



# Possible consensus recommendations in relation to the clarification, consideration and development of aspects on the normative and operational framework on emerging technologies in the area of LAWS

Written contribution by France

## A / Scope of application

1. The future normative and operational framework should apply to lethal autonomous weapons systems only, which thus excludes remotely piloted and tele-operated systems, automated systems and systems featuring autonomy in “non-critical”/“low-level” functions (such as altitude hold, observation, camouflage); “non-lethal” systems featuring autonomy.

2. Within this scope, a clear distinction should be made – as the integration of autonomy in weapons systems can and will be gradual – between “fully” lethal autonomous weapons systems (i.e. systems capable of acting without any form of human supervision or dependence on a command chain by setting their own objectives or by modifying, without any human validation, their initial programme or their mission framework) and “partially” autonomous lethal weapons systems (i.e. lethal weapons systems featuring decision-making autonomy in critical functions such as identification, classification, interception and engagement to which, after assessing the situation and under their responsibility, the military command can assign the computation and execution of tasks related to critical functions within a specific framework of action.

Fully autonomous weapons systems and partially autonomous lethal weapon systems should be distinguished as different objects; they do not require the same type of measures.

Fully lethal autonomous weapons systems would fundamentally run contrary to the agreed eleven guiding principles (endorsed by High Contracting Parties within the framework of the *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, CCW*).

Partially autonomous lethal weapons systems could bring important operational benefits, provided that all the guarantees of their correct use are met. They could potentially pose ethical and legal challenges, which could be mitigated by the implementation of appropriate measures and policies by High Contracting Parties (HPC).

## **B/ Objective and purposes**

As recalled by *guiding principle "k"*, the future normative and operational framework would be developed within the CCW which seeks to strike a balance between military necessity and humanitarian considerations. Thus, the future normative and operational framework:

- i. should primarily aim at ensuring that International Humanitarian Law (IHL) will continue to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems as recalled by *guiding principle "a"* endorsed by High Contracting Parties, in line with the objectives and purposes of the CCW as well as with High Contracting Parties existing obligations under international law;
- ii. should not unduly hamper progress in these dual-use emerging technologies (see guiding principle "j"), including in the military field. Indeed, the development of autonomy within weapons systems can have a very wide range of applications and provide opportunities and benefits such as a more precise awareness and estimate of the situation, application of force thus contributing to minimizing the risk of collateral damage, assisting humans in the decision-making process or improving the protection of soldiers.

## **C/ Principles, policies & measures**

1. Under the future normative and operational framework, High Contracting Parties could agree on a set of principles, policies and measures for the design, development and use of lethal weapons systems featuring autonomy.

2. This framework should build on the eleven guiding principles endorsed by High Contracting Parties.

3. In particular, within the future normative and operational framework, **High Contracting Parties should:**

- i. **Commit not to develop, acquire or use fully autonomous lethal weapons systems**, as such systems could not provide any sustainable assurance as to compliance with international humanitarian law (*guiding principle "a"*). They would also run contrary to *guiding principles "b"* (human responsibility for the use of weapons systems), *"c"* (human-machine interaction) and *"d"* (accountability).<sup>2</sup>
- ii. **Undertake and implement national policies and measures in order to regulate the development and use of partially autonomous lethal weapons systems**, guided by the following principles: (i) ensure full compliance with International Humanitarian Law (*guiding principle "a"*); (ii) preserve the responsibility and accountability of the human operator and of the human command (*guiding principles "b" and "d"*) and (iii) maintain a sufficient degree of human-machine interaction (*guiding principle "c"*). To that end, the following elements should form the cornerstone of the future normative and operational framework:
  - ❖ **Legal review and Compliance** (*guiding principles "e" and "h"*): Review of the legality of partially autonomous lethal weapons systems throughout their life cycle and define appropriate methods to that end;

- ❖ **Risk assessment, Safeguards and Mitigation measures** (*guiding principles “f” and “g”*): Implementing strict qualification, verification, assessment and validation procedures throughout the life cycle of the system to ensure the reliability of partially autonomous lethal weapons systems as well as technical and organisational safeguards, to prevent failures, misuse, diversion and relinquishment of human prerogatives;
- ❖ **Training** (*guiding principle “g”*): Providing appropriate and adequately adapted training and operational preparation of all personnel involved in the use of partially autonomous lethal weapons systems ;
- ❖ **Responsibility and Accountability** (*guiding principles “b” and “d”*): Maintain a chain of responsibility, command and internal control;
- ❖ **Human machine-interaction** (*guiding principle “c”*): Retain sufficient human control during the whole life-cycle (development, deployment and use) of partially autonomous lethal weapons systems and in particular, ensure that humans will always define and validate rules of use, rules of engagement, a precise framework for the mission assigned to the system and make critical decisions over the use of force.

France has provided guidance related to the types of measures and policies that High Contracting Parties could agree to implement to operationalize these general provisions. These national considerations are based on the previous working papers submitted by France in the framework of the GGE on LAWS and are built upon the recommendations of the Opinion on the integration of autonomy into lethal weapons systems published by its independent Defence Ethics Committee.