

Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems

First Session - Geneva, 2021

Proposals on possible consensus recommendations in relation to the clarification, consideration, and development of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems.

The following elements are presented by Brazil to the presidency of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems to inform the recommendations to the Sixth Review Conference of the Convention on Certain Conventional Weapons.

The Brazilian contribution is divided into two parts.

The first part addresses fundamental aspects of a future normative and operational framework, which, according to the Brazilian position, must take the form of Protocol to the Convention on Certain Conventional Weapons and must be centered in the concept of meaningful human control.

The second part offer suggestions for recommendations regarding a new mandate for the GGE on LAWS.

This contribution is based on the conclusions of the Group, on the various working papers circulated by States and other actors, and on Brazilian national position and practices.

I. Fundamental aspects of a future normative and operational framework: the need for a definition of human control and the inevitability of regulation

In the interest of brevity, this contribution will focus on three items of the agenda of the GGE: an exploration of the potential challenges posed by LAWS (item "a"); further consideration of the human element in the use of lethal force (item "c"); and possible options for addressing the humanitarian and international security challenges (item "e").

On discussing the challenges posed by emerging technologies in the area of lethal autonomous weapons systems to International Humanitarian Law, the Group concluded that the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems must be conducted in accordance with applicable international law, in particular IHL and its requirements and principles, including inter alia distinction, proportionality, and precautions in attack. The Group also concluded that IHL imposes obligations on States, parties, and individuals, who remain at all times responsible for adhering to their obligations under applicable international law, including IHL. Further work is needed to build a shared understanding of the role of operational constraints (CCW/GGE.1/2019/3).

On considering the human element in the use of lethal force, the Group has concluded that, although there is agreement on the importance of the human element, further work would be needed to develop shared understandings of this concept and its application, as well as of the type and degree of human-machine interaction required, including elements of control and judgment. Human involvement at the development stage of a weapon

system based on emerging technologies in the area of lethal autonomous weapons systems may not be sufficient to ensure compliance with IHL. (CCW/GGE.1/2019/3).

On addressing the humanitarian and international security challenges posed by LAWS, the Group concluded, mainly, that there is a diversity of views, including in relation to harm to civilians and combatants in armed conflict in contravention of IHL obligations, exacerbation of regional and international security dilemmas through arms races and the lowering of the threshold for the use of force (CCW/GGE.1/2019/3).

The reading of the three sets of conclusions referred above infers the findings conveyed by Ambassador Karklins in his "commonalities paper", which states that "further work is required to determine the type and extent of human involvement or control necessary to ensure compliance with applicable law, notably international humanitarian law, and respond to ethical concerns in the use of emerging technologies in the area of lethal autonomous weapons systems" (CCW/GGE.1/2020/WP.7, Annex II).

In the same vein, the joint comments provided by Austria, Belgium, Brazil, Chile, Ireland, Germany, Luxembourg, Mexico, and New-Zealand state that one of the main tasks of the GGE will be to "elaborate a common understanding of the type and degree of human-machine interaction that will be needed to ensure compliance with International Law and, in particular, IHL." Human-machine interaction, on that sense, "recognizes the necessity of retaining human control over the weapons systems and is a critical element in ensuring that there is no accountability gap in the design, development, deployment and use of weapons systems based on emerging technologies in the area of LAWS. Human control, responsibility and accountability are also intrinsically linked to the important ethical and moral considerations that should form part of the GGE's work". The countries were keen to conclude that "a normative and operational framework should ensure that human control is exerted and retained over critical functions of any weapons system based on emerging technologies in the area of LAWS." (CCW/GGE.1/2020/WP.7, Annex III).

In addressing the substantial aspects for a future normative and operational framework for LAWS, the GGE will have to address the pending issue in its recommendations: how to achieve consensus on a language regarding human control. In the past, "meaningful human control" was proposed as a framework to help advance an understanding around a threshold delineating acceptable or necessary levels of human control from those that are insufficient (CCW/CONF.V/2).

Currently, any formulation in this regard must ensure that the future framework adequately addresses the inescapable need for retaining human control in the use of force. This unavoidable need cannot be met except via positive and negative obligations since states would not willingly curb the strategic edge that fully autonomous weapons provide to their military forces.

It is imperative that the recommendations from the GGE acknowledge this condition, which states and civil society organizations have brought up throughout the works of the GGE. There is no other way to bound the development and use of autonomous weapon systems to international humanitarian law except through human control; there is no other way to ensure that human control is preserved except through legally binding norms.

Brazil has a longstanding position in defense of the centrality of the concept of human control in the discussions about the use of LAWS, for two cardinal reasons:

- Preserving human control during the performance of critical functions of autonomous systems can prevent violations to International Humanitarian Law;
- Preserving human control during the performance of critical functions of autonomous systems ensures the integrity of the chain of command, which provides for accountability and responsibility in the use of LAWS.

These reasons are based on logic and ethical principles. For the first reason, an autonomous system cannot be programmed to observe principles of *jus in bellum*, since: (i) such principles cannot be adequately converted in programming language and might not be upheld in uncertain conditions; (ii) the use of force without any human control should be considered a blatant violation to the ethical standards that underpin IHL and other norms vis-à-vis the conduct of hostilities.

For the second reason, regulation concerning autonomous systems must be developed to make certain that the responsibility for their use is attributable to States and individuals. It may be impossible to establish a reliable causality link between the actions performed by autonomous systems in the battlefield and the actual intention of their commanders. A potential accountability gap would incite moral hazard, encourage impunity and hinder the right of victims to seek justice.

These two reasons comprise the core challenges that beset discussions on LAWS. The centrality of the concept of human control provides a solution to the IHL compliance and the responsibility dilemma. Nonetheless, the concept is yet to be defined by the GGE. An adequate definition must rely upon establishing positive and negative obligations for the use of LAWS.

The normative and operational framework to regulate the use of LAWS will be flawed by design if it is not built around the concept of meaningful human control. Moreover, it would be useless if it does not bring about positive and negative obligations, which would have to take the form of a Protocol to the CCW.

Past discussions on the GGE have reaffirmed the need for some degree of human control over critical functions of autonomous weapons systems. Therefore, the GGE should make efforts to produce a concrete recommendation on this subject.

The negotiation of a legally binding instrument is the paramount goal. The GGE would fall short of completing its task if its recommendations do not create conditions for that negotiation to start within the next cycle. In addition, the recommendations from the GGE must allow for the concept of human control to serve as the basis for future obligations regarding the use of LAWS.

Brazil has been an unfaltering advocate for the concept of human control, which differs from that of human judgment, human involvement, or human-machine interaction. There are legal implications regarding the choice of words; preserving the integrity of the concept is also preserving its due and adequate effects for the future normative and operational framework.

Brazil believes that the GGE should work on a recommendation to the Sixth Review Conference that addresses the need for retaining meaningful human control in the use of LAWS. The GGE should work under a mandate to negotiate a consensual formulation on the concept of human control that would ensure compliance with applicable international law, in particular IHL. It will allow for the development of an adequate normative and operational framework for LAWS, which should take the form of a protocol to the CCW.

II – The new mandate for the GGE on LAWS.

The Informal Meeting of Experts recommended to the 2016 Fifth Review Conference the establishment of an open-ended Group of Governmental Experts (GGE) in accordance with established practice. The GGE should explore and agree on recommendations related to emerging technologies in the area of LAWS, in the context of the objectives and purposes of the Convention.

The current version mandate of the GGE was defined in the final report of the 2019 session (CCW/GGE.1/2019/3), which reaffirmed that the group "is to explore and agree on possible recommendations on options related to emerging technologies in the area of lethal autonomous weapons systems." The reports of the GGE were to be submitted to the meeting of High Contracting Parties in 2020, and to the Sixth Review Conference, in 2021.

The current version of the mandate will be exhausted by forwarding the recommendations to the Sixth Review Conference in 2021. Thus, the Review Conference will decide upon a new mandate for the next cycle, in accordance with the recommendations of the GGE.

Brazil is of the view that the new mandate must include language that incorporates the aim of starting negotiations with a view to a legally binding instrument to regulate the use of LAWS. This text does not have to prejudge the negotiation results, nor should it interrupt further discussions on how to address the challenges of LAWS.

The backdrop for the negotiations of Protocol V to the CCW might offer a useful example of constructive mandate language. The 2001 Review Conference decided to establish a Group of Governmental Experts to examine the legal, technical, operational, and humanitarian aspects of the explosive remnants of war (ERW). The final document of the Conference (CCW/CONF.II/2) specified a vital element of the mandate given to the GGE: "The Coordinator shall undertake work in an efficient manner so as to submit recommendations, adopted by consensus, at an early date for consideration by the States Parties, including whether to proceed with negotiating a legally-binding instrument or instruments on ERW and/or other approaches."

In its report to CCW States Parties, the Group recommended that it continue its work in 2003 and announced that it was ready to begin negotiations on "an instrument on post-conflict remedial measures of a generic nature." Apart from negotiating, states would continue their discussions on preventive measures and implement the existing principles of international humanitarian law (CCW/GGE/III/1). Finally, on 28 November 2003, the States Parties to the CCW adopted a new protocol on explosive remnants of war, the fifth Protocol to the Convention, a concerted effort to reduce the suffering caused by the explosive munitions that remain after the end of an armed conflict.

The example of Protocol V illustrates how the RevCon can adopt a negotiating mandate without prejudging the negotiation results nor obstructing discussions on further issues that need clarification.

Brazil believes that the GGE must offer a clear recommendation to the RevCon regarding the need for a new mandate, including language allowing states to negotiate a legally binding instrument or instruments on LAWS regulation, in the form of a new Protocol to the CCW.

In addition, the work of the Group should focus on defining prohibitions and regulations and other appropriate measures to ensure that the use of LAWS abides by the IHL and other applicable international norms.