CUBA'S COMMENTARIES ON THE OPERATIONALIZATION OF THE 11 GUIDING PRINCIPLES ON LETHAL AUTONOMOUS WEAPON SYSTEMS (LAWS) AT A NATIONAL LEVEL

Cuba does not possess nor develop lethal autonomous weapon systems. Since the beginning of the discussions on this matter, it has maintained a consistent position on that category of weapons, which has been registered and recorded at the meetings of the Groups of Government Experts on Emerging Technologies in the Field of Lethal Autonomous Weapons Systems.

Our country has actively and constructively participated in the negotiations of the Group of Governmental Experts. With regard to the 11 guiding principles adopted by said Group, we believe that they constitute a starting point for identifying and clarifying common understandings and that they could serve as a basis for the negotiations and subsequent developments of a regulatory framework.

While these principles can be further developed, they cannot by themselves curb the threat posed by lethal autonomous weapons systems, nor do they replace the need for a strict, legally binding international regulatory framework that includes a ban on weapons not subject to human control.

Principles a) and h)

The lack of a definition and primarily of a regulation on these weapons systems in the context of international humanitarian law imposes new challenges and higher stakes on States. It is expected that this intelligent weaponry will be able to seek out and attack military targets and people, using lethal force without human intervention.

We have defended, in all the relevant multilateral forums, that all autonomous weapons which cannot comply with the provisions of international law and international humanitarian law should be banned, even before they begin to be produced and deployed on a large scale. This is a preventive approach, based on the principle of precaution.

The use of lethal autonomous weapons would not be able to ensure compliance with and observance of the rules and principles of international law.

Fully autonomous weapons could be used in contravention of the principles of sovereignty and territorial integrity of States, which are enshrined in Article 2 of the United Nations Charter. The sovereignty and territorial integrity of States has already been violated through the use of weapons systems with a certain degree of autonomy, in order to carry out espionage or commit extrajudicial killings, among other actions. Under no circumstances is the violation of the
principles of sovereignty and territorial integrity acceptable. Even when the prescribed use of these weapons is for non-military purposes, the State in which they are used must have given its consent prior to the fact.

Based on the available information and technology, we believe that the use of these weapons could not guarantee compliance with and observance of the basic principles of international humanitarian law, such as the distinction between civilians and combatants, proportionality, and others.

We have therefore advocated for a legally binding instrument within the framework of the Convention on Certain Conventional Weapons that would prohibit LAWS.

Although we do not have programs associated with the development of this type of weaponry, Cuban national legislation regulates aspects directly related to the observance of the principles of international humanitarian law and, therefore, to the operationalization of these two guiding principles.

**Principles b), c) and d)**

Autonomous lethal weapons are not capable of making complex decisions. They have a limited capacity to perceive the overall conflict environment as well as to adapt to unexpected changes, and they cannot effectively determine human intentions.

Consequently, Cuba has expressed its concern over the possible use of these weapons systems aimed at dehumanizing conflict, and, in this sense, we believe that machines cannot replace human beings in the most important decisions of war, and in no event can they decide on people's lives. All autonomous weapons that do not maintain human control over these aspects (aspects such as selecting the target and attacking it) must be banned. The degree of autonomy and lethality are the basic characteristics that should guide the prohibition or regulation of autonomous weapons. The greater the autonomy and lethality, the stricter the framework that regulates them should be.

We advocate for the adoption of a legally binding international instrument that bans the manufacture, possession, and use of fully autonomous weapons and establishes specific regulations for the use of semi-autonomous weapons.

In order to move forward in the discussions, an agreed definition of autonomous weapons is of vital importance. We regret that this important issue has been left aside.

A definition of these weapons should consider both fully autonomous and semi-autonomous weapons.
**Fully autonomous weapons** should be understood as those that act without human supervision once they have been deployed.

**Semi-autonomous weapons** should be understood as those that have the supervision of a human controller, at least in their critical functions, e.g. for target selection and attack.

With the use of fully autonomous weapons, the responsibility of a State for internationally wrongful acts, or violations of international law, could not be effectively assessed. The very characteristics of autonomous weapons render it difficult or even impossible to attribute responsibility to a State or an individual in the event of illicit acts involving the use of these weapons.

Any State or individual which is responsible for illicit acts involving the use of autonomous lethal weapons should be held accountable.

To be able to assess and assign responsibility is one of the elements that reinforce the need for human control. Any programmer who intentionally programs an autonomous weapon to commit war crimes should also be held accountable.

In Cuban national legislation, articles 5, 42, 43, 44, and 45 of Act No. 22, "Military Crimes Act", of February 15th 1979, provide dispositions for aspects related to the military chain of command and the individual responsibility of combatants. Said provisions relate to the operationalization of these three guiding principles.

**Principle e)**

It is an obligation of States to ensure that their weapons comply with the rules and principles of international law, including international humanitarian law. New technologies have to comply with international law as well. Article 36 of Protocol I Additional to the Geneva Conventions of 1977 clearly states that when a High Contracting Party studies, develops or acquires or adopts a new weapon, means or method of warfare, it has an obligation to determine whether its use would, under certain conditions or in all circumstances, be prohibited by that Protocol or by any other rules of international law applicable to that High Contracting Party.

However, national reviews of new weapons are not, in themselves, a sufficient measure to regulate autonomous weapons. National reviews should be understood as a complement to a specific new international standard that is necessary for this new category of weapons. The lack of uniformity of national measures for the review of these new standards is another element that reinforces the need for a specific international rule specific to autonomous weapons.
Principles f) and g)

Everything that runs on software can be attacked or hacked by State and non-State actors. Lethal Autonomous weapons do not escape this phenomenon, as they are complex emerging systems that will never be completely immune to the vulnerabilities identified in traditional weapon systems. Due to their nature, autonomous weapon systems will be especially vulnerable to cyber operations.

We cannot rule out the possibility that the interactions these weapons withstand in the field during military operations, could damage both their software and hardware and, since they are totally autonomous and lack human monitoring and control, there would not even be the possibility of aborting an operation which has already been carried out by one of these defective weapons. This type of technical damage to which any machine is exposed to could lead, in this particular case, to major disasters and considerable losses, both human and material.

Fully lethal autonomous weapons with long deployment times raise cybersecurity concerns because, the longer such a system is deployed, particularly if it is out of communication, the more time an "adversary" will have to discover and exploit vulnerabilities, all the while remaining undetected. If a vulnerability related to security were to be identified in a fully autonomous object operating in environments with limited communications, we would have to wonder whether it would be possible to remotely correct the vulnerability, recover the object or at least initiate a fail-safe shutdown mode. Hence, the importance of maintaining human control over this type of weapon.

Principles i), j) and k)

The importance of the peaceful use of intelligent autonomous technology is not unknown, nor is it denied. There is a general agreement on the fact that progress and access to the peaceful uses of these technologies should not be hindered. However, the goal is to engage, as soon as possible, in setting limits on the development of lethal autonomous weapons and to regulate the use of intelligent autonomous technologies for military purposes, in particular by prohibiting their use for the manufacture and development of autonomous weapons.

The apparent tactical benefits resulting from the use of lethal autonomous weapons may cause possessor States to stop considering armed conflict as a last resort. In doing so, they could increase international conflicts and thus their casualties. The possession of these weapons by unauthorized non-state actors would also represent a danger to governments and civilian populations.

We recognize the work of the Group of Governmental Experts on Emerging Technologies in the Field of Lethal Autonomous Weapons Systems and support
its mandate, within the framework of the Convention on Certain Conventional Weapons, to achieve concrete strategies to address the security, ethical and humanitarian challenges posed by emerging technologies in the field of lethal autonomous weapons systems.

We favor the advancement of this important issue within the framework of the United Nations. The impasse we are facing in the Convention on Certain Conventional Weapons is regrettable. It is also understandable that States and civil society that support an instrument banning these weapons are seeing their actions and aspirations paralyzed in the GGE and are trying to bring the issue before the General Assembly. We do not favor the initiation of a negotiation process outside the UN system.