

Autonomous weapon systems and international humanitarian law

Abstract

There is practically no branch of international law that has been left unaffected by significant advances in modern technology in recent years. In the context of armed conflict, these advances could have far-reaching consequences for the application of not only established rules of international humanitarian law, but also of the rules of international criminal law or the rules governing international responsibility. Many States are currently devoting their attention as well as resources to the development of highly sophisticated weapon systems with autonomous functions, the control of which is being increasingly transferred from human operators to computer systems. These Autonomous Weapon Systems (AWS) have the potential to affect profoundly the nature of future armed conflicts. Although these systems are no longer a novelty at the international scene, they continue to cause tensions and provoke divisive reactions amongst the international community.

This dissertation aspires to provide a comprehensive insight into the development and use of AWS in the context of armed conflict. The dissertation has six parts. The first part clarifies the basic terminology relating to AWS and explains how autonomy in the context of a weapon system operates, in order to allow for a better understanding of the subsequent substantive parts of the dissertation. The following four parts form the analytical core of the dissertation. AWS are confronted with the rules of international humanitarian law governing the means and methods of warfare in order to determine under what conditions and in which situations, if ever, AWS could comply with these rules. Further, the obligation to conduct legal reviews of new weapons is analysed in relation to AWS. It is often referred to as the main preventive tool capable of ensuring that weapons contrary to the substantive rules of international humanitarian law are not developed and later deployed in armed conflicts. The fifth part of the dissertation examines the applicable responsibility and liability regimes, which might be relevant when dealing with the use of AWS in violation of international law. Finally, the topic is concluded with an overview of recent developments and current state of affairs. The dissertation offers a summary of the discussions at the main international fora dedicated to the issue and presents options and directions that a possible international regulation of the issue might take.