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THE EU, ARTIFICIAL MILITARY INTELLIGENCE AND AUTONOMOUS LETHAL WEAPONS

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AUTHOR'S PRESENTATION

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ABSTRACT

Artificial intelligence (AI) has the potential to revolutionise global military affairs, just as the atomic bomb did in the mid-20th century. When a technological revolution upsets the international strategic balance, diplomacy generally tends to enter the equation.

The issues surrounding military AI are therefore the subject of intense international debate. How is the European Union (EU) positioning itself in this context? What approach has it adopted to lethal autonomous weapon systems (LAWS) in particular? Formally, the EU has no competence in military AI. Yet, indirectly it has a number of tools that can influence this sector. Its new defence industrial policy is one of them.

However, the EU does not appear to have any intention of pursuing a restrictive policy in this area, at least for the moment. Its ambitions on the matter are limited to LAWS. And even then, thinking in this area is based on concepts that are so ambiguous that they should not have any substantial consequences in terms of development and industrial production.

INTRODUCTION

The use of artificial intelligence (AI) in the military field has become a major strategic, economic and diplomatic challenge for the international community. The challenge is first and foremost strategic, as artificial intelligence is set to play a decisive role in the technological superiority of tomorrow's weapons systems. Some specialists have even gone so far as to talk of a veritable revolution that has been underway for a handful of years now, the scope of which would be comparable to that introduced by the atomic bomb in the middle of the 20ème century[1].

The stakes are also high from an economic point of view, given that the number of companies specialising in AI is growing and that the armed forces are increasingly calling on them. Military spending in this area in 2023 reached the value of 8.58 billion dollars, compared with 7.28 billion in 2022 and around 6 billion dollars in 2021 (more than 17% growth per year). And according to *The Business Research Company*, this rise is not set to stop: by 2027, the share of defence markets destined for AI could exceed $15 billion[2], whetting the appetites of the world's leading defence industries, including China, India and Russia. Competition in this sector promises to be fierce.

Finally, AI represents a diplomatic challenge, because when the world is faced with a new military-technological revolution that upsets traditional balances and changes the cards on the table, diplomacy always ends up entering the equation. The white-collar workers then enter the scene on behalf of the states they represent, taking over from the engineers and the military, in the hope of regulating the machinery that risks eluding everyone, yet from which everyone would like to benefit.

Geopolitical competition in this area promises to be just as fierce as that between companies. As Niccolò Bianchini and Lorenzo Ancona for the Robert Schuman Foundation point out, the United States, China and the European Union (EU) generally embody three radically different political and regulatory models: the American model is market-oriented, the Chinese model is based on the omnipotence of the state and the European model is rights-based[3] . Inevitably, the competition between these three approaches is bound to extend to civil and commercial artificial intelligence as well. What about the more specific case of military AI? Does the EU intend to adopt a more inhibited, rights-based approach than its competitors here too? This is what this note intends to examine.

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[1] Kai-Fu Lee, The Third Revolution in Warfare, *The Atlantic*, 11 September 2021.
[2] The Business Research Company, Artificial Intelligence in Military Gobal Market Report 2023.
[3] Niccolò Bianchini, Lorenzo Ancona, Intelligence artificielle: l'Europe doit se mettre à rêver, *Schuman Paper* n.° 728, 27 novembre 2023.

A FEW DEFINITIONS TO FRAME THE DEBATE

Before examining what role the EU could play in the use of AI on the battlefield, it is necessary to circumscribe the debate. To do this, three notions need to be clarified: that which concerns Artificial Intelligence in general terms, that which is more specific to military AI and that of Lethal Autonomous Weapon System (LAWS).

According to the EU, **Artificial Intelligence** is a software that can "for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations or decisions influencing the environments they interact with"[4]. The Encyclopaedia Britannica provides a few more details and states that Artificial Intelligence (AI) means "the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience".

In the **military field**, AI can take several forms, which it would be impossible to list here. First and foremost, it can provide support for decisions that need to be taken on the battlefield or elsewhere, in particular by speeding them up. Today, most military applications of AI fall into this first category. They aim to improve and accelerate choices that, *in fine,* remain human. These applications can, among others, recognise and interpret the terrain, select and prioritise the best options, model and predict enemy behaviour, or help to detect, identify, track and reproduce target movements on a computer, even at night[5].

But it is well known that AI can go beyond these functions. In some cases, it can decide to autonomously engage targets that it has detected itself, thus replacing human intervention. These are known as **Lethal Autonomous Weapon Systems (LAWS)**, or more prosaically as "killer robots". LAWS are in fact a broad category whose definition is debatable. The term "autonomous" is interpreted in different ways depending on the areas in which it is applied, and in the military field there is no consensus on its meaning. This vagueness makes the subject difficult to define, and consequently fuels confusion within the international organisations that are trying to regulate it, as we will see throughout this article.

The United Nations Office for Disarmament Affairs (UNODA), for example, considers that an autonomous weapon does not need necessarily to be based on AI, as "autonomous

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[4] European Commission, art.3 of the Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS, COM/2021/206 final, 21/04/2021.
[5] See, for example, the programme developed by the Australian company Athena AI.

capabilities can [also] be provided through pre-defined tasks or sequences of actions"[6]. This is the case, for example, with anti-personnel mines, which do not interest us here. On the other hand, according to the official United States Department of Defense Policy on Autonomy in Weapon Systems, an autonomous weapons systems must be able, once activated, "to select and engage targets <u>without further intervention by a human operator</u>"[7].

For their part, neither the European Commission nor the Council has adopted a definition of this concept. However, the European Parliament (EP) has. For it, the notion refers to "systems <u>without meaningful human control</u> over the critical functions of selecting and attacking individual targets"[8]. The term "meaningful human control", which is absent from the American definition, is very important here because it does not rule out the possibility that a LAWS may still have some form of human control. As we shall see later, this is a real trick which enables the EU to greatly reduce the scope of any possible restrictive policy.

Despite this vagueness about what is meant by LAWS, it appears that such a category do not include *per se* unmanned weapons systems, as for example unmanned combat aerial vehicles (UCAVs) or unmanned ground vehicles (UGVs), at least until when these systems are operated and piloted by a human being. The case of loitering ammunition is more complicated. This type of weapon clearly falls into the AI category. But does that make it a LAWS? Once a loitering ammunition has identified the target, if it attacks it autonomously the answer is clearly yes. But if the loitering ammunition requires some form of human control before attacking, the answer is less clear. It depends on what is meant by human control and how far it should go. It is very difficult to draw a dividing line here[9].

However, such definitions should not be considered as set in stone. They remain purely indicative. The problem is that the dividing line between "decision support" and "autonomous decision-making" can sometimes be very fine, if not impossible to draw. When an artificial intelligence system provides extremely detailed, in-depth and even insistent information and options on a potential target, does it not have a decisive influence on the human decisions that follow? Don't military personnel then find themselves totally dependent on the machine's assessment of their decision to fire? Hasn't the machine *de facto* taken control of the decision to neutralise the target, by instigating the man or woman to act? As we can see, in reality the concept of "helping" someone to make a decision can be similar to "instigating" someone to make a given decision. In view of this "artistic vagueness", it is easy to see why it is so difficult

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[6] UNODA, <u>Lethal Autonomous Weapon Systems (LAWS)</u>.
[7] Gregory Alles, "<u>DOD Is Updating Its Decade-Old Autonomous Weapons Policy, but Confusion Remains Widespread</u>", Center for Strategic and International Studies. 6/5/2022.
[8] <u>European Parliament resolution of 12 September 2018 on autonomous weapons systems</u> (2018/2752(RSP)).
[9] Ingvild Bode, Tom F.A. Watts, "<u>Loitering munitions: flagging an urgent need for legally binding rules for autonomy in weapon systems</u>", Humanitarian Law & Politics, 29 June 2023.

to define what a LAWS really is, and therefore to regulate them at European and international level.

SOME OTHER KEY DEFINITIONS

Artificial general intelligence (AGI): a term used to describe future machines that could match and then exceed the full range of human cognitive ability across all economically valuable tasks.

Generative AI: A family of AI systems that are capable of generating new content (e.g. text, images, audio, or 3D assets) based on 'prompts'.

(Large) Language model (LM, LLM): huge amount of (often) textual data used to generate responses similar to those of a human being and/or to predict the next word in a self-supervised manner.

Model: an ML algorithm trained on data and used to make predictions.

Natural language processing (NLP): the ability of a program to understand human language as it is spoken and written.

AI Agent: software programs or systems that are designed to perceive their environment, make decisions, and take actions autonomously to achieve specific goals. AI Agent uses information from its surroundings, learns from its experiences, and acts to accomplish tasks without human intervention.

Computer vision (CV): the ability of a program to analyse and understand images and video.

Deep learning (DL): a type of artificial intelligence derived from machine learning, where the machine is capable of learning on its own, unlike programming, where it simply executes predetermined rules to the letter.

Definitions taken from: State of AI Report 2023, ChatGTP France, Entreprisedna.co, Futura-Sciences.com,

HOW THE EU COULD INFLUENCE LAWS

The first thing to say concerning the military AI and LAWS is that the EU doesn't prohibit their development nor they use. In fact, at the international level, today there are no forms of governance frameworks or rules dealing with these systems. However, pressure to partially ban LAWS is strong, both at the United Nations (UN) and the EU, as well as in other international forums.

At the United Nations, in Geneva, discussions on this topic are taking place since 2014 within the framework of the 1981 Convention on Certain Conventional Weapons (CCW), and more specifically within the Group of Governmental Experts (GGE) set up by the Convention. Eleven principles have been adopted in this context. They state that LAWS must always be compatible with international humanitarian law, humans must be responsible for the decision to use these systems and States must examine the legality of these new weapons[10]. The EU, through its High Representative for Foreign Affairs and Security, has committed itself to respecting these principles, which nevertheless remain vague and non-binding. António Guterres, however, spoke more explicitly about LAWS. In 2018, the United Nations Secretary General has declared that such weapons should be considered as politically unacceptable and "morally repugnant" and has called for their prohibition under international law[11]. He then called for the Member States to adopt a treaty on the subject by 2026[12]. The discussions between countries on this subject, nevertheless, are stalling[13].

In Brussels, the debates are on the same wavelength. On the one hand, the European Parliament has long insisted that the EU should push for the adoption, at the international level, of a legal instrument to ban LAWS, but not without ambiguities nevertheless, as we shall see. On the other hand, several Member States (but not all of them) do not seem to have any intention of budging. It should be stressed in this respect that this matter remains the exclusive competence of the Council and the Member States, and that any possible initiative at the EU level in this area could only come from them by unanimity.

This does not mean, however, that the EU, including the Commission and the European Parliament (EP), will not have any influence on research, development and production of military AI systems and LAWS. On the contrary, they could indirectly impact the way AI is approached, mainly through three factors:

1. The regulation that the EU have adopted at the end of 2023 on civil and commercial applications of AI.
2. The debate within the European institutions and the European Parliament on the need to regulate military AI, and in particular LAWS.
3. The way the EU manages its funding programmes for the defence industry.

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[10] Eleven Principles on Lethal Autonomous Weapons Systems (LAWS), 2014.
[11] António Guterres, ''Address to the General Assembly'', 25 September 2018.
[12] United Nations, A New Agenda for Peace, 2023.
[13] Statement by the International Committee of the Red Cross following the meeting of the Group of Governmental Experts on Lethal Autonomous Weapon Systems of the Convention on Certain Conventional Weapons (CCW).

The EU AI Act: a starting point for the regulation of the military sector?

Until a few years ago, the EU had no ambition to legislate on artificial intelligence. Instead, it intended to adopt non-binding criteria and recommendations, with the aim of controlling potential abuses[14]. However, given the dizzying technological advances in this sector in recent years, in 2021 the EU changed its mind and finally decided to legislate.

Thus, in December 2023, after long and difficult negotiations, the Member States, the Commission and the European Parliament managed to agree on a regulation called the Artificical Intelligence Act (AI Act), designed to promote a 'human-centric' approach to AI[15]. The aim of what the EU considers to be the world's first comprehensive regulation on AI is to create a favourable environment for the development of this new technology, while adopting measures to limit the risks it entails. In this way, the EU aims to become a global benchmark and an example for all those wishing to develop these technologies in a reliable and democratic manner. The AI Act will come into force in January 2025.

Europe's legislative ambitions, however, are aimed solely at commercial AI, and are therefore part of a single market regulatory approach. The standards adopted by Brussels do not concern research and development activities, weapons of war or the military. The Council ensured that these sectors were explicitly excluded from the scope of the Artificial Intelligence Act[16]. Throughout the negotiations that preceded the adoption of the text, several Member States, including France, wanted to limit the restrictions that the EP in particular wanted to impose on AI, with the explicit aim of preserving Europe's strategic autonomy[17]. The Council thus imposed numerous exemptions to the prohibitions laid down in the AI Act, exemptions which, in addition to the military sphere and R&D, also apply to the security services of the Member States.

In view of these safeguards imposed by the Member States, the influence that the AI Act will have on possible future regulation in the military field seems destined to remain limited. EU countries are clearly not prepared to deprive themselves of the strategic advantages that this sector offers them in terms of defence. What's more, the Artificial Intelligence Act clearly states that one of its objectives is to guarantee the Union's technological sovereignty and

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[14] Tambiama Madiega, Artificial intelligence act, European Parliamentary Research Service, June 2023
[15] Commission Communication, "Building Trust in Human-Centric Artificial Intelligence", COM(2019) 168 final, 8/04/2019. This expression is also used in point 1.1 of the Explanatory Memorandum of the Commission Proposal of 14 April 2021 on IAA.
[16] The European AI Alliance, Challenges of Governing AI for Military Purposes and Spill-Over Effects of the AI Act, European Commission, 27/02/2023.
[17] At least, that's what the French Minister for Digital Affairs, Jean-Noël Barrot, told Le Monde when the trialogue on the IAA reached a compromise.

strategic autonomy, which implicitly means that the Europeans are not about to adopt a restrictive approach to this technology in the military sector[18].

Although limited, the Artificial Intelligence Act may have some influence on the military domain in the future. Not only because the AI Act will apply to dual-use goods such as drones. But also because the "human-centric approach" on which it is based could have repercussions for the way in which the EU approaches the issues linked to LAWS, particularly in the context of its defence industrial policy.

The EU regulation on commercial AI introduces a classification of the risks associated with the different types of possible application. For each category of risk and each type of AI, the AI Act defines obligations that suppliers will have to comply with, as well as conformity assessment procedures that will have to be carried out by a new **AI specialized office** (probably an EU agency). These categories are as follows:

- When an AI involves risks classified as "**Unacceptable**" (for example, cognitive behavioural manipulation or classifying people based on behaviour, socio-economic status or personal characteristics), the EU simply bans it, although there are a few exceptions in the field of security.
- Where AI involves "**high risk**", the EU will impose certain obligations, such as human control over the machine. The technology will also have to undergo an evaluation before being authorised to go on the market.
- AI containing "**Limited risk**" will be subject to certain transparency criteria to enable consumers to be informed of these risks.
- The EU regulation also lays down specific provisions for **generative** artificial intelligence, aimed at ensuring the basic principles of transparency (sources used, copyright, mention that the content is generated by an AI, etc.)[19].
- Finally, the EU regulation provides for **financial penalties** for companies that fail to comply with the established standards (up to 7% of turnover, capped at 35 million euros).

In the light of this risk classification, it is immediately clear that financial support for military AI will have to be subject to predefined standards of reliability, transparency and, above all, legal admissibility. As we shall see in the following paragraph, however, the issues surrounding military AI, and in particular those relating to Lethal Autonomous Weapons Systems (LAWS),

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[18] Art. 40 of the General Guidelines of the Council on the <u>Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (artificial intelligence legislation) and amending certain Union legislative acts</u>, Interinstitutional file: 2021/0106(COD); 25 November 2023.

[19] <u>Amendments adopted by the European Parliament</u> on 14 June 2023 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts (COM(2021)0206 - C9-0146/2021 - 2021/0106(COD)).

are particularly complex, and present innumerable conceptual nuances which could end up. rendering any possible restrictive approach futile.

THE MAIN EU DOCUMENTS HAVE LED TO THE AI ACT
Documents setting out principles and guidelines
2018.04.25 - EC - Communication on AI for Europe (with the creation of a Group of Experts) [text] [fr
2019.04.08 - EC - Communication on an Human-centric AI [text]
2019.04.08 - EC - Ethics guidelines for trustworthy AI [text]
2019.06.26 - EC - Policy and investment recommendations for trustworthy AI [text]
2020.02.19 - EC - White Paper on Artificial Intelligence [text]
2021.04.21 - EC - Communication on Fostering a European approach to AI [communication]
Legislative procedure
2021.04.21 - EC - Commission proposal on the AI act [text] [FR
2022.11.25 - CO - Council general approach to EC proposal on AI act [text] [description] [description]
2023.06.14 - EP - EP position on the EC proposal on AI act [text] [description] [description]
2024.01.XX - EU - Artificial intelligence Act official text

The EU debate on military AI and the specific case of LAWS

The fact that the military sector is excluded from the scope of the AI Act does not mean that the EU is disinterested in this issue, far from it. For several years now, ethical issues relating to military applications of AI and LAWS have been discussed, sometimes bitterly, within the European institutions.

Before examining how the European institutions have positioned themselves on this issue, however, it should be remembered that the cardinal principle governing any type of weapon, with or without an AI, is that it must be compatible with international humanitarian law (IHL). IHL prohibits the use of certain weapons, including those that risk killing civilians

indiscriminately, make death unavoidable or cause unnecessary harm (anti-personnel mines, cluster munitions, etc.)[20]. These principles are fully recognised by the EU and its Member States.

The Case of the European Parliament

The European Parliament has been at the forefront of the debate on military AI, taking up the issue very quickly. Two major resolutions have been adopted on the subject, one in 2018[21], aimed exclusively at LAWS, and the other in 2021[22], concerning both military AI and the more specific case of autonomous lethal weapons.

In general terms, the EP is rather open to **military AI as a whole**. Admittedly, the 2021 resolution calls for this technology to be traceable and subject to rigorous certification and monitoring systems, including audits (a principle that will later be taken up in the civil sector, in the AI Act). But at the same time, MEPs recognise the strategic importance of artificial intelligence in defence and geopolitical competition. Above all, they recognise that this technology can save lives and protect European citizens and soldiers from certain risks. They are therefore not opposed to its military use. They are, however, asking three things: (1) that the "man in the loop" principle be respected throughout the chain of command and control, (2) that the legal responsibility of individuals and states can always be engaged, and (3) that the EU takes the lead at UN level to promote solid international governance in this area, with common rules and control systems, including for exports[23].

On the LAWS front, of course, the music is different. For six years, MEPs have been pressing the Council to adopt a Common Position "preventing the development, production and the use of LAWS capable of attack without meaningful human control, as well as the initiation of effective negotiations for their prohibition". More specifically, the EP wants the Council to get involved in the UN Convention on Certain Conventional Weapons Forum to regulate military AI and ban LAWS, at least when they do not provide for human supervision[24].

However, the EP's position on this issue appears ambivalent, sometimes bordering on the contradictory. In fact, at times the EP is clear and firm in its opposition to LAWS, and at other times it appears more nuanced. In point 27, the 2021 resolution states that the decision to select and engage a human target for elimination must always be taken by a human operator, even when this operation is carried out by a machine with a "certain level of autonomy".

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[20] Federal Department of Foreign Affairs FDFA of the Swiss Confederation, Interdiction et limitation de certaines armes.
[21] European Parliament resolution of 12 September 2018 on autonomous weapons systems (2018/2752(RSP)).
[22] EP resolution of 20 January 2021 on artificial intelligence in the areas of civil and military uses.
[23] EP resolution of 20 January 2021 on artificial intelligence in the areas of civil and military uses. See also the EP resolution of 18 January 2023 on the implementation of the common security and defence policy - Annual report.
[24] Points 27 and 49 of the EP resolution of 20 January 2021 on artificial intelligence in the areas of civil and military uses.

However, in the second part of the same sentence, the resolution does not ask for a human decision before engaging the target but for an "effective control and monitoring" by a human operator[25]. More generally, throughout the 2021 resolution, when MEPs state that the development and production of autonomous lethal weapons must be prevented, they specify that they are referring to weapon systems "capable of attack without meaningful human control", as if an autonomous lethal weapon could still have some form of human control.

The question that arises is therefore to understand whether, according to the EP, the human operator should take the place of the machine and 'decide' for it at the fateful moment of firing, or whether he can simply 'control' what the machine does. From an industrial point of view, the nuance between the notion of "human decision" and that of "human control" is fundamental. If an autonomous weapon is forced to give way to a "human decision" when it has to engage a target in order to eliminate it, this means that the manufacturer cannot produce the technology capable of autonomously choosing to kill. On the other hand, if the autonomous weapon were simply to be subjected to "human control" before firing, the technology in question could exist, given that the human operator could, if necessary, remain passive. In this case, the manufacturer could develop and produce a system capable of autonomously deciding to fire, provided that it also includes the significant human control required. In short, the simple need to ensure "human control" does not in itself prevent autonomous lethal technology from existing and functioning, or the manufacturer from developing and producing it.

The 2021 resolution further fuels the confusion when it insists "on the need for an EU-wide strategy against LAWS and a ban on so-called killer robots" (point 29). All of a sudden, out of nowhere, a distinction appears between the notion of "killer robot" and that of LAWS. What is the difference between these two concepts? And what is the difference between the desire to adopt a strategy against LAWS and the desire to ban killer robots? The EP does not provide any information to unravel this mystery. On the contrary, the mystery thickens further in point 34 of the resolution, when it is stated, on the one hand, that "LAWS should be used only as a last resort, and are lawful only if they are subject to strict human control", and then when it is stated, on the other hand, that "systems without any human control ('human off the loop') and human oversight must be banned with no exceptions and under all circumstances. Finally,

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[25] The point 27 of the 2021 resolution states more precisely that the EP shall "emphasises that the decision to select a target and to take lethal action by means of weapons systems with a certain degree of autonomy must always be made by human operators exercising meaningful control, oversight and the necessary judgement in line with the principles of proportionality and necessity".

a few lines later, the resolution states that "LAWS should be used only in clearly defined cases and in accordance with authorisation procedures laid down in detail in advance" (point 37)[26].

From these words, it is difficult to understand what the MEPs really want. The EP gives the impression that it wants to ban not the autonomous lethal weapon as such, but the way in which it might be used, i.e. without "genuine human control". The only certainty lies in the fact that the principle of "man in the loop" is defended tooth and nail by the EU assembly. But the concept remains ambiguous, and the fact that it has been incorporated as it stands into the European Commission's financial instruments is not without consequence, as we shall see in subsection 3.3.

The Council and the Commission

The Council, for its part, has remained much more discreet than the EP on the issues surrounding LAWS. This could indicate that the Member States are not yet prepared to deal with such a sensitive issue of national sovereignty in Brussels. If anything, they prefer to deal with it via their national legislation.

In a rare public statement made in 2020, however, Joseph Borrell nevertheless adopted a stance close to that of the EP on the issue, i.e. one marked by ambiguity. Speaking in his capacity as High Representative for the Union, Borrell was careful not to call clearly for a ban on LAWS. He remained vague on this point, asking that these weapon systems be compatible with international humanitarian law and that they guarantee an unspecified "sufficient human supervision"[27]. Despite the similarities, there is a semantic nuance that distinguishes the Council's position from that of the EP. The High Representative does not use the adjective "meaningful" when referring to human supervision, but rather "sufficient". This could indicate that the Member States and the EP are not entirely on the same wavelength on this issue, and that the Council would like to see a less restrictive management of LAWS.

The European Defence Agency (EDA), as an entity dependent on the Council, obviously does not have a separate position on military AI. However, it has already shown an interest in this area. In 2023, for example, it launched a project called Combat Unmanned Ground Systems (CUGS), with the aim to develop highly autonomous combat unmanned ground systems. Of course, the EDA stresses that the "human-in-the-loop" principle is fully respected within the project[28].

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[26] EP resolution of 20 January 2021 on artificial intelligence in the areas of civil and military uses
[27] EU Statement on the Group of Governmental Experts on Lethal Autonomous Weapons Systems Convention on Certain Conventional Weapons, 28/09/2020.
[28] European Defence Agency, New EDA project seeks to enhance combat unmanned ground systems technology, 3 February 2023.

Despite this, the Council and the Member States, which retain competence in this area, remain fully involved in the debates taking place within the Group of Governmental Experts of the Convention on Certain Conventional Weapons (CCCW). To date, however, neither France, Germany nor the EU delegation to the CCCW have succeeded in promoting a common international interpretation of the concept of human control, which means that we still do not know when the machine should stop and give way to the soldier, or whether it really should[29].

As for the Commission, it has neither the competences nor the will to influence the debate. In 2020, for example, it disappointed associations by failing to mention defence-related issues in its White Paper on AI[30]. This disappointment was repeated when it presented the first draft of its regulation on civil AI (AI Act), in which military issues were nowhere to be found[31].

On this point, we can conclude that the European institutions have no intention to date of putting obstacles in the way of Member States wishing to produce and develop LAWS, at least from a legal point of view. At most, they could ask them to ensure this imprecise human control over the ultimate decision to fire, when lives are at stake, without going any further.

The fact that the EU's regulatory ambitions are on balance limited, if not non-existent, however, does not mean that the Commission is prepared to fund and support autonomous lethal weapons, as we shall see below.

Could the EU fund LAWS?

Prohibiting is one thing, supporting and funding is another. The European Union is a cautious institution which, when it comes to defence, moves forward with hushed tones, trying to avoid controversial issues such as LAWS. On the face of it, therefore, the Union is refraining from financing LAWS, whether through the European Defence Fund (EDF), the EDIRPA programme, the ASAP programme or, very probably, the future EDIP programme. On closer examination, however, things are more complicated than they first appear. The limits that the EU has set itself in terms of funding do not seem to be as strict as that, at least from a legal point of view. This does not mean, however, that in practice Brussels intends to fund the development of autonomous lethal technology. What it does mean is that if it wanted to, it could theoretically do so. To understand this, we need to focus on European Defence Fund, which funds military R&D and is therefore the most relevant programme in terms of LAWS.

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[29] Esther Barbé, Diego Badell, "The European Union and Lethal Autonomous Weapons Systems: United in Diversity?", Part of the Norm Research in International Relations book series (NOREINRE), 2/11/2019.
[30] Eleonora Branca, "An International Regulation of Lethal Autonomous Weapon Systems: What Role for the EU?", ENTER Policy Brief No. 8 - June 2021.
[31] Proposal for a Regulation of the EP and the Council on the Artificial Intelligence Act, Brussels, 21.4.2021, COM(2021) 206 final.

During the negotiations for the adoption of the EDF, the EP had obtained that autonomous lethal weapons be considered ineligible as long as they do not allow the famous "meaningful human control" mentioned in its resolutions, as well as in UN forums. The MEPs therefore succeeded in imposing on the Council the term "<u>meaningful </u>human control" rather than "<u>sufficient </u>human control", which was preferred by the Member States. But that's not all the EDF regulation says. More specifically, Article 10 states that:

''*(...) actions for the development of lethal autonomous weapons without the possibility for meaningful human control over selection and engagement decisions when carrying out strikes against humans shall not be eligible for support from the Fund, without prejudice to the possibility of providing funding for actions for the development of early warning systems and countermeasures for defensive* purposes''[32] .

We are therefore faced with the same ambiguity examined in the previous paragraph. In fact, in the case of the Fund, there are even two ambiguities. Firstly, if the EU had wanted to ban categorically the funding of autonomous lethal technologies by the EDF, it would not have imposed "human control" over the machine, but it would have imposed that the machine gives way to a "human decision" when the target must be engaged. As we saw in the previous paragraph, asking for human <u>control</u> is not the same thing as imposing a human <u>decision</u>. It should be remembered that, by using the word "control" rather than "decision", the EDF regulation does not prohibit the funding of AI enabling autonomous targeting. The EU merely requires the machine to be supervised by a man or woman before firing. A human supervisor who could limit himself to observing what the machine does, without interfering in its actions until he deems it necessary. From an industrial point of view, then, there would be nothing to legally prohibit defence companies from using EU funding to develop autonomous lethal technologies, provided, of course, that they also make provision for this human supervision.

The second ambiguity lies in the last part of art. 10 of the Fund regulation, which suggests that there could be exceptions (''...without prejudice to the possibility of providing funding for actions for the development of early warning systems and countermeasures for defensive purposes'). It is, of course, the concept of "countermeasures for defensive purposes" that should attract our attention. The EU is probably referring here to certain so-called defensive weapons. European legislators, and especially the EP, had already taken care to exclude autonomous anti-air systems from the definition of LAWS that they had adopted[33]. These systems can save more lives than they can take, and from an ethical point of view it would be

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[32] Art. 10 of the <u>Regulation (EU) 2021/697 of the European Parliament and of the Council of 29 April 2021 establishing the European Defence Fund</u>.
[33] Point 6 of the <u>European Parliament Resolution of 12 September 2018 on autonomous weapons systems</u>.

absurd to ban them. Also, in adopting such a provision, the EU probably had in mind the idea that the EDF could still fund air defence systems equipped with an AI capable of making them fully autonomous. However, this kind of system can hardly be dissociated from the notion of LAWS, given that it can neutralise not only missiles, but also aircraft piloted by human beings. Theoretically, it could even be adapted to carry out ground strikes. The Russians, for example, would use the S-300, which is basically a ground-to-air system, to bomb land targets on Ukrainian soil[34]. This example shows once again how complicated it is to define in legal terms what can and cannot be financed by LAWS.

These provisions seem to indicate that, from a normative point of view, the EDF is not closed to LAWS, just like other EU defence industry funding programmes (EDIRPA, ASAP)[35]. In practice, however, although AI is present in several projects financed by the Fund, there is no information today to suggest that the EU budget has been used to finance autonomous lethal technology. It could be, if the EU wanted to, but so far it has not. However, this position is not set in stone, since Brussels has been careful not to give it legal protection.

CONCLUSION

At first, the EP seemed ready to crusade against autonomous lethal weapons, dragging the whole of the European Union along with it. Over time, however, MEPs have softened their stance, muddying the waters and fuelling confusion. The lack of clarity on this issue is probably due to the need to find a difficult compromise between the advocates of a strict approach against LAWS and the supporters of a more permissive approach. The EP, however, also gives the impression of having changed its tune as AI has become an inescapable technological reality in the military sector. Year after year, the MEPs have gradually softened their positions and their restrictive vigils, adopting in 2021 a resolution that is far more ambiguous than the one they endorsed in 2018.

The Council and the Commission, on the other hand, have always maintained a more discreet and cautious stance on the subject, avoiding exposing themselves. Artificial intelligence is in itself an increasingly difficult subject to define, especially in the military sphere. And legislating on something that is difficult to conceptualise is no mean feat. A standard is hardly effective when it addresses a phenomenon that is undefined and poorly circumscribed. What's more, if

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[34] Thomas Newdick, "Russia Now Firing S-300 Surface-To-Air Missiles At Land Targets In Ukraine: Official", The War Zone, 9 July 2022.

[35] Both EDIRPA (art. 8.2.b of regulation (EU) 2023/2418) and ASAP (art. 8.4.b of regulation (EU) 2023/1525) use terms similar to those used in the FEDEF regulation: the financing of LAWS is prohibited, but only when significant human control is excluded. EDIP will probably also have this same rule.

the standard in question has to be adopted at international level, the task becomes almost impossible.

So it should come as no surprise that the EU and the UN have not yet succeeded in banning autonomous lethal weapons. Even if they were to succeed one day, it is highly likely that the provisions they adopt would remain easily circumvented. The tentative consensus in Brussels and New York on the concept of "meaningful human control" is emblematic of this. Let us assume that one day this principle, as it is defined today, will be incorporated into binding legislation. This would not mean, however, that manufacturers could not develop and produce LAWS, as we have seen in the preceding pages. The only constraint they would have to respect is to set up a system that provides remote supervision, which could remain passive if necessary. Beyond that, the notion of " meaningful human control" would impose restrictions only at an operational level, i.e. on military personnel. It would oblige the latter to activate human supervision of the machine before it decided autonomously to eliminate a man or woman on the battlefield. But the machine and its lethal autonomous functions could still exist.

Under the current rules governing EDF, EDIRPA and ASAP, autonomous lethal weapons could, in theory, already benefit from EU subsidies. It is true that, for the moment, the Commission does not wish to fund them. But with time, and with the stiffening of international competition, the European executive could also change its mind. In any case, there is nothing legally preventing it from doing so.

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