UK Mission
Geneva

Convention on Certain Conventional Weapons
Group of Government Experts on emerging technologies in the area of Lethal Autonomous Weapons Systems

Geneva, 25-29 March 2019

Agenda item 5(a): an exploration of the potential challenges posed by emerging technologies in the area of Lethal Autonomous Weapons Systems to International Humanitarian Law

Mr Chair,

The UK aligns itself with the statement made by the European Union and its Member States; we have some additional comments in a national capacity.

International Humanitarian Law (IHL) regulates the conduct of armed conflict and seeks to limit its effects by protecting persons who are not participating in hostilities. IHL also restricts and regulates the means and methods of warfare available to combatants. Weapons systems designed, developed and deployed by states must be capable of being used in line with the obligations imposed by IHL. For the UK, the military application of IHL is known as the Law of Armed Conflict (LOAC) – also referred to by some states as the 'Law of War'.

Individual members of the armed forces are accountable for their own actions on operations. Commanders have additional accountability under the doctrine of command responsibility. A commander must consider the Law of Armed Conflict when issuing orders and instructions or establishing procedures or delivering training and must take steps to prevent or report violations, initiating disciplinary action where necessary. It is the UK's view that accountability can never be delegated to a machine or system; should a violation of IHL result from the operation of a weapon or weapon system, processes are already in place to conduct appropriate investigations and, if applicable, apportion responsibility. Legal accountability will always devolve to a human being, never a machine – increasing autonomy in weapons or weapons systems does not therefore present the risk of an accountability gap.

Weapons and weapons systems developed and fielded by the UK are subject to legal review. Article 36 of the First Protocol Additional to the Geneva Conventions of 1949 (Additional Protocol I) requires states to determine whether new weapons, means or methods of warfare may be employed lawfully under international law. Weapon reviews in the United Kingdom are undertaken by serving military lawyers and the UK takes the obligation very seriously. The UK will still conduct a review if it seeks to acquire equipment that is already in service with the armed forces of another state, even if that state has conducted its own weapon review.

UK weapon reviews take place at several key milestones in the equipment procurement process: notably at the decision to commit funds to developing a specific capability (known as 'Initial Gate'), at the decision to commit fully to the procurement of a particular system (known as 'Main Gate'); and at the date the finalised system enters service. Even where weapons are rapidly procured in response to urgent operational requirements, they are still meaningfully reviewed – rapidly if required, with more formal and comprehensive advice to follow. Further legal reviews will also be conducted if the parameters or capabilities of the system are changed – for example software or hardware upgrades, or a change in the envisioned concept of use.

It should be noted that even legal weapons can be used illegally, which reinforces the importance of a clear and well-understood accountability chain to establish fault in the event of a violation. This approach, taken as part of a wider regulatory framework including industry standards and operational directives and procedures, ensures that any weapons employed by the UK on operations are used in line with our legal obligations. Further detail on the UK's regulatory framework can be found in the UK's working paper submitted for consideration at the August 2018 LAWS GGE.

Mr Chair,

Warfare is highly complex and requires a high degree of human-machine teaming to support effective decision-making. In a military context, machines are vital for activities that require the assimilation and processing of increasingly significant amounts of data such as navigation, system management or logistical calculations. Conversely, humans are vital for understanding context and evaluating consequences. Within tightly defined circumstances and in response to a specific problem, machines may make more accurate decisions than a human; outside of these circumstances, the ability of a human to apply experience and judgement to a new situation currently exceeds that of machines. We have explored such issues in our Joint Concept Note on Human Machine Teaming and in the UK's 2018 working paper. The effective teaming of human and machine can improve capability, accuracy,

diligence and speed of decision, whilst maintaining and potentially enhancing confidence in adherence to IHL.

I note the presence at this GGE of many distinguished delegates who have sat with me in the same meeting rooms and discussed the problems presented by Explosive Weapons with Wide Area Effects in Populated Areas ('EWIPA'). Emerging technology offers opportunities to address some of these concerns by improving the fidelity of military decision making, improving situational awareness and offering lower-yield and higher-precision weaponeering options for operations in an urban or access-denied environment. Similarly, systems with disruptive, non-lethal capabilities could also increase the spectrum of effects open to military decision makers, reducing the requirement for traditional explosive weapons. The component sub-systems are likely to be common and some systems may be capable of cycling between lethal and non-lethal effects according to the demands of the operational environment. All could be adversely affected by a precipitous move towards a pre-emptive legal instrument.

It is the firm belief of the UK that states can best ensure that the development of next-generation weapons systems is adequately governed and regulated by robustly enforced and rigorously applied processes, including weapons reviews and national Systems of Control such as those explored in Australia's excellent non-paper, to ensure that the employment of all weapons is in accordance with international law. IHL underpins these measures and remains appropriate to controlling the means and methods of warfare.

We further contend that in the absence of any clearly articulated empirical evidence as to why existing regulation – including IHL – is inadequate to control developments in emerging technologies, the issue may well lie not with the processes themselves, but with the perceived ability of machines to assimilate, understand and meet the relevant extant legal and ethical standards. We argue that weapons systems that cannot meet these standards will remain incapable of legal use as set out in existing national and international normative frameworks and will not be developed, fielded and used. All states should look to ensure they meet the basic obligations already set out in the relevant articles of IHL before pressing for bespoke legislation for as-yet undefined capabilities.

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