

Statement on Building Blocks for a Regulation of LAWS and Human Control

International Panel on the Regulation of Autonomous Weapons (Twitter: [@iPRAW_org](#))

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Thank you Mr. Chair!

I would like to address some of your guiding questions while linking them to the normative and operational framework. In a recently published report, the *International Panel on the Regulation of Autonomous Weapons* has identified three larger buildings blocks that can guide the creation of the normative and operational framework for a regulation of LAWS. These blocks are (1) challenges to be addressed by a regulation, (2) the human element at the core of any regulation of LAWS, and (3) actual elements of the framework.

Block I – Challenges: The development and use of LAWS raises several challenges that need to be addressed, ranging from technological aspects to military, legal, and ethical considerations. But also questions relating to international security and stability play a pivotal role, deserving greater attention. Depending on the challenges it addresses, the regulation might look differently.

Block II – Human Control: The challenges I mentioned briefly are mostly caused by a lack of human control in the use of force. Accordingly, a regulation of LAWS should focus on that. iPRAW defines human control as situational understanding and options for intervention enabled both by design and in use. That means that the design of weapon systems with autonomous functions must enable the operator/commander to understand the operational context to allow for informed decisions over each step of the use of force. The necessary monitoring of the environment and the system includes system diagnostics, internal and external sensors for system and environmental monitoring as well as methods for communicating that information. In addition, the ability for humans to actively intervene at any time prior to the ultimate use of force should be a default feature.

The need for situational understanding and intervention is not limited to one single weapon system, but should also refer to systems of multiple platforms executing a shared mission, which is how these capabilities will likely be developed and fielded.

iPRAW's concept of human control to does not necessarily mean direct manipulation. It is focused on the necessity of humans to be making targeting decisions, including both technical and operational requirements. Both incorporate measures earlier in the life cycle of a weapon system to ensure that the need for human control in operation is considered during research and development, programming and testing of systems, and deployment of various components of a LAWS. The implementation of military objectives is based on design features and capabilities of weapon systems combined the mission planning. Even though this is a crucial step in a military operation, iPRAW's concept of human control would consider it as insufficient if the human involvement was limited solely to the planning phase of the mission.

For defining the necessary type and level of human control the operational context is crucial. All the more since multiple factors contribute to the determination of what level of human

control is adequate in a given situation. A ‘one-size-of-control-fits-all’ solution that addresses all concerns raised by the use of autonomous weapon systems will most likely not be achievable. Looking at this multitude of relevant factors from the perspective of the CCW, the crucial lens would be the risk for violations of IHL (due to a lack of situational understanding or timely intervention), especially if combatants and civilians cannot be distinguished properly or if the proportionally assessment cannot be made adequately.

One factor contributing to this is the predictability of the environment, e.g. the likeliness for changes with potential risks for civilians or hors de combat (‘dynamic, cluttered environment’). Other contextual factors relevant to this assessment are: the geographical range of the weapon, the purpose, and the type of target. In certain circumstances, e.g. a very limited range due to a stationary system, the deliberate or physical technical limitation of the used munitions, the domain of application, and a purely anti-materiel weapon, the necessary degree of human control can be substantially lower than in others.

To account for the context-dependency of human control, a future regulation of LAWS (e.g. a CCW Protocol) will probably have to consist of rather abstract stipulations regarding the concept of human control. The supplementary adoption of further agreements – legally or politically binding – could be useful to delineate human control in further detail. The requirements presented in the Chair’s draft present a very good starting point to define the operational context.

Block III – Elements of the Regulatory Framework: iPRAW recommends a technology-agnostic approach when it comes to a regulation of LAWS and a focus on the human element in the use of force rather than a categorical definition of LAWS. iPRAW considers it advisable to focus on the obligation to maintain human control over the use of force instead of a definition of LAWS.

In that vein, the distinction between fully and partially autonomous weapon systems as a criteria for the type of regulation could prove problematic. If states parties cannot draw the exact line between the two types they might create grey areas and slow down the GGE debate. Therefore a focus on human control and how to implement that could prove more effective. (I say this very carefully since I have not discussed that part with the whole group of iPRAW.)

The GGE Guiding Principles of 2019 are a suitable starting point for further discussions on a normative and operational framework on LAWS, but they are not sufficient. For example, a more detailed account of human-machine interaction is necessary. We have seen some very promising attempts to that in the last eight days. Other potential principles that were not explicitly mentioned in the Guiding Principles could also find entry into a future CCW Declaration or Protocol, such as predictability, reliability and transparency. Ultimately, solely one international treaty might not suffice to tackle all the aspects and challenges that are presented by LAWS. The adoption of additional treaties or even soft-law documents, such as codes of conduct and best practices, are recommended to supplement a potential treaty on LAWS and human control. However, the CCW is at the core of those deliberations and does and will continue to shape the international understanding of LAWS and human control.

Thank you, Mr. Chair.