CCW Meeting of Experts

Possible challenges to international humanitarian law due to increasing degrees of autonomy

Geneva, April 15, 2015

Madam Chairperson,

I would like to thank you for including the possible challenges to IHL due to increasing degrees of autonomy into this week’s discussions and thank the panelists for their thought provoking presentations. Respect for international law including in particular IHL, and the existence of an uninterrupted accountability chain are in my delegation’s view essential and applicable to any weapon system including lethal autonomous weapons systems (LAWS). Let me make some remarks on some key areas discussed today.

First, it is important to reiterate that any use of force, including through LAWS, must strictly comply with international law and, in times of armed conflict, with IHL. IHL imposes manifold obligations which would have to be respected when using LAWS, in particular the principles governing the conduct of hostilities. For example, in order for LAWS to be lawfully employed in an armed conflict, challenging assessments are required to distinguish between civilian and military objectives or in evaluating whether the causation of unavoidable incidental harm to the civilian population can be justified in view of the concrete and direct military advantage anticipated from that particular attack. These fundamental principles must not be circumvented by the use of LAWS.

These and other legal requirements are derived directly from longstanding principles of IHL and allow for no compromise. It is therefore clear that existing IHL sets the bar very high in terms of technological prerequisites for the lawful use of LAWS in armed conflict.
Madam Chairperson,

As with any other weapon system, States must ensure that the development and use of LAWS are in compliance with existing international law. In this regard my delegation considers the duty to conduct legal reviews in the study, development, acquisition or adoption of a new weapon, means or methods of warfare as an important element in preventing or restricting the employment of new weapons that would violate international law in all or some circumstances. The conduct of such reviews is an explicit treaty obligation for States Parties to the first Additional Protocol to the Geneva Conventions as expressed in its Art. 36. However, it would appear that the obligation to assess the legality of new weapons, also applies to all other States, as it flows directly from the general obligation of States to respect and ensure respect for IHL in all circumstances and from the general prohibition of using unlawful weapons or of using them in an unlawful manner.

Madam Chairperson,

While the basic duty to conduct a legal review is the same for any new weapons system, the actual review process itself may have to be quite different for LAWS as compared, for example, to a conventional artillery system. LAWS may be increasingly tasked to make their own tactical or operational determinations with little or no human intervention, including the identification and engagement of specific targets. Any legal review process concerned with such systems would have to assess not only their international lawfulness under the rules of classic weapons law (such as the prohibition of indiscriminate weapons), but also their capability to reliably implement the targeting principles of distinction, precaution and proportionality without human intervention. This is not the case with conventional weapons systems, where the actual targeting is always conducted by a human operator.

The present technical advances also show that developments in autonomy will most likely take place in an incremental way and by upgrades of ever more sophisticated software. Hence, an appropriate legal review process needs to review not only hardware but also software components as well as their relevant technical upgrades. Also, the legal review of LAWS should aim to ensure that LAWS cannot continue to function and cause unintended harm in case of a system malfunction or unintended loss of control. With a view to avoiding unwanted loss of control or unfriendly takeover, the resilience of a system to cyber-attacks, as well as to programming and deployment errors should also be assessed.

Madam Chairperson,

Against this background, my delegation is of the view that the biggest challenge for the legal review of LAWS appears to be a technical one: “Do we have the technical and experimental resources to perform adequate tests, which provide us with the necessary confidence that a
system acts predictably, as designed and in compliance with existing international law?" If we lack the capability to reliably assess this, the system should not be fielded.

An additional, more general thought with regard to legal reviews, which I wish to raise, is related to the transfer of lessons learnt. Certain nations have developed performant legal review procedures. Other nations might have performant statutory procedures but lack to a certain extent the day-to-day experience and perhaps technical expertise in implementing the procedures. Yet other nations may lack the statutory provisions and hence find themselves confronted with the complex task of establishing from scratch a proper legal review process. In this regard, we would find value in discussing how the CCW or any other relevant forum could contribute to sharing best practices related to the process of legal review,

Madam Chairperson,

Let me close with some considerations regarding accountability and responsibility. An uninterrupted accountability chain is essential for the implementation of international law, incl. IHL. This holds true not only for cases where LAWS would be used in an unlawful manner, but especially also in cases where such systems malfunction or cause unintended harm. We see a wide range of legal mechanisms, national and international, that could come into play to ensure accountability in the use of LAWS. On the international level, the primary enforcement mechanisms would be the rules governing State responsibility and, in case of individual culpability, international criminal law.

We all have the responsibility to ensure that legal liability for violations of international law cannot be evaded through the use of LAWS. In this respect questions seem to arise primarily with regard to establishing the intent required for holding a person criminally liable for the use of LAWS.

Perhaps our discussions could benefit from considerations in related fields where increasingly automatic or autonomous systems already exist, such as in the automobile industry. We would welcome more in-depth analysis on possible accountability gaps and ways to close them.

I thank you Madam Chairperson.