THE DISARMAMENT AND INTERNATIONAL SECURITY COUNCIL (DISEC)

AGENDA: LEGAL RAMIFICATION OF THE LETHAL AUTONOMOUS WEAPONS SYSTEMS (LAWS)
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A Note from the Executive Board
Dear Delegates,

It is an honor to be serving as the Executive Board of the Disarmament and International Security Council (DISEC) at the DPS Inter MUN. The committee which you will be a part of will be discussing on the crucial topic being, the legality of the Lethal Autonomous Weapons Systems (LAWS). You will be gathering for a formal meet during a span of three days, representing different countries and coming to a conclusion.

The Disarmament and International Security Council will be following the rules of procedure of the United Nations General Assembly which makes this committee the finest one in order to provide a better understanding of what the United Nations is.

To help you with your research, we have prepared this background guide for you so that you are more familiar with the topic. Please note that the background guide, as the name suggests is to merely provide you the basic idea regarding the agenda, so it is a must that you go beyond this guide and research well.

We hope to see collective participation from all of you in all of the sessions and if any help regarding the agenda or rules of procedure are required, the Organizing Committee as well as the Executive Board members would be happy to answer your queries.

We are looking forward to having you in our committee during then 15th, 16th & 17th of July and we hope that you find this study guide helpful for your extensive research.

Best Regards,

Rohan Joshi
(Chairperson)

INTRODUCTION
Disarmament and International Security Council

First Committee

The First Committee deals with disarmament, global challenges and threats to peace that affect the international community and seeks out solutions to the challenges in the international security regime. All 195 full member and full observer-status States are allowed to attend and participate. DISEC came into being with the creation of the UN, so first met shortly after the first UNGA session, in January 1946 – with representatives of just 51 nations.

The first ever resolution, adopted by The First Committee on the 24th January was to form a commission on the issues raised by atomic energy. DISEC possess a crucial mandate: to consider disarmament and international security issues across the world, in order to ensure peace and the progress of disarmament. DISEC attempts to form agreements between states on both these issues, in order to form consensus to confront those issues on their mandate.

It considers all disarmament and international security matters within the scope of the Charter or relating to the powers and functions of any other organ of the United Nations; the general principles of cooperation in the maintenance of international peace and security, as well as principles governing disarmament and the regulation of armaments; promotion of cooperative arrangements and measures aimed at strengthening stability through lower levels of armaments.

The Committee works in close cooperation with the United Nations Disarmament Commission and the Geneva-based Conference on Disarmament. It is the only Main Committee of the General Assembly entitled to verbatim records coverage.
What are Lethal Autonomous Weapons Systems (LAWS)

Lethal Autonomous Weapons Systems’ (LAWS), also known as ‘Lethal Autonomous Robots’ (LARs), or simply called ‘Killer Robots’ are weapons systems that can make their own decisions and operate independently without human control, often over long periods of time in open and unstructured environments. This includes being able to identify, track and attack humans or living targets.

The LAWS is a weapon system that, once activated, can select and engage targets without further intervention by a human operator. This includes human-supervised lethal autonomous weapons that are designed to allow human operators to override operation of the weapon system, but can select and engage targets without further human input after activation. LAWS are therefore distinct from remotely human-controlled weapons such as drones, or autonomous defensive weapons such as missile defense systems. While this technology remains in development, several states have already begun funding research and development into LAWS and some states have deployed robotic weapons systems with some varying degrees of autonomy. These developments have attracted the attention of activists, NGOs, various UN member states and the UN system itself.

Militaries all over the world already deploy systems which operate “on their own”, but these systems are currently confined to defensive functions such as the interception of rockets, artillery fire and mortars, either ship-based or stationary on land. The most prominent ones are PHALANX, PATRIOT, IRON DOME or MANTIS designed for use against such inanimate targets, if necessary, without human intervention (the rationale being that there may not be enough time for human intervention). However, these defensive systems operate automatically rather than autonomously, simply performing repeated pre-programmed actions.

To distinguish them from these precursors, weapons systems are described as autonomous if they operate without human control or supervision, perhaps over a longer period of time, in dynamic, unstructured, open environments. In other words, these are mobile (assault) weapons
platforms which are equipped with on-board sensors and decision-making algorithms, enabling them to guide themselves.

PHALANX- A Close In Weapons System (CIWS)
Why ‘autonomy’ in weapons systems?

Before we go deeper into this topic, it is important to first understand the main difference of what we know as automated weapons from LAWS: Automatic systems operate on a set of pre-programmed codes to perform a specific task. Automatic systems work based on rules provided by codes or are controlled by a human pilot through these rules. These systems include what we know as drones that are piloted by humans with a remote control. Autonomous weapons systems operate dynamically and are able to adapt to the situation as they fit. They will be able to decide when and how to take an action.

Autonomous weapons systems operate dynamically and are able to adapt to the situation as they fit. They will be able to decide when and how to take an action. Autonomous systems work based on reasoning, which is usually based off of probability. This includes systems/robots in sci-fi movies that get out of hand.

As of today, The LAWS is mainly for applications underwater or in the air – in other words, in less complex but more inaccessible environments – where the drive towards more autonomy is becoming most apparent. These systems can ultimately reason with human errors, make similar choices as humans do, and may even surpass our ability to think logically and not become swayed by sets of emotions. Also, they would be far more superior in their ability to complete a given task.

Transferring all the decision-making to the weapons system offers various benefits from a military perspective. After all, there is no longer any need for a control and communication link, which is vulnerable to disruption or capture and may well reveal the system’s location, and in which there is invariably some delay between the issuing of the command by the responsible person and the execution of the command. The time benefits already afforded by defensive systems are also valuable from a tactical perspective during military assaults. In the drone sector, a number of research and technology demonstrator programs have therefore been launched to develop (more) autonomous systems; examples are the X-47B in the US, Taranis in the UK, and the French nEUROn project.
Some observers draw attention to the superior efficiency of LAWS and their cost-cutting potential, especially due to the reduced need for personnel. Thus, The Autonomous Weapons Systems may seem to be a very good solution to human errors. However, the autonomous system also has its shortcomings and potential dangers that many worry about.

*BigDog is a quadruped robot that can autonomously guide itself through various terrains.*
The Problem and the need to regulate the LAWS

The major problem with the LAWS is that in creating a LAWS that adapts to the environment itself, there needs to be a lack of restricting code/rules in order for it to make a decision for itself. This means that nobody actually knows what the system would do in a certain situation. What this means, is that the system would work on its own, without the interference of humans and would do whatever it thinks is logical, making the predictions of what it would do next almost impossible.

From the military perspective, curbing LAWS was mostly about toying with ideas and looking at ways of deploying these systems in strictly controlled scenarios – for example as anti-materiel weapons. But these scenarios remain highly artificial. It is entirely unclear how the use of force could be restricted against only other military hardware in the chaos of battle.

From an international law perspective, there is considerable doubt that LAWS could potentially be capable of distinguishing between civilians and combatants and ensure that the military use of force is proportionate. Numerous international law and robotics experts doubt that it is possible, in the foreseeable future, to pre-programme machines to abide by international law in the notoriously grey area of decision-making in times of war.

What follows from this is that the ethical dimension may well pose the greatest problem regarding LAWS. In short, it stands to reason that giving machines the power to decide on the use of force against people violates basic principles of humanity and is unacceptable.

So the question arises, “What are the actual limitations of current robots and why do we need to regulate the LAWS?” Some points are addressed below:

- First, with the current technology, it is virtually impossible to create LAWS that can make judgments like humans. They are so far only able to work in a predictable, simple environment and perform simple tasks.
- Sensor technologies are not yet fully developed to the status to be used to be on LAWS. The LAWS requires very sensitive and accurate sensors in order to make the correct decisions.
- The LAWS cannot devise alternative approaches like humans do, when the failure of a strategy requires a Plan B.
- They may not be able to recover from mechanical failure during a mission.

**Opinion of Autonomous Weapons**

![Graph showing ideology and opinion on autonomous weapons](image)

**Should robots be given the rights to kill?**
Major Organizations

a. Convention on Conventional Weapons (CCW)

CCW, also referred as the Inhumane Weapons Convention aims to prohibit and restrict the use of excessively injurious or indiscriminate effect during combat. Originally only having three protocols, the fourth protocol concerning the use of blinding laser weapons is an example that delegates should look at. The fourth protocols successfully prohibited the use of laser weapons even before it was completely developed and weaponized due to collective effort by all States.

The purpose of the Convention is to ban or restrict the use of specific types of weapons that are considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately. The structure of the CCW – a chapeau Convention and annexed Protocols – was adopted in this manner to ensure future flexibility. The Convention itself contains only general provisions. All prohibitions or restrictions on the use of specific weapons or weapon systems are the object of the Protocols annexed to the Convention. There have been five such protocols till now. 121 states have ratified or acceded to the treaty. Five states have signed but not ratified the treaty.

<- CCW and its different protocols
b. The Campaign to Stop Killer Robots

The Campaign to Stop Killer Robots is a coalition of non-governmental organizations that are working together to ban the use of fully autonomous weapons. It is supported by many NGOs such as the Human Rights Watch, International Committee for Robot Arms Control, PAX, etc. The coalition seeks to achieve a comprehensive ban treaty both globally and locally that bans all stages of development, production, and the use of LAWS. The call issued by the Campaign to Stop Killer Robots for a pre-emptive ban on these fully autonomous weapons has become a central feature of the international debate.

A total of 87 countries participated in the four-day meeting of experts on “lethal autonomous weapons systems” by the Convention on Conventional Weapons (CCW) at the United Nations (UN) on Geneva, which concluded on the afternoon of Friday, May 16, 2015 (71 states parties and signatories to the convention and 12 observer states). Representatives were also present from UN agencies including UNIDIR, the International Committee of the Red Cross (ICRC), and registered non-governmental organizations including the delegation of the Campaign to Stop Killer Robots.

The Campaign to Stop Killer Robots believes that the stances taken by different nations has proved that there is an interest in not only continuing the CCW work on killer robots, but perhaps in creating a future legally-binding instrument to set down some clear rules on the matter but new international law is needed. It has urged all nations to develop their policy on fully autonomous weapons in consultation with relevant actors, including civil society experts.
c. The International Committee for Robot Arms Control (ICRAC)

The International Committee for Robot Arms Control – or ICRAC is an international not-for-profit association committed to the peaceful use of robotics in the service of humanity and the regulation of robot weapons. ICRAC was founded, and its founding Mission Statement adopted, in September 2009. ICRAC is a Non-Governmental Organization (NGO). It is an international committee of experts in robotics technology, robot ethics, international relations, international security, arms control, international humanitarian law, human rights law, and public campaigns, concerned about the pressing dangers that military robots pose to peace and international security and to civilians in war.

d. The International Committee of the Red Cross (ICRC)

Organized in 1863, the ICRC works to provide humanitarian help for people affected by conflict and armed violence and to promote the laws that protect victims of war –ICRC who we are. Its mission statement stems right out of the Geneva Convention and it has since its creation convinced nations to take actions to protect soldiers and civilians and properties.

International Humanitarian Law (IHL) governs the choice of weapons and prohibits or restricts the use of certain weapons. The ICRC plays a leading role in the promotion and development of law regulating the use of weapons.
Banning/Regulating Lethal Autonomous Weapons Systems: The Way Forward

"All too often international law only responds to atrocities and suffering once it has happened."
-Michael Moeller, acting head of the European UN Headquarters in Geneva.

The issue of LAWS may seem to belong to a distant future, but many see setting framework on the development, production, and future usage of the LAWS as important in ensuring the safety of all humans. As the quote above states, it lies in our hands to respond by setting frameworks before any unintended atrocities and suffering begin with the introduction of new technology.

It has to be considered that LAWS as the autonomous systems can indiscriminately target similar weapons due to sensor failures, or even punish people in cases, in which humans would’ve shown mercy.

Moreover, the LAWS are actually being used. According to the US government report from 2012, at least 76 nations had some form of drones, and 16 countries had armed ones. For example, the Foreign Affairs noted that South Korea uses a surveillance robot along the 38 parallel that searches targets along the border and has the capability to independently fire a machine gun towards the target. Not only that, the US, UK, Israel, China, Russia, and Taiwan also has working designs of autonomous weapons that can independently search and destroy potential targets.

Hence, the first goal must be to work towards a CCW protocol banning LAWS as swiftly as possible – a pre-emptive ban, that is, which would come into effect before countries and the arms industry invest so much in LAWS that the window of opportunity for a preemptive solution closes.

And to be clear, where automation can serve to protect human life – as in the aforementioned defensive systems – it is not necessarily a problem, but when machines make life and death decisions without human intervention and responsibility, a line is arguably being crossed.
The concept of “meaningful human control”, which was introduced into the CCW debate by Campaign NGOs (Article36) and has now been taken up by governments, is the counter-concept to “appropriate human involvement“ in the operation of (semi-)autonomous weapons systems, because it has been argued that though the fact is that the human brain needs time for complex evaluation and decision-making processes, compared to robots, some decision do require the involvement of humans.

With this, we come to some solutions:

1. Making sure that LAWS are deployed with the ability to be overridden by a human controller.
   - This is to ensure that the LAWS can be controlled once the system takes an unexpected action due to the lack of guiding codes.

2. Ensuring that the ‘critical decisions’ such as life and death decisions are carried out by humans.
   - This relates to the ethical controversy about whether robots get to decide whether a human lives or dies. Traditionally, in warfare, humans decided the fate of their enemies. However, with the introduction of lethal autonomous weapons, machines can and may be able to decide a human’s fate.

3. Transparency about internal weapons review processes

4. Consensus building process via conferences, etc.
   - Building a consensus among other countries is crucial in formulating an international treaty that will be accepted by many nations. The European Union was recommended to already form a consensus on this issue and ongoing conferences/forums including the CCW are needed for this cause.

Other Possible solutions may include:

1. Prohibiting the development, trade, and deployment of LAWS technology and LAWS through an additional Protocol VI to the CCW.

2. Interference of the CCW Implementation Support Unit to assist all member states in order to regulate any kind of future development programs of LAWS in alliance with IHL through:
a. Facilitating communication among Member States Parties, as well as non-governmental and international organizations;
b. Supporting Member States implementing the principles of the CCW and its protocols in their 135 respective domestic legislation.

3. Preventing terrorists from acquiring LAWS through the implementation of specific measures in the surveillance and control of the programs and institutions that may start any type of investigation in the creation of these weapons.

Stance of the P5 Nations

**United Kingdom**
The United Kingdom’s (UK) policy for the use of autonomous weapons is that “autonomous release of weapons will not be permitted… and that operation of weapon systems will always be under human control” (ICRC Report). The UK government is known to have notified the parliament that “no planned offensive systems are to have the capability to prosecute targets without involving a human” (ICRC Report) in the UK. In the legal sense, the UK believes that the existing sets of international law are able to regulate autonomous weapon systems.

**United States of America**
Mentioned in Department of Defense Directive 3000.09, autonomous weapons are regulated in order to reduce risks ‘associated with autonomy.’ The US’ directive just as that of the UK also emphasizes that even though there are guidelines and regulations to reduce risks of unintended engagements, there should be a way for autonomous weapons to allow operators to exert ‘appropriate level’ of human judgment over the use of force. The US policies are very broad in order to cover existing and potential future weapons and weapons that come in various forms. However, the US sees the use of some autonomous weapons such as electrical jammers that targets objects to be adequate and is willing to authorize the use of such weapons under review.
France
As part of its contribution to prohibit autonomous weapons systems, France chaired the Meeting of Experts on Lethal Autonomous Weapons Systems in Geneva May of 2014. France was the country that took the initiative for the conference and has been showing its willingness to participate in the global effort to successfully regulate the use of autonomous weapons systems before it is fully developed and deployed. France has also been part of the European Parliament that called for the ban on development and production and use of autonomous weapons without a human pilot.

China
China has not participated in the recent Meeting of Experts on Lethal Autonomous Weapons Systems in Geneva. China is yet careful about which road to follow. It stated during a meeting that China will wait for more information about this issue as it is currently more preliminary to see which actions it will take. Some predict that if one of the countries who are looking for more autonomy begins to actively develop and produce LAWS, other countries will be compelled to do the same and spark an arms race.

Russia
Russia has also not participated in the Meeting of Experts on Lethal Autonomous Weapons Systems in Geneva. However, Russia has taken a more of an ethics approach to this issue asking questions about what implications there will be for human rights doctrine and international humanitarian law when it comes to moving the process of decision making from human to robots. Russia also raised concerns on the possibility that LAWS can undermine the ability of the international legal system to maintain minimum legal order. Russia looks like it will wait and see as China does, as it believes that information at this stage is scarce.

Apart from that, 40 countries or more are involved in developing their own LAWS.
Questions Delegates may consider:

- How can LAWS be meaningfully defined? At what point is a LAWS considered fully “autonomous” given technological, legal and operational uncertainties?

- What are the pros and cons of LAWS for individual states?

- States should consider the ethical and sociological issues posed by LAWS. Can an autonomous robot make decisions over life and death? Can LAWS apply principles of ethics, human reasoning and observe norms such as human rights?

- What is the legal status of LAWS? Are LAWS able to fulfill their responsibilities under IHL or International Human Rights Law, such as distinguishing between combatants and non-combatants or observing principles such as proportionality?

- If a LAWS were to contravene international law, who would be legally liable and accountable for the operation?

- How should the research, development, testing and use of LAWS be regulated?

- Should they be lightly or strictly regulated, partially banned or banned outright?

- How would such regulations or prohibitions be enforced?
Links for Further Research

http://www.unog.ch/80256EE600585943/(httpPages)/A038DEA1DA906F9DC1257DD90042E261?OpenDocument


“Fully Autonomous Weapons”, Reaching Critical Will
http://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/7972-fully-autonomous-weapons

http://icrac.net/2014/06/banning-lethal-autonomous-weapon-systems-laws-the-way-forward/


“Autonomous weapons, civilian safety, and regulation versus prohibition”

“INTERNATIONAL GOVERNANCE OF AUTONOMOUS MILITARY ROBOTS”

“The Case for Banning Killer Robots: Counterpoint”
http://cacm.acm.org/magazines/2015/12/194632-the-case-for-banning-killer-robots/fulltext

“Towards a principle for the human supervisory control of robot weapons”

“Autonomous Weapon Systems and International Humanitarian Law: A Reply to the Critics”
SOME MORE RESEARCH LINKS:

- http://icrac.net/statements/
- https://www.stopkillerrobots.org/2015/10/unga-report/
- http://www.unog.ch/80256EDD006B8954/(httpAssets)/54B1B7A616EA1D10C1257CC00478A59/$file/Article_Arkin_LAWS.pdf
- http://www.stopkillerrobots.org/the-solution/