

Statement on Challenges of LAWS for International Security

Agenda Item 5 (e) Possible options for addressing the humanitarian and international security challenges

The International Panel on the Regulation of Autonomous Weapons (Twitter: [@iPRAW_org](https://twitter.com/iPRAW_org))
Delivered by Anja Dahlmann (Twitter: [@adahlma](https://twitter.com/adahlma)) on August 5th, 2021

Thank you, Mr. Chair.

On behalf of the International Panel on the Regulation of Autonomous Weapons I would like to highlight potential benefits and risks of military AI and machine autonomy, as they can have manifold implications for international security and strategic stability.

The major benefit of applying autonomous functions for military purposes is the possibility of accelerating information processing, decision-making, and command and control cycles. A faster tempo of warfare however *also* runs risk of overwhelming human operators and undermining human judgment, especially in crisis situations. This could be aggravated by the fact that AI-enabled systems are often not entirely comprehensible for humans, especially those relying on machine or deep learning. Automation bias, meaning human overreliance and over-trust in the effectiveness of machine autonomy, has already caused various accidents in the civilian domain and could be particularly acute if human operators were not aware of the limits of AI and autonomy. Therefore, technical errors, coupled with unpredictable, opaque systems and automation bias could lead to a situation where humans might lose the ability to control escalation and manage war termination.

Furthermore, already existing threat perceptions and an increasing speed of warfare could spur arms competition towards greater levels of autonomy that again increases the speed of conflicts, leading to a vicious circle. Similarly, while sophisticated AI-enabled systems might not be easily built or acquired, rather "crude" LAWS and their components could diffuse rather rapidly, potentially falling into the hands of illegitimate or irresponsible actors. Export controls in addition to a CCW regulation might be able to mitigate this issue to a certain extent.

Whether AI-enabled systems and machine autonomy will strengthen or undermine strategic stability will to a large extent depend on their application and the human role. In certain cases, AI technologies could aid human operators. For example, by enabling the integration of heterogeneous data and rapid information processing, computational methods could improve situational awareness of human operators and commanders. This however presupposes that technical risks and limitations (as mentioned earlier by ICRAC) as well as risks in relation to human-machine interaction are taken into account. Also safety measures and adequate training of human operators must ensure reliable systems and their responsible use. Ultimately, the focus must be on aiding rather than replacing the unique judgment of humans – which calls, once more, for an international regulation that includes the obligation to maintain human control by design and in the use of weapon systems.

The adequate type and level of human control depends on the specific context of a military operation. Translated into a CCW regulation, this might require rather abstract rules

addressing human control in more general terms, ideally supplemented by a set of more specific documents to elucidate the concept of human control and to operationalize it.

iPRAW presents more thoughts on human control and how it relates to the normative and operational framework in a report published in July. (Delegates can find it online and in print in the back of this room.)

Thank you, Mr. Chair.

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