

**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**

27 September 2021

English only

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

Geneva, 3-13 August, 24 September-1 October and 2-8 December 2021

Agenda Item 5

Focus of work of the Group of Governmental Experts in 2021

**Proposal for consensus recommendations in  
relation to the clarification, consideration and  
development of aspects of the normative and  
operational framework**

**Submitted by the International Committee of the Red Cross**

**I. The ICRC's concerns about autonomous weapon systems**

1. Autonomous weapon systems select and apply force to targets without human intervention. After initial activation or launch by a person, an autonomous weapon system self-initiates or triggers a strike in response to information from the environment received through sensors and on the basis of a generalized "target profile". This means that the user does not choose, or even know, the specific target(s) and the precise timing and/or location of the resulting application(s) of force.
2. The use of autonomous weapon systems entails risks due to the difficulties in anticipating and limiting their effects. This loss of human control and judgement in the use of force and weapons raises serious concerns from humanitarian, legal and ethical perspectives.
3. The process by which autonomous weapon systems function:
  - brings risks of harm for those affected by armed conflict, both civilians and combatants, as well as dangers of conflict escalation
  - raises challenges for compliance with international law, including international humanitarian law, notably, the rules on the conduct of hostilities for the protection of civilians
  - raises fundamental ethical concerns for humanity, in effect substituting human decisions about life and death with sensor, software and machine processes.

**II. The ICRC's recommendations to States for the regulation of  
autonomous weapon systems**

4. The International Committee of the Red Cross (ICRC) has, since 2015, urged States to establish internationally agreed limits on autonomous weapon systems to ensure civilian protection, compliance with international humanitarian law, and ethical acceptability.



5. With a view to supporting current efforts to establish international limits on autonomous weapon systems that address the risks they raise, including efforts by the Convention on Certain Conventional Weapons (CCW) Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems to develop consensus recommendations in relation to the clarification, consideration and development of aspects of the normative and operational framework, the ICRC recommends that States adopt new legally binding rules.<sup>1</sup> In particular:

(a) Unpredictable autonomous weapon systems should be expressly ruled out, notably because of their indiscriminate effects. This would best be achieved with a prohibition on autonomous weapon systems that are designed or used in a manner such that their effects cannot be sufficiently understood, predicted and explained.

(b) In light of ethical considerations to safeguard humanity, and to uphold international humanitarian law rules for the protection of civilians and combatants hors de combat, use of autonomous weapon systems to target human beings should be ruled out. This would best be achieved through a prohibition on autonomous weapon systems that are designed or used to apply force against persons.

(c) In order to protect civilians and civilian objects, uphold the rules of international humanitarian law and safeguard humanity, the design and use of autonomous weapon systems that would not be prohibited should be regulated, including through a combination of:

- limits on the types of target, such as constraining them to objects that are military objectives by nature
- limits on the duration, geographical scope and scale of use, including to enable human judgement and control in relation to a specific attack
- limits on situations of use, such as constraining them to situations where civilians or civilian objects are not present
- requirements for human-machine interaction, notably to ensure effective human supervision, and timely intervention and deactivation.

6. The ICRC's position and its recommendations to States are based on its analyses of associated humanitarian, legal, ethical, technical and military implications of autonomous weapon systems, insights published in a series of reports, and regular engagement with States and experts at the CCW and bilaterally.<sup>2</sup> These inform the ICRC's recommendations on the specific limits on autonomous weapon systems that are needed to ensure civilian protection, compliance with international humanitarian law and ethical acceptability.

7. The normative limits put forward by the ICRC are informed by views expressed by many High Contracting Parties to the CCW, and other stakeholders, on the types of measures that can contribute to ensuring human control, involvement or judgement, and on the need for new legally binding rules on autonomous weapon systems. More specifically, a number of High Contracting Parties, and other stakeholders, support the prohibition of certain autonomous weapon systems and the placement of constraints or requirements on other autonomous weapon systems.

8. The ICRC is convinced that these limits should take the form of new legally binding rules that specifically regulate autonomous weapon systems. These rules should clarify how existing rules of international law, including international humanitarian law, constrain the

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<sup>1</sup> ICRC, ICRC Position on Autonomous Weapon Systems and Background Paper, Geneva, 12 May 2021, <https://www.icrc.org/en/document/icrc-position-autonomous-weapon-systems>.

<sup>2</sup> Most recently: ICRC, Statement of the ICRC to Convention on Certain Conventional Weapons (CCW) Group of Governmental Experts on Lethal Autonomous Weapons Systems, Geneva, 21–25 September 2020; ICRC, Commentary on the “Guiding Principles” of the CCW GGE on “Lethal Autonomous Weapons Systems”, Geneva, July 2020; and V. Boulanin, N. Davison, N. Goussac, and M. Peldán Carlsson, Limits on Autonomy in Weapon Systems: Identifying Practical Elements of Human Control, ICRC & SIPRI, June 2020.

design and use of autonomous weapon systems, and supplement the legal framework where needed, including to address wider humanitarian risks and fundamental ethical concerns raised by autonomous weapon systems.

9. Considering the speed of development in autonomous weapon systems' technology and use, it is critical that internationally agreed limits be established in a timely manner. Beyond new legal rules, these limits may also include common policy standards and good practice guidance, which can be complementary and mutually reinforcing. To this end, and within the scope of its mandate and expertise, the ICRC stands ready to work in collaboration with States and other stakeholders at international and national levels, including representatives of High Contracting Parties to the CCW and their armed forces, the scientific and technical community, industry and civil society.

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