Overview of the issue of Lethal Autonomous Weapons Systems (LAWS) at the United Nations

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What are LAWS?

No internationally agreed definition of Lethal Autonomous Weapons Systems (LAWS) currently exists. However, they can be broadly characterized as weapons systems that incorporate autonomy to select and apply force to targets without human intervention.¹ While LAWS is one of the terms used to describe these types of weapons systems, they are often also referred to as "autonomous weapons systems" or "autonomous weapons".

The Group of Governmental Experts on Emerging Technologies in the Area of LAWS (GGE on LAWS) under the Convention on Certain Conventional Weapons (CCW) has been discussing, among other things, a characterization of LAWS. Such discussions have included the idea of formulating a technology-neutral, functional characterization, rather than a fixed definition, so that it could apply to all autonomous weapons, including those that have not yet been developed.

Do LAWS exist?

States are increasingly developing and deploying weapons with autonomous functions. However, certain systems incorporating rudimentary autonomous functions have been in existence for decades.

The most common types of weapons with autonomous functions are defensive systems. This includes systems such as antivehicle and antipersonnel mines, which, once activated, operate autonomously based on trigger mechanisms.

Newer systems employing increasingly sophisticated technology include missile defense systems and sentry systems, which can autonomously detect and engage targets and issue warnings. Other examples include loitering munition (also known as suicide, kamikaze or exploding drone) which contain a builtin warhead (munition) and wait (loiter) around a predefined area until a target is located by an operator on the ground or by automated sensors onboard, and then attacks the target. These systems first emerged in the 1980s; however, their systems functionalities have since become increasingly sophisticated, allowing for, among other things, longer ranges, heavier payloads and the potential incorporation of artificial intelligence (AI) technologies.

Land and sea vehicles with autonomous capabilities are also increasingly being developed. Those systems are primarily designed for reconnaissance and information gathering but may possess offensive capabilities.

What is the role of artificial intelligence (AI) in LAWS?

Autonomous weapons systems require "autonomy" to perform their functions in the absence of direction or input from a human actor. Artificial intelligence is not a prerequisite for the functioning of

¹ An overview of the characterizations of LAWS brought forward within the Group of Governmental Experts on Emerging Technologies in the Area of LAWS can be found here: <u>CCW/GGE.1/2023/CRP.1</u> (2023).

autonomous weapons systems, but, when incorporated, AI could further enable such systems. In other words, not all autonomous weapons systems incorporate AI to execute particular tasks. Autonomous capabilities can be provided through pre-defined tasks or sequences of actions based on specific parameters, or through using artificial intelligence tools to derive behavior from data, thus allowing the system to make independent decisions or adjust behavior based on changing circumstances. Artificial intelligence can also be used in an assistance role in systems that are directly operated by a human. For example, a computer vision system operated by a human could employ artificial intelligence to identify and draw attention to notable objects in the field of vision, without having the capacity to respond to those objects autonomously in any way.

Why are new international norms needed in relation to LAWS?

Emerging technologies and the integration of increasing levels of autonomy in weapons systems pose concrete humanitarian, legal, ethical and security challenges, and while there is agreement that International Humanitarian Law (IHL) applies to these weapons systems, there is a broad recognition that it does not sufficiently address the particular risks and challenges posed by these systems.

Some of these challenges have been discussed by the GGE on LAWS, including civilian casualties, unintended engagements, risk of loss of control of the system, risk of proliferation, risk of acquisition by terrorist groups. Target recognition, reliability, rapid scalability and human rights issues could also be listed. Some of these risks could represent catastrophic threats to peace and to the international community.

Furthermore, these technologies and capabilities are increasingly being developed and tested and might soon be deployed, underlining the urgent need for the international community to not only commit to upholding and strengthening compliance with IHL, but to develop effective and multilaterally agreed rules and limits on the development, deployment and use of LAWS that seek to prohibit autonomous weapons systems that cannot be used in compliance with IHL and to regulate other types of autonomous weapons systems. Ultimately, the rules and principles adopted by governments at the United Nations is what fundamentally guides the formulation of rules of engagement. This is why the work of bodies like the expert group under the CCW are absolutely critical.

It is important to note that any potential regulation of these weapons systems does not seek to hamper access to and development of peaceful uses of emerging technologies and AI.

What is the position of the UN on LAWS?

The UN has continuously stressed that regulation of these systems is needed to ensure that human beings retain control in the use of force. This is not only important to ensure accountability, and responsibility, but also to control the effects of these weapons which may otherwise perform unanticipated or unexplainable actions. The Secretary-General António Guterres has stated that "machines with the power and discretion to take lives without human involvement are politically unacceptable, morally repugnant and should be prohibited by international law". He was referring specifically to weapons that could be used to target and attack without any involvement, control or oversight of a human operator.

In his 2023 New Agenda for Peace, the Secretary-General reiterated this call, recommending that States conclude, by 2026, a legally binding instrument to prohibit lethal autonomous weapon systems that function without human control or oversight, and which cannot be used in compliance with international humanitarian law, and to regulate all other types of autonomous weapons systems. He noted that, in the absence of specific multilateral regulations, the design, development and use of these systems raise humanitarian, legal, security and ethical concerns and pose a direct threat to human rights and fundamental freedoms.

United Nations independent experts have also expressed concerns regarding lethal autonomous weapons systems. UN Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof

Heyns, was the first to raise the alarm about lethal autonomous weapons systems, in a report to the Human Rights Council in 2013. UN Special Rapporteur on counter-terrorism and human rights, Fionnuala Ní Aoláin, joined the Secretary-General's call for a global prohibition on lethal autonomous weapons systems in a report to the Human Rights Council in 2023.

<u>The Group of Governmental Experts (GGE) on Emerging Technologies in the Area of Lethal</u> <u>Autonomous Weapons Systems (LAWS) of the Convention on Certain Conventional Weapons</u> (CCW)

Introduction

The Group of Governmental Experts (GGE) on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS) is a subsidiary body of the Convention on Certain Conventional Weapons (CCW). CCW High Contracting Parties, at the Fifth Review Conference in 2016, decided to establish an open-ended Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems to explore and agree on possible recommendations on options related to emerging technologies in the area of LAWS, in the context of the objectives and purposes of the Convention. In line with this decision, the Group, often referred to as the "GGE on LAWS", has met annually since 2017. Meetings of the Group are open to all 126 High Contracting Parties (HCP) of the CCW as well as to any non-High Contracting Party, international organisations, civil society and academia, whose active participation has been instrumental to further substantive understandings surrounding the topic of LAWS. However, only HCPs can be involved in the decision making. The Secretariat of the Group is the Implementation Support Unit of the CCW, based in UNODA Geneva.

What is the mandate of the GGE?

The mandate of the GGE on LAWS at its creation was to "explore and agree on possible recommendations on options related to emerging technologies in the area of LAWS, in the context of the objectives and purposes of the [CCW], taking into account all proposals—past, present and future." (CCW/CONF.V/2, Annex, para. 3).

In 2023 the GGE on LAWS' mandate, as agreed by the Review Conference and furthered by the 2022 Meeting of CCW High Contracting Parties, is to "intensify the consideration of proposals and elaborate, by consensus, possible measures, including taking into account the example of existing protocols within the Convention, and other options related to the normative and operational framework on emerging technologies in the area of lethal autonomous weapon systems, building upon the recommendations and conclusions of the Group of Governmental Experts related to emerging technologies in the area of lethal autonomous weapon systems, and bringing in expertise on legal, military, and technological aspects."

The upcoming Annual Meeting of the High Contracting Parties to the CCW in November 2023, will discuss a renewed mandate for the GGE on LAWS going forward.

What is the GGE discussing?

Substantively, the focus of the Group has evolved over the years; however, the main points of discussions throughout the years have included: technical aspects, international humanitarian law (IHL) applicability, legal, political, military and security concerns, as well as humanitarian and ethical concerns surrounding the development and use of LAWS. Specifically, the Group has been discussing challenges posed by LAWS to the compliance with IHL, human control and autonomy in the use of lethal force, finding a common definition for LAWS. For example, in 2023, the Group discussed how to characterize LAWS while taking into account future developments of weapons and new technologies, hence leaning towards a technology-neutral definition.

Has the GGE reached any agreement on whether or how to regulate LAWS?

While divergence on some key issues, including the necessity for new legally binding rules and norms remain, substantial substantive progress has been made over the years and momentum on the issue has further grown. There is however still no consensus as to if and how LAWS should be regulated.

Nevertheless, a majority of the proposals that have been made by States have picked up what the Group refers to as the "two-tiered approach", meaning, in its simplest terms:

- i) Prohibitions on autonomous weapons that cannot be used in accordance with IHL, which must not be developed, deployed or used;
- ii) Regulations on all non-prohibited types of autonomous weapons to ensure compliance with IHL.

In 2023, the GGE on LAWS adopted a report at the end of the second session (CCW/GGE.1/2023/2). The report contains a very general framing of the two-tiered approach (prohibitions and regulations) and some language on the voluntary exchange of best practices. Furthermore, the document recognizes the need for weapon reviews:

Tier 1 (Prohibition) "Weapons systems based on emerging technologies in the area of LAWS must not be used if they are incapable of being used in compliance with IHL" and that control with regard to these systems is needed to uphold compliance with international law, in particular IHL.

Tier 2 (Regulation) States must ensure compliance with their obligations under international law, in particular IHL, throughout the lifecycle of weapon systems based on emerging technologies in the area of LAWS.

When necessary, States should, inter alia:

- a. limit the types of targets that the system can engage;
- b. limit the duration, geographical scope, and scale of the operation of the weapon system;
- c. provide appropriate training and instructions for human operators.

In 2019, the High Contracting Parties to the CCW adopted 11 guiding principles to guide the work of the GGE on LAWS, without prejudice to the result of future discussions. The guiding principles may be found here: <u>G1928569.pdf (un.org)</u>, Annex VI.

What are States proposing and what are the main positions?

Several proposals have been put forward by individual States or Groups of States on the way forward over the course of 2021, 2022 and 2023 regarding the outcome of the work of the Group², including:

- i) A draft protocol 6 / a draft legally binding instrument under the framework of the CCW;
- ii) Clarity on the implementation of existing obligations under international law, in particular IHL; an option that prohibits and regulates on the basis of IHL;
- iii) An option that no further legal measures are needed;
- iv) Draft articles on autonomous weapon systems prohibitions and other regulatory measures on the basis of international humanitarian law;
- v) A concept of activities in the development and use of weapons systems with artificial intelligence technologies.
- vi) Key elements from which to build meaningful human control over autonomous weapon systems and the use of force.

² Access to the proposals, for 2021: <u>Convention on Certain Conventional Weapons - Group of Governmental</u> <u>Experts on Lethal Autonomous Weapons Systems (2021) | United Nations (unoda.org), for 2022: Convention on</u> <u>Certain Conventional Weapons - Group of Governmental Experts (2022) | United Nations (unoda.org), for</u> 2023: <u>Convention on Certain Conventional Weapons -Group of Governmental Experts on Lethal Autonomous</u> Weapons Systems (2023) | United Nations (unoda.org)

- vii) Proposals for a normative and operational framework in the area of LAWS.
- viii) Working papers on the outcome of the GGE on LAWS and with ideas to further the work of Group.

Overall, while an increasing number and majority of countries appear to support a ban or at least new restrictions on LAWS, the militarily significant States remain opposed to the idea, for reasons such as national security or their perceived need to have military superiority. Their general position is that existing IHL is enough to properly regulate the development and use of LAWS, and do not want new rules that could constrain their weapons development. States supporting the elaboration of a new instrument also do not necessarily agree on whether it should be a new CCW Protocol or if the topic should instead be discussed in other fora, such as the UN General Assembly.

Why does the topic of LAWS come under the purview of the 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.

It considers all disarmament and international security matters within the scope of the Charter 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. (Source: https://www.un.org/en/ga/first/)

LAWS had already been mentioned at the First Committee under the discussions on Conventional Weapons, leading to a joint statement on the issue in 2022 (<u>KLw9WYcSnnAm_en.pdf</u> (<u>unmeetings.org</u>)). This year, the First Committee is due to discuss for the first time the issue of LAWS specifically through a resolution tabled by Austria (it will be made available here: <u>https://www.un.org/en/ga/78/resolutions.shtml</u>).

Additional resources

- Most recent report of the GGE on LAWS: <u>CCW/GGE.1/2022/2 (unoda.org)</u>
- Rules of Procedure of CCW Meetings: <u>1616663 (un.org)</u>
- On the First Committee: <u>https://www.un.org/en/ga/first/</u>
- ICRC resources on LAWS: <u>Autonomous weapon systems | International Committee of the Red</u> <u>Cross (icrc.org)</u>
- What you need to know about autonomous weapons | ICRC
- UNIDIR on Lethal Autonomous Weapons | UNIDIR
- UNIDIR list of publications on LAWS: UNIDIR_Publications_on_Lethal_Autonomous_Weapons_and_Military_Artificial_Intelligen ce_26062023.pdf
- UNODA list of resources on LAWS: <u>Resources UNODA</u>
