# APPLICATION OF ARTIFICIAL INTELLIGENCE IN MODERN MILITARY SYSTEMS[*]

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Abstract: Artificial intelligence (AI) is increasingly becoming a structural component of modern military systems, transforming the ways in which information is collected, processed, and utilized in command-and-control processes and the use of force. The aim of this paper is to examine the role and scope of AI application in the contemporary military environment, with particular emphasis on their implications for security, operational conduct, and strategic stability. The research is based on a qualitative analysis of available scholarly literature, official documents of international organizations, and a comparative examination of selected examples of AI implementation in different military systems.

The findings indicate that the application of AI significantly accelerates and enhances decision-making processes, intelligence, surveillance, and reconnaissance (ISR) activities, and logistical support, while simultaneously generating new challenges related to system reliability, legal accountability, and cyber vulnerability. A particular concern is the risk of inadequate or non-transparent behavior of autonomous systems in complex and dynamic security environments.

The paper concludes that AI will be one of the key drivers of the transformation of military capabilities in the coming decades, but that the sustainability of this transformation depends on the development of international regulations, ethical standards, and effective mechanisms of human oversight.

Keywords: *artificial intelligence, military systems, autonomous weapons, modern warfare*

# Introduction

Artificial intelligence in the military domain does not represent a single technology, but rather an integrated set of algorithmic and computational solutions encompassing methods of machine and deep learning, the analysis of large-scale data, and systems for natural language processing and understanding. These approaches enable software systems to independently extract relevant information from complex and often incomplete datasets, identify patterns, and generate recommendations or support decision-making under conditions of a high degree of uncertainty. It is precisely this capacity for adaptive information processing that makes AI particularly significant in the operationally demanding and time-sensitive environment of modern warfare. In a broader sense, AI refers to the development of systems capable of replacing certain aspects of human cognitive behavior, such as learning from experience, analytical reasoning, and selecting among multiple alternative courses of action, but at a speed and scale that exceed human capabilities.

In contemporary technological development, artificial intelligence stands out as one of the main drivers of systemic changes in the way information is collected, processed, and utilized in decision-making processes. In the military sphere, this transformation carries particular weight, as it affects response speed, the accuracy of assessments, and the ability to manage complex operations under high-risk conditions. For this reason, leading military powers are directing significant resources toward the development and implementation of AI-based systems, seeking to maintain or enhance their operational and strategic advantage in future conflicts. The application of these technologies not only transforms the technical aspects of military capabilities but also affects fundamental elements of military activity, including planning, intelligence support, logistics, and cyber protection. Technological progress, from early expert systems to contemporary machine learning algorithms, indicates the continuous evolution of this field, with the past decade witnessing an accelerated integration of AI into operational military systems (Morgan et al., 2020).

In an effort to preserve technological superiority, the military sector is increasingly adopting AI systems as a means of enhancing reliability and operational efficiency under high-risk conditions. These systems are particularly important in the processing of large volumes of data originating from various sources, such as reconnaissance sensors, satellite platforms, and surveillance systems, where human analysis is no longer sufficient in terms of time or cognitive capacity. AI algorithms enable the early detection of patterns and anomalies that may indicate emerging threats or changes in the operational environment, thereby shortening response cycles and improving the quality of decisions. In addition, a significant domain of application is the use of robotic platforms in explosive ordnance disposal tasks, where the integration of AI allows for more precise detection and neutralization of hazardous objects, while simultaneously minimizing personnel exposure to direct danger.

Contemporary armed conflicts increasingly reflect the influence of technological innovations that are reshaping the very foundations of military activity (Vuletić, 2018). Rather than relying solely on numerical strength and firepower, military advantage is increasingly built on the ability to manage information, the speed of analytical pro-

cessing, and the integration of advanced digital systems, as confirmed by existing research on the evolution of modern warfare (Jeftić et al., 2018). In this context, AI acts as a key catalyst for change, enabling the automated integration of data from diverse sources, supporting command processes, and facilitating the control of complex operational activities, including logistical and intelligence functions. Research indicates that the introduction of these systems affects not only the technical aspects of operations but also the way military conflicts are planned and conceptualized within a broader strategic framework (Miljković & Beriša, 2023; Zirojević, 2024). As technological innovations continue to accelerate, AI is becoming a tool for enhancing not only operational efficiency but also strategic decision-making processes in conditions of complex and dynamic security challenges.

Throughout history, the development of military strategies and doctrines has always been closely linked to technological innovations that have reshaped the ways in which force is applied in armed conflicts (Vuletić & Stanojević, 2022). The transition from cold weapons to gunpowder, the emergence of mechanized units, and the dominance of air power represent turning points that required adjustments in strategy, organization, and the conduct of warfare. Within this continuum, artificial intelligence represents a significant phase of technological evolution, as it enables military systems to operate faster, with greater precision, and across a broader spectrum of information than ever before. For this reason, leading military powers, including the United States, China, and Russia, are heavily investing in the development of AI-based systems, treating them as one of the decisive factors in the future balance of military power (Horowitz, 2019).

Although AI significantly expands the technological capabilities of military systems, its application simultaneously raises a range of complex normative and security issues. Particular concern arises from the possibility that autonomous systems may assume critical functions involving the use of lethal force, thereby calling into question the role of human judgment, as well as the principles of accountability and control. An additional risk stems from the potential for highly automated systems, operating under conditions of limited time and incomplete information, to contribute to the unintended escalation of crisis situations. In this context, a key challenge for military organizations and the international community is the establishment of frameworks that enable technological innovation while preserving the fundamental principles of international humanitarian law and the protection of human dignity.

# Application of AI in Military Operations

In modern military systems, AI increasingly functions as a key support in the processes of collecting, processing, and interpreting intelligence information, as well as in decision-making within a dynamic operational environment. Although forms of automation were present as early as the Cold War period, particularly in the domain of surveillance, it was only with the development of advanced machine learning algorithms and neural networks that these systems became adaptive and capable of continuous learning. This evolution has created the conditions for AI to be integrated across a wide range of military functions, from analytical support to command to the

management of complex computer networks. In this context, the application of AI in military communication systems contributes to a higher level of security, faster data transmission, and improved situational awareness, directly affecting overall operational effectiveness (NATO, 2021).

Under conditions of high uncertainty and time pressure that characterize modern military operations, AI-based systems are increasingly assuming the role of analytical support for commanders. These systems are capable of integrating data from multiple sources, assessing possible developments of the situation, and generating recommendations that may contribute to more effective decision-making in complex operational scenarios. Such an approach is particularly significant in situations involving limited or contradictory information, which traditionally complicates decision-making in armed conflicts (Scharre, 2018). In addition, the application of AI enables the automation of a large number of routine and analytically demanding tasks, thereby allowing human resources to be focused on those aspects of command and control that require strategic judgment and responsibility.

The concrete application of AI in the military domain is most clearly manifested through the development of systems capable of independently performing certain combat and support functions. A particularly important role in this process is played by autonomous platforms, including unmanned aerial vehicles, guided weapon systems, and robotic assets, which are designed to operate with limited or indirect human intervention. Such an architecture enables a significant increase in operational flexibility and a reduction in direct exposure of personnel to danger, while simultaneously raising questions regarding the reliability of algorithmic decision-making and its compliance with legal and ethical norms. For this reason, the use of these systems has become the subject of intense debate within international institutions and the expert community, particularly in relation to the risks of uncontrolled escalation and challenges for the application of international humanitarian law (Allen, 2017).

One of the central areas of AI application in modern military systems relates to the integration and analytical processing of diverse intelligence sources. AI-based algorithms make it possible to extract relevant patterns and indicators of potential threats from large and heterogeneous datasets, thereby supporting situational assessment and response planning processes (Department of Defense, 2017; Allen, 2017). At the same time, the digitalization and technological complexity of the security environment are transforming the nature of threats, requiring new approaches in the organization and functioning of defense systems (Đukić, 2018). In this context, AI is increasingly used for the management of military computer networks, where it contributes to optimizing data flow, enhancing resilience to disruptions, and protecting sensitive information in cyberspace. In addition, the advanced analytical and generative capabilities of AI are increasingly being applied in the domain of psychological operations, further expanding the range of challenges faced by contemporary national security structures (Proroković & Parezanović, 2023).

The integration of AI into military logistics systems has enabled a shift from reactive to proactive resource management. Tools based on advanced analytics and predictive models allow for more precise supply planning, more efficient management of transport capacities, and timely maintenance of equipment, directly affecting the relia-

bility and sustainability of military operations. Such approaches not only enhance the efficiency of armed forces but also contribute to cost reduction and better allocation of limited resources. Beyond logistics, AI is also significantly applied in the domain of training, where advanced simulation systems create realistic scenarios that replicate the complexity and unpredictability of the modern battlefield. Such an environment enables commanders and units to practice decision-making under pressure, with continuous feedback, which represents an important factor in building operational readiness for real-world security challenges.

# Key Areas of AI Application
# in Military Operations

Command and control represent the functional foundation of every military operation, as they integrate information, decision-making, and execution into a unified operational process. The introduction of AI into these systems enables the synchronized processing of data from various sensor, intelligence, and operational sources within a timeframe that exceeds human analytical capacities. The concept of Joint All-Domain Command and Control (JADC2), developed by the U.S. military, is based precisely on such a digital architecture, in which information from land, air, maritime, space, and cyber domains is integrated into a unified information framework. This integration allows commanders to maintain a continuously updated operational picture, which serves as the basis for faster and higher-quality decision-making. In this context, AI algorithms are not used solely for data visualization but also for analytical processing, including the identification of potential developments and the assessment of the consequences of different operational options. Furthermore, the automation of routine processes in command centers reduces the cognitive burden on personnel and allows greater focus on more complex tasks related to assessment and planning. In this way, AI-based systems contribute to accelerating the command cycle and enhancing the overall efficiency of managing modern military operations (Pavić et al., 2024).

The precise and timely identification of relevant objects and activities represents one of the key prerequisites for effective military action and the reduction of collateral effects. In this context, AI—particularly through machine learning and deep learning methods—enables the automated processing of large volumes of visual and sensor data, significantly enhancing situational awareness. Platforms with integrated AI can classify and contextualize detected elements in complex operational environments, contributing to more reliable differentiation between various categories of objects and activities. In addition, analytical models enable the monitoring of environmental dynamics and the generation of assessments regarding possible developments, thereby providing additional support for operational planning and management. Such automated analytics accelerate the decision-making cycle and increase overall efficiency in complex and time-sensitive conditions.

The key technological pillars of AI with direct applications in the field of defense are primarily based on machine learning and deep learning methods. Machine learning enables software systems to develop their own behavioral models based on data

analysis, without the need for detailed pre-defined rules. This capability forms the basis for the development of predictive analytics tools, object classification, and adaptive responses in dynamic environments, which is particularly important for threat assessment, spatial analysis, and support to tactical planning (Russell & Norvig, 2020). Deep learning, as a more advanced form of this approach, utilizes multilayer neural networks to process complex data types, including visual, audio, and textual content. Such models enable the development of sophisticated intelligence analysis systems and the functioning of autonomous platforms in complex operational environments (Goodfellow et al., 2016).

Autonomous platforms, such as unmanned aerial vehicles and robotic systems, increasingly rely on AI algorithms for navigation, environmental analysis, and task execution with limited human intervention (Scharre, 2018). These systems are particularly suitable for operations in environments that are difficult to access or hazardous for human presence, thereby reducing personnel exposure to potential risks. Across a broad range of missions—from surveillance and data collection to active operations—AI-enabled platforms can independently manage movement, assess situations, and track relevant targets. Modern systems, such as the U.S. MQ-9 Reaper or China's Wing Loong UAV, represent examples of technological advancement in AI applications, while final decisions regarding the use of force remain under human control.

Unmanned ground and underwater platforms represent an increasingly important segment of modern military capabilities in the domains of reconnaissance and logistical support. Such systems are already being used within certain operational units to reduce the physical burden on personnel and limit the need for their direct exposure to high-risk situations. Their application is particularly significant in environments that are difficult to access or contaminated, including areas with chemical, biological, or radiological hazards, where human presence entails substantial security risks. At the same time, these platforms can contribute to more precise task execution and the potential reduction of unintended consequences in specific operational scenarios. However, their effectiveness depends on the reliability of navigation and communication systems, as well as resilience to cyber threats, which represents one of the key challenges for their further integration into military structures.

Autonomous unmanned systems based on AI represent an important step in the evolution of military technologies, as they introduce algorithmic support into processes of surveillance, assessment, and task execution. The ability of such platforms to independently process data and generate operational recommendations has opened a broad debate on issues of accountability, reliability, and potential misuse in the context of the use of force (Allen, 2017). In this regard, the U.S. Department of Defense program (Project Maven) illustrates how machine learning techniques are used to enhance the analysis of visual data and support identification processes, thereby accelerating and standardizing the analytical component of operational procedures (Department of Defense, 2017; Allen, 2017).

Modern unmanned systems can be classified according to their level of autonomy, ranging from platforms fully controlled remotely by operators, through hybrid solutions with partial autonomy, to systems capable of performing certain functions without direct human intervention. At the core of these approaches are algorithms for real-time

data processing and automated interpretation of sensor inputs, enabling faster and more consistent responses in dynamic operational environments. Experiences from contemporary conflicts indicate that the role of AI is becoming increasingly prominent in the phases of planning, execution, and post-operation analysis of military activities (Đorić & Glišin, 2023). In this context, data integration systems that connect multiple sources, including unmanned platforms and satellite systems, enable the creation of a unified operational picture and support decision-making processes, as illustrated by the example of the Ukrainian Delta platform (Bondar, 2024).

The intelligence, surveillance, and reconnaissance (ISR) capabilities of modern armed forces increasingly rely on systems capable of processing and synthesizing data from a large number of heterogeneous sources. In this process, AI plays a key role by enabling the integration of information collected through satellite platforms, sensor networks, and communication channels into a coherent analytical framework. Advanced algorithms allow for the identification of patterns, anomalies, and indicators of potential threats within a timeframe that exceeds human analytical capacities. These systems are particularly significant in the processing of visual data, where automated analysis of satellite imagery and aerial footage enables continuous monitoring of changes in the operational environment. In this context, the U.S. armed forces are developing and implementing integrated AI-based systems to connect various intelligence sources and provide more reliable analytical support to decision-making processes (Department of Defense, 2017).

Through the application of advanced analytical models, AI enables the transformation of unstructured and heterogeneous data into intelligence information relevant for situational assessment. Algorithms can classify and track various categories of objects and activities based on data obtained from satellite platforms and unmanned aerial vehicles, as well as detect environmental changes that may indicate potential security risks (Allen & Chan, 2017). In addition, natural language processing techniques allow content from open sources—including media reports, social networks, and other public channels—to be systematically searched, translated, and analyzed in order to identify patterns, narratives, and indicators of potential threats. By combining previously collected data with real-time inputs, AI can also support the development of analytical assessments regarding likely directions of situational development in complex security environments.

The Israel Defense Forces (IDF) have introduced AI-based systems, such as the Gospel platform, with the aim of accelerating and synchronizing the analysis of collected data and supporting the prioritization of tasks in complex operational conditions. The integration of such tools contributes to greater consistency in situational assessment and reduces cognitive burden within command structures, in line with the broader trend of increasing reliance on AI in real-time tactical decision-making (Allen, 2017). At the same time, advancements in AI have enabled significant progress in the development of unmanned and autonomous aerial platforms. Initiatives such as the U.S. Air Force's ACE (Air Combat Evolution) program are focused on examining how algorithms can support or enhance certain aspects of air operations, indicating a gradual transformation of the concept of air superiority toward greater reliance on digital and algorithmic capabilities (Department of Defense, 2017).

The development of autonomous aerial platforms illustrates how AI is gradually penetrating areas that have traditionally been entirely within the domain of human control. The ability of algorithmic systems to process complex datasets within short timeframes enables rapid identification of changes in the operational environment and more precise responses to various types of threats. Although such capabilities may enhance reliability in dynamic situations, their application in contexts involving the use of force requires clearly defined mechanisms of oversight and accountability, precisely due to the risk of unintended or inappropriate outcomes (Scharre, 2018).

In the digital domain, AI is becoming one of the key instruments for maintaining the resilience and security of military information systems. Its application enables continuous monitoring and analysis of large volumes of data, allowing the detection of anomalies and indicators of potential intrusions or misuse (Vuletić, 2012; Vuletić & Nojković, 2018). Instead of relying solely on manual analysis, AI algorithms enable early recognition of patterns that may signal emerging cyber threats and support faster and more consistent responses to incidents (Geis et al., 2019). In this context, the United States Cyber Command (USCYBERCOM) has developed a strategic plan for the systematic integration of AI into cyber operations, aimed at enhancing analytical and defensive capabilities (Clark, 2024). At the same time, advances in machine learning are also influencing the evolution of military communication networks, where intelligent data flow management and the application of modern cryptographic solutions increase system reliability and resilience in adversarial conditions (NATO, 2021).

Logistics systems represent the functional foundation of every military operation, as the sustainability of combat activities depends on their reliability. In this context, the application of AI enables a transition from reactive to predictive management of equipment and supplies, based on the continuous analysis of data regarding the condition and usage of assets. Through the integration of sensor systems into military equipment, AI algorithms can monitor performance and assess the probability of component failure, enabling timely maintenance planning and reducing unexpected disruptions (US DoD, 2018; Scharre, 2018). In addition, AI is increasingly used for managing complex supply chains, where it enables the optimization of transport routes, dynamic adjustment of inventories, and more efficient allocation of limited resources. Examples such as DART (Dynamic Analysis and Replanning Tool), developed by the U.S. military, illustrate how algorithmic support can enhance the planning of logistical flows and contribute to the timely delivery of critical assets in complex operational environments (Department of Defense, 2017; Allen, 2017). In this way, the application of AI in logistics directly affects the reliability and overall success of military missions.

The application of AI in military training enables the creation of digital environments that replicate the complexity and unpredictability of modern operational space. Instead of static scenarios, advanced simulation systems use adaptive behavioral models to generate dynamic situations that evolve depending on the actions of training units. This allows members of the armed forces to develop command and other skills in conditions close to real ones, but without the risks associated with actual operations. Furthermore, virtual instructors and AI-based analytical modules enable a personalized approach to training by adapting the intensity and content of training to the specific needs and performance of each individual (Grand-Clément, 2023).

# Ethical Implications and Legal Considerations

Although the application of AI in military systems brings significant operational benefits, it simultaneously raises complex ethical and legal issues that require a systematic approach. One of the central challenges concerns the allocation of responsibility in situations where algorithmic systems participate in critical decision-making processes (Stanar, 2025, pp. 119–121). Given that many models function as so-called "opaque" or difficult-to-explain systems, there is a risk that traditional chains of command and accountability become less clear in cases of unintended outcomes. Moreover, the limited ability to understand how AI generates its assessments complicates both internal oversight and external regulatory control, which is particularly problematic in the context of the application of international humanitarian law. These challenges become even more pronounced in dynamic combat conditions, where decisions are made under time pressure and with limited room for human intervention (Morgan et al., 2020).

The issue of aligning AI applications with the rules of International Humanitarian Law (IHL) represents one of the key areas of contemporary academic and policy debate. Military systems that rely on algorithmic support must operate within established principles of distinction, proportionality, and military necessity, which imposes high requirements on their design and use (Shehata, 2025). In this context, the use of AI in armed conflicts inevitably raises questions regarding the transparency of decision-making processes, as well as compliance with humanitarian standards. Analyses by the RAND Corporation (Research ANd Development Corporation) indicate that increased levels of autonomy may heighten the risk of unintended escalation and weaken effective human control over the use of force (Morgan et al., 2020), while the International Committee of the Red Cross (ICRC) emphasizes the difficulties in verifying and assessing decisions generated by algorithmic systems (Klaus, 2024). The central normative issue remains the question of legal responsibility in cases where autonomous systems cause harm or lead to violations of international law. In the absence of clear international consensus, it remains unresolved whether responsibility should be attributed to developers, manufacturers, operators, or the command level (Kallenborn & Reddie, 2020).

Numerous states and international organizations, including the International Committee of the Red Cross, advocate the position that the use of weapon systems must remain under meaningful human control, particularly in situations involving the use of lethal force (ICRC, 2019). In this context, a fundamental question arises as to whether algorithmic systems can meet the normative requirements of international humanitarian law, such as distinguishing between military and civilian targets and assessing the proportionality of the use of force (Klaus, 2024). Analyses by the United Nations Institute for Disarmament Research (UNIDIR) highlight the need for clear political and legal guidelines to direct the development and application of AI in the military domain (UNIDIR, 2024). In the absence of such frameworks, there is a risk that autonomous systems may operate unpredictably or be misused, potentially leading to undesirable humanitarian and security consequences. Therefore, the establishment of internationally accepted rules and oversight mechanisms is of crucial importance for the sustainable and responsible use of artificial intelligence in military operations.

The United Nations Institute for Disarmament Research (UNIDIR), in its recent publications and analytical reports, systematically examines the application of AI in the military domain and its implications for international peace and security, with particular attention given to recommendations for future policies and regulatory approaches (AI in the Military Domain: A Briefing Note for States, 2025; Artificial Intelligence in the Military Domain and Its Implications for International Peace and Security: An Evidence-Based Road Map for Future Policy Action, 2025) (UNIDIR, 2024). These documents represent a comprehensive effort by the United Nations to identify risks, as well as ethical and normative challenges associated with the military use of artificial intelligence.

In addition, a significant step toward the formalization of a global approach to this issue is the adoption of the resolution Artificial Intelligence in the Military Domain and Its Implications for International Peace and Security, which for the first time expressed a shared position at the level of the United Nations General Assembly regarding the need to govern and regulate this technology in the military context. The revised draft resolution (document A/C.1/79/L.43), jointly proposed by the Republic of Korea and the Kingdom of the Netherlands, was adopted in the First Committee of the General Assembly on 6 November 2024, and subsequently confirmed at the plenary session on 24 December 2024 as resolution A/RES/79/239 (UNGA, 2024).

## *Conclusion*

Artificial intelligence has emerged in modern military systems as one of the key drivers of technological and doctrinal transformation. Its application is not limited to improving individual functions, but extends to fundamentally changing the way information is collected, processed, and utilized in command, planning, and operational execution. From intelligence data analytics and logistical support to cyber defense and training simulations, AI-based systems are becoming an integral component of military power and operational effectiveness. At the same time, this technological transformation brings a range of complex normative and ethical challenges. The increasing autonomy of military systems calls into question traditional models of responsibility, transparency, and control, which have long formed the foundation of the legal regulation of armed conflict. Although algorithmic systems can significantly accelerate and enhance decision-making processes, their application in contexts involving the use of force requires clearly defined oversight mechanisms, as well as compliance with the principles of international humanitarian law.

The future development of military capabilities will increasingly rely on the interaction between human and machine systems, with AI not replacing human decision-makers, but rather acting as a tool to augment their analytical and operational capacities. However, this synergy can only be sustainable if accompanied by institutional and legal frameworks that ensure human judgment and accountability remain at the core of the use of force. In this regard, international cooperation and the development of shared norms represent key prerequisites for the stable and predictable application of AI in the military domain. In the absence of such frameworks, there is a risk that the

technological race in autonomous and intelligent systems could lead to new forms of instability and unintended escalation of conflict. Conversely, well-considered regulation and responsible integration of AI may contribute to enhancing security and reducing the humanitarian consequences of armed conflicts. From a long-term perspective, the continued development of AI, in combination with other advanced technologies such as quantum computing, advanced communication networks, and the Internet of Things, has the potential to reshape the character of future conflicts. The outcome of this transformation will depend not only on technological advancements, but primarily on how the international community manages their application. Only if technological progress is accompanied by legal, ethical, and institutional control mechanisms can AI become a factor of stability rather than a new source of global security challenges.

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# *S u m m a r y*

Artificial intelligence is increasingly emerging in modern armed forces as a systemic technology that transforms the way information is collected, processed, and utilized in military decision-making. Its role is no longer limited to isolated technical applications but encompasses a wide range of functions, including command and control, intelligence support, unmanned platforms, operations in cyberspace, logistics, and training. By integrating data from multiple platforms and enabling its algorithmic analysis in real time, AI contributes to the creation of an integrated operational picture and accelerates the decision-making cycle.

A particularly important area of application is intelligence, surveillance, and reconnaissance activities, where advanced models enable the automated processing of visual and sensor data, pattern recognition, and the timely identification of potential security risks. At the same time, unmanned and partially autonomous platforms are assuming an increasing share of tasks in high-risk environments, thereby reducing personnel exposure and transforming the structure of military operations. Significant changes are also evident in logistics, maintenance, and training, where AI is used for predictive resource management, simulation of complex scenarios, and the individualization of training processes. In cyberspace, AI is becoming a key factor in network protection and stability, as it enables continuous monitoring, analysis, and response to digital threats.

At the same time, the expansion of algorithmic support in military systems raises serious concerns regarding accountability, transparency, and compliance with international humanitarian law. Maintaining meaningful human control over the use of force, as well as developing international rules and oversight mechanisms, emerges as a key requirement for the responsible integration of this technology. In this regard, initiatives by the United Nations and other international institutions indicate the gradual formation of a global framework for managing risks associated with the military application of artificial intelligence.

Overall, artificial intelligence represents one of the primary drivers of the transformation of modern military capabilities. However, its strategic significance will depend on whether it is accompanied by appropriate legal, ethical, and political frameworks

that ensure technological advancement contributes to stability and security, rather than to new forms of global instability.

Keywords: *artificial intelligence, military systems, autonomous weapons, modern warfare*