

Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects

2 October 2024

English only

Group of Governmental Experts on Emerging Technologies
in the Area of Lethal Autonomous Weapons System
Geneva, 4-8 March and 26-30 August 2024

Agenda item 5

Further consider and formulate, by consensus, a set of elements of an instrument, without prejudging its nature, and other possible measures to address emerging technologies in the area of lethal autonomous weapon systems, taking into account the example of existing Protocols within the Convention, proposals presented by High Contracting Parties 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, and bringing in expertise on legal, military, and technological aspects

Chair's summary – Second 2024 session of the GGE on LAWS

Submitted by the Chairperson*

The Chairperson submits this summary, under his sole authority, with the intention of capturing his understanding of the work carried out during the second 2024 session of the Group and to maintain an informal record of proceedings to help inform the work of the Group in 2024 and ahead. The Chair's summary of the first 2024 session is reflected in document CCW/GGE.1/2024/WP.6.

I. Background and procedural aspects

1. The second 2024 session of the Group of Governmental Experts (GGE) on emerging technologies in the area of lethal autonomous weapons systems (LAWS) (hereinafter “the Group”) was opened by the Chairperson, H.E. Mr. Robert in den Bosch of the Kingdom of the Netherlands, on Monday 26 August 2024. It was then closed on Friday 30 August 2024.

2. The Group's mandate was decided by the 2023 Meeting of the High Contracting Parties to the Convention on Certain Conventional Weapons (CCW). The Meeting decided as follows: “That the work of the open-ended Group of Governmental Experts related to emerging technologies in the area of lethal autonomous weapon systems established by Decision 1 of the Fifth Review Conference as contained in document CCW/CONF.V/10, adhering to the agreed recommendations contained in document CCW/CONF.V/2, is to continue, to strengthen the Convention. In the context of the objectives and purpose of the Convention, the Group is to further consider and formulate, by consensus, a set of elements of an instrument, without prejudging its nature, and other possible measures to address emerging technologies in the area of lethal autonomous weapon systems, taking into account the example of existing Protocols within the Convention, proposals presented by High Contracting Parties and other options related to the normative and operational framework on emerging technologies in the area of lethal autonomous weapon systems, building upon the

* The present document is being issued without formal editing.



recommendations and conclusions of the Group, and bringing in expertise on legal, military, and technological aspects.” (CCW/MSP/2023/7, paragraph 20).

3. Prior to the session, the Chairperson circulated an indicative timetable to organize the work of the Group, containing the following topics: (1) Characterizations and definitions; (2) Application of IHL, including possible measures needed to ensure compliance with IHL and the identification of any additional rules needed; (3) Risk mitigation and confidence-building measures; (4) Accountability and responsibility. The Group also had before it a rolling text, prepared by the Chairperson, with the aim of systematizing the work of the Group and making concrete progress towards fulfilling its mandate. The rolling text sought to synthesize a broad variety of proposals and positions, building on the discussions of the first session, the responses provided to the Chair’s guiding questions and reflected in conference room paper CCW/GGE.1/2024/CRP.1, as well as the discussions held during the intersessional period. The rolling text was presented by the Chair on the explicit understanding that “nothing is agreed until everything is agreed.”

4. The Chairperson briefed the Group about the intersessional programme, including the virtual informal consultations held on 7 May, 17 May and 7 June, at which High Contracting Parties were invited to discuss the characterization of LAWS and subsequently focused on international humanitarian law (IHL), including how existing IHL applies to LAWS, the measures needed to ensure compliance with IHL and whether any additional rules are needed, as well as the virtual informal consultation held on 6 June to provide observers with an overview of the intersessional discussions and gather their views on the work of the Group. Furthermore, the Chairperson acknowledged the contributions of international and regional conferences on autonomous weapon systems held in the intersessional period, including the ECOWAS conference hosted by Sierra Leone in Freetown on 17 and 18 April, which resulted in a *joint communique*¹ reflecting a joint regional position on autonomous weapon systems, and the international conference hosted by Austria in Vienna on 29 and 30 April.²

5. The Chairperson welcomed Singapore as a High Contracting Party to the Convention and congratulated Trinidad and Tobago for its accession to the Convention and all its Protocols.

6. During the general statements, delegations emphasized the need for prohibitions and/or regulations that would ensure human control over the use of LAWS and that would address other concerns, including those related to ethical, humanitarian and security concerns, as well as human rights. Delegations also noted that LAWS are being developed and deployed at present in the absence of specific regulations. Support was expressed for the negotiation of a legally binding instrument prohibiting the use of autonomous weapon systems that cannot be developed and used in line with international law, in particular IHL, and some delegations stated that until such agreement is reached, a moratorium is needed on the use of LAWS. Views were also expressed supporting the adoption of measures to ensure compliance with IHL, without the necessity of creating a new legally binding instrument on the matter, noting that existing IHL applies and is sufficient. Wide support was expressed for the central role of the GGE in serving as the adequate forum to discuss LAWS. Many delegations welcomed the report of the Secretary-General on lethal autonomous weapons systems,³ recognizing the high number of submissions that drew attention to a broad range of issues in relation to LAWS and the Secretary-General’s call for High Contracting Parties to work diligently to fulfil the mandate of the Group as soon as possible and to work towards the further codification of international law under the CCW. In this regard, a number of delegations called for the negotiation of a Protocol VI to the Convention. Following the general statements, the Chairperson shared the rolling text on-screen, for consideration by the Group and to support the discussions.

¹ Communiqué of the Regional Conference on the Peace and Security Aspects of Autonomous Weapons Systems: An ECOWAS Perspective. See: <https://www.aws-freetown.com/communique>.

² Humanity at the Crossroads: Autonomous Weapons Systems and the Challenge of Regulation. See the Conference Chair’s Summary: https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/AWS_2024/Chair_s_Summary.pdf

³ Prepared pursuant to resolution A/79/88.

7. During the session, which gathered 75 High Contracting Parties, 1 Signatory State, 2 Observer States, 1 organization which has been granted observer status in the United Nations, 1 United Nations entity, the International Committee of the Red Cross (ICRC), 6 academic organizations and 19 non-governmental organizations, the Group held substantive, technical and detailed discussions.

II. Overview of discussions

A. Characterizations and definitions

On the topic of “Characterizations and definitions”, the Chair’s rolling text initially proposed the following:

A working characterization of LAWS

Without prejudging any other options for measures, a lethal autonomous weapon system can be characterized as a weapon system that, after activation, can select and engage a target without further intervention by a human operator.

The above description also applies to those weapon systems that require only nominal human input after activation, thus operating without context-appropriate human involvement and judgement.

It does not apply to autonomous systems that are not weapon systems, manually guided /remote controlled munitions, mines or unexploded explosive ordnance.

The above description also does not affect any future understanding and the potential improvement or refinement of the characterization when formulating an international instrument.

8. Delegations welcomed this first part of the rolling text as a concrete effort to make progress on achieving the Group’s mandate. While a majority of delegations recognized the first section of the working characterization as broadly agreeable, concerns remained on several aspects of the terminology contained therein.

9. Delegations expressed differing views on the definition or concept of autonomy, and the implications of this on the use and effects of LAWS under IHL. Diverse views were also expressed regarding the understanding of the functions of autonomous weapon systems, the use of the term “lethal” and the implications and meaning of “nominal human input”. It was noted that all these issues had a bearing on the scope of a possible instrument. Regarding the scope, some delegations noted the need for a characterization to include a list of systems that are not considered to be LAWS.

10. As in the previous session,⁴ divergent views remained on the use of the term “lethal”. States arguing for its deletion insisted that the term does not find justification in IHL and should not be seen as an inherent property of a weapon system but rather a consequence of its use. Delegations further noted that the CCW and IHL are not restricted to “lethal” use of force, but also protect against excessive injury and indiscriminate effects. On the other hand, some delegations stressed that “lethal” must be retained to ensure that defensive weapon systems are excluded from possible prohibitions, and further underlining that the Group is mandated to work on emerging technologies in the area of “lethal” autonomous weapon systems.

11. In an effort to resolve the issue, the Chair suggested adding a footnote to the characterization to clarify the understanding of “lethal”, separating the effects and capabilities of weapon systems and to ensure that weapon systems with the capability of inflicting death, injury, destruction or damage to persons or objects are included in a

⁴ See the Chair’s summary – First 2024 session of the GGE on LAWS, CCW/GGE.1/2024/WP.6, para.7.

characterization of LAWS. This suggestion was extensively considered by the Group though no final consensus was reached.

12. Regarding the notion of “nominal human input”, delegations noted that the term is subject to different interpretations and that it could be discussed and included elsewhere in the text, possibly in relation to the application of IHL or under prohibitions and regulations. Some delegations affirmed the necessity of keeping this terminology in the text under the characterization to avoid loopholes, where a minimal human action post-activation of a LAWS could exempt a weapon from being classified as such, thus potentially bypassing regulations. Delegations also noted that the mention of human control in the text is essential for maintaining human agency and responsibility over the use of weapon systems and compliance with IHL.

13. The notion of “nominal human input” was omitted from the version of the “characterization” section circulated at the end of the second session of the Group, following observations by some delegations that it could be discussed elsewhere within the rolling text, though this proposal was not agreed upon by all.

14. Among other issues raised during discussions and revisions of the rolling text on “characterization” were the addition of “identification” of targets in addition to the functions of “select and engage” already existing in the text, and whether this list of autonomous functions is cumulative. Another suggestion was made to add “as part of an attack” to clarify the context of the use of LAWS, as some delegations expressed concern that this might narrow the scope of the characterization too much. Additionally, there was considerable support for replacing the term “operator” with “user” or “human user”, as it was argued that “user” more clearly signifies human involvement, while “operator” could also refer to other types of systems that might operate LAWS.

15. Before the end of the session, and following various rounds and formats of informal consultations led by the Chairperson, he presented to the plenary a revised version of the text on characterization of LAWS and highlighted four major crucial issues that needed to be resolved: (1) the matter of at which point in the life-cycle of a weapon system autonomy appears, (2) the distinction between military and dual-use systems, (3) the definition of lethality in the context of LAWS/framework of CCW, and (4) whether there was a need to list weapon systems that would not be covered by the characterization (a so-called the “exclusion clause”). Several delegations reserved the right to comment since they saw the text for the first time and were unsure about the source of some of the language. A number of these delegations stated that their preference would be to revert to the second revision of the working characterization presented by the Chair on 27 August, as it seemed to have wide support in the room, and appealed to revisiting that language as key elements such as “nominal human input” did not appear in the latest revision. Others made it clear that the latest version should be understood, considering the complexity of the text, in the light of a better mutual understanding of States’ positions on the working characterization. This, according to those delegations, was also the reason for some of the new text proposals, i.e. they were the result of attempts at compromising and bridging divergences. Delegations also noted that previously agreed language in past reports could also be supplemented by new elements from recent discussions and should not be considered final.

B. Application of IHL, including possible measures needed to ensure compliance with IHL and the identification of any additional rules needed

On the topic of “Application of IHL, including possible measures needed to ensure compliance with IHL and the identification of any additional rules needed”, the Chair’s rolling text proposed:

Preliminary considerations

Control with regard to weapon systems is needed to uphold compliance with international law, in particular IHL, including the principles and rules of distinction, precautions and proportionality.

Human judgement is essential in order to ensure that the potential use of weapon systems is in compliance with international law, and in particular IHL.

Application of international humanitarian law (IHL) to LAWS

IHL applies to all forms of warfare and all kinds of weapons, those of the past, those of the present and those of the future, and is, consequently, independent from the military technology used.

IHL, therefore, continues to apply fully to the development, deployment and use of LAWS.

Prohibitions and restrictions

LAWS that cannot be used in compliance with IHL, including the principles and rules of distinction, precautions and proportionality, are prohibited.

It is prohibited in all circumstances to use LAWS which are designed or of a nature to cause superfluous injury or unnecessary suffering, or which are inherently indiscriminate.

It is prohibited in all circumstances to make the civilian population as such, individual civilians or civilian objects the object of attack by LAWS.

LAWS must not be deployed or used if their effects in attacks cannot be anticipated and controlled, as required by international humanitarian law in the circumstances of their use.

LAWS that operate without appropriate control or human judgement are prohibited. To ensure that LAWS can be used in compliance with IHL, their effects must be adequately predictable, reliable, traceable and explainable.

For this purpose, States must:

Ensure that LAWS operate with appropriate control and human judgment across the entire life cycle of the weapon systems.

Limit the types of targets that the system can engage.

Limit the duration, geographical scope, and scale of the operation of LAWS, including through ensuring that LAWS can be deactivated by a human operator after activation and/or that they incorporate self-destruct, self-deactivation or self-neutralization mechanisms.

Limit the number of engagements that LAWS can undertake.

Ensure that LAWS' mission parameters cannot be modified by the system without appropriate control and human judgement.

Ensure appropriate training and instructions for human operators of LAWS.

16. The discussions highlighted the importance of aligning the language used in the rolling text with established IHL principles, adding that clear references to the principles of distinction, proportionality and precautions in attack are needed. Delegations also pointed out that language agreed in the 2019⁵ and 2023⁶ reports could be used in the rolling text, including several of the Guiding Principles and previous conclusions of the Group.⁷ Some delegations noted that, considering that the work of the Group is still ongoing, there is an opportunity to refine the language of past reports, to build on previously agreed language and to translate it into clear and concise prohibitions, restrictions, and positive obligations, rather than only repeating agreed language. One delegation noted that IHL is fully applicable to

⁵ CCW/GGE.1/2019/3

⁶ CCW/GGE.1/2023/2

⁷ CCW/GGE.1/2019/3, Annex IV, Guiding Principle (a): "International humanitarian law continues to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems."

autonomous weapon systems and therefore there is no need to adopt new legally binding rules.

17. Regarding the preliminary considerations and the application of IHL, significant convergence among views was noted, with minor suggestions for amendments to the language. The primary divergence centered around the inclusion of the term “human” before “control,” while others observed that “control” without a qualifier reflects the current consensus. The replacement of “human judgment” with “human control” also received substantial support. Additionally, some delegations emphasized the importance of incorporating a Martens Clause provision in this section of the rolling text. Some delegations underlined that the Group should consider, among others, international human rights law alongside IHL.

18. Regarding prohibitions and restrictions, the rolling text was based on the establishment of a distinction between two types of LAWS: those which are inherently incompatible with IHL and must be prohibited, and those which could be used in compliance with IHL but still must be regulated (the so-called “two-tier approach”). This general approach received broad support from the floor, despite some substantive divergences regarding how to further develop it. Delegations also underlined that this approach should be the core component of any future instrument which would be endorsed by the Group, and that the discussion of these elements was therefore crucial.

19. Delegations engaged in detailed discussions on prohibitions and restrictions, offering concrete textual suggestions for consideration. Numerous delegations supported the addition of “human” before “control” to ensure clarity and maintain accountability in decision-making associated with weapon systems to uphold compliance with IHL, and to ensure that LAWS are used within a responsible human chain of command and control. Some delegations argued that current rules and principles of IHL are sufficient to deal with any possible challenges and risks raised by LAWS. Other delegations underlined the unique characteristics of autonomous weapon systems, and consequently the necessity of having new regulations under IHL relating to their use.

20. In this regard, an important issue raised was the challenge that the use of artificial intelligence in LAWS and high degrees of autonomy pose to compliance with IHL. Some delegations suggested that the notions of predictability, reliability, traceability, and explainability of LAWS could serve as a tool to address these concerns. However, many delegations highlighted the need for a shared understanding of these terms to ensure their effective application. Meanwhile, a few delegations questioned the relevance of these notions, arguing that they are not intrinsic to IHL and should therefore be excluded from the text. While the use of previously agreed language was welcomed, some delegations emphasized the need to further decide on specific limits for key concepts such as restricting “types of targets,” “duration, geographical scope, and scale of the operation of LAWS”, as well as “number of engagements.”

21. Regarding the prohibitions, several delegations argued that stronger language banning anti-personnel LAWS, i.e. LAWS that would target human beings, was needed in the rolling text. Some delegations also reiterated their position that new prohibitions were not needed, and that a possible future instrument should instead focus on clarifying the application of existing IHL to LAWS.

C. Risk mitigation and confidence-building measures

On the topic of “Risk mitigation and confidence-building measures”, the Chair’s rolling text proposed:

Other measures to ensure compliance with IHL

Rigorous testing and evaluation should be conducted to enable a human operator to have a reliable expectation of how the weapon system will perform in the anticipated circumstances of its use.

States should conduct legal reviews of LAWS to understand the weapon's capabilities and limitations, expected circumstances of use, and its anticipated effects in different circumstances.

States should conduct reviews to detect possible unwanted bias in data sets.

States should implement measures to reduce unwanted automation bias.

22. Delegations emphasized the importance of accountability, human control and traceability concerning autonomous weapon systems. Many delegations welcomed language regarding the necessity for States to undertake national legal reviews of LAWS and suggested the inclusion of specific language in line with obligations to conduct reviews under Article 36 of Additional Protocol I to the Geneva Conventions.

23. Some delegations noted the distinction between legal reviews – which are mandatory under IHL for States parties to Additional Protocol I to the Geneva Conventions – and technical reviews of capabilities, which are determined by States at the national level, and which should be done throughout the lifecycle of the weapon system. Some delegations reiterated the need for maintaining human responsibility throughout the lifecycle of autonomous weapon systems. It was reiterated that accountability must be ensured in accordance with international law. The importance of testing and evaluating LAWS in realistic operational environments garnered significant support from delegations.

24. Several delegations called for stronger language on the need to prevent biases – in particular gender and racial bias - or to reduce their occurrence. Delegations also emphasized the need to remove qualifiers such as “unwanted” when addressing bias, as bias is inherently negative. In this regard, the working paper listing measures which could be implemented to avoid algorithmic biases was mentioned.⁸

D. Accountability and responsibility

On the topic of “Accountability and responsibility”, the Chair’s rolling text proposed:

Accountability

Humans must at all times remain accountable in accordance with applicable international law for decisions on the use of force.

Human responsibility for decisions on the use of weapon systems must be retained since accountability cannot be transferred to machines. This should be considered across the entire life cycle of the weapon system.

Accountability for the design, development and use of autonomous weapon systems must be ensured in accordance with applicable international law, including through the operation of such systems within a responsible chain of human command and control.

States must ensure internal mechanisms for the reporting of incidents that may involve violations of IHL. These internal mechanisms should also address incidents related to the operation of LAWS.

States must take all appropriate steps, including legislative and other measures, to prevent and suppress violations [of the agreed measures/international law] by persons or on territory under its jurisdiction or control.

25. Overall, delegations welcomed this section, on the basis that most of the paragraphs were language already agreed by the Group, or current existing obligations under IHL.

⁸ CCW/GGE.1/2024/WP.4

26. Delegations underlined that some measures to ensure accountability must be taken at the national level. Others argued that the rolling text must include examples of measures that States should take to ensure accountability, such as the need to create or ensure the existence of internal investigation mechanisms, and the establishment of penal sanctions for violations of IHL involving LAWS. Several proposals were also made to add language on State responsibility and on individual responsibility and accountability under international criminal law.

27. It was noted that the language addressing the investigation of IHL violations should also relate to their development and deployment. Moreover, beyond the mere “reporting” of IHL violations, effective follow-up must be ensured for accountability purposes.

III. Way forward

28. The Group succeeded in concluding a first reading of the complete rolling text, and of conducting preliminary yet in-depth discussions on all major issues. As a result, several positions on critical and more granular issues were made clear, which will facilitate the identification of pending matters to resolve. This process was generally considered constructive and helpful in delivering on the mandate of the Group.

29. At the conclusion of the session, the Chair informed delegations that he would share with them his summary of the discussions of the second session, as well as an updated version of the rolling text, based on the discussions of the week and previous work carried out.

30. The Chair also announced that he will organize intersessional consultations before the 2025 sessions of the Group and will call on a Group of Friends of the Chair to assist in fulfilling the Group’s mandate. To facilitate the intersessional work of the Group, the Chair noted that he would circulate the latest revision of the working characterization of LAWS of the Chair’s rolling text as displayed in the screen on 30 August 2024 and that it would be available to the public on the UNODA Meetings place.⁹

31. The Chairperson urged delegations to remain actively engaged and to keep in mind that the Group had few remaining sessions to finalize its mandate before the ultimate deadline of the Seventh CCW Review Conference, in 2026.

⁹ All documents of the first and second sessions in 2024 of the Group are available at: <https://meetings.unoda.org/ccw-/convention-on-certain-conventional-weapons-group-of-governmental-experts-on-lethal-autonomous-weapons-systems-2024>.