Group of Governmental Experts (GGE) on Lethal Autonomous Weapons Systems (LAWS)
Geneva, 27-31 August 2018

Further consideration of the human element in the use of lethal force, aspects of human-machine interaction in the development, deployment and use of emerging technologies in the area of LAWS

Intervention by Bulgaria

Mr. Chairman,

Allow me to express gratitude to the State parties for their valuable contributions to the deliberations on human-machine interaction and the concept of human control. The expressed convergent views on the matter demonstrate the constructive way ahead for attaining mutual understanding and reaching productive results.

In this respect, I would like to share the Bulgarian view on the issue. The ultimate life and death decision belongs to a human being, as such moral and ethical resolution cannot be transferred to an autonomous machine.

Therefore, human-machine interaction is paramount at the different phases of design, validation, deployment and use of an autonomous weapons system, especially in the targeting cycle. Human-machine interface should be built up at every stage of a weapons system's life cycle as a human element must be present in all of the processes - from research and development to the targeting loop.

Mr. Chairman,

The “sunrise chart”, drafted by you in April and further upgraded by the United Kingdom in their working paper, is truly beneficial for understanding of development and employment of weapons systems and the role of humans in the whole process.

In our view, human control must be exerted over the whole life cycle of an autonomous weapons system and primarily over the use of force. Human control must also be exercised in accordance with international humanitarian law and its core principles of distinction, military necessity and proportionality and precaution. A mutual understanding exists within the GGE that IHL is fully applicable to development and use of LAWS.

Any application of force by a machine needs a prior approval by an official in the chain of command as the subordination of an autonomous system to a higher military authority must be warranted. Human intervention in the decision-making process of where and when to use force is
a necessity that requires excellent communication links between a machine and a commander or an operator.

Bulgaria shares the view of the Swiss and Dutch delegations that commanders and operators must go through strict and comprehensive training on the use of autonomous weapons systems in compliance with the IHL before deploying and using them on the battlefield.

When deploying an autonomous machine, the commander and/or the operator must have a broad comprehension of its capabilities and adequate situational awareness of the operational environment. Thus the commander and the operator can properly assess the legality of an autonomous system's attack before authorizing it. In any cases, the use of force must be controlled and limited to the commander's initial intent and to the effects needed to achieve military goals.

Law applies to human beings. Thus, accountability cannot be transferred from a person to a machine. Officials in the chain of command must bear responsibility for the actions of the autonomous weapons systems under their command. As commanders and operators are deeply involved in the decision-making process in regard to the use of lethal force, they should foresee a system's biases and deviations from its pre-programmed functioning and take duly measures on time to prevent any unlawful hostilities.

Thank you, Mr. Chairman