

**Commentary of the Republic of the Philippines  
on the Normative and Operational Framework in Emerging Technologies  
in the Area of Lethal Autonomous Weapon Systems**

1. Given substantive discussions in the Group of Government Experts (GGE) on Emerging Technologies in the Area of Lethal Autonomous Weapon System (LAWS), there is already enough material for the GGE to start discussing specific elements of a normative and operational framework on LAWS.
2. Such a normative and operational framework should ultimately be institutionalized through a legally-binding Protocol of the Convention on the Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed To Be Excessively Injurious Or To Have Indiscriminate Effects (CCW).
3. Anything short of such a Protocol, including a political declaration or voluntary applicable guidance, can only be acceptable as an intermediary or complementary step towards a legally-binding instrument under the ambit of the Convention.
4. The eleven Guiding Principles provide a useful basis to flesh out the elements of such a normative and operational framework. In essence, these Guiding Principles also affirm many of the points of convergence arrived at by High Contracting Parties (HCP) in several GGE meetings. In essence, these points are:
  - 4.1. International law, including International Humanitarian Law, applies to all weapons or weapon systems, including autonomous weapons systems.
  - 4.2. Humans should retain effective control, responsibility, and accountability in any weapon or weapon systems across all stages of their life cycle.
  - 4.3. Machines should not be granted control over matters involving human life and death.
  - 4.4. States have the responsibility to ensure that all weapons or weapon systems, including autonomous, semi-autonomous, or any other advanced weapon systems, are in compliance with International Humanitarian Law.
  - 4.5. Safeguards must be put in place to prevent acquisition or proliferation of any advance weapons or weapon systems by armed non-state actors.
5. Having agreed upon these general premises, there is now enough basis to negotiate a legally-binding Protocol under the Convention that will contain prohibitions or regulations in the area of LAWS and other advanced weapon systems. The GGE should now be given the mandate to discuss the following specific elements of such an instrument, to wit:

- 5.1. **Characterization and differentiation.** There must be focused discussions on the characterization of and differentiation among advanced weapons or weapon systems to identify which of them are acceptable and which are not.

Advanced weapon systems include those that select, engage, and apply force on the basis of machine analysis of sensor inputs. Autonomous weapon systems, on the other hand, refer to those that operate without human control. When they are intended to select, engage, and apply force with the intention to destroy and kill, they could be considered lethal.

LAWS that are anti-personnel are never acceptable and should be prohibited. Unpredictable advanced weapon systems, or those that have effects that are impossible to determine within an acceptable degree of certainty or functions that are unable to accommodate meaningful human control, should likewise be prohibited. In accordance with International Humanitarian Law, these prohibitions should apply to all belligerents in armed conflict, whether States or armed non-State actors.

LAWS should be differentiated from automated or semi-autonomous military reconnaissance equipment or weapons that have autonomous features in terms of associated functions such as, *inter alia*, navigation systems, but not in term of making decisions regarding the destruction of targets.

LAWS should further be differentiated from autonomous, semi-autonomous, or automated weapons that are defensive in nature and target specific military objects such as, *inter alia*, torpedo missiles at sea or ballistic missiles in the air.

In assessing whether advanced weapons or weapon systems other than LAWS should be prohibited or regulated, States must examine if such weapons or weapon systems (1) can be directed at specific military objective, (2) avoid causing superfluous injury or unnecessary suffering, and (3) will have effects that can be limited as required by International Humanitarian Law. If the advanced weapons or weapons systems do not pass these tests, they should be prohibited.

International Humanitarian Law already provides a measure of protection from such semi-autonomous or automated weapons, but discussing measures to further regulate them could also be helpful.

- 5.2. **Control and accountability.** There must be a reaffirmation that all weapons or weapon systems must be designed to ensure meaningful human control. Discussions in this regard should lead to positive obligations that will ensure the perpetual retention of meaningful human control over the use of force.

The recommendations of the International Committee of the Red Cross (ICRC) provide a useful starting point in this regard. There is value in considering the imposition of limitations on (1) the types of targets that such semi-autonomous or automated weapons such that they are constrained to objects that are

designed to meet military objectives; (2) the duration, geographical scope, and scale of use with the view to enabling human judgment and retaining meaningful human control in relation to specific attacks; and (3) context of use such that they are constrained to situations where civilians or civilian objects are not present.

Meaningful human control refers to the degree of supervision and intervention that human operators should retain to ensure that operational, ethical, and moral hazards are mitigated, and that the rules of International Humanitarian Law and International Human Rights Law are observed.

Meaningful human control should be retained in the decision-making, technological, and operational components of any advanced weapon systems.

Only humans, non-human legal persons, and States can be held legally, ethically, and morally accountable and responsible for any use of force or for any breach of International Humanitarian Law and International Criminal Law.

The normative and operational framework on LAWS should therefore include stipulations on the culpability of individuals in a potentially criminal act using LAWS and the accountability of non-human persons with regard to relevant prohibitions and regulations.

- 5.3. **Transparency.** The uncertainties regarding which States are developing or in the process of acquiring advanced weapons or weapon systems that could fall under certain characterizations that may require either prohibition or regulation must be addressed. States should be transparent regarding important aspects of the development of their weapon systems, including their processes for reviewing new weapons, without prejudice to their reasonable national security prerogatives.

To build confidence, possible mechanisms for High Contracting Parties to exchange views, information, and insights on their domestic operationalization of the agreed norms on LAWS should be explored.

Discussion should likewise explore possible positive obligations with regard to ensuring responsible State behavior in the aspects of developing, utilizing, and deploying advanced weaponries and weapon systems. These include means to uphold obligations under International Humanitarian Law, including mainstreaming them in doctrines and trainings, and measures on risk assessment and mitigation in the design, development, testing, and deployment cycles of emerging technologies in weapons system.

- 5.4. **Safeguards.** States already endeavor to exercise responsible behavior in terms of governing the development of technologies, including weapon systems, but such responsible behavior is absent in armed non-state actors. Therefore, focused efforts must be undertaken to prevent the acquisition and proliferation of advanced weaponries by armed non-State actors, including

through a prohibition on transfer. This goal should likewise fall under the State's responsibility.

For any normative and operative framework on LAWS to be truly future-proof, the foundation for industry safeguards must be immediately laid. This can be done through an exploration of possible soft measures.

While it might be premature – or even counter-productive, from a development standpoint – to develop specific trade restrictions on potential technologies that could be weaponized, it could be useful to identify and define the characteristics of possible technologies that could be weaponized, possibly by putting together a glossary. This should be done with inputs from experts from the military and security sectors and from private research and development sectors.

It would also be useful for States to encourage industries and enterprises to adopt codes of conduct with regard to developments related to advanced technologies, including, *inter alia*, artificial intelligence, Big Data, and machine learning. These codes of conduct should be mainstreamed through a network of industry practitioners, the creation of which could be encouraged through national measures, with the view to, among others, developing common ethical norms and standards that can help safeguard emerging technologies.

This network should have regular interface with public policymakers including those in the legal and diplomatic, and military and security sectors. Such interface would facilitate the development of policies, laws, and regulations with the view to enhancing industry safeguards, with due respect to intellectual property and without unduly impinging on innovation. Some best practices at the national, regional, and global levels whereby states dialogue with industry and scientific experts to consider policy implications of dual uses of emerging technologies could be explored in this regard.

In order to incubate this network and interface, a Group of Experts mechanism based upon the model of those that are regularly held under the auspices of the Amended Second Protocol and Fifth Protocol to the Convention should be set up to institutionalize discussions on emerging technologies in the area of advanced weapon systems.