Forum:	Disarmament and International Security Committee
Issue:	Prohibition of the development, production and stockpiling of biological weapons
Student Officer:	Ioulia Sampani
Position:	Co-Chair

PERSONAL INTRODUCTION

Dear Delegates,

My name is Ioulia Sampani and it is my honor to serve as the Co-Chair of the Disarmament and International Security Committee in this year's Platon School Model United Nations. Having been an active member of my school's MUN Club for four years I have been provided with the chance to participate in 14 conferences. PSMUN 2017 will be my 4th PSMUN and my 15th conference overall. This will also be my fifth time chairing.

Having participated as a delegate in almost every committee I am definitely going to admit that the Disarmament and International Security Committee is my most beloved one! This year's agenda topics are very intriguing but most importantly they are demanding. Therefore, I would like to urge you all to make extra attempts to research after reading the study guides. This will help you come more prepared and confident to the conference.

My role as the Co-Chair of the Disarmament and International Security Committee is to move you to do your research, form your resolutions and generally understand the topic. This is what I will try to achieve via this study guide. Accordingly, I really hope that this study guide will prove helpful to you. As mentioned above "Prohibition of the development, production and stockpiling of biological weapons" is a really demanding topic with lots of aspects to focus on, hence I would like to invite you not to fully rely on this study guide. You are sincerely suggested to research more on the topic, especially to form your ideas concerning your country's policy.

In any case, if you need any help with your preparation or if you have any queries concerning the topic do not hesitate to contact me on my e-mail: jouliet13@gmail.com.

I'm looking forward to meeting you in the conference and I hope we will have an excellent conference consisting of fruitful debates and effective resolutions.

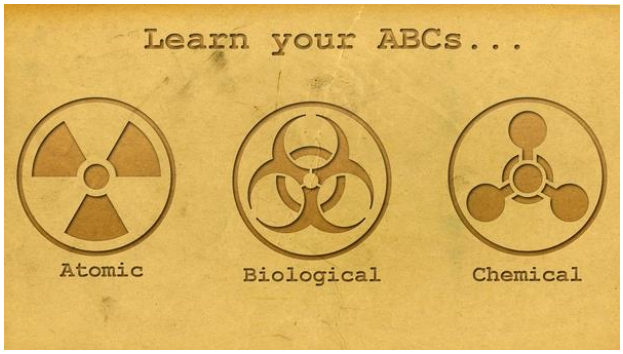
Come prepared!

Best Regards,

Ioulia Sampani

INTRODUCING TOPIC

Biological weapons are very advanced contraptions created by the combination of different types of genetically modified viruses and bacteria. The use of such infectious agents aiming at the spread of diseases or even the death of humans, plants, animals and any living organism is called Biological Warfare and is considered to be an act of war. Biological weapons are living organisms introducing bacteria or viruses within their host victims, while those hosting environments are not prepared to defend themselves from the invader. It is of vital importance to mention that biological warfare together with nuclear and chemical warfare make up the NBC, an acronym used by the military to define the Weapons of Mass Destruction (WMDs). However, though none of these weapons were conventionally created to be used in order to harm societies and their environments as a whole they are unfortunately constantly being used both by leaders of states as well as by individuals to threaten single individuals, groups of people or even entire populations in times of conflict or war. In the worst case scenario, the illegal use of such weapons can also be considered bioterrorism. To conclude, as far as the relationship between chemical and biological weapons is concerned, they are both weapons "invading" other organisms, but chemical weapons are mostly referred to as gases which cause massive burning or suffocate the victim, while on the other hand biological weapons are slower-acting, spreading diseases over populations before the first signs appear. However, both types have been addressed by the same convention, namely the Biological and Chemical Convention.



KEY TERMS

Biological weapons

"A biological pathogen or toxin, such as the anthrax bacterium or the smallpox virus, that has been prepared for release on the battlefield or within a civilian population in sufficient concentration to cause widespread illness or death" (The Free Dictionary).

Bioterrorism

"Terrorist acts involving the use of harmful agents and products of biological origin, as disease-producing microorganisms or toxins" (Dictionary.com.)

Biological warfare

"Warfare that makes use of bacteria, viruses, toxins, etc. to disable or destroy people, domestic animals and food crops" (Dictionary.com).

Stockpile

"A supply stored for future use, usually carefully accrued and maintained" (The Free Dictionary).

HISTORICAL INFORMATION

History of biological weapons (BW)

Biological Weapons are considered to be modern warfare weapons used by many countries and individuals to threaten their enemies. However, their history starts hundreds of years ago when the Assyrians, the Roman Armies and the Greeks used them to fight their enemies in the middle of the 6th century. They were also later used by the Aztecs and Incas to defend themselves and their history goes on and on with many populations being in possession of Biological Weapons including the Mongols, Russians, Swedes, French, Indians, British and many others.

The next major appearance of biological weapons was during World War I (1912-1918) when German agents started creating biological weapons in order to provide their allies. Several incidents followed that action including the infection of a Romanian sheep for export to Russia. Japan also tried to benefit from biological weapons and in 1937 they introduced Unit 731, a program focusing on research concerning biological weapons' development which was located in Harbin, Manchuria. As a result, Japanese started using the biological weapons by poisoning a Soviet water supply in 1939 and by attacking China and Manchuria in 1940.

At the same time, in 1945 another global power invested in the development of biological weapons. The United States of America began a biological weapon research program using Camp Detrick, Frederick, Maryland as the main research facility. Following the creation of those programs many tests took place as well. In 1951 biological simulants were sprayed over San Francisco as a result of such a test and in 1966 the United States released harmless biological agents into the subway system. It was later in 1969 when President Nixon decided to dismantle unilaterally the US biological weapons program and one year later he announced the complete dismantlement of it.

What is more, a lot of accidents have taken place due to the stockpiling of biological weapons with the most important one being the outbreak of pulmonary anthrax in Sverdlovsk, Soviet Union in 1979. This outbreak raised a lot of questions on the causes of such a disaster and who was responsible for it leading to the Russian president Boris Yeltsin acknowledging that the cause was the release of anthrax from a Soviet military microbiological facility.

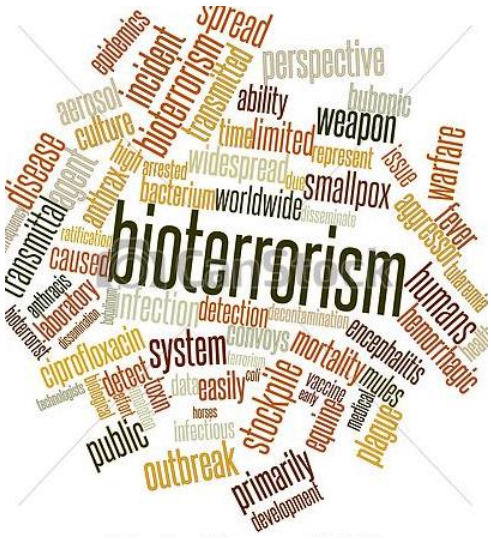
Structure and sub-categories of biological weapons

Being aware of the long history of biological weapons, we can now analyze the different types of them. Biological warfare agents differ as far as their stability, length of incubation, the organisms and toxins used to create the weapon, infectiousness and the way to be treated with vaccines and medicines are concerned. Taking into consideration those differences biological weapons can be divided in five categories. However, not all of them are necessarily weaponized, based on their ingredients and stability. The five categories are the following:

- Bacteria: dangerous single-cell organisms leading to diseases, including but not limited to: anthrax, tularemia, plague and brucellosis.
- Rickettsia: Typhus and Q fever are two of the main diseases that can be caused by Rickettsia. Rickettsia consist of microorganisms that resemble bacteria, but are mainly intracellular parasites reproducing inside cells.
- Viruses: They are also intracellular parasites, 1/1000 the size of bacteria. The viruses can be used to spread diseases like the Venezuelan equine encephalitis.
- Fungi: They are agents mainly used to attack crops; they are pathogen and can cause diseases such as cereal rust, potato blight and rice blast.
- Toxins: Poisons extracted from animals such as spiders, snakes and insects and other organisms to harm other living organisms. An example of toxins is the ricin, which comes from the castor bean.

Bioterrorism

As mentioned above, when biological weapons are used illegally to harm other human beings, this action is considered to be bioterrorism. Biological weapons have already been used in the past by terrorist organizations. The first known case involving biological weapons took place simultaneously in 1984 in Oregon, USA and in a nearby town named Antelope, where a Native American Tribe, the “Ranjeeshies”, settled. The “Ranjeeshies” wishing to win the elections of the Wasco County and to gain political control of the region used a salmonella virus to poison the food of the population to ensure that they would be the majority. This attack killed 751 people and was the one and only bioterrorist attack taking place in the United States. A few years later another bioterrorist attack took place in Japan. This attack was organized by a religious fundamentalist terrorist organization called AUM Shrinrikyo (“AUM Supreme Truth”), which used biological weapons to attack Japan in the period between April 1990 and July 1995.



Another quite infamous terrorist group in possession of biological weapons is Al-Qaeda. They specifically started being interested in biological weapons in 2001-2002, when they operated an anthrax attack in Afghanistan leading to them being overrun by the United States and Afghan Northern Alliance forces. In 2001 several letters consisting of biological agents were sent to US's politicians, killing five of them and sending another 22 to hospital. The evacuation of several offices followed that action to prevent the spread of those diseases and the costs for the clean-up reached many billion dollars. About eight years later the investigations were closed, having concluded to the fact that some microbiologists who had worked in the U. S. Army, were the ones that sent the letters. They committed suicide after being named suspects in 2008.

There are also other terrorist organizations in possession of biological weapons such as the self-proclaimed Islamic State of Iraq and Syria (ISIS). However, they have not used them to attack any human population so far.

Previous efforts to ban biological weapons

Biological weapons and their development and stockpiling has been an issue of discussion for the League of Nations (predecessor of the United Nations) since 1907, when the 1907 Hague Convention (IV) was signed. Following this step, lots of years had been spent to prohibit the use of biological weapons leading to the 1925 Geneva Protocol banning the use of asphyxiating, poisonous or other gases, also known as chemical and biological weapons. This protocol addressed biological agents such as but not limited to viruses or rickettsia, which were unknown by the time the Geneva Protocol entered into force. However, this was not enough since the Geneva Convention was not able to prohibit the development, production and stockpiling of new chemical and biological weapons. Other attempts were made in the 1930s by the League of Nations to solve the issue, but they were unsuccessful once again.

This issue was also part of the agenda of the Conference on Disarmament in 1968. One year later in 1969 the United Nations introduced an influential report on biological and chemical weapons, which drew the United Nations' General Assembly attention. This report concluded to the fact that such weapons may have irreversible and grave consequences for human beings and nature. The interest in the topic in the end of the 1960s lead to the Biological Weapons and Toxin Weapons Convention (also known as Convention on the Prohibition of the Development, Production and Stockpiling of biological and toxin weapons and on their destruction) in 1972, which entered into force in 1975.

The Biological and Toxin Weapons Convention (BTWC) came into force in March 1975, following the ratification of 22 governments. It was actually the first multilateral disarmament treaty banning an entire group of weapons of mass destruction. The four pages long convention has the right to ban the development, production and stockpiling of biological agents, that do not have medical, protective and peaceful purposes, as well as any kind of weapons that aims at spreading the above-mentioned agents. Nine months after the treaty's entry into force all such materiel had to be destroyed. It is a huge success to mention that the BTWC now has 163 member states and 110 signatories, and that seven review conferences have taken place so far, with the Seventh Review Conference taking place in December 2011.

COUNTRIES INVOLVED IN THE ISSUE

United States of America

The United States of America has been one of the states that have been developing biological weapons from the beginning. As mentioned above, the USA invested in and created their first biological weapon research program in 1945. Some very important tests followed its creation, which however had several not expected consequences, for example the release of biological agents in the subway system and the spraying of biological simulants over San Francisco. Those incidents lead President Nixon to put an end on the researchers conducted under this program. The displacement ended in 1969. As far as the later years are concerned, the United States have been secretly continuing biological weapons researches until 2003, avoiding any restriction by the Biological Weapon Convention. In 2003 the Defense Department spokesman Lt. Cmdr. Don Sewell announced that the US army has no plan to develop biological or chemical weapons if a treaty or convention doesn't allow them to be produced.

United Kingdom

The United Kingdom was also in possession of biological weapons in the past; it actually established the Microbiological Research Department 1947, which was also expanded in 1951. They were later making plans for biological weapons and developed new biological agents and weapon designs. Many tests were also conducted by the United Kingdom in Bahamas, in the Isles of Lewis and in Scottish waters to refine those weapons. This was the last connection between the UK and biological weapons as in 1957 the government decided to abandon their plans on biological weapons, destroy their stockpiles and adopt a biological weapon defensive strategy. Today, the British government continues the operation of biological weapons defensive programs, while conducting research on the potentially offensive pathogens.

Russian Federation

The Russian Federation, the main successor of the Soviet Union is a country that has been constantly involved in biological weapons issues. To begin with, the Soviet Union developed a biological weapons research program, during which tests and experiments were conducted all over the union. As a result of those tests a huge accident of an outbreak of pulmonary anthrax took place in Sverdlovsk, Soviet Union in 1979. Furthermore, the Soviet Union signed the Biological and Toxin Weapons Convention (BTWC) in 1972 and ratified it in 1975, following its entry into force. Russia later inherited its status as a party of the Geneva Protocol and the Biological and Toxin Weapons Convention (BTWC) in 1992. Nowadays, the Russian Federation is a country with an enormous pharmaceutical and biotechnological sector, while possessing infrastructure and expertise that could be applied to develop a biological warfare program. Western officials have therefore been lately concerned about the intentions of the Russian Federation, even though the Russian government asserts that it does not maintain any stockpile and announced that it will not engage in any illegal biological weapon production activities.

Iraq

Iraq can also be considered as a nation which has been highly affected by the biological weapons. On the one hand, Iraq also created a biological weapons research program owing to the fact that the state would benefit from them politically as well as defensively. According to the UN Special Commission on Iraq (UNSCOM), Iraq's biological weapons program operated from 1973 to 1991. Iraq's officials claim that the program began with the establishment of Al-Hazen an institute, which focused mainly on studies concerning toxins, anthrax, Shigella and cholera. The institute then closed because of fraud. However, in the time period between 1985 and 1991 Iraq developed an offensive biological weapons capability including anthrax, toxins and others. Today, Iraq is more of a victim from biological weapons and not a nation producing them. Since Iraq constitutes one of the main countries of action of the rifest terrorist organization at the moment one could easily say that Iraq is being highly threatened by bioterrorism.

Japan

Japan was the first state to develop biological weapons, having a very long history on this topic. In 1925 Japan refused to sign the Geneva Convention banning biological weapons and conducting experiments in Manchuria in 1932 causing damages to its environment. Following the World War I, Japan created Unit 731, a research program focusing on chemical and biological weapons and their effects on living organisms. The experimentation ways were in some cases even harsher than those of the Nazis. In 1945 Japanese troops demolished the headquarters of Unit 731 some days before the end of the "Pacific War". It is of utmost importance to mention that nearly 3000 people died due to the experiments conducted by Unit 731. Last but not list, in 1946 the United States of America together with Ishii, a Japanese army medical officer,

microbiologist and director of Unit 731, decided to exchange the germ warfare, for the immunity from war-crimes prosecution. The Japanese continued the research until today and many other incidents occurred in the meantime.

TIMELINE OF EVENTS

Date	Description of Event
1907	1907 Hague Convention
1912- 1918	World War I
1925	Geneva Protocol bans the use biological and chemical weapons, but not effectively
1937	Introduction of Unit 731 in Japan
1939	Japanese poison a Soviet water supply
1940	Japanese attack China and Manchuria
1945	The United States of America create their biological weapon research program
1951	Biological simulants are sprayed over San Francisco
1966	The United States of America release harmless biological agents into the subway system
1969	Introduction of a report concerning biological weapons by the United Nations
1970	President Nixon dismantles the USA biological weapon program
1975	Entry into force of the Biological and Toxin Weapons Convention
1979	Outbreak of pulmonary anthrax in Sverdlovsk, Soviet Union
1987	Creation of the AUM Shrinrikyo
April 1990 and July 1995	Confession of a participants in the disease outbreak in the USA
2001-2002	Anthrax attack by al-Qaeda in Afghanistan
2001	Letters with biological agents were sent to American politicians
2008	Suicide of those who helped in the abovementioned incident

POSSIBLE SOLUTIONS

Taking into consideration all of the abovementioned information it's obvious that this issue is of utmost importance and it is the United Nations' responsibility to make big steps towards solving the issue. As far as the previous attempts to solve the issue are concerned the UN has already debated on and passed numerous resolution. However, these decisions have not been effective enough at resolving this issue. Here are some of these resolutions the UN bodies have passed:

UN Security Council Resolution 1540 (2004): Requested that all States "refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer biological weapons"[1] in particular for terrorist purposes.

UN General Assembly Resolution 33/59 (1978): This resolution urged the USSR and the USA to submit a joint initiative towards the elimination of chemical and biological weapons and called the member states to sign and ratify the Geneva Protocol and the Biological weapons convention.

UN General Assembly Resolution 59/466 (2004): Recalled the decision of the Fifth Review Conference to enact penal legislation, and national mechanisms to "establish and maintain the security and oversight of pathogenic micro-organisms and toxins, to enhance international capabilities for responding to, investigating and mitigating the effects of cases of alleged use of biological or toxin weapons or suspicious outbreaks of disease, and strengthen efforts and existing mechanisms for the surveillance, detection, diagnosis and combating of infectious diseases"[2].

However, the issue still exists and further efforts have to be made in order to address this issue to its roots. Therefore, it is this year's PSMUN Disarmament and International Security Committee to fruitfully debate on it and find effective solutions.

To begin with, a very effective solution would be renewing the Biological and Toxin Weapons Convention, which was a very important step by the time it was introduced, but is not so effective and helpful nowadays. This could be achieved through further negotiations and conferences with participants from all over the world, so that each and every Member State will agree with its rules. Furthermore, amendments to the existing convention must be made in order to update it as well as include punishments for those states violating it. Besides this, the international community should invest in

[1] http://www.un.org/press/en/2004/sc8076.doc.htm
[2] http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/59/110

introducing more treaties and conventions concerning the topic, if deemed necessary, aiming at the complete disarmament from biological weapons.

Following those measures mentioned above it is each nation's government's responsibility to fight this issue unilaterally too. Every nation should create a new biological weapons defensive program so as to be able to defend their citizens from potential bioterrorist actions. Furthermore, states must be incented to reduce the biological agents of the country. In order for that to be achieved talks among states with biological weapons should be held in order for these states to reach a consensus and propose joint programs of action. What is more, the security systems of the individual states should be improved so that no biological agents are obtained by terrorist organizations and dangerous individuals.

To conclude, lots of other solutions could be found on this issue and I really hope that your ideas will be productive and that they will ensure a fruitful debate.

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