Working Paper on Lethal Autonomous Weapons Systems

Submitted by Poland

1. Poland welcomes the ongoing deliberations on lethal autonomous weapons systems (LAWS). We should continue to build common understanding of this complex multidimensional issue, such as the broad agreement that human control must be retained over weapons systems and the use of force. Poland believes that the progress made during the first meeting of the Group of Government Experts is a solid basis for further discussion. In this respect Poland would like to contribute to the debate by submitting this working paper, which focuses on ethical and legal dimensions of LAWS.

I. Ethical dimension of the use of LAWS

2. In the process of setting limits on autonomy in LAWS we need to evaluate the ethical aspects of the use of these weapons. From the technical point of view, creating systems that identify and engage targets autonomously is perfectly possible. One could argue that some of the dominant political and military interests will be leading us towards increasing implementation of LAWS. This is in the name of efficiency, benefits and strategic technical superiority that make human involvement an option and not a must. The underlying assumption here, however, is that humans are central actors and not mere factors that may or may not be included in the process of the use of LAWS. This is due to distinctively human characteristics that LAWS do not have, namely the human ability for ethical reasoning and ethical conduct which are inherent to life-and-death decisions. From the practical point of view, any view of LAWS as systems that are isolated and independent of human beings is unrealistic. All robotic and weapon systems are made and deployed by humans to a varying degree. The very need to remind of the human involvement is not so much due to the absence of humans in the LAWS framework as due to the increasing disregard for the human being as such. We argue here that the debate on LAWS should be conducted with humans and not machines at the center in a way it acknowledges the distinctiveness and complexity of human ethics and related human characteristics rather than dismisses or oversimplifies them.

II. The role and responsibility of humans in the use of LAWS

3. The discussion on ethical dimension of LAWS inevitably implies a question of responsibility. Hypothetical situations when humans are so far removed in time and space from the acts of selecting and attacking targets that human decision-making could be substituted with computer-controlled processes raise ethical questions about the role and responsibility of humans in the use of force. The idea of any weapon system, that places the use of force beyond human control, is not acceptable and moral responsibility for decisions to kill and destroy cannot be delegated to machines. The type and degree of human control
needs to be evaluated to establish limits on autonomy in weapons systems. In this process we should take into account that humans should remain fully responsible for decisions to use force. In other words, it is humans who should take responsibility for ethical conduct rather than expect autonomous systems to pursue this difficult task. In the review process states should consider the weapon in the light of the Martens Clause and examine whether the weapon, means or method of warfare is of nature that contravenes the principle of humanity or the dictates of public conscience. This principle provides moral guidance to our discussion on setting limits on autonomy in weapon systems.

III. Compliance of the use of LAWS with the international law

4. Development and use of LAWS should remain in compliance with the international law, in particular with the international humanitarian law and the international human rights law. According to Article 36 of Additional Protocol I to the Geneva Conventions of 1949 states should determine the lawfulness of any new weapon or means or method of warfare before it is used in armed conflict. Conducting legal review is a necessary step to ensure that armed forces are capable of conducting hostilities in accordance with its international obligations. Article 36 of Additional Protocol I also requires states to consider the general provisions of international humanitarian law and any other international law applicable to that state, including in particular rules prohibiting specific weapons and means of warfare or restricting the method by which they can be used.

5. When analyzing whether the weapon system itself is lawful, there are a few distinct rules that apply. The weapon system should not be indiscriminate by its nature. A weapon is deemed indiscriminate by nature, if it cannot be aimed at a specific target and would be as likely to strike civilians as combatants. The weapon system cannot also cause unnecessary suffering or superfluous injury. In case of the autonomous weapons systems it could be deemed lawful, if it would be armed with weapons and ammunition that comply with this rule. In some situations (e.g. peacekeeping missions), when the weapon is used to conduct law enforcement missions, the international human rights law would be applied. The autonomous weapon system could potentially affect a number of human rights, in particular the right to life. The autonomous weapon system used in a law enforcement context would have to be able to evaluate the degree to which life is at risk and be able to select alternatives to lethal force, such as negotiation or capture.

6. The weapon review determines, if the autonomous weapon system could comply with international law, in particular with international humanitarian law relating to the conduct of hostilities. The rule of distinction requires a determination as to whether the target is lawful and hence not a civilian or civilian object or a person hors de combat. For the use of an autonomous weapon system to be lawful, the system would be expected to reasonably distinguish between combatants and civilians (and between military objectives and civilian objects) given the particular environment and circumstances of the battlefield ruling at the time. The rule of proportionality prohibits an attack which may be expected to cause incidental loss of life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated. To comply with the principle, autonomous weapons systems would, at a minimum, need to be able to estimate the expected amount of collateral harm that might come to civilians from an attack. Additionally, if civilian casualties were likely to occur, the autonomous weapons systems would need to be able to compare the amount of collateral harm against some predetermined military advantage value of the target. The rule of proportionality is closely linked to the rule of precautions in attack. With respect to attacks those, who plan or decide upon an attack shall: do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects, but are military objectives; take all feasible precautions in the choice of means and methods of attack with a view to avoiding or minimizing incidental loss of civilian life, injury to civilians and damage to civilian objects, and refrain from deciding to launch any attack which may be expected to cause such effects. Compliance with these rules is dependent on reliable information about the target and its surroundings and must be kept under constant review. Rigorous application of the legal review duties in good faith by states, in particularly with regard to the targeting
rules, would be a good guarantee for adequate protection of civilians and civilian objects. The weapon review could be effective tool for ensuring that also autonomous weapons systems are developed, produced and used in compliance with the requirements of international law.

7. With these legal and ethical questions in mind, we should work on establishing principles and limits for autonomy in weapons systems, so that humans remain fully responsible for decisions to use force.