



**Group of Governmental Experts on  
Lethal Autonomous Weapons Systems**

**Agenda item 6(b)**

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Conference on Disarmament, Geneva**

**11 April 2018**

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Thank you Mr Chair.

Please allow me at the outset to convey New Zealand's appreciation for your leadership of this process and for your efforts to navigate our collective journey forward on the issue of Lethal Autonomous Weapons Systems. Like many others, we had identified last year the need for a step change in how we approach this issue and we look forward to concrete outcomes from our meetings this year.

I would like to comment briefly on our approach to issues relating to meaningful human control and to the human-machine interface. I say "approach to" because we are still working our way through these complex challenges and hope to learn more at this meeting on the approaches being considered by others.

As we have noted previously, New Zealand considers "meaningful human control" to be a key criterion when assessing an autonomous weapon system. In our view, the ability to exercise human control is critical to whether a weapon would be able to comply with International Humanitarian Law as well as other requirements, such as Rules of Engagement. As articulated by the ICRC and others, the challenge before us now is to determine the kind of human control that is considered necessary for partially autonomous weapons systems. I note, Mr Chair, that like others in the room we prefer not to limit discussions to *lethal* autonomous weapons systems but to *all* systems with autonomy in their critical functions.

It seems obvious that what might qualify as “meaningful human control” for a system undertaking one set of tasks in one particular operating environment might be insufficient for a system operating under different parameters. This should not discourage us from the task at hand but suggests that we should not expect to be able to agree a comprehensive list of system- or mission-specific requirements relating to meaningful human control.

Rather, we would see value in exploring the concepts of “human in the loop” and “human on the loop” in helping to define what might constitute meaningful human control across a range of operating contexts and weapons systems. We acknowledge the comments from Brazil this morning that the labels “in the loop” and “on the loop” are not in themselves sufficient – we agree but consider that they could provide a useful way to organise our thinking about the range and quality of control that is needed.

Some systems, for example may require a higher level of control such as that that could be provided by a human *in* the loop. Such a system would need to provide that human with the time and information necessary to make meaningful decisions that comply with IHL and other requirements such as targeting directives.

On the other hand, other systems might require decisions to be made in such a short space of time that any human *in* the loop would not be able to exert any meaningful control. In that context, however, meaningful human control could be ensured through a human *on* the loop applied through programming constraints governing target selection and engagement, and an ability to disengage the system if required.

As a number of other delegations have noted in their earlier comments, there are additional considerations in play here that we will need to factor into our work. For example, how can we be sure that any human in the loop would know when it might need to intervene, or when a system might need to be shut down? How can we ensure that any change in the operating context, for example from armed conflict to law enforcement, would be recognised by an autonomous weapon system and responded to appropriately? We are also aware of the many challenges relating to bias

in programming and are very interested in what these might mean for the role of any human in or on the loop. This is by no means an exhaustive list of issues and we look forward to considering all those that have been brought to the table by participants here.

We note that, in all situations, a decision to deploy a specific system in a specific environment would require the operator to know its characteristics and be assured that they are appropriate to the environment in which it would be deployed. This is one aspect of the human-machine interface which has been raised by many delegations.

Finally, Mr Chair, I would note that New Zealand sees accountability and as an essential aspect of meaningful human control as it provides the post facto assurance that control has taken place to the standard required. LAWS must therefore be able to provide Auditable Reasoning for actions taken. This is a challenging requirement and one that will require further work. More generally I would note that New Zealand shares the view on accountability and responsibility laid by the United Kingdom this morning.

Thank you.