

# Commentaries by Portugal on “Operationalising all eleven guiding principles at a national level”

As requested by the Chair of the 2020 Group of Governmental Experts (GGE) on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS) within the Convention on Certain Conventional Weapons (CCW)

## General Remarks

Welcoming an invitation by the Chair of the 2020 GGE-LAWS, Ambassador Jānis Kārklīņš, for the High Contracting Parties to submit national commentaries on the operationalisation of the Guiding Principles adopted by the 2019 GGE-LAWS and endorsed at the last Meeting of the High Contracting Parties to the CCW, Portugal shares below its interpretation of the Principles and its vision for their operationalisation and development.

The Guiding Principles provide a relevant overall guidance to the work of the GGE-LAWS and for the High Contracting Parties to take into account when designing and implementing internal law and policies on emerging technologies in the area of LAWS.

Portugal cautions that the Guiding Principles represent the lowest common denominator of consensus within the GGE-LAWS and should therefore not be interpreted as an end in themselves nor as a deliverable able to fulfil the mandate of the GGE-LAWS on its own. Furthermore, there may be issues concerning the regulation of LAWS that overstep the mandate of the GGE-LAWS. As such, and on the one hand, the GGE-LAWS does not exhaust all the international discussion on the development and use of these emerging technologies. On the other hand, for effectively pursuing its mission, the GGE-LAWS will need to research and discuss areas that, while not being the focus of its formal mandate, constitute vital auxiliaries to its completion. For example, and even from the point of view of the existing applicable law within the spirit of the CCW, areas other than International Humanitarian Law will have to be considered (*e.g.* International Human Rights Law and International Criminal Law).

Among other activities at the GGE-LAWS, Portugal once again stresses the need for an exercise towards a clarification, consideration and development of aspects of other normative and operational framework on emerging technologies in the area of LAWS. This exercise would be fully aligned with the mandate of the GGE-LAWS as provided in Decision 1 of the Fifth Review Conference of the High Contracting Parties to the CCW.

Certainly, simply agreeing that international law applies to LAWS is not enough. The GGE-LAWS must engage in a thorough discussion on identifying and interpreting those concrete international norms, enhancing legal certainty by building consensus on the existing normative framework applicable to LAWS and assessing the existing international law in order to find possible gaps that may call for an internationally binding instrument on LAWS. Moreover, ethical issues must also be the subject of deeper exchanges and prioritisation at the GGE-LAWS.

Having the Guiding Principles as background, this exercise would allow the GGE-LAWS to reach a consensual interpretation on the international law applicable to LAWS. Depending on its conclusions on the existing legal framework applicable to LAWS, the GGE-LAWS might need to explore the possibility of a new protocol to the CCW regulating the development and use of LAWS, either at a near future or at a later stage.

In addition to not fading attention from Portugal’s calls for the abovementioned exercise, these commentaries are also without prejudice to the position of Portugal in current and future international discussions on the development and use of LAWS (or prohibition thereof), as well as to Portuguese internal and external policies on the matter.

**“(a) International humanitarian law continues to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems;”**

As Portugal has continuously argued at the GGE-LAWS, new means or methods of warfare do not render International Humanitarian Law (IHL) – nor international law in general – obsolete. New technologies such as the emerging ones in the area of LAWS require a particular effort for identifying and interpreted applicable international law – also in order to verify whether existing norms are sufficient and adequate.

On this Guiding Principle, we would like to draw attention to two points on the application of IHL to LAWS that have mostly passed undiscussed.

Firstly, that IHL as applicable to LAWS will include not only obligations concerning wartime but also obligations that are enforceable during peacetime. This encompasses the obligation to disseminate the Geneva Conventions and their Additional Protocols and also obligations relating to the study, development, acquisition or adoption of new weapons – see our comment to Guiding Principle (e).

Secondly, that the GGE-LAWS should bear in mind that Article 2 of the CCW states that *“Nothing in this Convention or its annexed Protocols shall be interpreted as detracting from other obligations imposed upon the High Contracting Parties by international humanitarian law applicable in armed conflict.”*, not making a distinction between treaty and customary IHL. Therefore, when discussing the use of LAWS in the spirit of the CCW, customary rules of IHL<sup>1</sup> on the following topics should be taken into consideration<sup>2</sup>:

- Distinction between civilians and combatants (Rules 1, 2 and 6);
- Distinction between civilian objects and military objectives (Rules 7 and 10);
- Indiscriminate attacks (Rules 11 and 13);
- Proportionality in attack (Rule 14);
- Precautions in attack (Rules 15 to 21);
- Precautions against the effects of attacks (Rules 22 to 24);
- Attacks against persons hors de combat and against persons parachuting from an aircraft in distress (Rules 47 and 47);
- Use of weapons (Rules 70 and 71);
- Compliance with International Humanitarian Law (Rules 139 and 140);
- Enforcement of International Humanitarian Law (Rule 144);
- Responsibility for Violations of International Humanitarian Law and Reparations (Rules 149 and 150);
- Individual responsibility (Rules 151 to 154);
- War crimes (Rules 156 and 158).

**“(b) Human responsibility for decisions on the use of weapons systems must be retained since accountability cannot be transferred to machines. This should be considered across the entire life cycle of the weapons system;”**

Automation and artificial intelligence should be tools in assisting the human actors (enhancing human perception and human action) rather than being the (non-human) actors

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<sup>1</sup> Following the ICRC’s study on customary IHL (originally published by Cambridge University Press in 2005).

<sup>2</sup> This is without prejudice to the relevance of other rules in the context of the use of LAWS, in particular the rules concerning specifically protected persons or objects (e.g. protection of humanitarian relief personnel and objects, the protection of journalists, the protection of cultural property and the protection of the natural environment).

themselves – see our comment to Guiding Principle (i). The will and decision to use force must therefore always remain with a human being.

Especially during the deployment phase, considering that no weapon is developed without defect or possibility of malfunction, its human users must be trained and able to quickly act in order to avoid or minimise the negative consequences of a malfunctioning LAWS.

The use of force must be planned and executed in such a way that it can always be retraceable to the human being operating the machine, in order to prevent any accountability gaps for violations of international law – see our comment to Guiding Principle (d).

**“(c) Human-machine interaction, which may take various forms and be implemented at various stages of the life cycle of a weapon, should ensure that the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems is in compliance with applicable international law, in particular IHL. In determining the quality and extent of human-machine interaction, a range of factors should be considered including the operational context, and the characteristics and capabilities of the weapons system as a whole;”**

The goal when discussing and designing human-machine interaction should be (at least) twofold: (i) to avoid unintended engagement by LAWS and (ii) to retain the human element in critical decisions concerning the use of force by LAWS, in compliance with international law (as well as with internal law and appropriate rules of engagement).

Critical decisions in the use of force encompass, in Portugal’s reading, different decision levels pertaining to a mission’s planning (strategic and tactical planning) and execution.

Portugal calls attention to the fact that some existing and used weapons today already perform some autonomous functions, within certain operative restrictions. The development and use of LAWS could draw inspiration for similar restrictions to ensure compliance with IHL – for example, restrictions (i) in possible tasks and target-selection/engagement (particularly in complex and/or ever-changing environments where human, restrictions on the situation/context (ii) when and where LAWS may be used (i.e. time and space restrictions) and (iii) in the very autonomy of LAWS during engagement [e.g. with a constant and effective post-deployment human-machine communication system, restricting as much as possible the “points-of-no-return” in the use of force; see our comment to Guiding Principle (h)].

**“(d) Accountability for developing, deploying and using any emerging weapons system in the framework of the CCW must be ensured in accordance with applicable international law, including through the operation of such systems within a responsible chain of human command and control;”**

The CCW makes no direct mention to International Criminal Law (ICL) or its rules, neither do its annexed Protocols. Nevertheless, the development, deployment or use of LAWS in a manner incompatible with international law would give rise to individual or State responsibility – for example, in accordance with applicable customary IHL, see our comment to Guiding Principle (a).

Individual responsibility for the unlawful use of LAWS could include actions or omissions amounting to the crime of genocide (e.g. targeted killings of members of a national, ethnical, racial or religious group), crimes against humanity (e.g. murder) or war

crimes (e.g. wilfully causing great suffering or serious injury to body or health). These crimes are defined by and punishable under the Rome Statute of the International Criminal Court, of 1998).

Determining the nature and scope of individual accountability could raise issues regarding the very development and/or manufacturing of LAWS, in addition to their deployment and/or use. In the case of armed conflict, superior responsibility concerning the use of LAWS would be of particular interest.

**“(e) In accordance with States’ obligations under international law, in the study, development, acquisition, or adoption of a new weapon, means or method of warfare, determination must be made whether its employment would, in some or all circumstances, be prohibited by international law;”**

This Guiding Principle mimics much of the language used in Article 36 of Additional Protocol I (Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts).

Moreover, Portugal notes that this Guiding Principle echoes the Martens Clause as quoted in Paragraph 5 of the Preamble of the CCW: *“(The High Contracting Parties) Confirming their determination that in cases not covered by this Convention and its annexed Protocols or by other international agreements, the civilian population and the combatants shall at all times remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience”*.

The Martens Clause is also quoted in international legally binding instruments of IHL, such as the 1899 Hague Convention II on the Laws and Customs of War on Land<sup>3</sup> and the 1977 Additional Protocol II to the Geneva Conventions<sup>4</sup>. In Paragraph 78 of its 1996 Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, the International Court of Justice claimed that the Martens clause *“(…) has proved to be an effective means of addressing the rapid evolution of military technology.”*

As for the employment of LAWS giving rise to situations where it would be prohibited by international law – and in addition to our previous comments concerning IHL –, Portugal withstands that rules of International Human Rights Law (IHRL) must be considered.

The CCW makes no direct mention of IHRL or its rules, neither do its annexed Protocols. However, the principle of humanity under IHL has at its core elements compatible with IHRL and the relation between the legal frameworks of IHL and IHRL can be of extreme importance in certain scenarios of armed conflict – this relation is for example paramount to understand the legal framework applicable to situations of occupation.

Existing multilateral international treaties can be of importance when reflecting on IHRL as applicable to the use of LAWS. For example, the 1966 International Covenant on Civil and Political Rights (e.g. right to life) and the Convention on the Prevention and Punishment of the Crime of Genocide and the 1965 International Convention on the Elimination of All Forms of Racial Discrimination, bearing in mind the possibility of programming a LAW to distinguish and engage only targets with specific physical traits.

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<sup>3</sup> The Preamble of the the 1899 Hague Convention II on the Laws and Customs of War on Land reads *“Until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity and the requirements of the public conscience.”*

<sup>4</sup> *“In cases not covered by the law in force, the human person remains under the protection of the principles of humanity and the dictates of the public conscience.”*

Finally, and given our interpretation on Guiding Principle (f), Portugal underlines that it sees Guiding Principle (e) as being applicable to all means of warfare, including hybrid warfare.

**“(f) When developing or acquiring new weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, physical security, appropriate non-physical safeguards (including cyber-security against hacking or data spoofing), the risk of acquisition by terrorist groups and the risk of proliferation should be considered;”**

Intelligent autonomous technologies are more often than not dual-use technologies (i.e. with both peaceful and non-peaceful uses). In this sense, civilian applications of automation and artificial intelligence may create grey areas where LAWS could be legally be made available for purchase by civilians (e.g. for self-defence of their person, family or property, in compliance with the internal law of a High Contracting Party).

Due to existing very strict national and international standards currently in force in Portugal regarding arms control, Portuguese authorities discard the possibility of weapons with characteristics such as those of LAWS being made available for non-military use (and particularly by civilians): they would necessarily belong in a category of military goods/technologies.

Moreover, LAWS should be expected to be acquired by hostile actors at some point. A solid legal and operational framework and network should be in place to lower the risk of acquisition or development of LAWS by hostile actors.

Indeed, a hostile actor – be it a State actor, a non-State actor or an actor by proxy – in the possession of LAWS may use them as an asymmetric tool/mean of warfare or of cyberthreat. For example, LAWS could be used for espionage actions, intrusion/infiltration activities or in attacks against persons, facilities or networks located abroad, in violation of international law and in an undercover fashion making detection and accountability difficult or even impossible.

The unpredictability and ambiguity that may be entailed in the use of LAWS could result in an erosion of the traditional dichotomies in defence and security narratives (internal v. external; non-combatant v. combatant; civilian v. military; armed conflict v. peace) upon which conventional means and methods of warfare are built. For these reasons, it is advisable to understand LAWS as possible hybrid tools of disruptive power and, as such, to expect them to gradually become a part of the conceptual and analytic framework of hybrid threats.

**“(g) Risk assessments and mitigation measures should be part of the design, development, testing and deployment cycle of emerging technologies in any weapons systems;”**

High Contracting Parties must take action – through internal law, military doctrine/policy and good practices on certification and monitoring of weapons systems – to ensure that effective risk assessment and mitigation measures are put in place during the planning, research and development, certification, use and monitoring of LAWS.

To optimise the effectiveness of such measures, while crafting and implementing national action on risk assessment and mitigation measures, High Contracting Parties should maintain constructive exchanges on emerging technologies in any weapons systems with other relevant stakeholders – e.g. other States, international organisations, academia and

relevant industries (particularly defence and security industries and industries dedicated to advancing technology, particularly artificial intelligence). This is especially important when considering that emerging technologies in the area of LAWS and other weapons systems will rely on dual-use technology – see our comment to Guiding Principles (f) and (j).

**“(h) Consideration should be given to the use of emerging technologies in the area of lethal autonomous weapons systems in upholding compliance with IHL and other applicable international legal obligations;”**

The purpose of the CCW is to prohibit or restrict the use of certain types of weapons considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately. In its Preamble, the CCW alludes frequently to elements of the fundamental principles of IHL: humanity, distinction, proportionality and military necessity.

Advancing military capabilities with a view to enhance the accuracy and consistency of the means and methods and warfare and to minimise human suffering (or prevent it altogether) can be instrumental for bettering the compliance with those fundamental principles of IHL, as well as with obligations under IHRL. See our General Remarks and also our comments to Guiding Principles (a), (c), (d), (e) and (k).

**“(i) In crafting potential policy measures, emerging technologies in the area of lethal autonomous weapons systems should not be anthropomorphized;”**

By reaffirming the need for a meaningful human control over LAWS at all stages of their life cycle, the GGE-LAWS is not merely translating into a principle several legal imperatives stated by IHL and other areas of international law. In addition to concerns on accountability, ethical and moral considerations preside over this and other Guiding Principles, addressing a fundamental problem where the use of lethal force by machines is involved: human life and human safety cannot be left to the autonomous decision/choice of a machine/algorithm.

Consequently, policymakers, lawmakers, armed forces and other persons responsible by crafting and implementing policies, doctrine and strategies on these emerging technologies must be aware that LAWS are mere tools and not actors themselves – see our comments to Guiding Principles (b) and (c).

**“(j) Discussions and any potential policy measures taken within the context of the CCW should not hamper progress in or access to peaceful uses of intelligent autonomous technologies;”**

High Contracting Parties taking part in the GGE-LAWS should focus on discussing issues regarding emerging technologies in the area of LAWS in the context of the CCW and, as such, for use in armed conflict.

Nevertheless, access to peaceful uses of intelligent autonomous technologies (such as emerging technologies in the area of LAWS) must be taken into consideration, given the dual-use characterising these technologies. See also our comments to Guiding Principles (f), (g) and (k).

**“(k) The CCW offers an appropriate framework for dealing with the issue of emerging technologies in the area of lethal autonomous weapons systems within the context of the objectives and purposes of the Convention, which seeks to strike a balance between military necessity and humanitarian considerations.”**

Multilateralism presents a unique platform for States and of International Organisations to discuss common solutions to common challenges. The development and use of artificial intelligence in warfare, counterterrorism and against other security threats is one such common challenge.

The mandate of the GGE-LAWS is to discuss the questions related to emerging technologies in the area of LAWS in the context of the objectives and purposes of the CCW. Such discussions face a number of challenges, one of them being the very nature of the CCW – which, as a chapeau convention, contains only general provisions; the prohibitions or restrictions on the use of specific weapons or weapon systems being the object of the Protocols annexed to it<sup>5</sup>.

Consequently, the scope of the obligations of a High Contracting Party to the CCW will vary according to the specific Protocols that that it is bound to, as well as to whether it has ratified Amended Article 1 of the CCW (Scope of Application). Any research or reflection on the international legal framework created by or under the CCW must therefore consider that such framework is a complex and varied one and depends on an open exchange of views between the High Contracting Parties to the CCW.

So, in order to fully implement its mandate, the GGE-LAWS must seek ways to maximise the potential for consensus among the High Contracting Parties. It should reach both a consensual definition on LAWS and a consensual interpretation on the applicable international law, so that it can make informed recommendations on whether said norms are sufficient and adequate. A coherent and streamlined implementation of the Guiding Principles by the High Contracting Parties to the CCW depends on the further substantiation of the Principles, especially in the case of those mentioning that international law is applicable to LAWS – see our General Remarks and our comment to Guiding Principle (a).

Thus, Portugal understands the present exercise as an opportunity to gather different written comments and proposals from the High Contracting Parties to the CCW, with a view to possibly create useful outputs such as possible interpretative tools/materials useful for the operationalisation of the Guiding Principles at a national level – without prejudice to the non-binding nature of said tools/materials.

**Lisbon and Geneva, August 2020**

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<sup>5</sup> Protocol I on Weapons with Fragments not Detectable by X-ray (1980), Protocol II on Landmines, Booby Traps, and other Devices (1980, Amended in 1996), Protocol III on Incendiary Weapons (1980), Protocol IV on blinding laser weapons (1995) and Protocol V on Explosive Remnants of War (2003).