

Statement on Agenda 5c (Human Element)

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

Delivered by Anja Dahlmann (Twitter: @adahlima) on September 23rd, 2020

Thank you Mr. Chair!

On behalf of the *International Panel on the Regulation of Autonomous Weapons*, I would like to share some remarks on the human element. Specifically, how the operational context might relate to a potential regulation of LAWS.

The ‘human element’ can be conceptualized as human control, meaning the requirement for situational understanding by the human and the option to intervene built-in by design and available any time during use. We can find similar approaches in various national commentaries on the Guiding Principles.

The concept of human control applies to the whole life cycle of a weapon system, but ultimately the **design and all other steps of the life cycle are enablers to allow for human control during target selection and engagement**. Of course, human control does not necessarily equal direct manipulation. Furthermore, control is not to be understood as a singular event during or at the end of the targeting process, but as a process. To allow for predictability and to abide by legal requirements, the human operator must be aware of the state of the system as well as its environment. Therefore, the system’s design must allow the operator to monitor both. This could be achieved through frequent (technical or operational) points of inquiry throughout the targeting cycle. In addition to this situational understanding, the human operator needs options to interact with the system.

To define the adequate type and level of human control in a given situation, the **operational context** is a crucial factor and multiple variables contribute to it. Therefore, 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.

In the context of the CCW, the most relevant factor to approach human control would be the **risk for violations of IHL (due to a lack of situational understanding or timely intervention)**. One option to address this could be a classification of factors that define the operational context. The shortcoming of such a kind of typology lies in the multitude of combinations of environmental factors, operational requirements, and weapon capabilities it cannot account for. Instead, a regulation would be more useful if it included more general approximations to be specified in each case along the lines of existing IHL considerations. The report presented by SIPRI and the ICRC in June 2020 is a helpful starting point for that.¹ So, to account for a multitude of battlefield applications a regulation of LAWS might have to remain rather abstract with regard to the type and level of human control. Best practices and other dynamic soft law measures could accompany a more abstract regulation. In addition, tabletop exercises and other scenario-based workshops can facilitate a better understanding

¹ https://www.sipri.org/sites/default/files/2020-06/2006_limits_of_autonomy.pdf, also: <https://www.ipraw.org/human-control/> on the operational context and human control during attack.

of the context before actually fielding sophisticated weapon systems with autonomous functions.

iPRAW is currently developing a series of workshops to conceptualize the operational context and other aspects related to the human element. Delegations will receive invitations in due time.

Thank you.

The International Panel on the Regulation of Autonomous Weapons (iPRAW) is coordinated by:
Stiftung Wissenschaft und Politik (SWP) – German Institute for International and Security Affairs
Ludwigkirchplatz 3-4, 10719 Berlin, Germany

This project is financially supported by the German Federal Foreign Office.
Find all reports and more information online at www.ipraw.org