CCW meeting of experts on autonomous weapon systems
Session on technical issues, 14 May 2014

<u>Statement by the ICRC</u>

1. On the scope of discussions about autonomous weapon systems

General scope

- As we have heard from technical experts, and as the ICRC discovered in preparations for its own expert meeting, there is no clear line between automated and autonomous weapon systems.
- Rather than search for an unclear line, it may be more useful to focus on the **critical functions** of weapon systems (i.e. the process of target acquisition, tracking, selection, and attack).
- Where these functions are carried out independently by the machine then the weapon system should be within the scope of our discussions at the CCW.

Complexity

- We also heard from some technical experts that a weapon system that independently selects and attacks targets does not necessarily have to be highly complex.
- It could be quite simple in its design but highly autonomous in its functioning.
- To explain in another way; after you turn on the weapon– or activate it – the weapon system itself choses its specific target and then to attack it. And it does this without human control or intervention.

Human control

- This brings us back to the central issue of human control, which ICRC highlighted in its opening statement.
- There has been much reference to the concept of 'meaningful human control' during discussions.
- One way to get a better understanding of this concept is to examine current weapons that have autonomy in 'critical functions' to see how meaningful human control is understood and considered to be implemented in practice today.

Substituting humans with machines

- There have been different views regarding whether machines would ever be 'taking decisions' on selecting and attacking targets, or whether they would always be 'following the instructions' of humans in some form.
- However, it seems that at a certain point – where humans are so far removed in time and space from the process of collecting, analysing, and acting on the information gathered by the weapon system – we are in effect **substituting** the human decision-making process with machine decision-making process on the use of force.
- In such a situation the user of the weapon system would be placing machines in control of the 'critical functions' while relying on the machine to have sufficient advance information to make the correct decisions.

2. On discussions about the “lethality” of weapons

- In the view of the ICRC, which is quite well known on this issue, it is not useful to discuss weapons in terms of their “lethality” or “non-lethality”.
- Lethality is not an inherent property of a weapon but depends on the weapon and the context of its use.
- That context includes how the weapon is used in practice and the vulnerability of the victim(s).
- For example, it is a misconception that conventional weapons are 100% “lethal” (e.g. data since the Second World War shows that around 25% of those wounded on the battlefield by conventional weapons die from their injuries).
- Conversely, some weapons described as “non-lethal” have been used in a way that causes comparable outcomes in terms of fatalities (e.g. due to the weapons’ characteristics and context of use; or their use in combination with conventional weapons).
- For a simple illustration of why it does not make sense to talk about “lethality” take this example: A rifle fired above a person’s head as a warning shot has a non-fatal outcome, whereas a plastic bullet fired directly at a person’s head can easily kill.
- We should also remember, especially given that we are in a CCW meeting, that some weapons promoted at the time of their development as “non-lethal” were eventually banned in 1995 on the grounds that the injuries produced constituted "superfluous injury or unnecessary suffering". Here am referring of course to blinding laser weapons.
- In sum, in discussions about autonomous weapon systems we should be referring to the use of weapons and the use of force.