

UNITED KINGDOM

JUNE 2021

WRITTEN CONTRIBUTIONS ON POSSIBLE 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

The following suggestions from the UK build on areas and themes where important progress has been made within the CCW and uses them as a basis for possible consensus recommendations. Where applicable, we have continued the recommendation with a suggestion of where future discussions within the CCW would be most beneficial. The UK believes that consensus around a set of positive obligations – e.g. technical, legal and military good practice throughout the lifecycle of a weapon – is the optimal way for the CCW to progress.

Overarching principles

- The CCW remains the optimum forum to discuss and progress the issue of Lethal Autonomous Weapons Systems (LAWS).
- The deployment in armed conflict of any weapon system - including one with autonomous functions - in a manner which does not distinguish between combatants and non-combatants or fully assess the proportionality of potential action, would be contrary to International Humanitarian Law (IHL) and therefore unlawful.
- The eleven guiding principles, and other understandings, contained in the reports adopted by the GGE from 2017 through to 2019, represent important areas of international consensus and provide an excellent basis from which to develop a normative and operational framework.
- The human role in an autonomous weapons system is a fundamentally important factor when determining if a system can be used in accordance with IHL. Identifying where and how control could exist, and how it might be impacted is crucial to furthering our collective understanding.
 - The CCW should ensure that identifying the various forms through which humans interact with autonomous systems and exercise control over the use of lethal force should be a key focus of its future discussions.

Legal Framework & Norms

- IHL is principle-based and looks at how a weapons system is used – focussing on weapons, means and methods of warfare. It is imperative that weapons and the way in which they are used, together satisfy the legal tests and/or basic principles.
- IHL and the existing regulatory framework for the development, procurement and use of weapons systems are capable of sufficiently regulating new capabilities.
 - The CCW should establish a multidisciplinary network of experts to work through the legal and ethical implications of autonomous weapons systems. This network must include those who believe IHL is insufficient to regulate new technologies so any possible gaps can be identified, and a holistic view can be formed

- Autonomous systems *can* support the better application of IHL, improving the evidence, analysis and timeliness of decision making. Better decisions mean better outcomes - in compliance with IHL's fundamental principles.
 - Future CCW work should identify the ways in which autonomous systems could be used to reduce risks and potential harm to civilians as a result of military operations.
- The responsibility of States and parties to armed conflict for the deployment of weapons, means and methods of warfare cannot be removed. Irrespective of weapons systems, states are responsible for ensuring IHL compliance and the accountability of decision makers in relation to application of specific obligations and compliance with core principles
- The use of autonomous weapons systems does not, and cannot, negate state responsibility and individual accountability under IHL.
 - Future CCW discussions should illustrate how the principles of responsibility and accountability can be applied to LAWS. This might include exploration of the factors that enable responsibility such as appropriate level of human understanding of the system and the operational context, along with the degree to which outcomes need to be predictable.
- Legal reviews of new weapons means and methods of warfare are crucial to determining whether a system can be used in compliance with IHL – states must revise and develop methodologies and ensure rigorous reviews in step with the emergence of new technologies.
- The normative landscape, encompassing obligations and principles, ethical and legal concerns is of central importance to the LAWS debate and is an area that should be further explored.

Lifecycle of A Weapon System

- The six phases of a weapon's life cycle identified in the report of the 2018 GGE should be used to provide the structure to illustrate how the guiding principles can be translated into an operational framework that can be used in practice.
- The CCW should acknowledge that autonomous weapons systems are not a class of weapons systems in and of themselves – autonomy can exist within a system, or a system of systems, and cover a range of functions.
- The technology industry are important stakeholders due to their role in research, development, design and manufacture of emerging technologies relevant to LAWS. Therefore, industry could provide useful insights to help inform the development of policy on autonomous systems, and the CCW should involve them in its discussions. It is important to consider the implications of Guiding Principles (b) and (d) for developers and manufacturers.
- States should use detailed and technical understandings of human involvement at different parts of the lifecycle to inform common understanding and effective definitions of the systems which are under the purview of discussion within the CCW

Sharing of Best Practice

- All parties are encouraged to identify and share good practice relating to key activities during the lifecycle of a weapons system (such as the methodology of legal weapon reviews).
- Where appropriate, Defence policies, doctrines, manuals and training materials must be updated to ensure personnel are able to use new technologies lawfully.
- A compendium of good practice mapped against a weapons system's lifecycle would provide a clear framework for the operationalisation of the guiding principles and provide guidance for states on how development and use of autonomous systems can be achieved in compliance with international humanitarian law. Discussions on a compendium should have input from multiple stakeholders across governments, industry and civil society.

The Human Role in Autonomous Weapon Systems

- Human accountability for military outcomes remains fundamental to effective and responsible decision-making in Defence. In order to establish responsibility for autonomous weapons systems, it is essential to understand the details of human involvement in such systems across the entire system lifecycle.
 - The CCW should ensure that consideration of the human role across the lifecycle of a system forms a fundamental part of its future discussions, in tandem with work on a compendium of good practice. It is important that focus is not just on control at the point of attack or use, as there are a number of areas in the build-up (development, testing, training etc) that impact on what type of involvement might be acceptable when a system is in use.
 - As human responsibility for autonomous systems rests on an appropriate level of understanding of these systems by military personnel, these discussions should also include the necessary understanding, competence and training required of individuals involved with the development or use of autonomous weapons system.
- The CCW should acknowledge that human control is complex, dynamic, multidimensional and situation dependent.
- Activities through the lifecycle of a weapon system can collectively contribute to – or detract from – the level of overall human control and compliance with IHL. These activities should not be considered in isolation. Instead it is important to develop a shared understanding of clear and comprehensive processes for implementing control measures throughout a weapon lifecycle and how these interact.

Norms for the responsible development and use of autonomous systems

- Building norms of responsible development and use of autonomous systems can be a critical area for future progress.
- Setting out high level unilateral policy frameworks for the intended use of autonomous systems, the characteristics of acceptable systems, and ethical development and operational practices would be a valuable way for states to contribute to ongoing discussions on LAWS.
- The UK is developing a set of policy principles which will guide its development of AI-enabled systems (across the full range of use cases: including but not limited to LAWS) as part of its

upcoming AI Strategy. Such a set of principles could form the basis of future discussions around norms of responsible use of these systems.

Characterising LAWS

- Whilst a shared definition of LAWS has not yet been reached by the GGE, characterising these systems is nonetheless foundational to the future work of the CCW. The degree to which an entire system or its constituent functions can be autonomous is an important area of discussion. So too is the distinction between automated and autonomous systems and the characteristics which may contribute towards this distinction such as learning capabilities and predictability. How these characteristics may challenge or support compliance with IHL is an important area of future work for the CCW.
- Those taking decisions in regard to military action, and deploying autonomous systems, need to properly understand the effect the system will have. The ability to understand the effect of the decision to take action, using a particular tool and in a particular way, is a requirement of the military and legal concerns. This understanding is supported by proper training and ensuring the availability of suitable technical and legal expertise to support decision making.