

Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects

Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems 2020

Contribution of Austria to the Chair`s request on the Guiding Principles on emerging technologies in the area of LAWS

The Chair of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (GGE LAWS) 2020 encouraged State Parties to the Conventional Weapons Convention (CCW) to share views on national operationalization of the Guiding Principles agreed and subsequently adopted by States Parties of the CCW. Austria appreciates the opportunity to share and exchange understandings of international law, including human rights law and international humanitarian law.

However, it has to be mentioned that the guiding principles agreed in the GGE LAWS, represent Guiding Principles developed initially in 2018 with the intention affirmed in their preamble that *“international law, in particular the United Nations Charter and international humanitarian law (IHL) as well as relevant ethical perspectives, should guide the continued work of the Group. Noting the potential challenges posed by emerging technologies in the area of lethal autonomous weapons systems to IHL.”*

In line with the mandate given by the Meeting of High Contracting Parties of the CCW to the GGE in 2019, which reads

“The Group is to consider:

- the guiding principles, which it may further develop and elaborate*
- the work on the legal, technological and military aspects*
- the conclusions of the Group, as reflected in its reports of 2017, 2018 and 2019*

and use them as a basis for its consensus recommendations in relation to the clarification, consideration and development of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems”,

Austria wishes to seize this opportunity to share its views on guiding principle a) *“International humanitarian law continues to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems.”*

Over years of discussions in the GGE, it has become all the more evident that rapid progress of technologies, particularly in the area of autonomous weapons and artificial intelligence (AI) will impact armed conflict, the application of international law (IL), including international humanitarian law (IHL) and human rights law (HRL), and might even change the future of warfare with potential global impact. History has also demonstrated that particularly sophisticated weapon systems, once developed, do not remain confined to a single county, but are also strived for by others, be it through development, acquisition or proliferation. It is Austria`s understanding that the complexity of the issues, rapid

technological advances, and their potential legal, humanitarian, security and - last but not least - ethical challenges led to the establishment of expert work in the CCW on emerging technologies in the area of LAWS in 2014.

The notion of reaffirming the applicability of the international legal order to emerging technologies in the area of LAWS is important. Yet, given the enhanced technological capabilities, which are difficult to predict in their entirety today, but which potentially include the notion of transferring control over (lethal) weapon systems to machines, make the question of meaningful human control all the more important. In Austria's view it is not only about a legal, humanitarian, security and ethical imperative, but also a question of accountability, responsibility and ultimately political responsibility and control of how hostilities are conducted in the future. In our view, these questions cannot be fully answered in the context of existing norms, but require further clarity to prevent unintended consequences in the long run.

The underlying basis of the GGE's work is the reaffirmation that IL and IHL in particular, apply to LAWS and that the choice of means of warfare is not unlimited. While there is consensus, as i.a. expressed in guiding principle a), that the international legal order applies to emerging technologies in the area of LAWS, the main question remains if there is a need to specify certain elements given the substantively new capabilities of emerging technologies in the area of LAWS. Never before has it been more urgent to address specific issues, e.g. safeguarding human control over selecting and engaging the target, triggering a multitude of responsibilities and obligations under international law. The human element is critical to IL and IHL compliance. Now, the key question is to determine the type and degree of human control necessary to ensure compliance with IL, IHL, the core principles of IHL and customary IL, such as the dictates of public conscience. Legal obligations, responsibility and accountability can, by definition, not be outsourced to machines as international legal norms are based on humans.

The assessment of compliance with the existing standards and rules under IHL has to be considered in a contextual manner in light of concrete circumstances. Circumstances on the battlefield are of an evolving nature and human control of a weapon and human judgement are necessary prerequisites.

Among a multitude of obligations and responsibilities, there are at least two dimensions noteworthy to IL and IHL compliance: First, the legality of a weapon per se and second, the question of lawful use of a certain weapon. In Austria's view, the level of autonomy, particularly in the selection and engagement of targets, is decisive for determining the legality of a weapon per se as well as the potential of legal use of a weapon system.

First, means and methods of war are not unlimited. In Austria's view, with increasing levels of autonomy of weapon systems, the question of legality of a weapon per se deserves particular attention. During the development of new technologies, states must ensure that any potential weapon would per se be capable to be used in respect of IL and its basic principles such as distinction, proportionality and precautions in attack. If a weapon is by its mere design not compatible with IL, it must not be developed. IL recognizes the concept of weapons that are indiscriminate by nature, due to their unacceptable humanitarian harm, and thus must not be developed. However, this evaluation is subject to weapon reviews, which will be addressed at the end of this paper.

Second, when exploring the limits of the acceptable, the question of possible lawful use of a certain weapon system is another key consideration. It is noteworthy that lethality per se is not a concept in IHL. In other words, a weapon that delivers lethal effects might very well be used in compliance with IHL. The same reasoning is valid for autonomy, but it is a question of the level of autonomy. It is important to consider the key challenges autonomous weapons systems without meaningful human control over

critical functions would pose to IHL. IHL compliance is highly context-dependent, which is particularly sensitive when it comes to emerging technologies with autonomy in critical functions. Any use of a new weapon needs to comply inter alia with the three fundamental IHL principles, namely the principle of proportionality, distinction and precaution in attack. In this context we wish to recall Austria's 2015 working paper on meaningful human control.

The principle of precaution, requiring that an attack must be cancelled or suspended if it becomes apparent that the objective is not a military one or is subject to special protection or that it would violate the rule of proportionality, is also challenged by the potential development of LAWS. There needs to be a possibility for humans to override the system.

In the context of LAWS, ethical considerations deserve particular attention. The appropriate legal framework is provided for inter alia by the dictates of public conscience and the principles of humanity, as referred to in the Geneva Conventions, but also in the CCW preamble. IHL is grounded on the basic values of humanity shared by all civilizations. The Martens clause demands the application of "the principle of humanity" in armed conflict.

Ensuring meaningful human control requires a multidimensional approach, which also relates to the level of predictability and reliability required to ensure human control and the necessary required human legal and situational judgement. An important question remains the unpredictability of machine learning algorithms, especially considering their underlying data. Setting boundaries – or operational constraints – in the operation of an autonomous robotic system – for example, on the task, time-frame of operation, scope of movement in or over an area, and operating environment – can contribute to increasing predictability. Predictability and reliability are crucial for IHL compliance as both contribute to the ability to estimate the expected effects and results of a particular weapon use.

While some weapon systems developed in the past were automated, e.g. based on a binary if-then function (e.g. defensive weapons with pre-defined targets such as specific missiles in a specific area), the question of how compliance with international law, in particular international humanitarian law and its principles, can be ensured in the context of potentially merely algorithm-driven selection or engagement of targets, remains broadly unanswered by the international community. The general notion that the international legal order applies can be helpful in this regard. Some countries have published doctrines on national legal and ethical limits to weapon development. Yet, if there is no common understanding of different states applying the currently nonspecific rules of international law, including international humanitarian law and human rights law, to the particular case of LAWS, the international legal acquis risks to become subject of mere national understandings and interpretations of the broadest guidelines and legal obligations of international law, including international humanitarian law and human rights law.

The legal weapon review outlined in Article 36 of the Geneva Additional Protocol of 1949 requires that „In the study, development, acquisition or adoption of a new weapon, means or method of warfare, a *High Contracting Party* is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the *High Contracting Party*.“ Yet, the procedure makes it very clear that the responsibility lies with the State itself to determine, if in the particular State's point of view a weapon or for the purpose of this GGE a weapon system would be compatible to be operated within the applicable existing legal norms. This is closely linked to the challenge of how States interpret existing norms (including IL, IHL and the dictates of public conscience). In the absence of a specific legal norm, States could differentiate in their assessment, if a weapon system is compatible with IL, potentially opening the door to uncertainties in the application of norms by using different standards. For reasons that go well beyond this paper, it is clear that detailed information of weapons development, including potential capabilities, is unlikely to be shared in real

time with the broader international community. History shows that detailed insight into weapon reviews is provided, if ever, only years after a particular weapon system was considered for development. In the light of emerging technologies advancing at an unprecedented pace, such insights would be possibly shared at a stage when the information exchange might be too late to influence policy decisions in other states.

Therefore, Austria considers the necessity of developing specific international law in the context of autonomous weapon systems without meaningful human control over the selection and engagement of a target as an urgent matter to be dealt with by the international community. In our view, it is key to preserve human moral dignity, the rule of law and international security as a whole. The absence of clear legal norms regulating LAWS might ultimately challenge many of the previous achievements in international law, international humanitarian law, the ethical principles enshrined as a minimum standard in the Martens clause and human rights law. In the past, in cases where states felt the need to further clarify international law, more specific regulations were adopted. Under the CCW, the Protocol IV is a case in point, where states given the potential gravity of such weapons being developed, recognized that blinding laser weapons should be prohibited preemptively. In Austria's view the GGE should urgently intensify focus and efforts on minimum requirements for human control, with a view to adopting a legally binding norm.