



Statement delivered by Germany

on

Security Dimension and Options

The development and use of increased automation

- The dynamics in the civilian domain – science and technology as well as industrial applications – in the areas of artificial intelligence and robotics is expected to remain at a significantly high level and to continue to influence and drive military developments.
- From a military point of view there might be various options to use systems with higher degree of automation, in particular in areas of logistics support, reconnaissance, or clearance of explosive ordnance. Any sophisticated automation is predestined in areas with limited access or survivability for humans.
- As every new technology implemented in military weapon systems, autonomy in weapon systems too, has the potential to create different effects on international security – stabilising as well as adverse effects.
- Autonomy being used to create improvised autonomous weapons could possibly lead to an expansion of military or military-like activities into non-traditional battle-fields, widening already existing tensions, in particular in crisis regions.

LAWS and the possibility of a new arms race:

- By using “LAWS” some actors might be in the position to minimize the risk to their own forces, without losing the ability to inflict harm on their adversaries.
- Because those future weapon systems are considered to confer significant military potential, states’ threat perceptions are likely to change under the impression that potential adversaries have or are in the process of acquiring such weapon systems.
- This situation might have the potential to accelerate into an arms race and could result in considerable consequences for security policy.
- For these reasons the international community has been asked to take steps to mitigate the concerns of of an arms race in the field of LAWS for example by:
 - a Political Declaration or by
 - transparency and confidence-building measures

as explored by the Franco-German Paper submitted to the 2017 GGE to serve to reassure states and contribute to more stability in arms procurement dynamics (see more detailed below).

Software of LAWS risks exacerbating the threat of Terrorism

- Transfer of software, which can constitute the most significant and defining part of highly sophisticated systems is difficult to prevent and even harder to detect, which considerably increases opportunities for diversion.
- Illegitimate actors could deliberately set them up with the result of expanding their capacity to indiscriminately inflict harm and inflict terror on civilians.
- At this point in time it is assumed that the effective and purposeful operation of LAWS does require considerable expertise, technical know-how and financial means. However this may change rapidly once autonomous technology (in general, not only concerning LAWS) has been tested and becomes available via illicit market places.
- Known terrorist activities in the context of nuclear and chemical weapons demonstrate that despite significant technological hurdles, certain groups might engage in activities to obtain such capabilities.
- Apart from continuing cooperative counter-terrorism efforts, states should consider developing best-practices for the export control of related goods, particularly focusing on software.
- As it is already now the case, these concerns are being addressed and regulated by national administrative laws, in particular weapons law and transport and traffic law. This enables governments to effectively stop or limit the spread of dangerous dual-use technologies, if necessary.
- Technological developments in the civilian branch may allow illegitimate groups to construct improvised autonomous weapons. Therefore relevant branches of science and commerce should be included in the above mentioned transparency and confidence-building measures in appropriate ways.

Legal/ Ethical Issues

- International law, in particular international humanitarian law (IHL), fully applies to autonomous weapon systems like to any other weapon system.
- There is no need to modify or adapt IHL with regard to autonomous weapon systems. In this respect we refer to our comprehensive submission on legal aspects of autonomous weapon systems submitted to the 2014 CCW Expert Meeting on LAWS.
- All impacts of LAWS on the promotion and implementation of IHL will have to be considered, including also the humanitarian benefits of emerging technologies in the area of LAWS.
- Likewise the legal regime of international accountability fully applies to autonomous weapon systems. Individuals can be held accountable at all stages in the process of the development, deployment and operation of an autonomous

weapon systems in accordance with the established principles of attribution of responsibility.

- Germany remains fully committed to the implementation of Article 36 of the Additional Protocol to the Geneva Conventions (Protocol I), concerning the study, development, acquisition or adoption of a new weapon, means or method of warfare.
- As previously stated, in 2016 Germany has issued a Joint Service Regulation on the Review of New Weapons, Means and Methods of Warfare. Therefore Germany determines strictly, in a procedure pursuant to Art. 36 of Protocol I, that any new weapon, means or method of warfare, introduced in its armed forces, is in accordance with international law.

Suggested Measures to mitigate adverse Security Policy Effects of LAWS:

- **Political Declaration**

- At the heart of the joint Franco-German position for a result focused approach to the GGE is the recommendation for a political declaration, which should affirm that State parties share the conviction that humans should continue to be able to make ultimate decisions with regard to the use of lethal force and should continue to exert sufficient control over lethal weapons systems they use.
- Moreover State parties should in our view recall that rules of international law, in particular international humanitarian law, are fully applicable to the development and use of future LAWS. All impacts of LAWS on the promotion and implementation of IHL will have to be considered, including also the humanitarian benefits of emerging technologies in the area of LAWS.

- **Transparency and Confidence Building**

- Existing arms control agreements entail several relevant examples, ranging from information sharing over the demonstration of new weapon systems to providing mutual access to certain facilities.
- A general awareness among states of each other's autonomous weapons capabilities would also contribute to the creation of trust and confidence and help address the security challenges stemming from uncertainty with regards to a potential adversary's capabilities.
- Participation in these measures could be voluntary, based on the corresponding instrument which states decide to adopt.

- **Code of Conduct:**

- Based on the Political Declaration to be endorsed in the framework of the CCW as suggested by the Franco-German Paper submitted to the 2017 GGE, a code of conduct could be developed as a next step.
- It would provide a politically binding set of rules for the development and use of future LAWS.

- **Developing effective national weapons review mechanisms for LAWS**
 - The 2006 ICRC Guide to the Legal Review of New Weapons, Means and Methods of Warfare offers a list of recommendations on formal, procedural and administrative aspects.
 - Germany and several other member states to the CCW have come forward and presented their own legal weapons review processes, with a view to creating transparency and enabling a productive exchange of ideas among state parties.