

HCSS Security

Snapshot: The Development of ‘Killer Robots’ and the European Union’s Strategic Options

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The development of lethal autonomous weapon systems (hereafter LAWS), colloquially known as ‘killer robots’, has increased considerably over the past decade.¹ As a normative power that derives its legitimacy from ethical principles and rules,² the European Union (EU),³ like many other actors in the international stage, has opposed the production and deployment of LAWS.⁴ This snapshot indicates that the EU approach to the development of LAWS is characterized by a *normative-strategic dilemma*. The normative element pertains to the erosion of the EU’s ability to lead by example when investing in LAWS, while the strategic aspect refers to the strategic disadvantage for the Union when refraining from developing LAWS vis a vis other actors which continue to do so. This snapshot 1) provides an overview of the current state of affairs in the development of LAWS; 2) analyzes the compatibility of EU foreign policy with the growing automation of weapons systems; and 3) provides three strategic options for the EU in relation to its approach to LAWS.

LAWs Development: Perceptions by the International Community

The use of weapons systems that perform certain functions autonomously has increased significantly over the past fifty years, comprising a wide range of military applications such as navigating to a target area, intelligence gathering, target recognition, and loitering, among others (Figure 1). Systems’ autonomy is defined as “the ability of a machine to execute a task, or tasks, without human input, using interactions of computer programming with the environment.”⁵ Since 2013, multiple artificial intelligence (AI) and robotics experts have warned that LAWs will likely constitute a ‘third revolution in warfare’⁶, providing strategic benefits to countries that possess such systems over those that lack them.⁷

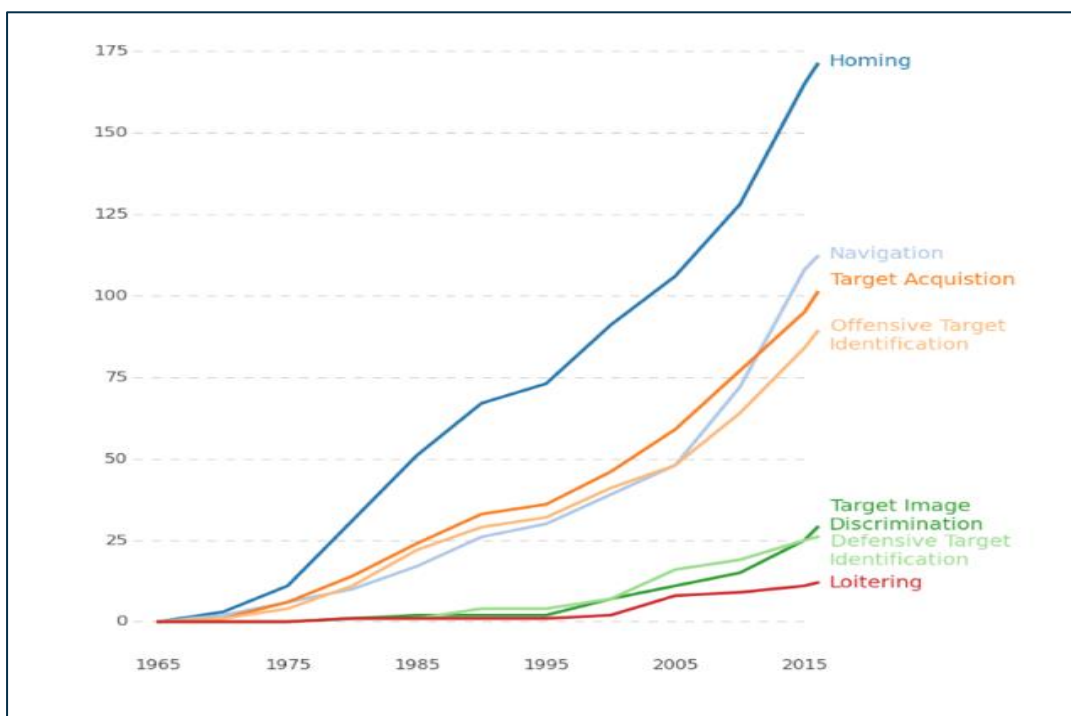


Figure 1: Number of deployed weapons systems employing automated technologies (1965-Present). Source: Foreign Policy, <https://foreignpolicy.com/2016/09/28/weapons-autonomy-is-rocketing/>

A number of countries are believed to have pursued the development of LAWs despite attempts by members of the international community to ban their use. The United States was the pioneer to officially announce that advanced autonomy constitutes a core component of its future military capabilities.⁸ In 2015, Washington published its ‘Defense Innovation Initiative’, also known as the ‘Third Offset Strategy’, which emphasizes that the US should pursue ways to leverage emerging technologies in an innovative manner in order to outperform adversary armies and preserve its military superiority.⁹ In March 2018, the Chief of the General Staff of the Russian Army, Valery Gerasimov, also stated that “the use of robots will be one of the main features of

future wars.”¹⁰ Since 2017, Russia’s largest weapons manufacturer, Kalashnikov, has worked on the development of drones that use AI for target identification and strike.¹¹ China, too, is believed to be working on multiple autonomous weapons systems, some of which employ concepts resembling those utilized by the US military.¹² In 2017, for instance, Chinese scientists announced their progress on the development of an autonomous submarine capable of performing various mission tasks without human control.¹³

Despite these countries’ emphasis on the military benefits of LAWs, an international Campaign to Stop Killer Robots was launched in 2013, pressing governments and the United Nations to prohibit the development of LAWs.¹⁴ To date, campaigners – which include representatives from 93 NGOs in 53 countries, supported by 28 governments – have reached no major successes,¹⁵ as Russia and the US, among few other states, have blocked the progress on a potential LAWs ban.¹⁶

The EU and LAWs: An Incompatible Relationship?

The EU is traditionally seen as a soft power, whose foreign policy successes have been achieved through peaceful and diplomatic initiatives such as economic aid, peacekeeping, and humanitarian support.¹⁷ For instance, with \$74 billion distributed in 2015, the EU has been the largest foreign aid donor, surpassing the rest of the members of the international community combined (Figure 2). Accordingly, the EU supports a global ban on LAWs¹⁸ and has not, to date, implemented policies that place heavy emphasis on the development of autonomous weapons systems.¹⁹ The Union emphasizes that LAWs should be governed by International Humanitarian Law and Human Rights Law and has called upon the High Representative for the Common Foreign and Security Policy to cooperate with representatives of the UN and other international organizations in identifying ways to responsibly govern autonomous weapons systems.²⁰

It can be assumed, therefore, that the accelerated proliferation of LAWs undermines the legitimacy of the EU which is traditionally derived from liberal values, ethical conduct, and normative principles.²¹ On the other hand, the development of LAWs by others could render the EU strategically disadvantaged: as the technology gap between the Union and those actors would widen considerably, this could potentially put the security of the EU at stake. One might argue that – as with nuclear weapons during the Cold War – the EU could rely on the US for its security by stationing American LAWs on the continent. However, given the recent erosion of the NATO alliance,²² and French President Emmanuel Macron’s announcements that “Europe can no longer entrust its security to the United States alone”²³, this course of action seems increasingly unlikely. Moreover, the use of LAWs by an ally to defend the Union would erode the very foundation of the EU as a “normative power”²⁴, which, consequently, could weaken the Union’s ability to conduct its external policy effectively. Hence, one might conclude that the EU’s approach to LAWs is characterized by a normative-strategic dilemma in which the former relates to the Union’s obligation to remain a powerful normative actor, while the latter concerns the military necessity associated with the accelerated LAWs development by other

states, especially adversaries. To add complexity to the dilemma, traditionally, it has been recognized that only powerful actors are able to impose their norms.²⁵

Total Development and Humanitarian Aid in 2015 (% of total aid and in billion USD)

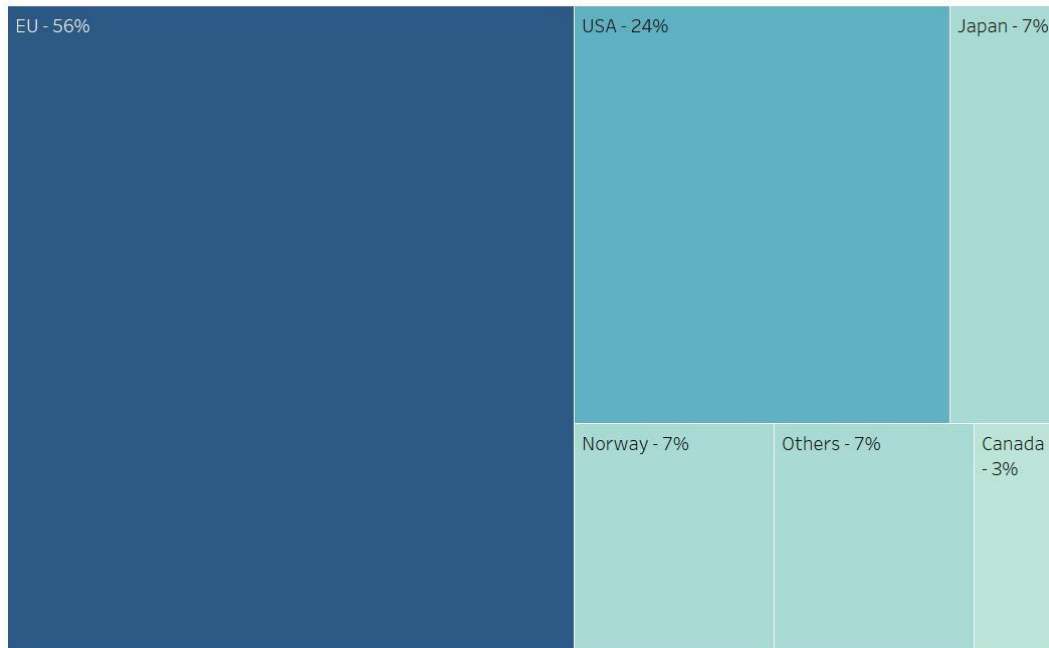


Figure 2: The EU is the biggest donor of development and humanitarian aid. Source: OECD, 2015, EU=EU and its Member States

What Can the EU Do: Three Strategic Options

The following section discusses the possible options that can result from the (potential) increased proliferation of autonomous weapons systems by state actors and the subsequent steps the EU can undertake in response to such military build-ups.

Option 1: Leading by Normative Example

This option suggests that the EU27 declines to adopt policies geared towards the development of LAWS, which would enhance the Union’s ability to uphold the international legal order through its influence to lead by example. The EU would thus preserve – and possibly strengthen – its status as a ‘normative power’ in the international stage and reaffirm its position as a strong promoter of European values and norms. This scenario is in line with the EU’s historical identity, according to which the Union has derived its power not through military and other coercive means but rather through the “attractiveness of its example.”²⁶ Should the EU adhere to this scenario, it will remain in a credible position to put pressure on other state actors to refrain from developing LAWS and continue to promote its essential values and principles such as democracy, liberty, and peace.²⁷ The EU27 could engage in a dialogue with states that aim at building autonomous weapons systems but which also recognize the risks of escalation. However, strategically speaking, this option

would place the Union in a disadvantaged position vis a vis adversaries that refuse to cooperate and instead decide to invest into and exploit LAWS’ advantages for offensive purposes.

Option 2: Prioritizing Security over Norms

The second scenario assumes that the EU fully recognizes the security threat posed by the accelerated development of LAWS by other states and, consequently, expands its autonomous weapons arsenal by incorporating a wide range of systems capable of delivering strategic advantage on the battlefield. Assuming that adversary actors would continue to increasingly develop LAWS, the integration of advanced RAS technologies would serve as a force multiplier, providing the military with an opportunity to optimize combat effectiveness and ensure that it is capable of outperforming – or at least matching the performance of – enemy forces.²⁸ Investments into LAWS would, thus, address two of the most pressing challenges that militaries of the future are expected to face, namely 1) the increased speed of adversary actions; and 2) the accelerated use of RAS by adversaries.²⁹ Additionally, LAWS could reduce human casualties, as they would remove human combatants from dangerous battle zones.³⁰ Despite the strategic advantage outlined herein, this scenario entails a major downfall: a decision to develop LAWS might spur a race-to-the-bottom situation in which a LAWS race becomes inevitable. Such a case would contradict the Union’s ethical principles, constrain the EU’s ability to promote norms, and, ultimately, erode the international legal order.³¹

Option 3: Establishing Guidelines for Acceptable Use

The third scenario envisions, to a large extent, a reconciliation between LAWS’ strategic advantage on the battlefield and the normative challenges associated with their practical deployment. This scenario assumes that the EU27 would decide to develop LAWS, yet their deployment would be strictly led by normative and legal guidelines that outline the borders of acceptable use. These might limit the use of lethal autonomous weapons to strictly *defensive* objectives, thereby proscribing the use of LAWS for specifically offensive purposes.³² France and Germany, for instance, have already proposed a formal declaration that outlines points of consensus and guiding principles with regards to autonomy and human control.³³ By establishing clear rules and principles of appropriate RAS rules, the EU would ensure that it would not exploit its advanced systems in offensive operations, while, at the same time, the Union would guarantee its capacity to protect its borders in case of adversary attacks (even ones involving LAWS and other advanced threat systems).

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Endnotes

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