

LAWS and the Risks of IHL extension

Thank you Madam chairwoman—and thanks to Ambassador Biontino for the invitation to present here today.

In the short time I have I will proceed in two parts:

- First: I will comment briefly on how IHL would have to be adapted and extended to govern the development, testing and deployment of AWS—for that I will focus on the rule of proportionality.
- Second—and this is really my main point—I will identify three serious risks in this process of adapting and extending IHL.
 - In identifying these risks, I will be looking at the law from the outside, as it were. I will be using insights from political science into how international law operates.
- The upshot of my presentation is that unless these barriers are overcome—and it is by no means easy—the use of AWS can create tremendous, unforeseeable risks to civilian populations. So, while AWS may minimize risks to own forces and civilians, in the process they can externalize and potentially multiply risks to innocent, foreign civilians.

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First: on the extension of the proportionality rule to cover AWS:

- As you all know, IHL mandates that “those who plan or decide upon an attack shall refrain” when they may expect to cause “incidental loss of civilian life, injury to civilians, or damage to civilian objects” in excess of the direct military advantage anticipated (Art 57, API)
- Critics of AWS have argued that a machine could never perform this balance, and they may be right. But it does not follow that AWS are inherently unlawful, as some have claimed.

- The question is not whether a machine could be designed to undertake a balance of proportionality, but rather how proportionality would work when a human commander or operator must decide whether or not to deploy an AWS.

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- Proportionality requires that the human commander estimate what would be the “incidental loss” to civilians caused by the machine, and whether (or not) that would be in excess of the advantage anticipated.
- It follows that the rule of proportionality mandates that a commander be able to estimate the risks generated by the weapon on civilians.
 - Fielding AWS under complete uncertainty would essentially be like releasing a lethal substance in an inhabited environment. This constitutes a criminal offense—criminal negligence.
 - In the context of IHL, a commander is responsible for anticipating and taking into account all “non-negligible risks” to civilians when preparing an attack.
- The difficulty with AWS is of course that they are autonomous, hence non-deterministic, hence they necessarily involve some level of uncertainty in their operation.
 - Extending IHL to AWS requires to set standards regarding sufficient knowledge or, as ethicists like to say, non-culpable vs culpable ignorance.
 - As many experts have argued, proportionality requires that this uncertainty be bounded—it must be probabilistic, not second-order uncertainty (not uncertainty about the uncertainty). It must be possible to determine probabilistically the machine’s range of action, because only on that basis it is possible to make judgments of proportionality.
 - The crucial question is what level of probability and ex ante knowledge should be required, or what level of uncertainty would be unlawful.

- Similar considerations apply to the principle of distinction, and also to the doctrine of command responsibility, which my colleague Neha Jain discussed in some detail yesterday.

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So, turning now to my second part: what are the risks involved in this task of adapting and extending IHL to govern AWS?

- First: defining what would be sufficient knowledge, and gaining sufficient “epistemic confidence” about the performance of AWS would take considerable investment and testing. But these financial and time costs may run against the budgetary constraints, tactical interests, and sense of urgency of deploying states. It may be very tempting to opt for expediency.
 - This problem is compounded by the fact that, unlike robotics for civilian purposes, in the case of AWS there is of course no equivalent to impartial consumer protection agencies that would protect the vital interests of civilians. Foreign civilians have no voice or representatives in the weapon review process mandated by article 36. Their interests could be discounted in the review process at low cost, particularly if there are ways to keep harm to them out of public sight.

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- Second: many fundamental rules of IHL are in fact open-ended principles which appeal to criteria such as reasonableness and feasibility. These are legal keywords that call for human judgment, and as such are vague and open-ended.
 - Students of international law have pointed out that references to reasonableness often have the function of concealing diverging interpretations and unresolved political tensions. Such disagreements are often solved not by the normative force of the most appropriate considerations but rather by the sheer power and interests of the parties.
 - In the context of AWS, open-ended appeals to reasonableness and feasibility may end up incorporating the preference of stronger powers for shifting risks away from their own forces and enjoying economies in testing.

- The overall effect of this will be that the principles of proportionality and due precaution will gradually shift to reflect the preferences of AWS holders—higher damage to civilians will come to be treated as proportional; higher uncertainty will be found admissible.

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- Third: while in principle it is possible to attribute responsibility fairly to human beings in the context of AWS, in practice this may require defining (conventionally) specific roles within a very complex web of industrial-military production and use. It may not be easy even to identify who is in command for putting an autonomous system into operation; someone may have to be designated as responsible. Unless such “role responsibilities” are explicitly assigned, any notion of human responsibility could dissolve to a vanishing point.
 - Unless deploying states are willing to define certain roles as those responsibility for the impact of AWS, the nightmare of unaccountable robots killing innocent civilians may become reality.

To conclude: the process of extending and adapting IHL to cover AWS must:

- Ensure that the vital interests of civilians are properly reflected in the testing and review process;
- Avoid the further erosion of open-ended IHL principles, in particular proportionality and distinction;
- Make sure that specific roles and responsibilities are well defined such that human beings can be held accountable for the impact of AWS—
- Otherwise, AWS will further increase ongoing trends in asymmetrical warfare, in which risks are externalized to foreign civilian, while own forces and civilians are kept far from the awful consequences of war.

Thank you.