biological weapons program before the inspectors arrived. Additionally, with the availability of biological materials being necessary in many settings for vaccinations and research, it would not be difficult to explain away the presence of such materials.⁸³ The group of experts also suggested ways to ensure that the integrity of biological research remains intact while addressing the security concerns of many nations. The industry recommended strict training standards along with accountability to specific personnel at biological research facilities. They assert that an overseeing infrastructure should be in place in order to monitor the training and working of researchers, to certify biological security practices at each facility and to track all projects which involve genetically modified materials.⁸⁴

In spite of the pharmaceutical and biological research groups taking steps to involve their industry in the BWC process, it is not evident that the issues have been duly considered by the BWC member states. The pharmaceutical industry may wish to re-examine its approach, as well. The chemical industry decided to promote the Chemical Weapons Convention and worked with negotiators to create a verification regime that protected their intellectual property as well as promoting safety from potential illicit chemical weapon production. It is imperative that the cooperation of both the member states and the industry conducting research and work in biology be achieved in order to establish an efficient and successful verification protocol.

Conclusion

The now 144 signatories to the Biological Weapons Convention have spent decades to ensure that biological weapons are no longer a threat to the world's citizens. Without a verification regime in place, however, there is no way for the global community to make certain that biological weapons are not being developed, produced and stored. An internationally recognized monitoring system could help prevent the use of bacterium, viruses and toxins as threats and weapons against the civilians and military of nations. After many setbacks, it is necessary for a verification protocol to be devised and implemented so that the BWC principles can be upheld. The view of the pharmaceutical and biological research industry, particularly in developed nations who boast a large and competitive program, is indispensable to the creation of the monitoring system. Without the cooperation from this industry, the protocol developed under the BWC will be very difficult to implement.

Committee Directive

For this topic, delegates will first need to know if their nation is a party to the Biological Weapons Convention as it stands today. It is important to know why your nation is signed on to this convention, or why your nation refrained from becoming a signatory. Delegates should also investigate the status of the pharmaceutical and biological research industry in your country. Is the industry well developed? Are there research facilities at all?

Next, it is essential for delegates to consider a verification regime that would fit into the principles and guidelines of the BWC. The Chemical Weapons Convention may provide some ideas and models for both a successful verification regime and a successful enforcement mechanism. How should biological weapons programs be investigated? How could facilities be monitored for foul play? What are the most efficient strategies to ensure that biological materials necessary for vaccinations and research are not misused as weapons? Should nations only be investigated when they volunteer? Or when there are allegations against them? How should infectious disease outbreaks be handled by the BWC verification program?

II. Assessing the Security of Transnational People and Goods Transportation

"By these operations [roads, rivers, canals, etc.], new channels of communication will be opened between the states; the lines of separation will disappear, the ~~Thomas Jefferson~~ be identified, and their union cemented by new and indissoluble ties."

History

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵

Transportation systems are used in every country across the globe. The systems used in each nation range from extremely developed organizations which include metro tunnels, airports and sea ports to lesser developed systems which are made up of smaller roads and rivers. Some nations boast massive airports, complex highway systems and large public transit structures of buses and subways along with developed cargo shipment avenues such as rivers and seaports. However, many citizens of lesser developed nations comprised mostly of rural communities may only have access to a few unpaved roads.

Regardless of whether a nation's system is extensive or simple, the ability to transport people and goods across space is essential to the development and growth of a nation. These transportation systems are essential to all aspects of a nation and its citizens' well-being. Transit services are used to travel to and from work. Roads and railways are used to move not only businessmen, workers and tourists, but are also essential to the transportation of essential goods within the trade community.

Along with movement within nations, movement between nations is occurring more and more due to the increased affordability of air travel. In the United Kingdom alone, the past thirty years has seen a five hundred percent increase in the number of people using air travel.⁸⁶ Citizens are constantly on the move for both business and leisure alike. Those within the European Union are able to move freely between member nations without being submitted to intense security measures, due to the *Schengen Agreement*.⁸⁷

Because of the attacks on the United States on September 11, 2001, however, the security of transportation systems has been a concern to governments across the globe. The attack on the World Trade Centers was one of the most dramatic uses of transportation systems ever to commit terrorist acts. Air travel has been widely used since the 1950s, consistently growing in popularity. The terrorist organization Al-Qaeda used this system to fly two commercial airplanes into the World Trade Towers and another into the Pentagon, headquarters of the U.S. Department of Defense.

Since September 11th, other horrific events have taken place in the train and metro systems of Madrid, Spain and London, England, on top of increased threats to both people and cargo around the world. The most recent attacks against transportation systems took place in London, England on July 7 and 14, 2005. Four bombs detonated almost simultaneously, three within the metro tubes, and one aboard one of London's famous double-decker buses, during morning rush hour. The terrorists involved in these attacks used the lack of security in subway and public transit systems to kill at least 52 people and wound hundreds more.⁸⁸ In both cases, the devices used were created in "bomb labs."⁸⁹ The terrorists utilized sophisticated cellular technology to detonate the weapons.⁹⁰ The attack involved several conspirators.⁹¹ Currently Investigations have revealed the various labs where the devices were created and have arrested four men to stand trial in relation to the attacks.⁹² These acts have left the millions of other commuters across the globe concerned with the safety of their own modes of transportation.

One of the largest concerns in both transportation of people and commodities is the abolition of internal border control in the European Union (EU). The *Schengen Agreement*, originally signed in 1985 by France, Germany, Belgium, Luxembourg and the Netherlands, lifts all border control along the lines shared by countries in the European Union.⁹³ This allows for the absolute free movement of people and commerce across international borders, including the movement of laborers and tourists.⁹⁴ However, the dissolving of border control has left many concerned with the resulting freedom of movement for terrorists and their materials. In response to the recent attacks in London, France activated the security clause in the Schengen Agreement and reinstated border control

⁸⁶ "The Future of Air Transport." The United Kingdom Department of Transport. August 12, 2005.

http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/divisionhomepage/029650.hcsp

⁸⁷ *Schengen Agreement*. The European Union. 1985.

⁸⁸ "Timeline: London bombing developments." The BBC News. <http://news.bbc.co.uk/1/hi/uk/4694069.stm>

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Ibid.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ Ibid.

procedures at all borders of France.⁹⁵ Italy followed suit by restoring border control on the Austrian and Slovenian borders.⁹⁶

Transportation of Peoples

Every day, more and more people are traveling, whether for business or leisure. Over 5 billion people used the European railways in 2003 alone.⁹⁷ These railway stations are extremely vulnerable because of ease of accessibility to stations, open buildings and track infrastructure which is not easily protected, especially in rural areas.⁹⁸ Elements of track along with trains carrying passengers are at risk to interference from explosives or even biochemical weapons by terrorists, including track, bridges and tunnels. These pieces of the railway system are vulnerable to terrorists due to the openness of the track. Terrorists could easily plant bombs along railway track or bridges without ever being seen or noticed. Devices along rural track would allow terrorist organizations to afflict a huge amount of damage to railway cars and passengers.⁹⁹ As recently as July 12, 2005, an explosive device was discovered along railway track in Ireland.¹⁰⁰ Passengers are also susceptible to exposure to biological weapons because of the close quarters of railway cars.¹⁰¹ Even the digital controls of these widely used human transport systems are susceptible to cyber hijacking.¹⁰² A vast amount of railways administration, including routes and passenger information are monitored and controlled simply with computers. Computer systems ensure that trains continue on the correct tracks and that trains are not at risk for crash. An experienced hacker would easily access the controls of a train and change the route and destination of a passenger or cargo train.¹⁰³

Another area of human transportation exposed to security issues are the public transportation and commuting systems of large cities. Over the years, there have been countless reports of suicide bombings on buses in places such as Israel, Japan and Russia.¹⁰⁴ Europe alone has 238,000 kilometers of metro track, which are vulnerable to attack.¹⁰⁵ Many of the most populous cities of the world are dependent upon underground railway systems to move workers to and from their jobs. New York City and Moscow transit systems each move 9 million people daily.¹⁰⁶ The metro system of Tokyo carries around 6 million workers and tourists daily.¹⁰⁷ Many nations have begun taking small steps to better secure both above and under ground railway systems. Japan has increased patrols and video surveillance in both train stations and rail yards.¹⁰⁸ The use of explosive sniffing dogs has also been added. Tokyo has even removed rubbish bins from subway stations to prevent bombs from being planted out of sight.¹⁰⁹ However, several international organizations are concerned that any new security measures implemented will be limited to activities such as these and neglect some of the more intense forms of security such as metal detectors and other screening equipment.¹¹⁰

Due to the September 11 attacks, air transport security has increase dramatically. All passengers in the United States are subject to metal detector searches along with random individual pat down searches. In airports, there is a constant security presence and public announcements for passengers to be aware of suspicious activities. Carry on and checked luggage being transported are also examined by X-ray technology and another set of random individual searches. But due to the limited number of entrances to an airport and in particular to departure gates, it is efficient

⁹⁵ "France restores border controls." The BBC News. July 13, 2005. <http://news.bbc.co.uk/1/hi/world/europe/4680163.stm>

⁹⁶ Ibid.

⁹⁷ TRANS/SC.2/200/2. *Safety and Security in Rail Transport*. The United Nations Economic Commission for Europe.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ "Bomb Discovered on Railway Line." The BBC News. July 12, 2005.

http://news.bbc.co.uk/1/hi/northern_ireland/4675977.stm

¹⁰¹ "US-VISIT Program." The United States Department of Homeland Security.

<http://www.dhs.gov/dhspublic/display?theme=20&content=4094>

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ "Transit Systems are Frequent Targets." CNN. July 7, 2005. <http://www.cnn.com/2005/US/07/07/schuster.column.transit/>

¹⁰⁵ TRANS/SC.2/200/2. *Safety and Security in Rail Transport*. The United Nations Economic Commission for Europe.

¹⁰⁶ Ibid.

¹⁰⁷ "Japan Steps Up Security Measures." The BBC News. July 18, 2005. <http://news.bbc.co.uk/1/hi/world/asia-pacific/4662767.stm>

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

to screen all airline passengers.¹¹¹ The forms of security useful in air travel situations are extremely difficult to implement in mass transportation systems that are intended to move large numbers of people rapidly. Equipment available to airports are not conducive to the fast pace of efficient transit systems. In addition, the reliability of these transit systems makes it easy for attackers to do reconnaissance and plan attacks.

Transportation of Goods

Transit trade is also of great concern to governments across the globe. Transit trade is “a country’s foreign trade which passes through a third country’s territory prior to reaching its final destination.”¹¹² This type of trade normally assumes the use of the third country’s airport or seaport. The security issues surrounding transit trade are increased by the lack of standardized security measures for all nations involved.¹¹³ In the exporting country, cargo and transportation services are required to adhere to one particular set of regulations and administrative rules, including documentation, cargo searches and transportation laws.¹¹⁴ Then, in each of the intermittent territories, the cargo is likely to be subject to a different set of laws and regulations, only to find that the importing country has a third set of rules.¹¹⁵ Increasing communication and technology uniformly across the globe would ensure that efficient security measures were utilized in all countries that could be affected by attacks on a transport system.¹¹⁶ Doing so would allow businesses and governments to focus more energy on increasing trade and development rather than securing cargos.¹¹⁷ Devising and installing large systems across borders would be extremely costly, however. This would greatly affect many of the lesser developed nations who are attempting to increase their exports, even to the point of exclusion.¹¹⁸ Also, increasing security measures at borders will increase the time necessary to transport shipments. Many argue that increasing security measures at borders would cause businesses to search for faster and cheaper methods of shipment, and therefore adversely affect the railway and truck industries.¹¹⁹

As many governments begin to assess the security needs of cargo transportation, the focus of new measures has shifted to how terrorists may use interventions such as theft and hijacking to damage not only the trade systems of nations, but also the people who work within those systems. One of the largest threats facing the international trade system is the potential shipment of materials for and/or the actual weapons of mass destruction or illicit small arms.¹²⁰

Rising costs are requiring cargo ships to cut crews to a minimum. While this may, at first glance, seem to improve a company’s profits, access by unauthorized people on minimally crewed ships has become a problem in recent years.¹²¹ Piracy continues to be a problem in many parts of the world. Pirates not only steal goods to sell on the black market, but there have been many reports of violence between crews and pirates, including the murder of entire crews from Nigeria and Indonesia.¹²² Currently, according to the International Maritime Bureau (IMB), the most dangerous waters are those of Indonesia with pirates accessing 42 ships in the first half of 2005 and making off with thousands of dollars in cash and cargo.¹²³ The shipping lanes surrounding Iraq and Somalia are also at a great risk as well with crews having been held for ransom, along with the occurrence of theft.¹²⁴ With contact to cargo

¹¹¹ “About TSA.” The Transportation Security Administration. July 11, 2005. <http://www.tsa.gov/public/display?theme=7>

¹¹² TRANS/WP.30/219. *Design and Implementation of Transit Transport Arrangements*. The Economic Commission for Europe.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ TRANS/WP.30/219. *Design and Implementation of Transit Transport Arrangements*. The United Nations Economic Commission for Europe.

¹²⁰ TRADE/2003/22. *Proposal for Standards development in support of Trade Facilitation and Security: a collaborative approach*. The United Nations Economic Commission for Europe

¹²¹ TRANS/SC.3/WP.3/2004/20. *Transport and Security*. The United Nations Economic Commission for Europe.

¹²² “Growing Threats of ‘maritime muggers.’” The BBC News. March 15, 2005. <http://news.bbc.co.uk/1/hi/world/asia-pacific/4350881.stm>

¹²³ Ibid.

¹²⁴ “Sharp Fall in Ship Hijackings.” The BBC News. July 20, 2005. <http://news.bbc.co.uk/1/hi/world/asia-pacific/4698757.stm>

holds being easily available, terrorists could also gain access to the goods and destroy or contaminate them.¹²⁵ Fortunately, the number of piracy incidents has fallen for the first half of 2005 with only 127 hijackings occurring, compared to 182 in the same period in 2004.¹²⁶ Private security companies have offered their services to escort cargo ships to port, especially in the region of the Malacca Strait of Indonesia.¹²⁷ Members of the IMB are concerned with this method of security, however, citing that the presence of armed guards would only increase the total number of arms and essentially create an even more dangerous area.¹²⁸

Current Situation

The United States of America was among the first countries to begin assessing security needs in transportation systems and has taken many steps to remedy the weaknesses it has found. In November 2001, the *Aviation and Transportation Security Act* established the Transportation Security Administration (TSA) to “protect the nation’s transportation systems by ensuring the freedom of movement for people and commerce.”¹²⁹ One of the largest and most well known duties of the TSA is to screen travelers at airports. In addition to air travel, TSA also monitors passenger travel on trains, water vessels, highways and mass transit.¹³⁰ The organization has also introduced new port security initiatives to increase the number of patrol boats in particular harbors, enhance surveillance equipment on bridges and construct new command facilities near harbors.¹³¹

The United States has also introduced major legislation on maritime transportation and port security, including compulsory procedures for all traders and service providers.¹³² The international community also responded to threats to port security through the International Maritime Organization by adopting the *International Ship and Port Facility Security Code* in December 2002.¹³³ This code focuses on risk management and the overall prevention of vulnerable situations as opposed to how to handle terrorist events should they happen.¹³⁴ The 148 stations included in the agreement must first conduct security assessments which have three components. The first is to determine the essential aspects of a particular port, meaning those assets and infrastructures which are essential to the facility which would result in loss of life or significant damage to the environment or trade structure if attacked.¹³⁵ Once these critical areas are ascertained, actual threats to these infrastructures are identified so that security can be prioritized.¹³⁶ Finally, the weaknesses of the facility are assessed in order to understand which areas of a facility are most likely to be attacked. After this assessment, the port authority can effectively manage the risk involved for a facility.¹³⁷

The European Union has addressed the security concerns surrounding the *Schengen Agreement* with a series of measures to ensure that the freedom of movement does not, in fact, endanger security.¹³⁸ Not only are the external borders of the EU more closely guarded by homogenous security policy and a common visa policy, but also by the Schengen Information System which allows EU member states to transmit alerts to other border control stations about security threats and other shared information.¹³⁹ The agreement also includes a security clause which allows for countries to re-establish border controls in case of national security threats.¹⁴⁰

¹²⁵TRANS/SC.3/WP.3/2004/20. *Transport and Security*. The United Nations Economic Commission for Europe.

¹²⁶ “Sharp Fall in Ship Hijackings.” The BBC News. July 20, 2005. <http://news.bbc.co.uk/1/hi/world/asia-pacific/4698757.stm>

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ “About TSA.” The Transportation Security Administration. July 11, 2005. <http://www.tsa.gov/public/display?theme=7>

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² Ibid.

¹³³ UNCTAD/RMT/2003. *Review of Maritime Transport*. The United Nations Conference on Trade and Development. http://www.eclac.cl/transporte/perfil/UNCTAD_Review_of_Maritime_Transport_2003_en.pdf

¹³⁴ Ibid.

¹³⁵ “The International Ship and Port Security Code.” *International Maritime Organization*. www.imo.org. July 14, 2005.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ TRANS/SC.2/200/2. *Safety and Security in Rail transport*. The United Nations Economic Commission for Europe.

¹³⁹ Ibid.

¹⁴⁰ *Schengen Agreement*. European Union. 1985.

As mentioned before, many of the security measures proposed in recent years have significant economic costs attached to them. Unilateral approaches could increase transaction and transportation costs across the globe and adversely affect developing nations.¹⁴¹ Implementation of enhanced security would be costly, and a heavy burden to developing countries. Therefore, while the augmentation of current security measures is essential, developing nations must be kept in consideration. Without the execution of such required measures, any nation could be kept from participation in the global market, pushing developing countries farther from their development goals.¹⁴²

Non-governmental organizations such as the World Customs Organization (WCO) and the International Maritime Organization (IMO) encourage nations to create and unanimously accept standardized security initiatives. These initiatives should be established throughout the supply chain to ensure that cargo is secure at each step.¹⁴³ During the July 2005 Trade Facilitation conference in Bangkok, Thailand, the Deputy Secretary General of the WCO called for the streamlining of customs checks to only one stop at each border. This would make the transfer of goods and people across international borders much easier for both companies and consumers.¹⁴⁴ The IMO was the leading organization in creating the previously mentioned *International Ship and Port Facility Security Code* to standardize port security.¹⁴⁵ However, many countries have come to see that unilateral measures are essential in order to protect national interests from the increased security threats.¹⁴⁶

Conclusion

The transportation systems of the world are essential to the everyday workings of citizens. Subways carry people to and from work, airplanes and trains move people and cargo over larger distances, and ships transport even more international trade items. When any of these systems are attacked, in any country, all governments and people are affected in some way. “With the interdependence of the world's economies today, the chain reaction that such an act may trigger will have a major negative impact on trade and the global economy - we will all be victims.”¹⁴⁷ It is essential for the global community to address transportation security issues quickly and effectively.

Committee Directive

To address this topic, delegates will need to first assess the transportation security threats towards their own nation. Have any attacks taken place? What areas of transportation are vulnerable to attack? Delegates should also examine how their nation and region address border control, both in goods and people, and how effective these policies are in protecting the people and cargo crossing these borders. Have there been any incidents that could/did cause a security threat involving means of transportation?

After assessing the threats, it is necessary to devise innovative security procedures to address the threats affecting your nation and region. An analysis of both possible national, regional and international controls is needed. What are the advantages and disadvantages of unified security measures along each level of implementation? How can you provide security and peace-of-mind to your citizens, while also ensuring that the transportation methods used are as efficient as possible?

Lastly, how will these new security measures be implemented? How can these measures be kept cost effective? What financial obligations will be required for all nations? How can the new security procedures and equipment be funded? Delegates should address their solutions by each of the different aspects of transportation by type of transportation and cargo as well as types of threats.

¹⁴¹ Ibid.

¹⁴² Ibid.

¹⁴³ TRADE/2003/22. *Proposal for Standards development in support of Trade Facilitation and Security: a collaborative approach*. The United Nations Economic Commission for Europe.

¹⁴⁴ “WCO Encourages One-Step Service at Borders.” World Customs Organization. August 9, 2005. <http://www.wcoomd.org/ie/En/Press/press.html>

¹⁴⁵ “The International Ship and Port Security Code.” *International Maritime Organization*. www.imo.org.

¹⁴⁶ TRANS/WP.30/2004/22. *International Convention on the Harmonization of Frontier Controls of Goods, 1982, preparation of new Annex on security issues*. The United Nations Economic Commission for Europe.

¹⁴⁷ “ISPS FAQ.” *International Maritime Organization*. July 14, 2005. www.imo.org

III. Establishing a Nuclear-Weapon-Free Zone in the Region of the Middle East

Despite its storied renown of historically important cultural and art histories, the Middle East has long been a tense and sensitive region of the world. Land disputes between warring factions and tribes have been a constant mainstay throughout the millennia, with many lives lost and much blood shed. The region, though, is globally important because of its large natural stores of unrefined oil that reside below the sands of its deserts. Neighbouring and outside countries have shown great interest in establishing peace between the nations of the region. Notwithstanding, nuclear weapons remain potent and significant threats to not only the safety and welfare of Middle Eastern nations but, most notably, the stability within the region. With the onset and passing of the Persian Gulf War in 1991, Iraq's nuclear weapons development program was uncovered while it was suggested that Israel had a larger nuclear arsenal than previously suspected.¹⁴⁸ In addition, it was discovered that Algeria was pursuing nuclear capabilities along with Iran and Syria.¹⁴⁹ Many experts feel that, considering the current volatility of the region, an influx of nuclear arsenals in the Middle East may cause other regional countries to follow suit, presenting unprecedented nuclear threats to the world.

The threat of nuclear weapons has been a constant fear throughout the world since its initial uses against Japan during World War II. The idea of nuclear non-proliferation became a recognised international objective after the public witnessed the immense power and destruction of the atomic bombs.¹⁵⁰ Complete and absolute disarmament has always been one of the original goals of the United Nations; the first Resolution passed by the General Assembly in January 1946 called for the elimination of nuclear weapons from national arsenals and was adopted without opposition.¹⁵¹ Subsequent attempts at nuclear disarmament such as the American Acheson-Lilienthal-Baruch plan or the Soviet Union's June 1946 plan to ban production and use of nuclear weapons were ultimately unsuccessful.¹⁵²

While efforts at a complete abolition of nuclear weapons have not been successful thus far, several intermediate steps have occurred. Although no nuclear weapon has been used in war for over a half century, the five current nuclear weapons States face justifying their weapons in terms of national security while denying aspiring nuclear States those weapons for the purpose of global security.¹⁵³ That paradigm has been a primary reason nuclear disarmament has not yet been achieved. Nuclear non-proliferation, though, can be divided into four broad categories of policy: restraint, collective defence, technology transfer restriction and the agreements and instruments that make up the international non-proliferation regime.¹⁵⁴ Two large efforts to achieve nuclear disarmament and non-proliferation came in the form of treaties: the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) (1968) and the Comprehensive Nuclear-Test-Ban Treaty (CTBT) (1993). Those two documents, as well as nuclear-free zone agreements, fall under the last category of nuclear non-proliferation policy as aforementioned.

A Short History of Nuclear Arms Control

Nuclear Non-Proliferation Treaty

¹⁴⁸ Leonard S. Spector. "Nuclear Proliferation in the Middle East: The Next Chapter Begins." *Non-Conventional-Weapons Proliferation in the Middle East: Tackling the Spread of Nuclear, Chemical, and Biological Capabilities*. Eds. Efraim Karsh, et al. Oxford: Clarendon Press. 1993, p. 135.

¹⁴⁹ Ibid.

¹⁵⁰ A. F. Mullins, Jr. "The Logic of Nuclear Proliferation: A Look at the Persian Gulf States." *Pulling Back from the Nuclear Brink: Reducing and Countering Nuclear Threats*. Eds. Barry R. Schneider & William L. Dowdy. London: Frank Cass. 1998, p. 157.

¹⁵¹ "The United Nations and Disarmament 1945-1970." United Nations. 1970, pp. 11-12.

¹⁵² Jack Steinberger, et al. "A Nuclear-Weapon-Free World: Is It Desirable? Is It Necessary?" *A Nuclear-Weapon-Free World: Desirable? Feasible?* Eds. Joseph Rotblat, et al. Boulder: Westview Press. 1993, p. 52.

¹⁵³ Ramesh Thakur. "Stepping Stones to a Nuclear-Weapon-Free World." *Nuclear Weapons-Free Zones*. Ed. Ramesh Thakur. London: Macmillan Press. 1998, p. 3.

¹⁵⁴ A. F. Mullins, Jr. "The Logic of Nuclear Proliferation: A Look at the Persian Gulf States." *Pulling Back from the Nuclear Brink: Reducing and Countering Nuclear Threats*. Eds. Barry R. Schneider & William L. Dowdy. London: Frank Cass. 1998, p. 158.

The NPT opened for signature on July 1, 1968, and entered into force nearly two years later on March 5, 1970, when the United States deposited their signature of ratification.¹⁵⁵ Its overall goal is to prevent the dissemination of nuclear weapons and technology, promote the peaceful use of atomic energy and advance the goal of achieving complete nuclear disarmament.¹⁵⁶

The NPT was designed to accomplish two things: Allow the development of peaceful uses of atomic energy for research, power generation and medicine; and eventually eliminate all nuclear weapons. The negotiators of the NPT decided that the best way to accomplish the second goal was to lock in the existing nuclear powers at the time, China, France, the Soviet Union, the UK and the US, while legally binding all other signatories of the NPT to not develop nuclear weapons. The reward for NPT signatories was support, research and materials to enable them to pursue both the medical and the energy generation possibilities of the atom.

Comprehensive Nuclear-Test-Ban Treaty

The idea for a nuclear test-ban has been around for decades and, although the Conference on Disarmament (CD) created a subsidiary body to debate the creation of one in 1982, disagreements over a mandate for the body created an impasse in discussions.¹⁵⁷ It was not until 1994 that the terms for a nuclear-test-ban treaty would begin to be negotiated, but it would be two more years, in June 1996, before a draft could be presented by the Ad Hoc Committee to the CD.¹⁵⁸ In August of 1996, Australia asked the General Assembly to reconsider the previous topic of a comprehensive test-ban treaty, and it submitted a draft CTBT, identical to the draft presented to the CD.¹⁵⁹ A month later, the CTBT was adopted by the General Assembly by *Resolution A/RES/50/245*.¹⁶⁰ The CTBT was opened for signature in 1996 and will enter into force once all forty-four States listed in Annex 2 sign and ratify the document.¹⁶¹

History of Nuclear Weapons-Free Zones

Nuclear-free zones (NFZs), or nuclear-weapons-free zones, are sectors where it is illegal to possess, test, deploy or use nuclear weapons of any kind.¹⁶² They are highly regarded as potential answers to the nuclear impasse that the international community faces because they are founded on the premise that there is a direct correlation between denuclearisation and peace.¹⁶³ They are legal apparatuses for nuclear non-proliferation, while serving as political springboards towards nuclear disarmament.¹⁶⁴ Article VII of the NPT gives regions the authority to write treaties to establish NFZs.¹⁶⁵ NFZs have proven successful at ensuring regional security from nuclear weapons in the regions of Latin America, Southeast Asia, Africa and the South Pacific.¹⁶⁶ The four aforementioned NFZs were established by the signings of the Treaty of Tlatelolco (1967), the Treaty of Bangkok (1995), the Treaty of Pelindaba (1996),

¹⁵⁵ "Treaty on the Non-Proliferation of Nuclear Weapons." United Nations Mission to International Organisations in Vienna. <http://www.usun-vienna.rpo.at/npt1.htm>

¹⁵⁶ "Treaty on the Non-Proliferation of Nuclear Weapons (NPT)." UN Department for Disarmament Affairs. 2002. <http://disarmament2.un.org/wmd/npt/index.html>

¹⁵⁷ "Nuclear Testing." United States Department of State. <http://usinfo.state.gov/products/pubs/archive/armsctrl/pt7.htm>

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ A/45/435. *Establishment of a Nuclear-Weapon-Free Zone in the Region of the Middle East: Study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East*. United Nations General Assembly

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¹⁶² Leonard S. Spector. "Nuclear Proliferation in the Middle East: The Next Chapter Begins." *Non-Conventional-Weapons Proliferation in the Middle East: Tackling the Spread of Nuclear, Chemical, and Biological Capabilities*. Eds. Efraim Karsh, et al. Oxford: Clarendon Press. 1993, p. 7.

¹⁶³ Adam Shapiro. "Nuclear-Weapons-Free Zones: The Solution to Nuclear Disarmament?" UN Chronicle. August 2004. http://www.un.org/Pubs/chronicle/2004/webArticles/081204_nwzf.asp

¹⁶⁴ Ramesh Thakur. "Stepping Stones to a Nuclear-Weapon-Free World." *Nuclear Weapons-Free Zones*. Ed. Ramesh Thakur. London: Macmillan Press. 1998, p.

¹⁶⁵ "Treaty on the Non-Proliferation of Nuclear Weapons (NPT)." UN Department for Disarmament Affairs. 2002. <http://disarmament2.un.org/wmd/npt/index.html>

¹⁶⁶ Ramesh Thakur. "Stepping Stones to a Nuclear-Weapon-Free World." *Nuclear Weapons-Free Zones*. Ed. Ramesh Thakur. London: Macmillan Press. 1998, pp. 4-5.

and the Rarotonga Treaty (1985), respectively.¹⁶⁷ In addition to inhabited regions of the world, Antarctica, outer space, the moon and the ocean floor have been declared nuclear-free zones by the Antarctic Treaty (1959), the Outer Space Treaty (1967), the Moon Agreement (1979), and the Seabed Treaty (1971), respectively.¹⁶⁸

In addition to all of the previously mentioned nuclear-free zones, there are also a couple of individual States who have declared themselves, independently, as nuclear-free: Austria in 1999 and Mongolia in 2000.¹⁶⁹ The total area that current NFZ agreements have effectively denuclearised currently stands at more than half of the Earth's surface, including nearly all of the Southern Hemisphere.¹⁷⁰

The idea of a Middle Eastern NFZ is not a new idea. Egypt and Iran proposed this notion in 1974 to the UN General Assembly, which included the item in its agenda entitled "Establishment of a nuclear-weapon-free zone in the Middle East."¹⁷¹ Israel followed this proposal to the UN with another version of their own a year later in 1975.¹⁷² Every General Assembly session since 1974 has adopted an annual resolution on establishing an NFZ in the Middle East, including *Resolution A/RES/35/147* which was passed without a vote on December 12, 1980.¹⁷³ No significant progress was made in proceeding years regarding the establishment of a Middle Eastern NFZ until Egypt made a new proposal in 1988 at the fifteenth special session of the General Assembly.¹⁷⁴ Egypt's proposal contained a three-pronged approach which 1) called for all regional states and non-regional nuclear-weapon states to declare they would not introduce nuclear weapons into the Middle East; 2) authorized the Secretary-General to appoint a group of experts to work with regional states to formulate a draft treaty that would establish a NFZ in the Middle East; and 3) invited the International Atomic Energy Agency (IAEA) to prepare a study and submit recommendations related to verification and inspection measures in conjunction to when the Middle Eastern NFZ was created.¹⁷⁵ No action was taken on Egypt's proposal due to the inconclusive work of the third session, so Egypt presented its proposal to two other fora, the IAEA and the General Assembly's regular session.¹⁷⁶

The IAEA General Conference adopted Egypt's proposal in September 1988 as *Resolution GC(XXXII)/RES/487*, which requested that the IAEA Director-General prepare a study on applying IAEA safeguards in the Middle East, while taking into account the Agency's prior experience in applying its safeguards.¹⁷⁷ The study was released in 1989 as GC(XXXIII)/887.¹⁷⁸

Current Situation: Obstacles to Overcome

There are three interconnected issues in the Middle East that are preventing the creation of a nuclear weapons free zone. The first is that one country in the region possesses a weapon. The second is that there is strong evidence to support the widely held suspicion that other countries in the region have ongoing weapons programs and are actively

¹⁶⁷ Ibid.

¹⁶⁸ Ramesh Thakur. "Stepping Stones to a Nuclear-Weapon-Free World." *Nuclear Weapons-Free Zones*. Ed. Ramesh Thakur. London: Macmillan Press. 1998, p. 4.

¹⁶⁹ Adam Shapiro. "Nuclear-Weapons-Free Zones: The Solution to Nuclear Disarmament?" UN Chronicle. August 2004. http://www.un.org/Pubs/chronicle/2004/webArticles/081204_nwzf.asp

¹⁷⁰ Michael Hamel-Green. "The UN Role in Facilitating Regional Nuclear-Free and Weapons of Mass Destruction-Free Zones." *Between Sovereignty and Global Governance: The United Nations, the State and Civil Society*. Eds. Albert J. Paolini, et al. London: Macmillan Press. 1998, p. 118.

¹⁷¹ A/45/435. *Establishment of a Nuclear-Weapon-Free Zone in the Region of the Middle East: Study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East*. United Nations General Assembly.

¹⁷² Avner Cohen. "The Nuclear Issue in the Middle East in a New World Order." *Middle Eastern Security: Prospects for an Arms Control Regime*. Eds. Efraim Inbar & Shmuel Sandler. London: Frank Cass. 1995, p. 55.

¹⁷³ A/45/435. *Establishment of a Nuclear-Weapon-Free Zone in the Region of the Middle East: Study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East*. United Nations General Assembly.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ GC(XXXII)/RES/487. *Israeli Nuclear Capabilities and Threat*. International Atomic Energy Agency General Conference.

¹⁷⁸ A/45/435. *Establishment of a Nuclear-Weapon-Free Zone in the Region of the Middle East: Study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East*. United Nations General Assembly.

seeking to develop nuclear weapons. The third issue is that there is an unresolved conflict in the region that manifests itself in several ways and threatens to turn into armed conflict at any time that could result in the elimination of a country. When viewing the obstacles to a nuclear free zone, all three of these obstacles must be viewed as interlocking and interconnected. One element can not be solved without at least addressing, if not resolving, the other two.

The first issue is that Israel is the sole possessor of nuclear weapons in the region. Israel has never acknowledged the fact that it has nuclear weapons, but is known to possess multiple nuclear weapons and may possess as many as 200.¹⁷⁹ Israel also has multiple delivery systems including a modern air force with nuclear capable planes and the nuclear capable Jericho-2 missile system with a range of 4000 km.¹⁸⁰ Israel may have even developed the capability of launching cruise missiles with nuclear missiles from submarines.¹⁸¹ It is believed that during both the 1967 and 1973 wars Israel went on nuclear alert and armed nuclear weapons to be deployed.¹⁸²

The second issue is that other countries are actively attempting to develop nuclear weapons. Iran has reprocessed uranium. Technically, this is legal under the terms of NPT, but Iran was found by the IAEA Director-General to have violated the NPT by not reporting the import of limited amounts of uranium, the transfer of that uranium, the reprocessing of that uranium and the existence of nuclear facilities that are required to be disclosed under the IAEA.¹⁸³ Though there is a theoretical usage of enriched uranium for energy purposes, the reprocessing is highly suspicious because Iran did not disclose it. Further, Iran has been guaranteed a supply of nuclear fuel for its nuclear power plants. Finally, reprocessing is an essential step in the production of nuclear weapons. There are also historic instances of other countries in the region attempting to develop nuclear weapons. In 1981, Israeli planes bombed and destroyed the Osirak nuclear facility in Iraq which was believed to be a research center for the development of nuclear weapons.¹⁸⁴ Evidence gathered after the first Gulf War indicated that Iraq was anywhere from 6 months to 3 years away from producing a workable nuclear weapon.¹⁸⁵

The third issue is the underlying conflict in the region. Several countries in the region still do not recognize the state of Israel. Israel's Arab neighbors invaded in 1948, 1967 and 1973. Several Palestinian groups maintain a campaign of terror against Israel in an effort to establish a Palestinian state. Many of these groups are funded either directly by other countries in the region or privately by citizens from other countries in the region.

Each of these issues in and of themselves present a difficult challenge to creating a nuclear weapons free zone in the Middle East, but the complicating factor is that all three are issues and all three are interconnected.

Israel views its nuclear arsenal as the ultimate guarantee of its existence. There is the possibility of open conventional war, but any attempt to overwhelm and destroy the Israeli state is unlikely given the fact that Israel would launch a nuclear attack that would devastate any attacker. Israel will therefore be extremely reluctant to relinquish its nuclear weapons as long as the underlying conflict continues.

Other countries will continue to pursue nuclear weapons in the region in an effort to counterbalance Israel. The existence of Israel's nuclear arsenal gives it great political and military leverage in the region. If another country in the region acquired a sufficient number of nuclear weapons, it would partially nullify this leverage because Israel could be threatened with nuclear devastation. Finally, the conflict is made more intractable because Israel has greater leverage due to its nuclear arsenal and the fact that there is even greater resentment for Israel because it is a nuclear power. One final complicating factor in the situation is that the United States holds a veto in the Security Council and has shown a historical willingness to use it against any resolution that it felt potentially harmed Israel.

¹⁷⁹ "Nuclear Weapons--Israel." Federation of American Scientists. August 17, 2000. <http://www.fas.org/nuke/guide/israel/nuke/>

¹⁸⁰ "Missiles--Israel." Federation of American Scientists. <http://www.fas.org/nuke/guide/israel/missile/index.html>

¹⁸¹ "Submarines--Israel." Federation of American Scientists. June 19, 2000.

<http://www.fas.org/nuke/guide/israel/sub/index.html>

¹⁸² "Nuclear Weapons--Israel." Federation of American Scientists. August 17, 2000. <http://www.fas.org/nuke/guide/israel/nuke/>

¹⁸³ *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*. International Atomic Energy Agency.

June 6, 2003. Available at: <http://www.fas.org/nuke/guide/iran/iaea0603.html>

¹⁸⁴ "Iraqi Nuclear Weapons--Iraqi Special Weapons." Federation of American Scientists. November 3, 1998.

<http://www.fas.org/nuke/guide/iraq/nuke/program.htm>

¹⁸⁵ Ibid.

Conclusion

Any attempt to create a nuclear weapons free zone in the Middle East is complicated by three challenging issues that are all interconnected. Creating a nuclear weapons free zone that is effective could be a major step towards finding a long-term sustainable peace in the Middle East, but it is in many ways dependant on finding a resolution to the underlying conflicts in the region.

The issue is definitely an important one because the Middle East has shown a history of conflict, and a conventional war could transition to a nuclear one. Theoretically decision makers would act rationally and prevent any conflict from reaching the threshold where it might become nuclear, but the conflicts in the Middle East retain many irrational elements such as anger and revenge that might lead to one or more leaders not showing the necessary restraint. Additionally, non-state actors in the region could play a role that pushes leaders to that threshold. Terrorism is an issue in the region, and it is theoretically possible that a terrorist group could launch an attack that could spark a conventional war that could, again, lead to a nuclear attack.

Committee Directive

While a nuclear weapons free zone in the Middle East has linkages to other issues such as the long standing conflict in the region and terrorism, remember to stay focused on the issue of disarmament in the region and specifically the creation of a nuclear weapons free zone. What is your country's assessment of the reason for the failure to implement a nuclear weapons free zone? What is your country's relationship vis-à-vis Israel, the Arab countries in the region and Iran? Does your country possess a nuclear weapon? Is your country protected by an agreement with a nuclear power? Is your country threatened by the nuclear arsenal of another country in its region? Does your country believe that nuclear disarmament should be pursued?