

# WARMUN 2022

## **The Disarmament and International Security Committee (DISEC)**

Agenda I:

*Regulation of Lethal Autonomous Weapon Systems (LAWS)*

Agenda II:

*Regulation of Biowarfare and Prevention of Bioterrorism*

Chaired by Ramiz Mehdiyev, Kristupas Katilius and Alexandra Cheung

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# **LETTER FROM THE CHAIRS**

*Dear Delegates,*

*We would like to warmly welcome you to the Disarmament and International Security Committee (DISEC) of WARMUN 2022! Your chairs for the committee this year are Ramiz Mehdiyev, Kristupas Katilius and Alexandra Cheung. We are very much delighted to be your dais this year!*

*The past couple of years have certainly not been easy for anyone. Yet, we sincerely urge you to seize the value that arises from having gone through such tumultuous times. This conference represents a chance to get involved in something bigger, to share ideas, learn about and change the world around you. Don't worry if you do not possess previous MUN experiences – WARMUN 2022 is a very friendly and welcoming environment for everyone – whether you are a beginner or someone with multiple 'Best Delegate' awards – and we will ensure DISEC is no different. Wit and grit will shine through. Believe it or not, the past few years have not taken from you the power of your perspective and your capacity for growth.*

*We hope you enjoy your experience – we will certainly do anything we can to ensure that happens.*

*Please do not hesitate to contact us through email if you have any questions or concerns – it is our duty to be of assistance to you!*

*We are full of excitement as we look forward to meeting you at the conference!*



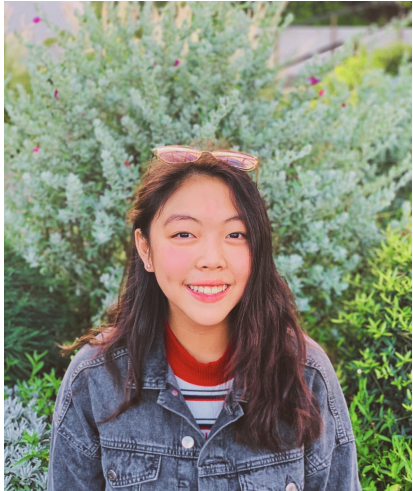
*All the best,*

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# YOUR CHAIRS

<u>Ramiz Mehdiyev</u>	<u>Kristupas Katilius</u>	<u>Alexandra Cheung</u>
		
<p><i>My MUN journey began way back in 2015. As a young pupil with stage fright and extremely limited public speaking skills, it sounded like a tough challenge – one I wouldn't enjoy. Obviously, that couldn't have been further from the truth. MUN has helped me develop as a person, and has enhanced my leadership, diplomatic, debating and brainstorming skills. Today, my MUN CV includes multiple distinguished delegate awards, a best delegate award, as well as various chairing experiences.</i></p>	<p><i>I will be your deputy chair. My MUN experience is a good balance of high school conferences all across Europe, and likewise, chairing opportunities at university level conferences in the UK. The key takeaways that resonate with me most with MUN are a development of a robust diplomatic skill set, enhancement of self-confidence and public speaking, as well as an establishment of a strong network of outward-thinking and open-minded individuals.</i></p>	<p><i>As someone who fears being put on the spot, the decision to try out MUN in 2016 was one of the strangest decisions I have ever made in my entire life. However, my interest in MUN gradually transformed into a passion, as I quickly found myself enjoying different MUN conferences and talking to people all around the world, while noticing how my public speaking and critical thinking skills were getting better along the way. Nowadays, I have moved my focus in MUN towards chairing, and I am looking forward to my role here as DISEC's other deputy chair.</i></p>

# **INTRODUCTION TO DISEC**

The United Nations (UN) Disarmament and International Security Committee (DISEC) was created as the first of the Main Committees in the General Assembly when the charter of the United Nations was signed in 1945. Thus, DISEC is often referred to as the First Committee. DISEC was formed to respond to the need for an international forum to discuss peace and security issues among members of the international community. According to the UN Charter, the purpose of DISEC in the General Assembly is to establish ‘general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments and also to give “recommendations with regard to such principles to the Members or to the Security Council.” Although DISEC cannot directly advise the Security Council’s decision-making process, the UN Charter explains that DISEC can suggest specific topics for Security Council consideration. Aside from its role in the General Assembly, DISEC is also an institution of the United Nations Office for Disarmament Affairs (UNODA), formally named in January 1998 after the Secretary-General’s second special session on disarmament in 1982. The UNODA is concerned with disarmament at all levels—nuclear weapons, weapons of mass destruction, and conventional weapons—and assists DISEC through its work conducted in the General Assembly for substantive norm-setting support to further its disarmament initiatives.

**AGENDA I: REGULATION OF LETHAL  
AUTONOMOUS WEAPON SYSTEMS (LAWS)**

# STATEMENT OF THE ISSUE

As Artificial Intelligence continuously develops, it is tested out in various fields in society. Likewise, with military turmoil across the world, countries are reluctant to reduce military spending and thus, the great influx of military funding leads to the development of ever-advancing military technologies. Lethal Autonomous Weapons Systems refers to the concept of weapon systems that are able to engage in combat without active inputs. They are able to seek out and eliminate targets and carry out military operations with simple input of parameters by the use of AI; without active human intervention. This concept of weaponizing AI and releasing human intervention on the battlefield raises a lot of moral, philosophical and more practical concerns. The current issue at hand is that there is no wholly-binding regulation on such technologies, despite the various warnings and concerns raised by professionals such as AI development specialists, NGOs and various scholars.

Moreover, countries have already been accused of the deployment of such autonomous or quasi-autonomous weapons systems on the battlefield with no real repercussions being placed upon the respectable member states. Furthermore, the fundamental issue of different opinions with regard to this topic from the biggest economies and political powers in the world call for action in evaluating and finding consensus in this newly emerging and highly dangerous field.

# INTRODUCTION TO THE TOPIC

Lethal Autonomous Weapons Systems (LAWS) or likewise commonly known as “slaughter bots”, “killer robots”, and “Autonomous Weapons Systems”, are defined as the weapon systems which do not require any active input from humans in completing lethal objectives. The development of more autonomous weapons systems came about in the last century.

The more autonomous the weaponry and machinery that is employed in the army, the more potential lives can be spared on the battlefield. Autonomous weapons systems have likewise been argued to be more effective in incorporating new technologies to carry out military task more effectively. However, with great strides being made in the field of AI, implementation of more technologically advanced elements introduces various moral, legal, and philosophical implications.

As time goes on, more and more countries, starting in 2010, have chosen to speak out against the narrative of an ever-more autonomous militarization of the world following the various concerns expressed by scientists, politicians, NGOs, think tanks and data analysts. The current political and diplomatic atmosphere in the field would indicate towards a shift of discussion of the aforementioned problems and a move towards a unilateral convention either outright banning any sort of Lethal Autonomous Weapons System, or at least imposing strict limitations and requirements, such as the need for ultimate human intervention in the decision-making on the battlefield.

Nonetheless, the seemingly apparent trend of traversing towards a unilateral convention has been brought into question as the talks thought the UN Convention on Conventional Weapons (CCW) have been lacking substance and direct action. Likewise, individual state actors that have expressed a need for further debate and possible regulation in the future have been manufacturing versions of autonomous weaponry systems such as in the Libyan conflict, Ukraine-Russian War, and others.



# **HISTORICAL SITUATION**

## **TIMELINE:**

### **1950 - Introduction of Artificial Intelligence**

Alan Turing releases his work “Computing Machinery and Intelligence” outlining the key concepts of Artificial Intelligence. This is seen as the first major piece of scientific literature to present this topic to the general public.

### **1953 - First test of Semi-Autonomous Weapons System**

USS Mississippi test fires the RIM-2 Terrier, weighing 1,180-pounds, which is one of the earliest applications of an autonomous weapons system. This further led to the development of the Talos Weapons System, which implemented the use of the first homing missiles.

### **1972 - First use of Semi-Autonomous Weapons System**

The United States Air Force employs laser-guided weaponry in Vietnam to strategically destroy key military architecture. One such case was the destruction of the Thanh Hóa Bridge in 1973. Likewise, unmanned surveillance aircraft were used for reconnaissance in Vietnam, which consisted of autonomous aircraft on planned routes filming their journey until they ran out of fuel and the film was recovered.

### **1991-1994 - First production of Semi-Autonomous “Killer Drones”**

Building upon the AAI RQ-2 Pioneer and AeroVironment FQM-151 Pointer, which were the first autonomous surveillance drones capable of transmitting live satellite footage, the RQ-1 Predator Drone, constructed by General Atomics, is fitted with the ability to carry Hellfire missiles.

### **2006 - First instance of Semi-Autonomous Sentry Robots**

The Samsung SGR-A1 is the first autonomous sentry robot that has been commissioned to be built by the South Korean government. Its purpose is to monitor the demilitarisation zone

separating South Korea from the DPRK. Its features include autonomic targeting of up to 3.2 km away, active machine gun or grenade launcher weaponry, as well as password indication for soldier identification.

## **2009 - U.S. Air Force publishes the Unmanned Aircraft Systems Flight Plan 2009-2047**

The US Air Force outlines its long-term plan for the development of “fully autonomous” aircraft to be developed to strengthen its military. The plan states that it is an inevitable evolutionary step.

## **2010 -**

### **August - “Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions” A/HRC/17/28/Add.2**

A collaborative UN Report calls for “Urgent consideration <...> to be given to the legal, ethical and moral implications of the development and use of robotic technologies, especially but not limited to uses for warfare.” (A/HRC/17/28/Add.2)

## **October - ICRC Workshop and Campaign Begins**

The International Committee for Robot Arms Control, an NGO campaigning for the safe use of robotics to aid humanity and stop the development of “killer robots”, convene in Berlin and call for an international treaty to ban LAWS.

## **2013 -**

### **May - First Human Rights Council Meeting on the Banning of Fully Autonomous Weapons**

The first official meeting is called to discuss the dangers and prospects of Lethal Autonomous Weapons Systems. Major countries like the UK, US, Germany etc. discuss their positions with further dangers being outlined if any specific action is not taken. However, no concrete limitations are placed or concluded on this matter.

## **July - First Successful Landing of Autonomous Combat Air Vehicle**

The USS George H.W. Bush undertakes the first successful landing of the Northrop Grumman X-47B, an unmanned autonomous combat air vehicle. This marks a new area of autonomous weaponry in the sky.

## **2014 - Convention on Conventional Weapons (CCW)**

This is the first official UN meeting under the topic of lethal autonomous weapons. The Convention on Conventional Weapons is used to format this meeting, with over 87 nations present, as well as the ICRC and other experts in the fields of AI, ethics, and legal and technical professionals.

## **2015 - International Joint Conference on Artificial Intelligence (IJCAI)**

116 specialists including Elon Musk and Mustafa Suleyman convene in Buenos Aires, issuing an open letter with particular regard to the dangers of AI in weaponization and a call for an outright ban of further development of autonomous weapons systems.

## **2018 - Lethal Autonomous Weapons Pledge**

During the 27th International Joint Conference on Artificial Intelligence in Stockholm, more than 200 companies pledge to adhere to the Lethal Autonomous Weapons Pledge drafted by the Future of Life Institute. The pledge creates accountability for companies and individual signatories to refrain from AI utilization in military technological development. Notable signatories include Tesla, SpaceX, Google DeepMind, European Association for AI and many others.

## **2022 - UN General Assembly Discussion on LAWS**

70 states and other non-governmental organizations delivered a statement outlining the dangers of Lethal Autonomous Weapons Systems, the acknowledgement of the need for human responsibility and accountability in the use of force, and the need for an international framework of regulation. This is seen as one of the biggest strides in recent years for unity and cohesion in the views of different state actors.

# CURRENT SITUATION

Recognizing the relatively short history of this issue, it is apparent that the developed world is moving towards a unilateral international convention to ban or limit the development of LAWS. There are many countries with strong views, such as Austria, and NGOs like the International Committee for Robot Arms Control in favour of banning and moving towards such a convention. Nevertheless, various states are cautious to express a clear-cut view on the issue as the industry is very lucrative, and many of them have interests in the development of the industry.

The main issue when talking about this topic is to consider how various states should be convinced to move towards a ban or limitations when their own interests of national security are in question. For instance, the US has expressly stated that autonomous weapons systems have prevented “collateral damage” on the battlefield and thus saved lives. The People’s Republic of China have taken a similar stance, but they focused on the fact that with the development of AI and other technological strides, such autonomous machinery can be considered as “inevitable”.

Many other economies have interests vested in such a lucrative but potentially highly morally-conflicting and dangerous venture, therefore finding a solution that would fit all the members is not easily feasible. It is likely important to consider the regulatory aspect of any type of treaties and how enforceability of any limitations imposed by the UN may be achieved.

# MAJOR STANCES

## United States:

The United States has made it clear that it is open to discussion with regard to autonomous weaponry and its development, but as of currently, it has a strong stance against any binding resolutions banning such prospects. The US Navy has recently issued various contracts in further development of unmanned surface vehicles (USVs) or “ghost ships” as well as further development of autonomous drone technologies. The main stance expressed by US officials is that of guidelines being provided on the ethical uses of such technologies, rather than banning the prospect.

## People’s Republic of China:

China has been active in this topic since the talks began in 2013 in the CCW. Nevertheless, despite some of the concerns they expressed, especially regarding the potential “upset” in the strategic balance of arms control, they have not outrightly supported the option of a ban. In 2018, in a working paper submitted to the CCW of Government Experts, the Chinese delegation called for a limited ban of such technologies in certain situations, but further clarified that this did not encompass the development or production of LAWS. The main takeaway is similar to that of the US, where an international arms race for AI supremacy in weaponry makes taking a strong position against difficult.

## Russian Federation:

The Russian Federation believes in the power of such weapons systems and, as is the case of the US and China, it has invested a large portion of its defence budget on research and development in this field. Russia has played an active role in the talks as part of the CCW since its start, but likewise has not committed to an outright ban or any regulation of the kind. President Putin has specifically outlined in 2017 that supremacy in the field of AI will prove to be the determining factor in who controls the future. Being involved in the war against Ukraine, Russia has also distanced itself from expressing strong opinions to leave leeway for its own use of such technologies on the battlefield.

## **POSSIBLE SOLUTIONS / FOCUS QUESTIONS**

- 1) What sort of regulatory implications would a unilateral ban on the development and use of LAWS have on individual member states?
- 2) What provisions are essential in ensuring that a strong piece of legislation or treaty is drafted and would be actively enforced around the world?
- 3) How would countries currently invested in the success and prospects of autonomous weapon system technologies be persuaded to ban such practices?
- 4) What role do private-industry companies play as part of signing the Lethal Autonomous Weapons Pledge in influencing the work of governments?
- 5) What would be any alternatives to a binding treaty, and what prospects do ethical and technical guidelines as an alternative to a ban hold?

# ADDITIONAL RESEARCH

<https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and>

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**AGENDA II: REGULATION OF BIOWARFARE  
AND PREVENTION OF BIOTERRORISM**



# STATEMENT OF THE ISSUE

It appears that current treaties seem to be lacking in tangible power to act as a deterrence for countries to continue to stockpile on biological agents, or to secretly conduct offensive biological programmes. Moreover, there are still a small number of nations who have not signed the BWC, having this compiled with the fact that technologies related to gene modification are becoming more mature and accessible, using bioweapons would be an increasingly enticing alternative for them as producing a bioweapon becomes easier and cheaper, and they are not limited to the constraints and rules of the BWC.

This all signify the fact that, whether may it be terrorists or powers, it is much simpler for various parties to create mass destruction and chaos. Seeing this, it is of utmost urgency and importance that the council set up new and improved legislations to regulate the use of gene-editing technologies and biological agents, and to ensure such pathogens that can cause unimaginable damage do not fall in the hands of ill-willed people.

# INTRODUCTION TO THE TOPIC

Biological warfare, is the employment of biological poisons or infectious agents like bacteria, viruses, insects, and fungus with the intention of killing, harming, incapacitating humans, or as an act of war. Bioterrorism, similar to biowarfare, is the deliberate release of bacteria, viruses, or other pathogens that can infect or kill humans, animals, or crops by non-national groups.

Offensive biological warfare is to employ a harmful biological agent to gain a tactical or strategic advantage over the opposition, including but not limited to: an individual, a group of people, or even an entire population. This is prohibited under several international treaties, notably the Biological Weapons Convention (BWC) and the Geneva Convention. Research on bioweapons for defensive purposes, however, is not prohibited by such treaties, leading to different nations to continue to maintain various pathogens (e.g. smallpox) samples being in their arsenal.

One important thing to note is the danger of biological agents, whose effects are far more potent than conventional and chemical weapons due to the nature of the biological agents themselves. A biological attack may cause massive numbers of civilian casualties and severely damage a society's economy and structure. Moreover, the capacity of certain biological agents to spread through air, water or respiratory droplets could lead to unanticipated side effects, such as transmitting it to unexpected populations, including neutral or even friendly forces. Furthermore, pathogens could 'escape' the laboratories where it was created and spread to the masses unknowingly. Looking at this, compared to the low cost needed to store bioweapons, the impact it can cause on humanity far exceeds those caused by conventional, chemical and even nuclear weapons.

With new technologies like CRISPR-Cas9 that can easily alter and edit the genome of biological agents, this lowers the cost and the difficulty to produce biological weapons, or to make them even more lethal, it becomes apparent that the need to establish new, updated laws and regulations that would effectively prevent the offensive use of bioweapons is increasingly urgent and vital in order to ensure the safety of humanity's future.

# HISTORICAL SITUATION

The earliest known instance of the aim to employ biological weapons is mentioned in Hittite literature from 1500–1200 BCE, when tularemia patients were sent into enemy territory to spread an epidemic. Since the advances in scientific research on bacteriology in the 1900s, the increased understanding of pathogens allowed the use of biological agents in warfare reached a new degree of complexity, with the choice of biological weapons shifting from smallpox in the 1700s to anthrax during World War I. Chemical and biological weapons usage was outlawed by the Geneva Protocol of 1925.

However, the Geneva Protocol was met with opposition from the United States and United Kingdom. Offensive biological warfare reached its peak during World War II, with multiple countries developing biological warfare programmes to research more on different viruses. Notable programmes include Porton Down from the United Kingdom, Unit 731 by the Imperial Japanese Army, in which deadly pathogens such as tularemia, anthrax, brucellosis, and botulism toxins are effectively weaponised.

Things started to take a turn during the Cold War, with various countries such as the United Kingdom and the United States terminating their biological weapon programmes around the late 1900s. Such decisions have catapulted the progress of negotiations to impose a ban on offensive biological warfare, resulting in the BWC in 1972, which adjuncts from the Geneva Protocol and states the prohibition of the creation, manufacture, acquisition, transfer, stockpiling, and use of biological weapons.

In 2004, the United Nations Security Council (UNSC) passed Resolution 1540, which requires all UN Member States to implement legal and regulatory measures against the proliferation of chemical, biological, radiological, and nuclear weapons and their means of delivery, in order to prevent the spread of weapons of mass destruction to non-state actors.

However, despite the international laws and treaties created, they cannot prevent biological attacks caused by non-state actors, and neither would they be able to prevent accidental leaks of

the specimens from laboratories. The Rajneesh cult purposely infected salad bars with *Salmonella typhimurium* in a number of restaurants in Dalles, Oregon, in 1984. This attack appears to be one of the confirmed examples of biological terrorism following World War II, resulting in 751 cases, of whom 45 required hospitalisation. One of the more recent instances of bioterrorism is the case of the "anthrax letters," which occurred in New York on September 9, 2001. Five of the 22 anthrax-infected individuals died as a direct result of anthrax or its complications. The specific strain employed was linked to the US army's laboratory at Fort Detrick, which was the establishment that held the US's biological research programme during the Cold War.

## CURRENT SITUATION

Nowadays, most countries engage in defensive biological research, in which they focus their research on how to use biological agents for defensive operations, in order to strengthen their efforts to address and protect existing and expected biological threats against civilians, agriculture, food, and water. Scientists have also developed specialised field equipment and technology to identify and examine items that may contain biological agents, in order to respond to the growing threat of biowarfare agents and bioterrorism. Moreover, the UN has also established Task Force Scorpio, a biological and chemical response team that responds to any potential use of weapons of mass destruction.

However, one thing to note is that despite the numerous treaties signed, and with countries shifting their focus towards biodefense, such treaties lack sufficient enforcement or verification provisions. As a result, several of the treaty's signatories still have active bioweapons programmes, and have strains of various biological agents in their arsenals or laboratories. Notable examples would be the United States and Russia, which still hold frozen stocks of the smallpox virus, which may lead to disastrous consequences if the strains were to be obtained by people with ill intentions.

Moreover, due to the affordability and accessibility of CRISPR-Cas9, and with the genetic maps of various pathogens being widely available in the public domain, people with malicious intentions may easily clone such viruses, and could even make them even more lethal by altering their DNA sequences. Moreover, advances in gene editing may allow for the possibility to create biological weapons that could discriminate against target populations based on racial, ethnic, or other genetically determined traits.

Emergence of such technologies, and the reduction in cost can not only allow nations to readily create new or alter diseases that can spread more quickly, infect more people, result in more severe illness, or are more resistant to treatment, it might make it simpler to execute targeted assassinations. A government could alter the genes in a pathogen so that it exclusively affects a specific target based on their genetic makeup. This may make biological weapons such an

enticing option that nations will re-evaluate their strategic usefulness. This has warranted the attention of various countries, for instance, Vladimir Putin, the president of Russia, which he suggested to his military minister in 2012, that he prepares to build weapons based on novel ideas, such as genetics.

## MAJOR STANCES

Currently, there are 183 countries who have ratified the Biological Weapons Convention (BWC), while there are four signatories. The BWC has not been ratified or signed by ten states.

### The Russian Federation

Regrettably, despite being a state-party, the issue of Russia's adherence to the BWC has been entirely missing from Western diplomacy. In 1992, the biological weapons programme of the Soviet Union was made public by Russian President Boris Yeltsin, in which he ordered the program's termination and the destruction of all its resources. However, it is still uncertain whether this was done completely, since at least three installations in Kirov, Yekaterinburg, and Sergiev Posad have reportedly remained closed to any outside inspection. Moreover, in the 2000s, President Vladimir Putin was presented with a new biological warfare program called the "Biological Shield of Russia". Regardless of this, Russia has expressed concerns about whether the United States was complying with the BWC. Given the Kremlin's track record of BWC violations, the secrecy surrounding its research facilities, and the purported strategic usefulness of an offensive biological programme, there will likely continue to be a great deal of mistrust and suspicion between Russia and the West for the foreseeable future.

### The United States of America

The United States has been pretty vocal about the topic, with them publicly charging multiple countries violating the BWC. The US has accused Iraq of violating the rules of the BWC after Iraq's extensive biological weapons programme was unveiled after the Gulf War, while also expressing concern about Syria's compliance as well as fellow states-parties Iran, Libya, Cuba

and the DPRK. As of 2021, the United States assesses Russia to have an offensive biowarfare programme. However in 2001, certain activities by the US government, which were purportedly carried out as part of its biodefense programme, was met with scepticism on whether it would comply with the BWC.

### The People's Republic of China

Although China has not explicitly denied the existence of a biowarfare programme, it has described its research in biological agents as being defensive in character. The People's Liberation Army (PLA) states that their anti-biological warfare unit's purpose is to research infectious diseases. Moreover, the USA has assessed that China to possibly have a limited inventory of chemical and biological weapons as a deterrent against prospective chemical and biological threats or assaults. However, it has been purported that China had engaged in biowarfare research before which had catastrophic repercussions. The hemorrhagic fever epidemics in Xinjiang province that happened in the late 1980s, were allegedly caused by an accident in a laboratory where Chinese scientists were weaponising pathogens.

### State of Israel

Israel is one of the few countries that are not a signatory of the BWC. Although it is generally acknowledged that Israel does not possess an arsenal of biological weapons, it is believed that Israel still has the capability to actively create and disseminate biological weapons, most likely due to its incredibly intricate biodefense programme. This may have led the US Congress Office of Technology Assessment to believe Israel has created a capability for offensive biological warfare. It still remains unclear to this day why Israel refuses to sign the BWC, but we can try to speculate why Israel thinks that joining the treaty would be in its self-interest. First, they may be hesitant to place their faith in multilateral agreements that they believe others may violate without consequence. Moreover, they may be unwilling to give up a token that may be used as part of a bigger regional bargain, because the Middle East security situation is extremely complicated and interdependent.

## POSSIBLE SOLUTIONS / FOCUS QUESTIONS

1. How can we establish adequate regulations that balances between restriction and accessibility of technologies for gene-editing and genetic maps of pathogens, to prevent them from being used for malicious purposes?
2. How can we update the current international laws and treaties to include genetically edited biological weapons, in case they do emerge?
3. Should laws be established to force nations to abandon and destroy the strains of various harmful biological agents in their arsenal, to prevent the possibility of 1) unintentional leakage; 2) weaponisation and deployment of such pathogens?
4. What formal processes can we propose to verify that countries are complying with the obligations of the BWC, and to look into alleged violations?

## ADDITIONAL RESEARCH

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