ROMANIAN MILITARY THINKING

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A LEGACY SINCE 1864

The Romanian Armed Forces road to modernity started in 1859, once the United Principalities General Staff Corps, currently the Defence Staff, was established.

Soon after it, in 1864, a group of nine captains, graduates of the first series of the Officer Cadet School in Bucharest, took the initiative to develop a *"military science, art and history journal"* named *"România Militară/Military Romania"*.

The initiators of the publication – **G. Slăniceanu** (Captain, Chief of the Engineer Battalion), **A. Gramont** (Staff Captain), **G. Borănescu** (Engineer Captain), **G. Anghelescu** (Staff Captain), **A. Anghelescu** (Artillery Captain), **E. Arion** (Artillery Captain), **E. Boteanu** (Staff Captain), **E. Pencovici** (Staff Captain) and **C. Barozzi** (Engineer Captain) –, educated not only in Romania but also abroad, were inspired by the necessity to develop a substantial theoretical activity in the Romanian Army too.

The journal manifesto[1], included in the first issue, which appeared on 15 February 1864, contained innovative ideas and approaches that were meant to:

"- contribute to the organisation of our military system the Legislative Chamber is about to decide upon soon;

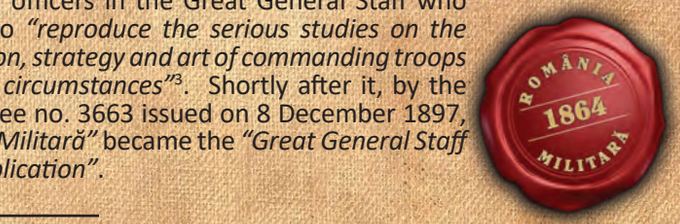
- assemble and examine the Country old military institutions that had made for the glory of Romania for several centuries and ensured our existence;

- explore, in the absence of any military study, all the aspects related to the Army training, the most solid basis of the armed forces;

- get the Romanian Troops well-informed about the military events in the world;

- join efforts to work concertedly and whole-heartedly to develop and strengthen the edifice that is meant to ensure the future of our country"[2].

"România Militară" was an independent publication, under the aegis of the War Ministry, and it ceased to appear in 1866 as there were no sufficient funds and subscribers. The publication was resumed in 1891, about a quarter of a century later, also as the result of the initiative of a group of officers in the Great General Staff who intended to *"reproduce the serious studies on the organisation, strategy and art of commanding troops under any circumstances"*[3]. Shortly after it, by the Royal Decree no. 3663 issued on 8 December 1897, *"România Militară"* became the *"Great General Staff official publication"*.



[1] *Din trecutul României Militare cu prilejul aniversării a 75 de ani de la apariția ei în viața armatei. 1864-1939*, București, 1939, p. 31.

[2] *Ibidem*, p. 32.

[3] *România Militară*, no. 1, 1981, p. 6.

English version by **Diana Cristiana LUPU**.

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The *GÂNDIREA MILITARĂ ROMÂNEASCĂ* Journal Awards are yearly bestowed, by the Romanian Armed Forces Defence Staff, on the most valuable works in the field of military science, published in the previous year

"Brigadier General Constantin Hîrjeu" Award

"Lieutenant Colonel Mircea Tomescu" Award

"Division General Ştefan Fălcoianu" Award

"Army Corps General Ioan Sichitiu" Award

"Marshal Alexandru Averescu" Award

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THE IMPACT OF ARTIFICIAL INTELLIGENCE ON SECURITY AND DEFENCE: A STRATEGIC NECESSITY OR AN UNDERESTIMATED RISK?

Major General Adrian BRÎNZĂ
Deputy Chief of Defence Staff for Planning

The world is entering a new era of conflict, where technology and data are becoming weapons just as important as conventional ammunition. Artificial Intelligence (AI) is no longer just a concept of the future, but a concrete reality of the Fourth Industrial Revolution and a key factor that can determine the structure of power, both regionally and globally, as well as a tool already used in modern warfare. The United States of America, China, Russia, and other world powers are allocating enormous resources to develop autonomous systems capable of analysing data, identifying threats, and even deciding the course of military operations.

In practice, the rapid evolution of AI is redefining defence structures, tactics, and military strategies on a global level. Technology is becoming a decisive factor in the response capacity of states, influencing both operational efficiency and national security. Romania, as a NATO member and a state located in a geopolitically sensitive area, must understand that AI is no longer just an option, but a strategic necessity. However, the integration of this technology brings multiple challenges: Who controls military AI? How secure are autonomous systems? Are we prepared to defend ourselves against cyberattacks targeting AI-based infrastructures?

Artificial Intelligence – Exponential Impact and Emerging Trends in the Field of Defence

AI-augmented weapon systems are already being employed in missions involving reconnaissance, surveillance, logistics, and combat operations, executing complex tasks while reducing human risk. The transformational impact of AI in defence is no longer a matter of debate – it is an inevitability. The critical question is how to move beyond theoretical potential toward achieving exponential gains in capability development and military readiness. The role of artificial intelligence in modern warfare extends far beyond traditional notions of speed and efficiency. Its strategic value lies in the ability to convert

data into actionable intelligence, thereby enhancing decision-making speed, operational accuracy, and ultimately, mission success.

Currently, three key AI-driven trends are reshaping the defence landscape. Firstly, AI integration into command and control (C2) architectures enables faster and more informed decision-making in critical situations. The era in which military leaders were required to manually sift through overwhelming amounts of data is rapidly fading. AI algorithms can analyse vast data streams in real time, identifying patterns and potential threats with remarkable speed. This capability provides military leadership with timely and actionable insights, significantly reducing the time between decision and execution – a decisive advantage in contemporary warfare.

Secondly, AI is redefining operational readiness by enabling predictive maintenance, efficient logistics, as well as advanced military simulations and training. AI systems can assess the condition of military equipment and anticipate potential failures, thus optimizing maintenance schedules and minimizing the downtime of combat units. Through AI-driven predictive maintenance and decision-making optimization across the logistics chain, armed forces can ensure sustained mission readiness by reducing preparation time and avoiding unnecessary resource expenditure. Moreover, advanced algorithms can be used to generate realistic combat scenarios, significantly enhancing the quality of soldier training and preparedness for a wide range of operational situations. These capabilities allow military organizations to adopt a proactive approach to maintenance while ensuring operational flexibility and responsiveness to evolving mission demands.

Thirdly, artificial intelligence has fundamentally transformed the nature of military tactics. Modern confrontations increasingly take place within the cyber domain, where AI plays a critical role in monitoring, preventing, and responding to cyberattacks. Armed forces that integrate AI into their defence strategies are better equipped to anticipate and neutralize threats, thereby protecting critical infrastructure more effectively. Furthermore, AI facilitates the development and deployment of autonomous systems, such as unmanned ground vehicles and combat drones. These platforms are capable of executing military operations without direct human intervention, significantly altering battlefield

dynamics. AI-augmented autonomous systems offer new opportunities for minimizing operational risks while enhancing mission efficiency. AI is already enhancing the capabilities of unmanned vehicles – whether aerial, terrestrial, or maritime – enabling them to operate in complex environments, provide real-time intelligence, and carry out sophisticated missions including surveillance, reconnaissance, and even strategic strikes against enemy targets. All of this can be achieved while keeping personnel out of harm's way, thus contributing to force protection and operational sustainability.

Looking ahead, the role of quantum computing in enhancing encryption and operational precision is expected to further strengthen AI-driven defence systems. Additionally, artificial intelligence enables what can be described as an "amplification of operational capacity" – allowing armed forces to achieve more with the same set of resources. This capability is critical in an era characterized by high-intensity conflicts, escalating threats, and constrained defence budgets, where efficiency and adaptability are of paramount importance. AI-based command centres, for instance, are already improving the agility and effectiveness of military coalitions around the world.

Risks and Challenges of Artificial Intelligence in Defence Sector

Artificial intelligence is having a profound impact on modern warfare, fundamentally transforming how armed conflicts are conducted and reshaping military tactics. While AI offers significant opportunities for enhancing operational efficiency and strengthening defence capabilities, it also presents critical ethical and strategic challenges that demand careful consideration. Moreover, AI has the potential to exacerbate international tensions, as states compete to develop increasingly advanced military technologies. This emerging technological arms race may contribute to global instability, while the use of AI in the military risks undermining existing international norms governing armed conflict.

1. Cyber Warfare and AI Vulnerabilities

Modern conflict is no longer confined to physical confrontations on the battlefield. As previously mentioned, cyber warfare has become

an essential component of contemporary military engagements. Artificial intelligence plays a significant role in detecting and preventing cyberattacks, thereby safeguarding a state's critical infrastructure. However, AI can also be exploited by malicious actors to bypass security systems, creating new and highly sophisticated threats. The ability to automate cyberattacks through AI empowers both state and non-state actors to conduct sabotage and espionage operations with increased efficiency. Such capabilities have the potential to destabilize state structures, inflict severe economic and social damage, and do so without the need for direct armed confrontation. Cyberattacks targeting AI-based military systems represent one of the most serious threats in today's defence landscape. A vulnerable AI infrastructure can be exploited by adversaries to:

- ***manipulate data inputs*** *– adversaries may inject false or misleading information into AI networks, distorting the situational awareness and decision-making processes of military forces;*
- ***seize control of autonomous systems*** *– sophisticated hackers can potentially take over drones or automated defence systems, effectively turning them into weapons against their own operators;*
- ***disrupt critical communications*** *– if AI is integrated into command-and-control networks, a successful cyberattack could paralyze the decision-making and operational response capabilities of an entire military force.*

2. Loss of Human Control over Military Decision-Making

The growing impact of artificial intelligence on armed conflict raises major ethical and legal challenges that require serious international deliberation. One significant concern is the potential desensitization of soldiers and political-military leaders to the use of violence, as direct human involvement in operational decisions diminishes. At present, decisions to initiate attacks remain under human authority; however, in the near future, advanced algorithms may be capable of making such decisions autonomously. This development raises several critical questions, including:

- *Who is responsible if an AI algorithm makes an error and causes the death of innocent civilians?*

- *How can we ensure that AI systems comply with the principles of international humanitarian law?*
- *Is it ethical to allow machines to make lethal decisions without human intervention?*

In light of these concerns, there is a clear need for comprehensive international regulation governing the use of AI in armed conflict. Such regulation must ensure that AI is employed in ways that uphold human rights and adhere to established norms of international law. Many experts advocate for maintaining human oversight – keeping humans "in the loop" – with respect to all critical decisions involving the military use of AI.

3. Economic and Social Implications

One of the most evident ways in which artificial intelligence can influence the global balance of power is through its impact on national and international economies. Countries that successfully integrate AI into their economic systems can gain a substantial competitive advantage. For instance, nations such as the United States of America and China are investing heavily in AI research and development – not only to enhance economic efficiency but also to reinforce their geopolitical influence. These innovations allow them to position themselves as global leaders in key sectors such as healthcare, transportation, and manufacturing. This leadership, in turn, grants them greater control over essential resources, markets, and emerging technologies. Furthermore, AI facilitates the development of personalized and adaptive solutions tailored to the specific needs of national economies, which may widen the gap between technologically advanced nations and those unable to adapt to these emerging trends.

The AI impact extends beyond economic and military domains; it also carries profound social implications. The widespread adoption of AI-powered social media platforms has the potential to shape public opinion and influence political behaviour. Both state and non-state actors can more easily manipulate information and sway electoral outcomes by leveraging algorithms that target citizens based on their preferences and behavioural patterns. Moreover, AI may contribute to the deepening of existing social and economic tensions, as power disparities are exacerbated by unequal access to advanced technologies.

Countries that fail to develop AI capabilities or invest in digital specialization risk falling behind, which could lead to heightened social and political instability.

The majority of innovations in the field of artificial intelligence are being developed by private companies based in technologically advanced countries such as the United States of America, China, and others. In order to remain relevant in the new global reality shaped by AI, smaller powers are compelled to invest in national-level AI research and development centres. Additionally, these nations must foster collaboration between the public sector, private industry, and academic institutions to support the development of indigenous technologies. Equally important is the need to advocate for the adoption of common standards that ensure interoperability with allied forces, while safeguarding data security and national interests.

To fully harness the AI advantages, Romania must adopt a clear and well-directed national strategy. Key measures that could be considered include:

1. *Developing a robust digital infrastructure in the defence sector by implementing secure networks that enable the safe operation of AI systems without the risk of cyberattacks.*
2. *Establishing a national ecosystem for research and innovation in military AI, supported by sustained investment in specialized laboratories and the attraction of technological talent.*
3. *Adopting clear policies for the use of AI in combat, including strict regulations to ensure that AI systems are not deployed without human oversight and are fully compliant with international legal standards.*
4. *Training military personnel in AI operations by updating the Romanian Armed Forces' educational and training programmes to reflect the requirements of emerging digital technologies.*

Conclusion: A One-Way Path Having a Purposeful Direction!

Artificial intelligence holds the potential to profoundly reshape the global and regional balance of power. With far-reaching economic, military, and social implications, AI is not merely a technological

tool but a transformative force that introduces complex ethical, strategic, and operational challenges, thus requiring a carefully balanced and forward-looking approach. It is therefore essential for nations to recognize both the opportunities and the risks of a world increasingly shaped by AI. These changes may redefine international alliances, exacerbate uneven economic development, and generate new geopolitical tensions. Ultimately, the way in which the international community manages the rapid evolution of these technologies will determine the future trajectory of global stability and international relations.

The integration of AI into the fields of security and defence presents unique challenges. AI systems used for sovereign tasks – particularly in defence – are fundamentally different from the data-intensive models typically employed in consumer-oriented AI applications. This distinction underscores the need to develop a hybrid form of AI specifically tailored for security and defence contexts. Such an approach would combine two methodologies: one based on machine learning and statistical processing of large or moderate volumes of data, and another based on rule-based logic, often referred to as symbolic AI, which operates on predefined rules and logical frameworks.

Artificial intelligence will play a central role in the future of warfare, whether we are prepared for it or not. Romania cannot afford to fall behind, but it must adopt a strategic approach that combines innovation with strict security and ethical safeguards. If we aspire to build a modern, efficient, and geopolitically aware military force, the time to invest in AI and prepare for future challenges is now. Moreover, we must adapt our defence doctrine and allocate resources to remain competitive in an increasingly complex geopolitical landscape. The technological race waits for no one, and states that fail to keep pace risk becoming increasingly vulnerable. Romania must be ready!

ROMANIAN MILITARY THINKING

APPROACHES TO THE CONCEPT OF *"MULTI-DOMAIN OPERATIONS"* IN THE DOCTRINAL VISION OF NATO AND ITS MAIN STRATEGIC COMPETITORS

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DOI: 10.55535/RMT.2025.1.01

As the global security landscape becomes increasingly complex due to the intensification of global competition and the growing interdependence among various operational domains – land, maritime, air, space, and cyber – key actors are adapting their military doctrines to exploit these interactions and gain strategic advantages. This article examines the approaches to the concept of multi-domain operations (MDO) from the doctrinal perspective of NATO's main strategic competitors. The study provides a comparative analysis of the multi-domain operational concepts adopted by major powers, highlighting both the similarities and differences in their strategic approaches. By reviewing doctrinal documents, analysing lessons learned from conflicts and military exercises, as well as other relevant sources, the article identifies the factors influencing the evolution of these doctrines and their impact on global security dynamics. The conclusions suggest that NATO's continuous adaptation to these doctrinal changes is essential for maintaining a position of strategic superiority in an ever-evolving security environment.

Keywords: multi-domain operations; Russia; weapons technology; China; disinformation;

INTRODUCTION

Developing a new approach to military strategy requires a thorough understanding of both the current and future operational environment, as well as its evolution from past conflicts. Over the past two decades, as NATO member militaries have shifted their doctrines and resources toward counterinsurgency operations, allowing their high-intensity warfare capabilities to atrophy, several powerful state competitors have escalated their aggressive behaviour. By asserting their dominance in the operational environment, these actors have signalled a return to a new era of great power competition. The likelihood of military conflict against a near-peer adversary or a regional actor of a similar rank to the USA or NATO has increased significantly, imposing the need to rapidly focus on effective competition in all areas and across the full spectrum of military operations.

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A comparative analysis of NATO's Strategic Concept (2022) and the US National Defense Strategy shows a coherent position on the definition of common threats and the identification of the main strategic adversaries of the Western powers. The USA points out that over the past decade, we have witnessed Russia's increasingly aggressive and retaliatory actions, China's military rise and economic emergence, an increasingly threatening North Korea and an unscrupulous Iranian regime. Each of these adversaries aims to alter the world order in their favour and challenge the strategic interests of Western states (US DoD, 2022, pp. 2-7). Following the outbreak of the war of aggression against Ukraine, NATO positions Russia as posing *"the most significant and direct threat to the security of allies"*, judging that it is attempting *"to fundamentally change the Euro-Atlantic security architecture"*. At the same time, the Alliance condemns *"the coercive and ambitious policies of the People's Republic of China, its hostile rhetoric, disinformation and exertion of economic influence to create strategic dependencies"*,

as well as the deepening of its *"unrestrained"* strategic partnership with Russia. Also, the *"further development of nuclear and ballistic missile programs"* by Iran and North Korea while *"providing direct military support to Russia to fuel the war against Ukraine"* remains a permanent threat to NATO (MAE, 2024).

The strategic inter-state competition, highlighted by the ongoing armed clashes in the Euro-Atlantic area and the Middle East, as well as by the tensions in the Indian Ocean and Asian area, is mainly driven by the growth of military arsenals and supported by unprecedented technological development that ensures rapid and continuous integration of all areas of warfare. Advancements in weapons technology, sensors, communications, and information processing have significantly enhanced the lethality of military operations. Adversaries now possess the capability to detect, track, and target military forces across the full depth of the extended battlefield, particularly in emerging domains such as cyber, information, and space. They seek to gain a strategic edge by integrating land, air, sea, cyber, and space-based strike capabilities. Furthermore, in the information environment, adversaries engage in intense competition, frequently employing propaganda, disinformation, misinformation, and deception to manipulate perceptions and create a distorted or ambiguous representation of reality. All the mentioned aspects represent the new coordinates of contemporary warfare that are changing the way of fighting and call for the adoption of new concepts of operation.

The strategic inter-state competition, highlighted by the ongoing armed clashes in the Euro-Atlantic area and the Middle East, as well as by the tensions in the Indian Ocean and Asian area, is mainly driven by the growth of military arsenals and supported by unprecedented technological development that ensures rapid and continuous integration of all areas of warfare.

In this article, through the investigation and analysis of official documentary sources, together with the comparative analysis of the results of case studies and lessons learned from recent military operations or exercises, we aim to highlight the key principles, similarities and differences in the doctrinal approach to Multi-Domain Operations (MDO) at the Alliance level and the main declared strategic adversaries – Russia, China, Iran and North Korea.

The findings will point to possible directions for analysing capabilities and estimating the actions of potential adversaries, while calling for the continued adaptation of the Alliance to maintain a position of strategic superiority in today's changing security environment.

USA AND NATO APPROACHES TO THE CONCEPT OF MULTI-DOMAIN OPERATIONS

The accelerated technological advances in all fields, the development of space systems, autonomous robotic systems, the information and communications revolution have fundamentally altered the way military organizations prepare to wage war. Today's armed forces face the challenge of adapting their doctrine and tactics at an accelerated pace to the rapidly changing nature of future conflict. For the USA and NATO, the resurgence of great power competition, the advancement of anti-access/area denial (A2/AD) capabilities by peer adversaries such as Russia and China, and their strategic competition below the threshold of armed conflict across multiple regions have been the primary drivers behind the development and implementation of the MDO concept as an effective response. Seeking to counter the successful application of Allied doctrines in operations in Iraq and the Balkans, strategic adversaries have focused their efforts on building up high-battle, multi-layered engagement capabilities that deter proximity and provide so-called Anti-Access/Area Denial (A2/AD) *"bubbles"* with the ultimate goal of preventing freedom of manoeuvre by Western enemy military forces in all domains, in areas of previously unchallenged superiority. These aspects immediately increased the US military's concern about the *"inability to make direct contact with the enemy, destroy him, conquer and secure the terrain, and then consolidate gains"* (Dwight, 2023, p. 2). Thus, it was necessary to rethink doctrine to combat in particular the enemy's layered capabilities of holding at a distance (with integrated fire support and air defence systems) in order to create windows of opportunity for freedom of manoeuvre for the assembled forces.

For the USA and NATO, the resurgence of great power competition, the advancement of anti-access/area denial (A2/AD) capabilities by peer adversaries such as Russia and China, and their strategic competition below the threshold of armed conflict across multiple regions have been the primary drivers behind the development and implementation of the MDO concept as an effective response.

The new concept has been crystallizing since 2014, with Russia's invasion of Crimea being a powerful catalyst for American military and civilian experts in the US Department of Defense, who were convinced that the threat of an invasion of US or allied territory by an advanced military enemy with similar capabilities would seem plausible and difficult to defend against. Combining successful elements of earlier concepts, American thinkers base the new concept on the doctrinal principles of *air-land battle*, applied to an expanded and integrated battlespace that involves incorporating new domains such as space

and cyber, the electromagnetic spectrum and the information environment in addition to the traditional land, sea and air. At the same time, the term *"battle"*, which has tactical connotations applicable only to armed conflict, is replaced by *"operations"*, a term specific to the operational and strategic level, which is intended to address both the competitive and conflict phases and to better describe both joint force actions in all areas and inter-allied and inter-agency actions. An evolution of joint operations, the MDO concept – formalized in the FM 3-0 Operations doctrine – integrates capabilities across all domains to *"create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains"* during competition, crises, and armed conflicts (US Army, 2022). MDO extends beyond the operational level, requiring the coordination of distinct forms of manoeuvre across five domains while engaging agencies, intergovernmental organizations, and allied forces to develop asymmetric strategic responses on a global scale. Given the speed and operational reach of advanced weapon systems, as well as the complexities of global logistical support chains, such joint operations can no longer be restricted to clearly defined geographical areas (Lund-Hansen, Reilly, 2024).

An evolution of joint operations, the MDO concept – formalized in the FM 3-0 Operations doctrine – integrates capabilities across all domains to "create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains" during competition, crises, and armed conflicts.

Three fundamental principles define the new operational concept: the positioning of joint and inter-allied forward-readiness forces capable of manoeuvre over strategic distances and equipped with all-domain operating capabilities, predominantly for the competitive phase; the constitution of multi-domain, agile and resilient force structures capable of manoeuvring independently, integrating support through inter-domain fire being manned by professional personnel, selected and trained to operate advanced technologies; the achievement of convergence, which requires the rapid integration of capabilities across all domains, the electromagnetic spectrum and the information environment to maximize effects, approach that leverages inter-domain synergy and employs multiple forms of attack to overwhelm and defeat the adversary. (TRADOC, 2018, pp. 17-20).

The success of implementing these principles relies on the adoption of modern and emerging technologies, the use of highly professional human resources, commanders who are *"capable of making swift decisions and designing dynamic operations"*, and the provision of *"efficient and resilient logistical structures capable*

of promptly delivering the necessary resources and services to combat units, ensuring the support and regeneration of operational efforts" (Minculete, 2023, p. 183).

Russia's threats to the security of the Euro-Atlantic area have spurred the adoption and implementation of the MDO concept in the military doctrine of the North Atlantic Alliance almost simultaneously with the USA, with the transition from joint to multi-domain operations being a strategic priority for NATO. The adoption of the Alliance Concept for Multi-Domain Operations[1] (NATO ACT, 2023, p. 11) marks NATO's shift from a joint approach – centred on the military services coordination – to a multi-domain approach, defined as *"the orchestration of military activities, across all domains and environments, synchronized with non-military activities, to enable the Alliance to deliver converging effects at the speed of relevance"* (NATO ACT, 2022). Inspired by the considerable US lead, Alliance member nations such as the United Kingdom, Canada, France, Italy, Spain, Germany have focused their efforts on building conceptual frameworks for MDO, conducted exercises, and undertaken initiatives to prepare forces to combat the full spectrum of threats using multi-domain warfare scenarios.

The adoption of the Alliance Concept for Multi-Domain Operations marks NATO's shift from a joint approach – centred on the military services coordination – to a multi-domain approach, defined as "the orchestration of military activities, across all domains and environments, synchronized with non-military activities, to enable the Alliance to deliver converging effects at the speed of relevance".

Guarantees for the implementation of the doctrinal principles of the concept include the establishment of the NATO Response Force (NRF) and the prepositioning of eight multinational battlegroups representing NATO's *"enhanced Forward Presence" (eFP)* on the Alliance's eastern flank, as well as the operationalization of NATO's most recent multinational commands – a corps-level command in Romania and a division-level command in Hungary (Minculete, 2024, pp. 37-39). Additionally, at the NATO summits in Vilnius (2023) and Washington (2024), the need was identified to establish a new *"multinational and multi-domain Allied reaction force, capable of providing a broader range of rapid response options to threats and crises from all directions"* (MAE, 2023). In late 2024, the NRF was replaced by the NATO Allied Reaction Force (ARF), a strategic-level, multi-domain force (NRDC-ITA, 2024). These force structures were initially modelled

[1] The Alliance's MDO Concept was the topic of debates at the NATO MDO Conference in Copenhagen, Denmark, 2023. Session 1 of the Conference states that this document was adopted on 19 May 2023, but, because it is a classified document, it cannot be released to the public, www.act.nato.int/wp-content/uploads/2024/05/2024-MDO-Catalogue-April-12.pdf., retrieved on 12 January 2025. (A.N.)

after the Multi-Domain Task Forces (MDTF) established and deployed by the US Army for potential theatres of operations in the Indo-Pacific and Europe (Feickert, 2024).

Countering the threats posed by strategic adversaries in all domains requires, simultaneously with the adoption of doctrinal changes and the reorganization of force structures, the development of integrated multi-domain capabilities that make predominant use of emerging technologies, professional training of forces and commanders, the adaptation of logistical support, and the development of a command-control and communications system that can ensure convergence and synergy of actions and effects across domains.

RUSSIAN PERSPECTIVE ON MULTI-DOMAIN OPERATIONS

The lessons learned from Air-Land Battle principles and derived concepts led to the identification by anti-Western strategic rivals of key conditions that favoured the success of US and NATO military operations and needed to be countered.

The dissolution of the Warsaw Pact followed by the former communist states in Eastern Europe gaining independence and subsequently joining NATO has caused growing concern to the former hegemon to the east. One unacceptable development was the expansion and positioning of the Alliance's military infrastructure ever closer to Russia's borders. Moreover, it led to Russia's loss of a strategic buffer zone between Russia and NATO that enabled it to organize and maintain defence in depth and to ensure freedom of manoeuvre of forces on its territory in the event of an attack. In response, a strategic move by the giant, which had seemed asleep for two decades, was to be expected. Thus, Russian politico-military leaders have closely monitored NATO's and particularly the US's efforts to develop advanced concepts and capabilities, aiming to prepare for a future form of *"high-tech"* warfare. In this evolving battlespace, inter-domain synergies are viewed as a critical factor for achieving success (Griesemer, 2018).

The lessons learned from Air-Land Battle principles and derived concepts led to the identification by anti-Western strategic rivals of key conditions that favoured the success of US and NATO military operations and needed to be countered: gaining access to the theatre of operations and establishing a force projection base through air or sea ports of debarkation; interdependence and interconnectedness among land, sea, air, and even space-based systems; force manoeuvre

capability backed by timely and effective fire support, command-control, and logistical support systems. Subsequently, a process of reorganization of the Russian Armed Forces proved to be urgent, focusing equally on the organization of force structures, modernization of equipment and adaptation of tactics to synchronize operations in several areas. Thus, Russian doctrine has pivoted towards a *"new generation"* warfare that can no longer be equated or confused with non-linear or hybrid warfare, which requires a multi-domain approach.

In its strategic documents, the Russian Federation portrays NATO's actions – such as the expansion of military infrastructure near its borders, intensified information operations, and the increased deployment of larger military force structures and nuclear weapons – as escalating threats to its national security. Moreover, Russia asserts that the United States of America is systematically withdrawing from international arms control agreements while advancing its global missile defence system. Additionally, the deployment of US medium- and short-range missile systems in Europe and the Asia-Pacific region is perceived by Russia as a direct challenge to strategic stability and international security (National Security Strategy of the Russian Federation, 2021, p. 8). As a result, Russia has reiterated the importance of the military domain in achieving its geopolitical objectives of strategic deterrence and conflict prevention. With its return to competition as a global strategic actor, Russia has adopted a strategy aimed at re-establishing a buffer zone between its borders and those of NATO by creating multi-domain layered defence *"bubbles"* using A2/AD capabilities, extending coverage over parts of NATO territory. Despite economic constraints, Russia has focused its efforts on developing advanced A2/AD capabilities consisting of: integrated, multi-layered, long-range air defence systems, incorporating fighter and bomber aircraft, fixed and mobile surface-to-air missile systems, and coastal defence platforms; cruise, ballistic, and intercontinental missiles, capable of being launched from air, sea, and land platforms to strike both land and maritime targets; long-range artillery and precision-guided missile systems, enhancing deep-strike capabilities; next-generation submarines, armed with supersonic anti-ship missiles and ballistic missile systems; kinetic and non-kinetic anti-satellite weapons, supported by dedicated launch infrastructure

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and advanced space surveillance systems; advanced cyber warfare and electronic warfare capabilities, designed for information dominance and disruption of adversary networks; search and strike systems based on the use of unmanned vehicles covering air, surface and underwater domains; automated command and control (C2) networks using communications systems protected against adversary interception and countermeasures.

The most threatening and aggressive strategy impacting the security environment on NATO's eastern and southern flanks is Russia's deployment of A2/AD capabilities in Kaliningrad, the Crimean Peninsula, and, to some extent, Syria. This posture is designed to influence, deter, and restrict potential NATO operations in the North Sea, the Baltic Sea, the Black Sea, and the Eastern Mediterranean, as illustrated in *figure 1*.

The most threatening and aggressive strategy impacting the security environment on NATO's eastern and southern flanks is Russia's deployment of A2/AD capabilities in Kaliningrad, the Crimean Peninsula, and, to some extent, Syria. This posture is designed to influence, deter, and restrict potential NATO operations in the North Sea, Baltic Sea, the Black Sea, and the Eastern Mediterranean.

As part of a holistic, multi-domain effort, Russian strategic thinking increasingly emphasizes the importance of informational and psychological actions carried out with military and non-military instruments, integrated and interlinked with traditional military actions to achieve strategic objectives. Russian techniques of disinformation, propaganda and manipulation from the Soviet era have been adapted to the characteristics of the information and security environment of the 21st century, and today have been extended to so-called *computational propaganda*, defined as *"the use of algorithms, automation, artificial intelligence, supported by human intervention, to intentionally distribute misleading information through social networks"* (Howard et al., 2023, pp. 47-53). Their success can be maximized in combination with cyber actions.

The reorganization of force structures and the evolution of operational tactics for modern conflicts have been key components of Russian military doctrine. This transformation reflects a paradigm shift toward an emerging multi-domain force centred around the *battalion-level battle group.* In this new structure, traditional mechanized and armoured combat units are reinforced with capabilities previously reserved for higher echelons, including advanced radar-guided surface-to-air missile systems, long-range artillery and missile systems, unmanned aerial vehicles (UAVs), and electronic warfare assets. This integration enables a single manoeuvre unit

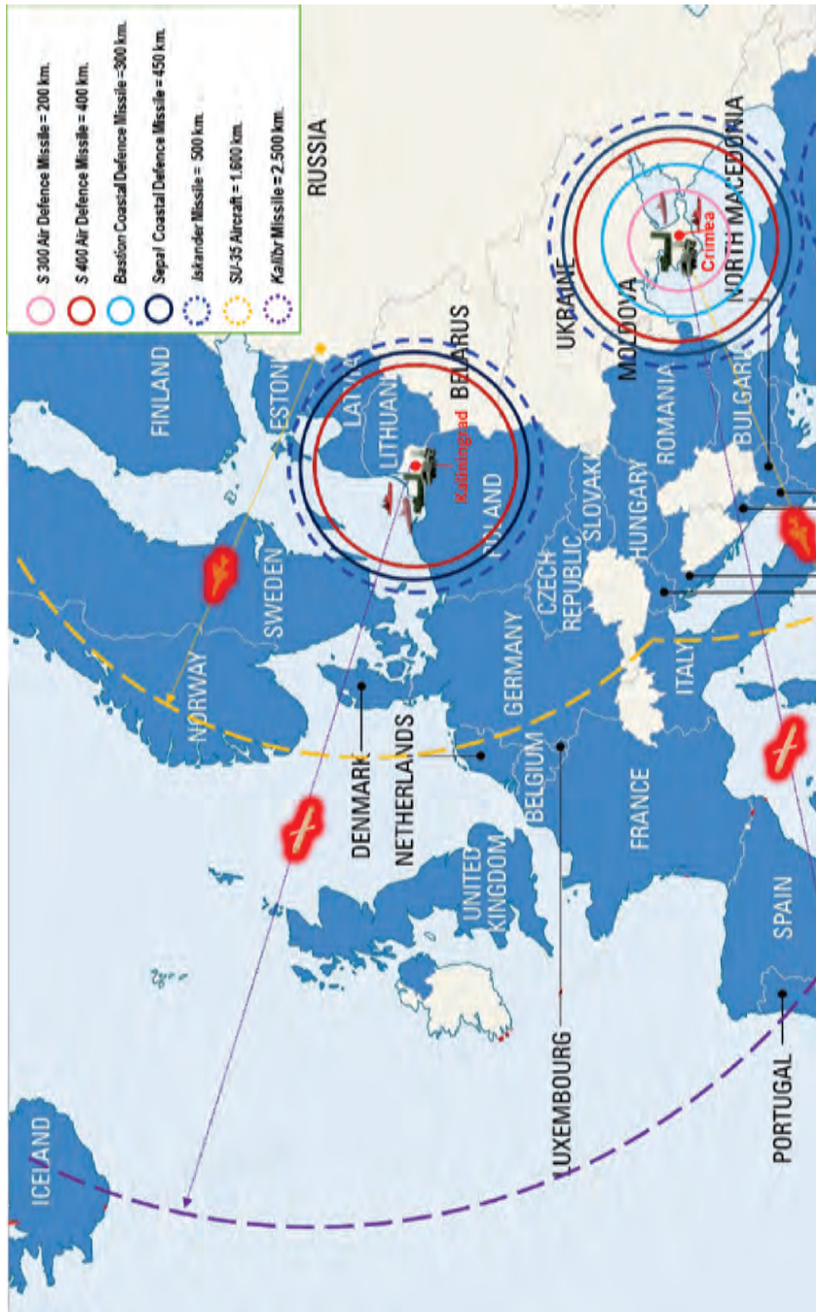

Figure 1: Approximate coverage of Russian A2/AD capabilities on NATO's eastern and southern flank, updated based on Wright and Barrie, 2024

to conduct operations with multi-domain capabilities. The first notable demonstration of this approach occurred on 11 July 2014, during the Zelenopillya attack against Ukrainian mechanized forces. What set this engagement apart was Russia's synchronized use of UAVs, cyber operations, and ground forces under a single battalion commander, achieving a coordinated multi-domain effect. The overwhelming success of this operation not only led to its replication along the Russian-Ukrainian front but also prompted Ukraine and NATO to rapidly develop countermeasures.

An analysis of recent military actions indicates that Russia possesses the capability to conduct complex warfare across multiple domains, with a particular focus on emerging threats and opportunities in the information, cyber, electronic, and space domains. However, Russia's approach to domain integration differs from the Western conceptual framework, as it incorporates several traditional elements of Russian military theory and practice, including:

Russia possesses the capability to conduct complex warfare across multiple domains, with a particular focus on emerging threats and opportunities in the information, cyber, electronic, and space domains.

- *Warfare of the new type* consisting of asymmetric operations conducted in multiple domains, physical and informational, governed by the nuclear threat in order to manipulate the perceptions and decisions of adversaries, shaping their strategic behaviour in directions favourable to Russia;
- *Information warfare* based on the combination and mutual supplementation of information-technical and information-psychological capabilities;
- *Reflexive control* is a strategy designed to achieve mission objectives by deceiving, persuading, coercing, and manipulating an adversary through carefully crafted and targeted information;
- *Disorganization* refers to the deliberate disruption of an adversary's command and control (C2) systems, aiming to degrade their ability to coordinate operations and make effective decisions;
- *Gaining the advantage in the initial period of war* by considering readiness and motivation to fight as determining factors and by taking rapid actions with devastating effects in the initial phases of the conflict that could be decisive in achieving success (Black et al., 2022, pp. 54-57).

Although affected by structural challenges and shortcomings, Russia continues to adapt, seeking to maintain and expand its advantages

in both military and non-military domains. Despite its difficulties, Russian thinking on MDO and related theories is expected to continue to evolve. Russian military thinkers are continually developing new concepts, tactics and methods based on lessons learned from its ongoing operations, spurred by technological developments, as well as as a result of analysing Western approaches with the intention of exploiting the opportunities they present.

CHINA'S PERSPECTIVE ON MULTI-DOMAIN OPERATIONS

The People's Republic of China perceives great power competition as a continuous process of leveraging both military and non-military instruments to achieve its key strategic objectives. This perspective is evident in its implementation of the civil-military fusion strategy and the *"nuclear triad"* doctrine, grounded in the principles of unrestricted warfare. At the same time, China is preparing for potential high-intensity conflicts by emphasizing concepts such as *"information warfare"* and multi-domain *"systems confrontation"*. This approach reflects an unconventional strategy that integrates all available levers of power to gain a competitive edge while remaining below the threshold of armed conflict.

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The reassertion of territorial claims in the South and East China Seas, persistent threats of invasion and annexation of Taiwan, and a lack of transparency regarding the expansion of its military arsenal – including nuclear capabilities – have heightened tensions, intensifying China's rivalry with the USA and its allies at both regional and global levels. Learning the concepts of operation of Western forces, China moved to develop an A2/AD strategy in the Indo-Pacific to protect their interests and deter US power projection in the region, a model later borrowed by Russia. The development of A2/AD capabilities has involved significant investment in new aircraft, sophisticated surface-to-air missiles, modernization of the surface navy and submarine fleet, but the effort has focused on increasing the performance of precision-guided ballistic missiles. American military experts have assessed that, as early as 2019, China possessed *"the most advanced ballistic missile force in the world"* (Impson, 2020), raising doubts about the USA's ability to respond to this threat, overwhelming its missile defence systems. For land-based targets, China has deployed ballistic missiles

that fulfil all three objectives of its A2/AD strategy: DF-31 and DF-41 intercontinental ballistic missiles (ICBMs), with ranges between 11,000 km and 15,000 km, are capable of striking the US mainland; DF-26 medium-range ballistic missile (MRBM), also known as the *"Guam Killer"*, can target US military bases on islands up to 4,000 km away; DF-21D missile, referred to as the *"carrier killer"*, is designed to prevent aircraft carriers from approaching within a range of over 1,700 km (Mihal, 2021). In addition, the development of a network of military bases on artificial islands in the South China Sea has reinforced China's emergence as a global military power, while simultaneously increasing strategic challenges for the USA and its allies in the region. An estimate of the coverage of China's A2/AD capabilities in the Pacific is presented in *figure 2*.

The multi-domain approach in Chinese doctrine is based on proprietary concepts such as "computerized warfare" and "systems confrontation". The former consists in the use of emerging technologies for information acquisition, processing and transmission, the use of artificial intelligence and the robotization of military systems, and the latter is aimed at affecting the nodes and links between elements of an opposing force operating from different domains.

The Chinese military literature increasingly recognizes the strategic relevance of emerging domains such as cyberspace, outer space, electromagnetic and cognitive domains, and considers the information domain to be of primary importance. China's military is increasingly focusing its organization, equipment procurement and training on conducting military operations in information environments that disrupt and dominate adversaries' systems of systems. The multi-domain approach in Chinese doctrine is based on proprietary concepts such as *"computerized warfare"* and *"systems confrontation"*. The former consists in the use of emerging technologies for information acquisition, processing and transmission, the use of artificial intelligence and the robotization of military systems, and the latter is aimed at affecting the nodes and links between elements of an opposing force operating from different domains.

China is excelling in the development and deployment of emerging technologies in the military with capabilities to produce microelectronics, machine components, telecommunications equipment, radars, optical devices, sensors and other products needed to manufacture missiles, drones and tanks. An example is the experimentation in the latest military exercises (Peace Unity-2024 and Golden Dragon-2024) of robot dogs, deployed by drones behind enemy lines and designed to support the military in urban operations with weapon firing, grenade throwing, explosive ordnance disposal capabilities, while being coordinated and supported in the area

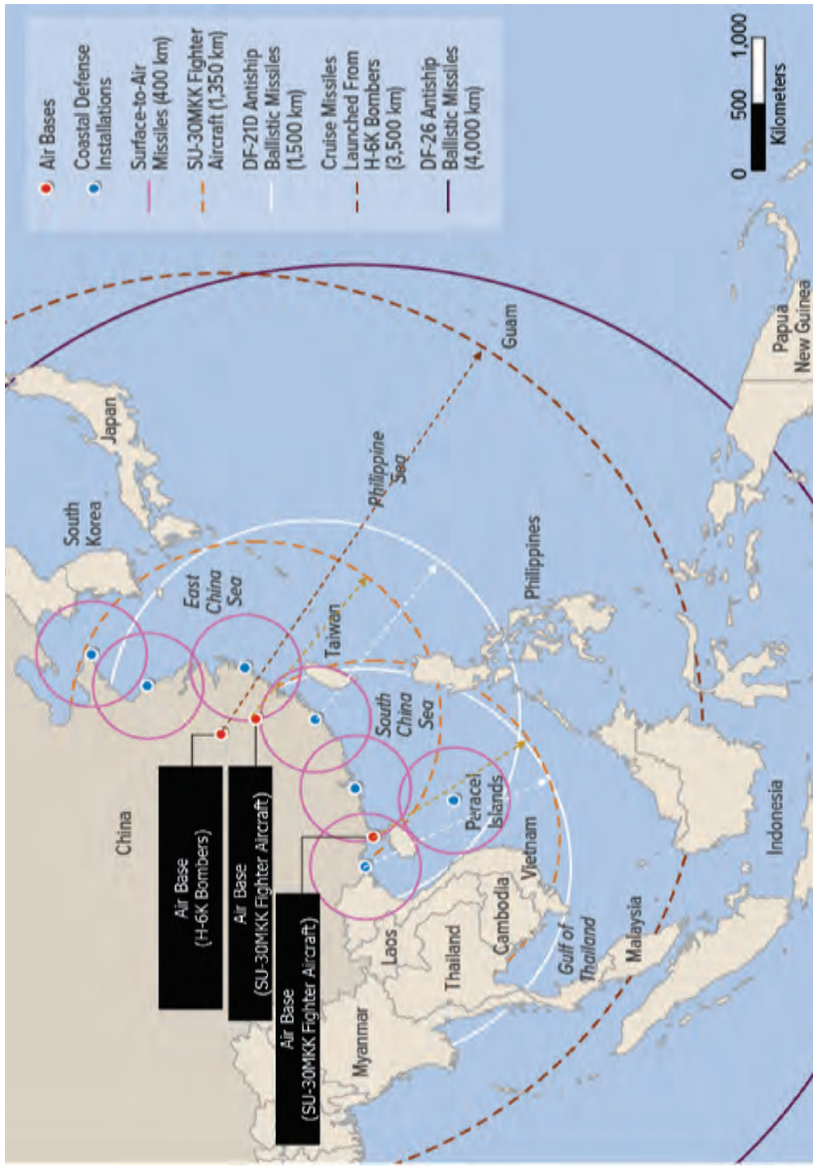

Figure 2: Approximate coverage area of China's A2/AD capabilities in the Pacific (CBO, 2023).

of action by unmanned aerial and ground vehicles (Hurst, 2024, p. 13). The major challenge for Western adversaries lies in China's status as an exporter of these technologies to strategic partners such as Russia, North Korea or Iran, pursuing its economic interests and building sustainable relations with them.

China's latest operational concept called *"Multi-Domain Precision Warfare"* (MDPW) focuses on *"the use of advanced command and control (C2) networks, artificial intelligence, big data analytics, and other modern technologies to identify and exploit critical vulnerabilities in adversaries' operational systems"* (Osborn, 2023). The concept aligns with the military goal to develop a *"mechanized, computerized, and intelligent"* force capable of operating effectively in a warfighting environment characterized by interdependence and multi-domain integration (Withington, 2023). The aim is to coordinate forces from different domains – land, sea, air, space, cyber and electromagnetic spectrum (EMS) – to perform precise strikes against identified vulnerabilities of adversaries. The new type of warfare is based on intelligence, artificial intelligence, connectivity between force services and the ability to achieve new levels of precision in identifying and attacking targets.

China's latest operational concept called "Multi-Domain Precision Warfare" focuses on "the use of advanced command and control (C2) networks, artificial intelligence, big data analytics, and other modern technologies to identify and exploit critical vulnerabilities in adversaries' operational systems".

In the Pentagon's view, the implementation of this concept in Chinese doctrine represents a replication of US development initiatives on the organization of Multi-Domain Task Forces (MDTF) and the development of the Joint All Domain Command and Control Concept (JADC2). This similarity underscores the influence that American concepts of military modernization have on China's emerging strategies, suggesting a continued adaptation of Chinese military forces to keep pace with global trends in multi-domain warfare.

NORTH KOREA'S PERSPECTIVE ON MULTI-DOMAIN OPERATIONS

Over the past decade, North Korea has adopted an approach centred on the development of military concepts and capabilities geared towards an *"asymmetric strategy"* designed to support a type of *"hybrid warfare"* (Black et al., p. 22). This strategy seeks to exploit the critical vulnerabilities of a militarily superior adversary, generating a significant psychological impact that undermines their initiatives,

actions, or will. To achieve these objectives, North Korea maintains a large conventional military force, reinforced by ballistic missiles and nuclear weapons. Additionally, it leverages asymmetric capabilities in emerging operational domains – such as cyber, electronic, and information warfare – to deter aggression. North Korea also employs special operations forces to conduct sabotage, disruption, and neutralization missions targeting adversary command, control, communications, and intelligence (C3I) systems.

Similar to China, North Korea is paying increasing attention to the importance of the information domain, using cyber, electronic warfare and space capabilities to exploit adversaries' vulnerabilities. In the context of actions directed against its main rival, South Korea, there is a subtle shift in strategic priorities from the development of conventional land, air and sea-based military forces to the modernization and diversification of offensive cyber and electronic warfare capabilities. These efforts are geared towards undermining the national will and cohesion of South Korea's alliance with the USA through attacks targeting societal structures, the economy and critical infrastructure.

Despite the difficult economic situation, after 2010, North Korea has prioritized its efforts to increase its military arsenal with a particular focus on ballistic missile development and its nuclear program to deter the United States of America and its allies in the Asia-Pacific region.

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The transformation and modernization of military capabilities has gone through five successive stages, starting with a massive increase in the size of the armed forces, followed by the development of short- and medium-range ballistic missiles (up to 2,500 km), while the nuclear arsenal is being increased as a priority, then the expansion of ballistic missile capabilities to long-range (up to 5,000 km) and intercontinental (over 12,000 km). Pyongyang's ambitions are moving towards supremacy in missile strike, including nuclear missiles, which are considered the most effective means of deterrence, the capabilities of those in service being shown in *figure 3.*

The last two phases have been devoted to modernizing missile strike capabilities for naval forces, stepping up training for special operations forces and, last but not least, equipping the air force with new technologies, including the use of unmanned aircraft (Tasic, 2021, pp. 53-72). North Korea has established specialized military

and civilian units dedicated to electronic, cyber, and information warfare. These efforts are supported by *"surprisingly sophisticated cyber and intelligence capabilities and an institutional base to support these activities"* (Black et al., p. 23).

The integration and coordination of effects across multiple domains can significantly enhance operational effectiveness. The North Korean regime has shown a notable ability to align propaganda and official statements with provocative actions, such as missile tests and nuclear demonstrations, to amplify its strategic and psychological influence.

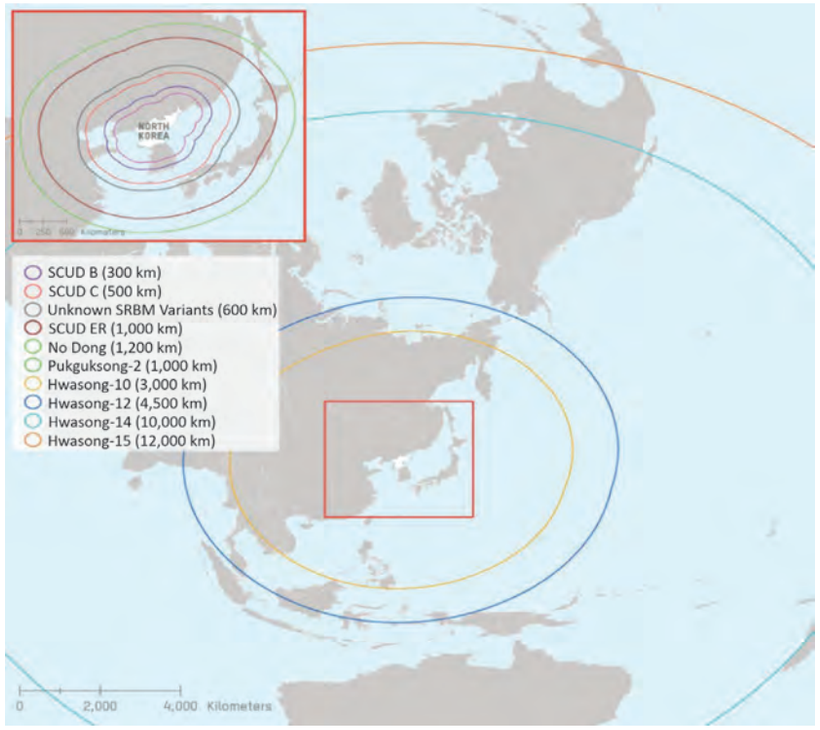

Figure 3: Capabilities of North Korea's ballistic missile systems
(Defense Intelligence Agency, 2021)

The conducted offensive actions, consisting of numerous ballistic missile tests, cyber and electromagnetic spectrum attacks on South Korean military forces and civilian institutions, internal and external propaganda, show that the pursued asymmetric strategy is definitely a non-linear and layered one that has elements in common with the MDO concept but without being backed so far by a capability to integrate and synchronize these cross-domain capabilities. The integration and coordination of effects across multiple domains can significantly enhance operational effectiveness. The North Korean regime has shown a notable ability to align propaganda and official statements with provocative actions, such as missile tests and nuclear

demonstrations, to amplify its strategic and psychological influence. This approach seeks to reinforce perceptions of the seriousness of its threats in order to amplify deterrence.

The regime's lack of transparency and exclusive control over its own media outlets limit access to official information about the North Korean military's operational concepts and doctrine. Therefore, their expansion towards a multi-domain operational framework competing with the West can also be interpreted as a result of intensified military cooperation with Russia and China, but subject to multiple uncertainties.

IRAN'S PERSPECTIVE ON MULTI-DOMAIN OPERATIONS

The rise of US and Western allies' influence in the Middle East at the end of the 20th century posed a major challenge to Iran's interests in maintaining its status as the main power pole in the region.

The rise of US and Western allies' influence in the Middle East at the end of the 20th century posed a major challenge to Iran's interests in maintaining its status as the main power pole in the region. Its geostrategic positioning leads Iran to adopt a 360-degree defence strategy, appreciating that war can start from any direction amid mistrust and historical adversity towards the USA and its close allies. At the same time, North Korea recognizes the necessity of relying on domestically developed military resources, considering the impact of economic sanctions. It has driven the adoption of an asymmetric warfare strategy to offset the imbalance between threats and available resources. Additionally, it has increasingly turned to proxy groups and unconventional warfare methods to extend its influence and counter the US presence across the Middle East.

Iranian concepts of future warfare are based on a general strategy of *"active defence"* and deterrence, using both conventional and asymmetric A2/AD capabilities to resist foreign military incursions, presumed to be US-led (Black et al., pp. 20-21). At the same time, the leadership in Tehran prioritizes securing the regime against internal threats, treating internal stability as a prerequisite for success against external threats. It extends beyond merely suppressing internal dissent, highlighting a strong focus on countering threats from hostile information operations. These threats encompass psychological warfare, espionage, electronic and cyber warfare, as well as precision actions carried out by special operations forces.

Iran's conventional military force consists of the Islamic Republic of Iran Army (Artesh) focused on the defence of national borders. In addition, the state also relies on the Islamic Revolutionary Guards Corps (IRGC), a revolutionary force with additional roles including asymmetric warfare, proxy warfare and internal security, but with control over the ballistic missile program and external operations. The core force services ensure both internal defence and external operations, except for naval and ballistic missile forces, which are dedicated solely to external conflicts. The roles of the IRGC's land and air forces, originally intended for counterinsurgency and territorial defence, can be adapted to support Iran's proxy groups and partners abroad. It is evident in the deployment of counterinsurgency specialists, as well as the use of drones, artillery, and missiles in conflicts across Iraq, Syria, and more recently, the Israel-Palestine conflict. Iran's doctrine utilizes these proxy forces and allied groups, such as Hezbollah and various militias in Iraq and Syria, to project influence and create strategic depth without engaging in direct confrontation.

Iran's deterrence strategy is based on the principle of "Retaliatory Deterrence" or "Threat in Response to Threat", which emphasizes responding to aggression with retaliatory actions severe enough to deter further attacks or prompt rapid de-escalation.

Iran's deterrence strategy is based on the principle of *"Retaliatory Deterrence"* or *"Threat in Response to Threat"*, which emphasizes responding to aggression with retaliatory actions severe enough to deter further attacks or prompt rapid de-escalation (McInnis, 2017, pp. 17-19). In this context, Iran is shifting toward a deterrence approach that leverages emerging technologies and operational domains. To compensate for its limited long-range air power, it continues to develop advanced ballistic and cruise missile systems while significantly expanding its cyber and information warfare capabilities.

Iran's military advances include:

- the development of smart missiles and drones launched from land, helicopter or sea platforms (Dagres, 2024, p. 23);
- the production of medium-range ballistic missiles, most recently the Khorramshahr-4, with a range of 2000 km, while ambitions to produce intercontinental missiles are growing (Rubin, 2024-a, p. 25);
- the space industry's success in launching six satellites to date and building three space launch bases (Rubin, 2024-b, p. 31).

The recent missile attacks from Israel have spurred Iran's military leadership to reassess Iran's air defences and upgrade radars, anti-air

missile systems, electronic warfare systems and drones that will be integrated into the country's air defence cycle as soon as possible.

We assess that Iran is adopting a multi-domain approach by expanding its capabilities across both traditional physical domains and emerging cyber, space, and information domains, leveraging advanced technologies to enhance its strategic reach and effectiveness. A significant challenge in this process is Iran's aim to develop more professional, integrated, and interoperable armed forces. However, this effort is hindered by ongoing competition and redundancy between the Islamic Republic of Iran Army (Artesh) and the Islamic Revolutionary Guard Corps (IRGC), which continues to obstruct improvements in joint and multi-domain operational interoperability.

CONCLUSIONS

Achieving and sustaining strategic superiority in today's security environment necessitates profound transformations and adaptations in military strategy, doctrine, and operational execution for the principal competing powers. A brief analysis of the emergence and evolution of operational concepts shows that they have determined each other in counterbalance and have been adapted according to the strategic interests of each actor, the conditions of economic development, the emergence of new technologies and even the geographical positioning. Thus, we note that the principles of the American Air-Land Battle were countered by A2/AD, asymmetric and hybrid warfare strategies involving action in diverse environments, and later responded to by MDO based on capability integration, convergence and action synchronization. The multi-domain approach, however, presents notable similarities and differences between the main strategic adversaries analysed, which can be summarized as follows:

The principles of the American Air-Land Battle were countered by A2/AD, asymmetric and hybrid warfare strategies involving action in diverse environments, and later responded to by MDO based on capability integration, convergence and action synchronization.

❖ Russia has evolved from a non-linear/hybrid warfare doctrine to a *"new generation"* warfare doctrine, characterized by the synchronization of operations in multiple domains (land, air, sea, space and cyber). It has focused on developing A2/AD capabilities in the Euro-Atlantic region while integrating emerging technologies and multi-domain strategies to counter and deter NATO operations. Russian force structures have been reorganized to reflect an integrated

approach to military operations, with a strong emphasis on multi-domain capabilities such as UAVs, advanced air defence systems, precision missiles, cyber warfare and electronic warfare;

❖ China has enhanced its A2/AD capabilities in the Indo-Pacific region by developing advanced ballistic missiles, sophisticated defence systems, and military infrastructure on artificial islands, aiming to counter and deter US and allied power projection. It has adopted innovative operational concepts such as *"information warfare"* and *"systems confrontation"* aimed at exploiting enemy vulnerabilities;

❖ North Korea has opted for an asymmetric military strategy based on exploiting the vulnerabilities of the superpowers, utilizing unconventional capabilities including cyber and information warfare, ballistic missiles and nuclear weapons. Hybrid warfare and sabotage operations, such as those carried out by North Korean special forces, are essential components of the military strategy, with the aim of causing psychological impacts and destabilizing the strategic infrastructures of adversaries;

While Russia, China, Iran, and North Korea do not explicitly adopt a "multi-domain" doctrine, their military strategies exhibit multi-domain characteristics similar to those found in the USA and NATO doctrine. It can be inferred from their force structure reorganizations, capability development priorities, and the tactics employed in recent military operations and exercises.

❖ Iran is investing heavily in the development and deployment of A2/AD capabilities, such as ballistic missiles, advanced air defence systems and attack drones. It applies a concept of hybrid warfare, combining cyber, intelligence and asymmetric operations capabilities to influence public opinion and destabilize NATO or US alliances in the region. Iran has a vast network of *proxy* groups and allies that can be used to wage asymmetric warfare on multiple fronts, complicating any multi-domain strategy.

Therefore, while Russia, China, Iran, and North Korea do not explicitly adopt a *"multi-domain"* doctrine, their military strategies exhibit multi-domain characteristics similar to those found in the USA and NATO doctrine. It can be inferred from their force structure reorganizations, capability development priorities, and the tactics employed in recent military operations and exercises.

In the face of rapid and aggressive response adaptations by major strategic competitors, we identify several implications for strengthening the future approach to US- and NATO-led multi-domain operations:

- continued investments to integrate advanced technologies into equipment (artificial intelligence, augmented reality, cyber weapons, and autonomous systems) that support the integration and synchronization of MDO;
- ensuring excellent interoperability between NATO forces, particularly for command and control (C2) systems;
- building robust cyber resilience, improving information defence and countering disinformation capabilities;
- expanding cooperation with regional and global allies, as well as strengthening partnerships with third states and international organizations;
- testing and validating doctrines for MDO through integrated military exercises;
- training and equipping military personnel to conduct MDO.

These implications highlight the necessity of developing an integrated, flexible, and innovative approach to address future strategic challenges, particularly in response to the emerging capabilities of adversaries and the growing complexity of *"multi-domain warfare"* on a global scale.

BIBLIOGRAPHY:

1. Black, J. et al. (2022). *Multi-Domain Integration in Defence Conceptual Approaches and Lessons from Russia, China, Iran and North Korea*. RAND Corporation.
2. CBO (2023). *U.S. Hypersonic Weapons and Alternatives,* Congressional Budget Office, https://www.cbo.gov/publication/58924, retrieved on 21 October 2024.
3. Dagres, H. (2024). *Iranian Military Equipment Integrating Artificial Intelligence*. Operational Environment Watch (8), p. 23, https://fmso.tradoc.army.mil/oe-watch-previous-issues/, retrieved on 11 March 2024.
4. Defense Intelligence Agency (2021). *North Korea – A Growing Regional and Global Threat*, p. 27, https://www.dia.mil/Military-Power-Publications/, retrieved on 10 April 2024.
5. Dwight, P. (2023). *Multi-Domain Operations: Passing the Torch.* Hague: The Hague Centre for Strategic Studies, https://hcss.nl/report/multi-domain-operations-passing-the-torch/, retrieved on 17 May 2024.
6. Feickert, A. *The Army's Multi-Domain Task Force (MDTF),* Congressional Research Service, https://sgp.fas.org/crs/natsec/IF11797.pdf, retrieved on 19 April 2024.
7. Griesemer, T. (2018). *Russian Military Reorganization: A Step Towards Multi-Domain Operations*. OTH: Multi-Domain Operations&Strategy,

https://othjournal.com/2018/11/19/russian-military-reorganization-a-step-toward-multidomain-operations/, retrieved on 29 May 2024.
8. Howard, P. et al. (2023). *Computational propaganda: Concepts, methods, and challenges.* Sage Journal, 8(2), pp. 47-53, https://doi.org/10.1177/20570473231185996, retrieved on 19 September 2024.
9. Hurst, C. (2024). *China Introduces New Unmanned Systems in Combat Exercises.* Operational Environment Watch (8), 13, https://fmso.tradoc.army.mil/oe-watch-previous-issues/, retrieved on 12 December 2024.
10. Impson, N. (2020). *The Next Warm War: How History's Anti-Access/Area Denial Campaigns Inform the Future of War.* In *Small Wars Journal*, https://archive.smallwarsjournal.com/comment/62423, retrieved on 15 November 2024.
11. Lund-Hansen, K., Reilly, J. (1 November 2024). The Multi-Domain Operations Approach to Intermediate PME, WAR ROOM: https://warroom.armywarcollege.edu/articles/competencies-6/, retrieved on 5 February 2025.
12. Ministerul Afacerilor Externe/MAE/Ministry of Foreign Affairs (11 July 2023). *Comunicatul Summitului NATO de la Vilnius/NATO Vilnius* Summit Communiqué, mae.ro, https://www.mae.ro/node/62432, retrieved on 22 December 2024.
13. MAE (2024). *Declarația Summitului de la Washington emisă de șefii de stat și de guvern care au participat la reuniunea Consiliului Nord-Atlantic din Washington, D.C./NATO Washington Declaration*, https://www.presidency.ro/ro/media/comunicate-de-presa/washington-summit-declaration-issued-by-the-heads-of-state-and-government-participating-in-the-meeting-of-the-north-atlantic-council-in-washington-d-c-10-july-2024, retrieved on 21 October 2024.
14. McInnis, M. (2017). *Iranian Concepts of Warfare – Understanding Tehran's Evolving Military Doctrines*. American Enterprise Institute, pp. 18-19, retrieved on 25 September 2024.
15. Mihal, C.J. (July-August 2021). *Understanding the People's Liberation Army Rocket Force Strategy, Armament, and Disposition.* In *Military Review*, pp. 220-234, https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/China-Reader-Special-Edition-September-2021/Mihal-PLA-Rocket-Force/, retrieved on 25 November 2024.
16. Minculete, Gh. (2023). *Abordări conceptuale, organizatorice și relaționale privind operațiile multi-domeniu*. In *Gândirea militară românească*, pp. 164-185.
17. Minculete, Gh. (2024). *Augmentarea logisticii operațiilor joint multinaționale în condiții de modernitate și progres.* Sibiu: Academia Forțelor Terestre *"Nicolae Bălcescu".*
18. NATO ACT (2022). *Multi-Domain Operations: Enabling NATO to Out-pace and Out-think its Adversaries,* Allied Command Transformation,

https://www.act.nato.int/article/multi-domain-operations-enabling-nato-to-out-pace-and-out-think-its-adversaries/, retrieved on 5 November 2024.
19. NATO ACT (10-11 October 2023). NATO Multi-Domain Operation Conference 2023. Report, www.act.nato.int: www.act.nato.int/wp-content/uploads/2024/05/2024-MDO-Catalogue-April-12.pdf., retrieved on 27 November 2024.
20. NRDC-ITA (2024). *NATO Allied Reaction Force*, nrdc-ita.nato.int: https://nrdc-ita.nato.int/operations/allied-reaction-force, retrieved on 22 November 2024.
21. Osborn, K. (2023). *China's New "Multi-Domain Precision Warfare" Operational Concept "Mirrors" US Strategy*, https://warriormaven.com/china/chinas-new-multi-domain-precision-warfare-operational-concept-completely-mirrors-us-strategy, retrieved on 2 February 2025.
22. Rubin, M. (2024-a). *Iran Highlights Recent Missile Achievements. Operational Environment Watch*, p. 25, https://fmso.tradoc.army.mil/oe-watch-previous-issues/, retrieved on 11 April 2024.
23. Rubin, M. (2024-b). *Iran Spaceport to Open in 2025*. *Operational Environment Watch*, p. 31, https://fmso.tradoc.army.mil/oe-watch-previous-issues/, retrieved on 11 April 2024.
24. *National Security Strategy of the Russian Federation* (2021), https://rusmilsec.blog/wp-content/uploads/2021/08/nss_rf_2021_eng_.pdf, retrieved on 17 November 2024.
25. Tasic, M. (2021). *Exploring North Korea's Asymmetric Military Strategy.* In *Naval War College Review*, 72(4), pp. 53-72, https://www.jstor.org/stable/26775519, retrieved on 10 December 2024.
26. TRADOC (2018). *Pamphlet 525-3-8, U.S. Army Concept for Multi-Domain Combined Arms Operations at Echelons above Brigade.* Virginia, SUA: U.S. Army Training and Doctrine Command.
27. U.S. Army. (2022). *FM 3-0 Operations*, Headquarters Department of the Army, Washington, D.C.
28. U.S. DoD (2022). *U.S. National Defense Strategy, Department of Defense,* https://www.defense.gov/National-Defense-Strategy, retrieved on 14 September 2024.
29. Withington, T. (2023). *MDO with Chinese Characteristics,* Armada International, https://www.armadainternational.com/2023/11/chinese-military-communications-modernisation/, retrieved on 10 October 2024.
30. Wright, T., Barrie, D. (2024). *The return of long-range US missiles to Europe*, https://www.iiss.org/online-analysis/online-analysis/2024/08/the-return-of-long-range-us-missiles-to-europe/, retrieved on 14 October 2024.

IMPLICATIONS OF ARTIFICIAL INTELLIGENCE IN THE WAR OF THE FUTURE

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Artificial intelligence (AI) is not a myth; it is a reality… and it is already influencing numerous aspects of modern life. While AI has the potential to transform many fields, it is not a fully autonomous intelligence and cannot replicate all human cognitive functions. As AI continues to advance, exaggerated myths about its capabilities must be separated from the reality of its current developments to understand its true potential and its impact on people's lives.

AI holds significant strategic importance, both in every day life – by streamlining and automating processes, and in the military domain – by enhancing defensive and offensive capabilities.

In defence, AI aids decision-making, threat prevention and counteraction, protects soldiers, and ensures a tactical advantage over adversaries.

Overall, AI is a technology that continues to redefine the boundaries of innovation, bringing profound benefits across various sectors and contributing to societal progress.

Keywords: drones; cybernetics; artificial intelligence; machine learning; human-machine interaction;

INTRODUCTION

Artificial Intelligence (AI) has a significant impact across numerous fields, from economics and healthcare to national security and defence. It brings a transformative shift in how complex problems are addressed, leveraging its ability to process vast amounts of data, learn from experience, and automate complex tasks.

In the present paper I will highlight several key aspects of AI's importance and utility in general, and specifically in the military sector.

❖ *The importance and utility of artificial intelligence* in general concerns several aspects of which I highlight a few more important.

A. Automation of repetitive tasks and efficiency improvement

AI can automate repetitive and time-consuming tasks, such as document processing, complex data analysis, and routine operations management. It frees human resources for more strategic and creative activities, enabling organizations to become more efficient and competitive.

B. Big Data processing and analysis

AI's capability to process and analyse large datasets rapidly helps identify patterns and trends that might otherwise go unnoticed by human analysts. It is crucial in fields like healthcare (for quick diagnoses), finance (to detect fraud), and scientific research (to discover new technologies or treatments).

C. Learning and adaptability

Machine learning algorithms allow AI to improve over time as it processes more data and learns from experience. This adaptability enables AI to respond effectively to new contexts and challenges, becoming increasingly accurate and efficient with continued use.

D. Innovations in Human-Machine interaction

AI technologies such as voice recognition and natural language processing make human-machine interactions more intuitive and accessible. These advancements improve user experiences and reduce

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technological barriers across sectors like consumer services, education, and public administration.

❖ *The importance and utility of artificial intelligence in the military domain*

AI represents a strategic advance in defence and security technologies, fundamentally transforming how military operations are conceived and executed. The main areas cover decision-making, equipment, information, logistics and training issues as follows:

A. Decision support and strategic analysis

AI can rapidly analyse data from diverse sources, such as satellites, drones, and communication networks, to identify threats or strategic opportunities. This type of analysis is vital for making fast, well-informed decisions, especially in critical national security situations.

B. Autonomy in military vehicles and equipment

Autonomous vehicles, such as drones and robots, allow the military to conduct reconnaissance, surveillance, and attacks in hazardous zones without endangering human lives. AI also enhances defensive systems by providing extremely short reaction times to potential threats.

C. Cyber warfare and information security

AI plays a crucial role in detecting and countering cyberattacks. Advanced algorithms can analyse traffic patterns and suspicious behaviours within military networks, identifying and preventing cyber threats in real time. Machine learning capabilities allow these systems to adapt to new attack strategies.

D. Logistical and operational support

AI can optimize supply chains and logistics, ensuring troops have swift access to equipment and supplies. It is critical for maintaining the operational efficiency and the mobility of military forces during conflicts.

E. Simulations and training

AI-based simulation systems provide soldiers with realistic environments for training, allowing them to practice various combat scenarios. These simulations are interactive and adaptive, reflecting the dynamics of real-world situations and enhancing training effectiveness.

Artificial Intelligence plays a crucial role in detecting and countering cyberattacks. Advanced algorithms can analyse traffic patterns and suspicious behaviours within military networks, identifying and preventing cyber threats in real time.

F. Support in combat medicine and soldier recovery

AI also contributes to battlefield medical assistance through rapid diagnostics and health monitoring of soldiers. In post-trauma recovery, AI supports personalized treatment plans tailored to individual soldiers' needs and improves real-time monitoring of their health status.

ARTIFICIAL INTELLIGENCE – CONCEPTS AND OPINIONS

Artificial intelligence (AI) is a branch of computer science focused on creating systems and algorithms capable of performing tasks that usually require human intelligence. These tasks may include reasoning, learning, image recognition, natural language processing, planning, and decision-making. The goal of AI is to enable computers and machines to solve complex problems and understand their environment to react autonomously and efficiently.

AI is found in a variety of fields and practical applications, such as virtual assistants, autonomous vehicles, voice recognition applications, industrial robots, and the recommendation algorithms. Generally, AI can be used to enhance efficiency, automate processes, and add value across many sectors, including medicine, education, transportation, entertainment, and military applications.

The emergence and development of new technologies have enabled spectacular advancements in beneficial applications for society as well as destructive ones. It can be said that *Information technology is "a double-edged sword"* (Boaru, David, 2022, pp. 312-315).

As AI advances, it increasingly influences fields such as philosophy, psychology, and biology, offering new perspectives on understanding the mind, human behaviour, and brain function. AI also raises ethical and philosophical questions, including those concerning its impact on jobs, safety, and the future of humanity as machines become increasingly intelligent.

The primary aim of artificial intelligence is to enable computers to perform tasks typically associated with human minds. Some of these tasks (e.g. reasoning) are commonly described as *"intelligent",* while others (e.g. visual perception) may not be. Nevertheless, they all involve psychological abilities – such as perception, association, prediction, planning, and motion control –, which allow humans and animals to achieve their goals.

Artificial Intelligence is found in a variety of fields and practical applications, such as virtual assistants, autonomous vehicles, voice recognition applications, industrial robots, and the recommendation algorithms.

Intelligence is not a single dimension but a complex space structured by diverse capacities for processing information. Consequently, AI employs many different techniques to address a variety of tasks and is present everywhere.

The practical applications of AI (Boden, 2016, pp. 1-3) are found in the home, in the car (self-driving car included), in the office, at the bank, in the hospital, in the sky... and on the Internet, including in the *Internet of Things – IoT* (Boaru, 2021, pp. 59-79), which connects the numerous physical sensors in our gadgets, equipment and surrounding environments (it is actually the network of physical objects connected to the Internet, which can collect and exchange data).

Hollywood animation, video and computer games, navigation systems and the Google search engine are all based on AI techniques. So are the systems used by financiers to predict stock market movements and by national governments to support health and transportation decisions.

Some applications go beyond the limits of our planet: robots sent to the Moon and Mars or satellites orbiting in space. Hollywood animation, video and computer games, navigation systems and the Google search engine are all based on AI techniques. So are the systems used by financiers to predict stock market movements and by national governments to support health and transportation decisions. So are apps on mobile phones. Added to them are virtual reality avatars and early emotion models developed for *"companion"* robots.

Even art galleries are using AI – on their websites and in computer art exhibitions. Less pleasantly, military drones patrol today's battlefields, some of them causing human and/or material damage – but fortunately, so do ground-based demining robots.

AI has **two main goals** (Boden, 2016, p. 2). One is **technological**: using computers to achieve useful things (sometimes using methods very different from those used by the human mind). The other is **scientific**: using AI concepts and models to answer questions about humans and other living things. Most AI specialists focus on only one of these goals, but some consider both important.

In addition to providing an endless number of technological devices, AI has profoundly influenced the life sciences. A computer model of a scientific theory is proof of its clarity and coherence and a convincing demonstration of its often-unknown implications. Whether the theory is true or not depends on the evidence from that science. But even discovering that the theory is false can be revealing.

In particular, AI has allowed psychologists and neuroscientists to develop powerful theories about the mind and brain. They include models of how the physical brain works and – a different but equally important question – what exactly the brain does: what computational (psychological) questions it addresses and what kinds of information processing enable it to do so. Many questions remain unanswered, as AI itself has taught us that our minds are much more complex than psychologists previously imagined.

Biologists have also used AI – in the form of *"artificial life" (A-Life),* which develops computer models of various aspects of living organisms. It helps them explain different types of animal behaviour, the development of bodily form, biological evolution, and the nature of life itself.

In addition to influencing the life sciences, AI has influenced philosophy. Many philosophers today base their explanations of mind on concepts of AI. They use them to address, for example, the famous mind-body problem, the dilemma of free will, and the many conundrums of consciousness. However, these philosophical ideas are highly controversial. And there are deep debates whether any AI system can possess real intelligence, creativity, or life.

Ultimately, AI has challenged the way we think about humanity and its future. In fact, some people worry about the possibility of a future because they predict that AI will surpass human intelligence in all aspects. Although a few thinkers embrace this prospect, most view it with trepidation: *What room, they ask, will be left for human dignity and responsibility?*

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TYPES AND FIELDS OF ARTIFICIAL INTELLIGENCE

Introducing the typology and domains of AI is an essential step for a better understanding of the potential and limitations of artificial intelligence. It contributes to informed decision-making, ethical use of technology, educating the public and encouraging responsible innovation, helping us better understand how AI works, what it can do and how it can be effectively applied in various sectors. Understanding these aspects helps both to maximize the benefits of AI and to manage the risks and challenges responsibly.

A synthetic presentation of AI typology and domains can be as follows:

❖ **Types of Artificial Intelligence:**

AI can also be classified by its capabilities:

- **Narrow AI (NAI)***:* It is oriented towards a specific task (e.g. a recommendation algorithm on a streaming site);
- **Artificial General AI (AGI)***:* It is a theoretical concept of AI that could understand, learn and apply knowledge as well as a human being;
- **Superintelligence:** A hypothetical concept in which an AI surpasses human intellectual capabilities.

Today, most AIs are *"narrow",* specialized in solving a specific type of problem.

Some important areas in AI include Machine Learning and Neural Networks, which are two fundamental concepts in the field of Artificial Intelligence used to develop systems capable of learning and making decisions based on data.

❖ **Fields of Artificial Intelligence**

Some important areas in AI include *Machine Learning* and *Neural Networks*, which are two fundamental concepts in the field of Artificial Intelligence used to develop systems capable of learning and making decisions based on data. Here is a detailed description of each of them:

- ***Machine learning (ML)***. This is a branch of AI where systems learn from data and improve performance based on experience. For example, a machine learning algorithm can be trained to recognize images of cats based on a set of images of cats and non-cats.

Machine learning is an area of AI that focuses on developing algorithms and models that can learn from data and make predictions or decisions without being explicitly programmed for each task. In other words, machine learning allows a system to *"learn"* from data experience, continuously improving itself.

Depending on the type of data and learning method, machine learning can be classified into several types:

- *Supervised learning*: The algorithm is trained on a labelled data set (e.g. images with cats labelled as *"cats"* and images without cats labelled as *"non-cats"*). The algorithm learns to recognize patterns to make predictions on new, unknown data.
- *Unsupervised learning*: The algorithm learns from unlabelled data, i.e. without being guided about what that data represents. The goal is to discover hidden structures

in the data, such as groups (clusters) or patterns. For example, in online user behaviour analysis, clustering can reveal similar types of buyers.

- *Reinforced learning*: The algorithm learns through trial and error, receiving rewards or penalties for its actions. It is mainly used in fields such as robotics or in the development of autonomous agents (e.g. game agents).

Let us take a moment to explore the relationship between the terms *AI, machine learning* and *deep learning*. On the one hand, all three have become synonymous with what we call modern AI. It is a bug, but a convenient one. *Figure 1* shows the correct relationship between these terms.

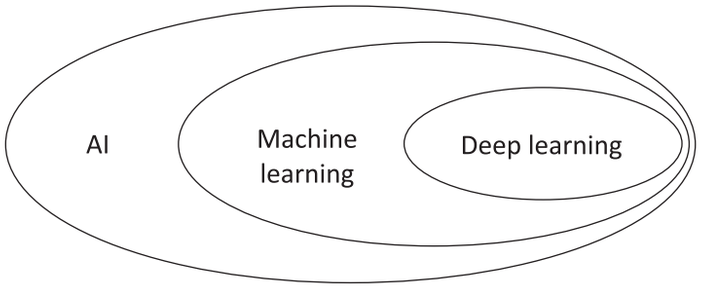

Figure 1: The relationship between artificial intelligence, machine learning and deep learning (Ronald, 2024, p. 18).

Artificial Neural Networks are models inspired by the structure of the human brain that can identify complex patterns in data. Deep Neural Networks (DNN) are the basis of many modern AI applications, such as speech recognition and image analysis.

Deep learning is a subfield of machine learning, which in turn is a subfield of artificial intelligence. This relationship implies that AI includes concepts that are neither machine learning nor deep learning.

We will call these concepts *"classical"* AI, which encompasses the algorithms and approaches developed since the 1950s. Classical AI is not what people have in mind when they discuss AI today.

- ***Artificial Neural Networks (ANN)****:* These are models inspired by the structure of the human brain that can identify complex patterns in data. *Deep Neural Networks (DNN)* are the basis of many modern AI applications, such as speech recognition and image analysis.

Neural networks are a type of machine learning algorithm inspired by how the human brain works. They consist of artificial *"neurons"* organized in layers: an *input layer*, *hidden layers*, and an *output layer.*

Neural networks are used to identify complex patterns in data and have been instrumental in the development of technologies such as image recognition, voice analysis and text generation.

How Neural Networks Work:

- *The input layer* receives the raw data (e.g. an image or a sequence of text);
- *The hidden layers* are where the complex calculations take place. Neurons in these layers are connected by weights that adjust during model training to optimize the output;
- *The output layer* produces the final output, such as identifying an object in an image or generating a text response.

Neural networks are complex machine learning models that rely on large data sets and continuous adjustment of connections to achieve high accuracy.

Deep neural networks or *"deep learning"* are neural networks with many hidden layers, being thus extremely effective in recognizing complex patterns. They have led to major achievements in AI, such as:

- image recognition in medical applications for disease detection;
- natural language processing in chatbots or virtual assistants;
- recommendation systems for streaming platforms that learn user preferences.

Neural networks and machine learning are often used together: neural networks are complex machine learning models that rely on large data sets and continuous adjustment of connections to achieve high accuracy.

Δ ***Natural Language Processing (NLP)***: This is an area of AI that deals with the interaction between computers and human language. NLP allows computers to understand and generate natural language, as is the case with voice assistants (e.g. Alexa, Siri).

NLP is a field of artificial intelligence that deals with the understanding and generation of human language by computers.

Natural language processing is used in many applications, such as:

- *Virtual assistants* (e.g. Siri, Alexa, Google Assistant), which interpret and respond to voice commands;
- *Automatic translation* (e.g. Google Translate), which translates the text from one language to another;
- *Sentiment analysis* in social media posts or reviews to determine if the text is positive, negative or neutral;

- *Chatbots* and other forms of *online assistance*, which interact with users via text to provide support and information (Boaru, David, 2022, pp. 328-342).

NLP combines linguistics, computer science and machine learning techniques to enable computers to *"understand"* and *"communicate"* in natural human language.

Δ ***Robots and autonomous systems***: These systems are capable of making decisions and acting in an autonomous way in various environments, such as industrial robots or autonomous cars.

Δ ***Computer Vision***: This is an area of AI that allows computers to interpret and understand the visual world around them using static images and videos.

GENERAL AND MILITARY APPLICATIONS OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is playing an increasingly important role in society and in militaries around the world, helping to improve strategies, safety and operational efficiency. Here are some of the ways AI is being used in social and military fields.

❖ ***Drones and autonomous vehicles***

AI is used to develop drones and vehicles that can operate without the help of humans. They can perform surveillance or even attack missions, reducing the risks to soldiers. For example, drones can identify and destroy targets on the battlefield without direct human intervention.

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Drones and autonomous vehicles represent an innovative category of autonomous technology with diverse and ever-expanding applications in many industries. They use artificial intelligence, sensors, cameras and GPS to navigate and perform tasks without direct human intervention.

- **Drones** *(Unmanned Aerial Vehicles – UAVs)*

Drones are unmanned, remotely controlled or fully autonomous aerial vehicles. They can range in size from small models used for recreation to large drones used in industrial and military applications such as:

a) Agriculture: Used for crop monitoring, pesticide application and irrigation, streamlining the process and reducing the use of resources;

b) Logistics and delivery: Companies like Amazon are testing the use of drones to deliver packages in a fast and efficient way;

c) Film and media industry: Drones provide spectacular aerial images for films, television and journalism;

d) Military and security applications: Drones are used for surveillance, patrolling and even in military operations;

e) Disaster management: Drones can help identify areas affected by natural disasters and assist rescue teams.

- **Autonomous vehicles**

Autonomous vehicles are machines capable of navigating and operating without human intervention. Their development includes advanced technologies such as *LIDAR*[1] *(Light Detection and Ranging)* sensors, radars, cameras and machine learning algorithms.

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Autonomous vehicles are rated on a scale of 0 to 5, where:

- Level 0: Full human control, no automation;
- Level 5: Fully autonomous automobile, capable of operating without a steering wheel or pedals.

- **Applications of autonomous vehicles:**

a) Public transport: Autonomous vehicles can make public transport more efficient, reducing travel time and fuel consumption;

b) Ride-sharing services: Companies like Waymo and Uber are investing in autonomous vehicles for ride-sharing, which could reduce the need to own a personal car;

c) Industry and logistics: Autonomous vehicles are used in industrial spaces and warehouses for the transport of goods without drivers, optimizing production flows;

d) Freight transport: Autonomous trucks, developed by companies such as Tesla and TuSimple, can make long-distance freight transport more efficient and secure;

e) Passenger transport: Companies such as Tesla are working on developing fully autonomous vehicles for personal transport to increase safety and reduce accidents.

[1] *LIDAR sensors* are devices that use a laser to measure distances to objects and create a three-dimensional map of the environment. LIDAR works by emitting pulses of laser light, which are reflected off the surfaces of surrounding objects and return to the sensor. By measuring the time it takes for the light to return, the sensor can calculate the distance to each point. (A.N.)

- **Challenges and perspectives**

While drones and autonomous vehicles have huge potential, there are also major challenges such as safety, legal regulations, data protection and social acceptance. The ethical issue is also important: Who is liable in the event of an accident? In addition, the issue of cyber security is crucial, as drones and autonomous vehicles can be vulnerable to cyber attacks.

As technology continues to evolve, it is anticipated that we will see an increasing integration of drones and autonomous vehicles into everyday life. It will lead to major transformations in many industries, from transportation to agriculture and security.

❖ ***Data analysis for quick insights***

AI helps to quickly analyse a large volume of information, such as satellite images or intercepted messages. It allows the military to make quick and appropriate decisions in real time based on accurate data.

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❖ ***Planning battle strategies***

AI algorithms can simulate various battle scenarios, helping military leaders better understand how situations will play out and choose the best strategies to win.

❖ ***Cyber protection***

AI is used to protect the military's IT systems. Algorithms can quickly detect and respond to cyberattacks, preventing the loss of important information and ensuring the safety of military networks.

❖ ***Optimizing logistics***

AI helps manage military resources such as equipment, supplies, and personnel. For example, AI can predict what resource needs are and help plan troop movements or coordinate equipment deliveries.

❖ ***Facial recognition and monitoring***

Artificial intelligence is used to recognize people's faces and monitor activities in conflict zones. It helps identify suspicious people and behaviour.

❖ ***Robots for hazardous tasks***

Robots using AI can perform risky tasks, such as defuse mines or interventions in a dangerous environment. They can save lives and reduce risks for soldiers.

❖ ***Quick and informed decisions***

AI helps make quick decisions by providing clear and precise information that allows military leaders to choose the best course of action in a given situation.

❖ ***Virtual trainings***

Artificial intelligence is used to create realistic combat simulations that help soldiers prepare for various scenarios. These simulations can be extremely useful for learning how to react in different situations.

❖ ***Health systems for soldiers***

AI can also help in the medical field, monitoring the health of soldiers and quickly diagnosing injuries or illnesses. It can also optimize the management of equipment and medical resources in the field.

In conclusion, AI helps militaries become more efficient, better protect resources and respond quickly to threats. Although these technologies offer many advantages, it is important that they are used responsibly and with careful control.

*"Despite fears that AI could overtake and dominate humanity, these concerns are often based on misconceptions. Among engineers, AI is less feared due to a deeper understanding of the technology's limits. Although AI, like any technology, has the potential to be misused, doomsday scenarios are largely based on fear of the unknown and remain speculative" (*Kaushik, 2024, p. 219).

The integration of AI into military operations is seen by many as a sign of a new Revolution in Military Affairs.

ARTIFICIAL INTELLIGENCE IN MILITARY OPERATIONS

The integration of AI into military operations is seen by many as a sign of a new *Revolution in Military Affairs (RMA).* Robotic systems are increasingly common on the modern battlefield, showing higher levels of autonomy in various functions such as search, detection, assessment, tracking, engagement, and strike effectiveness evaluation. Examples include *"fire-and-forget"* munitions, patrol torpedoes, and smart anti-submarine or anti-tank mines. Mines feature modern technologies that allow them to be more effective and reduce the risk of collateral damage. They can include features such as automatic target type detection or activation based on precise criteria.

Because of these advances, AI and robotic technologies are seen as having the potential to trigger a new *RMA*, especially as *Lethal Autonomous Weapon Systems (LAWS)* become more sophisticated.

Defining LAWS is difficult because of the ambiguity of the term *"autonomous".*

A 2012 directive from the US *Department of Defense (DoD)* provides some clarification, defining an autonomous weapon as one that, *"once activated, can select and engage targets without the intervention of a human operator. In contrast, a semi-autonomous weapon is intended to engage individual targets or specific groups of targets once activated. As these technologies evolve, the definition of <fully autonomous> continues to be a matter of debate"* (Ib.).

❖ ***AI in Military Operations from an International Perspective***

AI technologies could impact future warfare and international security in three interconnected ways: *"amplifying the uncertainties and risks posed by existing threats (both physical and virtual); transforming the nature and characteristics of these threats; and introducing new risks to the security landscape. Artificial intelligence could bring about fundamental changes in military power, in turn reordering the military balance of power and triggering a new military-technological arms race"* (James, 2021, p. 2).

Some experts speculate that AI could push the pace of combat to a point where machine actions outpace human decision-making and change the cognitive underpinnings of international conflict and war, challenging the Clausewitzian notion that war is a fundamentally human endeavour, heralding a genuine revolution (with unprecedented potential) in military affairs. For example, China's military leadership recently stated that artificial intelligence will lead to a profound military revolution (Kanya, 2017, p. 8).

This speculation *"explores the tension between those who see the introduction of AI into warfare as inherently destabilizing, revolutionary and juxtaposed, and those who see AI as more evolutionary and a* ***double-edged sword*** *for strategic stability"* (James, p. 3).

Former US Secretary of Defense James Mattis has warned that AI is *"fundamentally different"* in ways that call into question the very nature of war (Mattis, 2018).

To date, several countries have deployed near-autonomous defensive systems to intercept enemy attacks. In contrast, offensive weapon systems would be those that can be deployed anywhere and actively seek targets. However, the distinction between offensive

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and defensive weapons is not strict. The best-known autonomous defensive weapons are missile defence systems such as Israel's *Iron Dome* and the *Phalanx* Proximity Weapon System used by the US Navy. *"Launch-and-forget"* systems such as the UK's *Brimstone* missile system and Israel's *Harpy* Air Defence Suppression System are also nearly autonomous.

South Korea uses the *SGR-A1* sentry robot, equipped with an automatic mode, in the Demilitarized Zone with North Korea.

An example of an autonomous offensive system that is likely to be deployed in the near future is Norway's Joint Strike Missile, which can hunt, recognize and detect a target, either on a ship or a ground object, without human intervention.

The United States of America has placed AI at the centre of its efforts to maintain military dominance. In November 2014, former US Secretary of Defense, Chuck Hagel, announced a new Defense Innovation Initiative, also referred to as the *"Third Offset"* (Kaushik, 2024).

❖ ***Opinions on the exploitation of AI***

There is a view that instead of focusing exclusively on autonomous systems, the power of AI should be harnessed to increase the combat power of the current force. This approach is known as *Narrow AI* or *Weak AI*. Narrow AI could bring many benefits, such as using image recognition from video streams to identify imminent threats, anticipating supply bottlenecks, automating administrative functions etc. Such applications would allow the force to be restructured, with a smaller staff of data specialists replacing large organizations. Therefore, *Narrow AI* has the potential to help defence forces improve the ratio of combat to support components (Ib., p. 219).

Another area of interest in the evolution of autonomous weapons is what can be called *human-machine collaboration*, where machines and humans work together in a symbiotic relationship. Like the mythological centaur, this approach aims to combine inhuman speed and strength with human judgement, uniting machine precision and reliability with human robustness and flexibility, and allowing computers and humans to help each other think, a concept called *cognitive collaboration. "Some functions will need to be fully automated, such as laser missile defence or cyber security, in cases*

where there is no time for human intervention. But, at least in the medium term, most military AI applications will involve teamwork: computers will pilot the missiles, aim the lasers, jam the signals, read the sensors, and centralize all the data into an intuitive interface that humans, drawing on their experience, will use to make well-informed decisions" (Freedberg, 2015).

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Their impact on military effectiveness and comparative advantage can be significant and difficult to predict in their early stages. Moreover, such technologies and the resulting capabilities rarely spread evenly along geopolitical lines (Raska, Bitzinger, 2023, p. 8).

However, critical questions remain: How much can we trust AI systems, especially safety-critical ones? A growing area of research focuses on how to trick AI systems into making wrong predictions by generating fake data. State and non-state actors can use the so-called *"adversarial machine learning"* to deceive adversaries, using incorrect data to generate wrong conclusions and thus alter decision-making processes. The overall strategic impact of *"adversarial machine learning"* on international security could be even more disruptive than the technology itself (Danks, 2020).

"Some functions will need to be fully automated, such as laser missile defence or cyber security, in cases where there is no time for human intervention. But, at least in the medium term, most military AI applications will involve teamwork: computers will pilot the missiles, aim the lasers, jam the signals, read the sensors, and centralize all the data into an intuitive interface that humans, drawing on their experience, will use to make well-informed decisions".

Indeed, complex AI systems and data flows must also be technologically, organizationally and operationally integrated. For many militaries, it is an ongoing challenge: they must be able to efficiently integrate (in real time) AI-sensor-shooter loops and data flows between various services and platforms. It includes connecting various operational battle management and data systems; command and control, communications and networks; electronic warfare; positioning, navigation and synchronization; with precision ammunition. Although certain AI systems can mitigate some of the challenges, the same systems create new problems related to ensuring reliable AI (Cummings, 2017).

Consequently, it can be argued that the direction and character of the *"AI wave"* will depend on the appropriate strategic, organizational and operational agility, particularly how AI technologies interact with current and future operational structures and force structures (Raska, Bitzinger, ib.).

The convergence of three major factors – *strategic competition, emerging dual-use technological innovation, and the changing*

nature of human-machine interactions in warfare – is propelling a new environment that defines and leads the wave of AI-based *RMA*. In other words, a veritable military-technological *"tsunami"* is looming, one that can defy previous military revolutions. While this view risks exaggerating the impact of new technologies, it also demonstrates that current methods of warfare – weapons, tactics, trainings, procurement, and operational approaches – could quickly become obsolete, especially in a world where strategic vulnerabilities and dependencies coexist in a wide range of factors, sectors and countries (Ib.).

The fundamentals for machine learning were established in 1956 by researchers at Dartmouth College, USA. John McCarthy, then a Professor of Mathematics at Dartmouth College, proposed that the research group "proceed on the assumption that any aspect of learning or any other characteristic of intelligence can be described precisely enough that a machine can be made to simulate".

CONCLUSIONS

Although artificial intelligence is treated as a new technology, it is not actually new; rather, it is the diverse applications of AI technology that are new and ever-growing. The fundamentals for machine learning were established in 1956 by researchers at Dartmouth College, USA. John McCarthy, then a Professor of Mathematics at Dartmouth College, proposed that the research group *"proceed on the assumption that any aspect of learning or any other characteristic of intelligence can be described precisely enough that a machine can be made to simulate"* (Dartmouth College).

Why did it take from 1956 to 2023 for AI technology to gain global prominence and capture the imagination of tech firms, researchers and governments? There are concerns that the technology may not fully deliver on its promises, and memories of the Internet revolution, which turned from a boom period into a bust for many tech companies, are one of the *"elephants in the room"* (Jahankhani et al., 2024, p. 144).

In the ever-evolving digital landscape, the fusion of artificial intelligence and cybersecurity has introduced a formidable ally. AI's unique capabilities in processing massive volumes of data, recognizing complex patterns, and rapidly adapting to emerging threats mark the beginning of a new era in cyber defence. As AI continues to integrate seamlessly into our cybersecurity strategies, it plays a crucial role in our ongoing battle against the ever-changing cyber threat landscape (Mahajan et al., 2024, p. 40).

Projections of future warfare and operational concepts – such as multi-domain operations – increasingly depend on the direction

and character of the new wave of AI-based technological and defence innovations, including the development of advanced combat aircraft paired with unmanned air vehicle teams, lethal autonomous weapons systems, hypersonic missiles, directed energy or laser weapons, and technologies relevant to competition in cyberspace and the electromagnetic spectrum (Lingel et al. 2020).

At the same time, the diffusion trajectory of the AI wave raises new challenges and questions related to strategic stability, alliance relations, arms control, ethics and governance, but also the conduct of combat operations (Stanley-Lockman 2021).

As authors such as Michael Raska and Richard Bitzinger point out, (Raska, Bitzinger, p. 3), armed forces around the world are aggressively seeking to integrate certain AI systems and technologies into their arsenals to create a competitive advantage over adversaries. These developments raise questions about the challenges to current systems of decision-making, trust and military ethics. From existing applications of narrow artificial intelligence to the future prospect of superintelligence, human-machine dependency and collaboration are increasingly marked by issues of ethics and norms.

As authors such as Michael Raska and Richard Bitzinger point out, armed forces around the world are aggressively seeking to integrate certain AI systems and technologies into their arsenals to create a competitive advantage over adversaries.

Given the current borders, with friendly or unfriendly neighbours, it is well understood that sufficient presence of own troops is absolutely necessary. At the same time, it is imperative that the Romanian Armed Forces keep pace with the changing nature of warfare in the 21st century, fuelled by rapid advances in technology on multiple fronts. AI and robotics technologies, after decades of failed attempts, today appear to be at an inflection point, being rapidly incorporated into a wide range of products and services in the commercial environment. It is only a matter of time before they manifest themselves in defence systems, in ways significant enough to usher in a new revolution in military affairs.

Despite worldwide concerns regarding the development of Lethal Autonomous Weapon Systems from a legal and ethical point of view, it is increasingly clear that, regardless of the conventions adopted by the UN, research and development by the major players in this field is likely to continue unfettered (Kaushik, p. 225).

Considering Romania's own security landscape, in the current European context, the adoption of AI-based systems with increasing

degrees of autonomy in various operational scenarios is expected to bring considerable benefits in the coming years.

Perhaps a radically different approach is needed to facilitate the development of autonomous AI-based systems, using the best available expertise from within and outside the country.

Like any transformation, this is no easy task. I believe that the lack of personnel can somehow be compensated with super-qualified personnel, with well-regarded and motivated reservists. Only a determined effort, with Romanian specialists in the field, with motivated soldiers but also with highly trained reservists, to be consulted, as well as with a corresponding impulse from the higher level, is possible to lead to the desired results.

BIBLIOGRAPHY:

1. Boaru, Gh., David, A.-C. (2022). *Componente tehnice și tehnologice ale războiului informațional*. Craiova: Editura SITECH.
2. Boaru, Gh. (2021). *Impactul tehnologiilor emergente și disruptive asupra societății 5.0: Internetul lucrurilor (IoT).* In *Revista de* Științe *Militare*, no. 4/2021. București: Editura Academiei Oamenilor de Știință din România.
3. Boden, M.A. (2016). *AI: Its Nature and Future.* Oxford, Publisher: Oxford University Press.
4. Cummings, M. (2017). *Artificial Intelligence and the Future of Warfare*. Chatham House Research Paper, 26 January 2017, https://www.chathamhouse.org/sites/ default/files/publications/ research/2017-01-26-artificial-intelligence-future-warfare-cummings-final.pdf, retrieved on 10 September 2024.
5. Danks, D. (2020). *How Adversarial Attacks Could Destabilise Military AI Systems.* IEEE Spectrum, 26 February 2020, https://spectrum.ieee.org/adversarial-attacks-and-ai-systems, retrieved on 15 September 2024.
6. Dartmouth College (2023). *Artificial intelligence coined at Dartmouth,* https://home.dartmouth.edu/about/artificial-intelligence-ai-coined-dartmouth, retrieved on 1 September 2024.
7. Freedberg, S.J., jr. (2015). *Centaur Army: Bob Work, Robotics, & The Third Offset Strategy*, 9 November 2015, https://breakingdefense.com/2015/11/centaur-army-bob-work-robotics-the-third-offset-strategy/, retrieved on 18 January 2024.
8. Jahankhani, H. (ed.), Bowen, G. (ed.), Sharif, M.S. (ed.), Hussien, O. (ed.), (2024). *Cybersecurity and Artificial Intelligence: Transformational Strategies and Disruptive Innovation (Advanced Sciences and Technologies for Security Applications).* London, Publisher: Springer.

9. Johnson, J. (2021). *Artificial intelligence and the future of warfare: The USA, China, and strategic stability.* Manchester, Publisher: Manchester University Press.
10. Kania, E.B. (2017). *Battlefield Singularity: Artificial Intelligence, Military Revolution, and China's Future Military Power.* Washington, DC: Center for A New American Security.
11. Kaushik, R. (ed.). (2024). *Artificial Intelligence, Ethics and the Future of Warfare.* London, New York, Publisher: Routledge.
12. Kneusel, R.T. (2024). *How AI Works: From Sorcery to Science.* San Francisco, Publisher: No Starch Press.
13. Lingel, S., Hagen, J., Hastings, E., Lee, M., Sargent, M&Walsh, M., Zhang, L.A., Blancett, D. (2020). *Joint All-Domain Command and Control for Modern Warfare – An Analytic Framework for Identifying and Developing Artificial Intelligence Applications*. Santa Monica-California, published by RAND Corporation, https://www.rand.org/pubs/research reports/RR4408z1.html, retrieved on 20 October 2024.
14. Mahajan, S. (ed.), Khurana, M. (ed.), Estrela, V.V. (2024). *Applying Artificial Intelligence in Cybersecurity Analytics and Cyber Threat Detection*. New Jersey, Publisher: Wiley.
15. Mattis, J.N. (2018). *Secretary Mattis en Route to Washington, D.C.,* Department of Defense, 17 February 2018, www.defense.gov/News/Transcripts/Transcript-View/Article/1444921/press-gaggle-by-secretary-mattis-en-route-to-washington-dc/, retrieved on 10 September 2024.
16. Raska, M., Bitzinger, R.A. (2023). *The AI Wave in Defence Innovation – Assessing Military Artificial Intelligence Strategies, Capabilities, and Trajectories.* London, New York, Publisher: Routledge.
17. Stanley-Lockman (2021). *Responsible and Ethical Military AI: Allies and Allied Perspectives*. Center for Security and Emerging Technology Issue Brief, 25 August 2021, https://cset.georgetown.edu/publication/responsible-and-ethical-military-ai/, retrieved on 10 October 2024.

THE MORAL LIMITS OF SABOTAGE – THE WAR IN UKRAINE –

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The war that began in February 2022 with the invasion of the Russian Federation in Ukraine currently presents all the characteristics specific to total war. This fact reveals Russia's commitment to conduct a war of attrition, atypical for the 21st century, in order to achieve strategic objectives at any cost. In this context, an upward trend has been noted in the frequency of the use of sabotage actions by both states, through which the enemy's defence capacity is attempted to be damaged through kinetic, punctual actions. New technologies have been integrated into old doctrines regarding sabotage, and the results have been remarkable for making military operations more efficient.

Sabotage fits perfectly into the military activities specific to the grey area, where the boundary between morality and immorality is very sensitive, and for this reason, a comparative analysis of the most representative sabotage activities identified in the conflict in Ukraine is required. Following the analysis, different degrees of morality are attributed to sabotage missions, which are positioned hierarchically, depending on the principledness and military necessity.

Keywords: sabotage; morality; ethics; collateral damage; Ukraine;

SABOTAGE – FROM SIMPLE TO COMPLEX: INTRODUCTION

Sabotage is and will continue to be an important tool for military conflicts, the main advantage of its use being efficiency. Ukraine has demonstrated that the asymmetry on the contemporary battlefield can be compensated by the use of sabotage and resistance groups. The increasing frequency of sabotage actions reaffirms the hypothesis that old military doctrines are not abandoned, but only adapted to the current operational environment.

Sabotage is defined as *"an act or acts with intent to injure, interfere with, or obstruct the national defense of a country by willfully injuring or destroying, or attempting to injure or destroy, any national defense or war materiel, premises, or utilities, to include human and natural resources."* (ATP 3-05.1, 2021, p. C-19).

Sabotage activities are divided into two broad categories, depending on the complexity of the mission – simple and strategic/general. While simple sabotage does not require advanced specialized training and does not require special materials or equipment, strategic sabotage requires extensive planning and a specific material base to achieve an optimal result.

The main advantage of this type of mission is the impact generated at a strategic level, with minimal use of human and material resources. On the other hand, the disadvantages include the risks of the saboteur being captured as a result of the clandestine way of operating in enemy territory. In addition, the ambiguity of sabotage can be exploited by public opinion, and the saboteurs can be accused of perfidy or immorality.

It is important that both decision-makers and tactical elements comply with the laws of armed conflict and minimize collateral damage. During an armed conflict, sabotage falls within the bounds of morality if the persons involved in the execution of these missions assume responsibility for their actions and realize that involvement

During an armed conflict, sabotage falls within the bounds of morality if the persons involved in the execution of these missions assume responsibility for their actions and realize that involvement in sabotage implies the loss of the rights specific to combatants. Saboteurs are subject to a special regime, do not have the same rights as prisoners of war and may be sanctioned by the state on whose territory they operate, in accordance with its legislation.

in sabotage implies the loss of the rights specific to combatants. Saboteurs are subject to a special regime, do not have the same rights as prisoners of war and may be sanctioned by the state on whose territory they operate, in accordance with its legislation (FM 6-27/ MCTP 11-10C, 2019, pp. 1-15 - 1-18). However, saboteurs must be treated with dignity and have the right to a fair trial: *"(…) such persons must nevertheless be treated humanely and in the case of trial must not be deprived of the rights of a fair and regular trial"* (Ib., p. 5-3).

❖ **Simple sabotage** is used to generate a small but constant pressure on state authorities, in order to increase the morale of their own troops, but also to train saboteurs *(confidence targets)* in order to carry out more complex missions. It is important to note that these activities are subtle and small-scale, so as not to trigger coercive reactions from the authorities. Some examples include puncturing car tires, starting fires or short-circuiting electrical systems.

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An advantage of using this strategy lies, first of all, in placing sabotage activities in the grey area, when it is difficult or even impossible to make a clear distinction between peace and war. The unified actions of a significant number of civilians can be interpreted as a gesture of protest against the state authorities, a phenomenon that can only be sanctioned *en masse* when the threshold of violence is significantly exceeded.

Secondly, this mode of operation is specific to fifth-generation (5GW) conflicts, in which the aggressor cannot be identified, or moreover, there are no suspicions of a possible attack orchestrated from outside (Neculcea, 2021, p. 316).

An innovative approach to how sabotage has been adapted to the current operational environment is reported by Richterova et al. (2024). The authors propose for analysis how intelligence services have integrated new technologies in order to recruit agents, minimizing both the costs and the risks of attributing acts of sabotage or intelligence gathering to state-type actors. In this sense, the new approaches of intelligence services have conformed to the increasingly popular trend among employers, that of the *"gig-economy"*. The phenomenon specific to the free market is widespread in the online environment and offers the opportunity for both employers and private individuals to benefit from or provide services, for a fee (Ib., pp. 14-15).

In this context, it is necessary to analyse the moral consequences of this approach and try to answer the question: *How is a saboteur who is not aware that he is carrying out sabotage missions treated?* Situations of this kind seem to be increasingly frequent in the current operational environment, the main reason being the accelerated evolution of technology that allows the recruitment of saboteurs from the online environment. Thus, intelligence services can carry out recruitment actions remotely, via the Internet, without exposing their personnel to the risks of infiltration into enemy territory: *"Available evidence suggests that Moscow has expanded its recruitment of agents-saboteurs online to go beyond the usual suspects".* (Ib., p. 14). At the same time, this mode of operation has significantly reduced the costs of sabotage actions by manipulating appearances and directing individuals to carry out actions specific to sabotage, without them being aware of the seriousness of the actions they are taking.

The manipulation of appearances by intelligence agencies to recruit and involve civilians in high-risk missions, such as espionage or sabotage, constitutes a serious moral violation. However, in recent history, such situations have been identified that were intended to reduce the risks of exposure to military personnel.

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In the context of the war in Ukraine, both states accuse each other of perfidy due to the involvement of young people in acts of sabotage. According to information in the public space, young people are manipulated through online games and messaging applications to set fire to and photograph elements of critical infrastructure (electrical substations) and military equipment that contribute to the war effort (Infosecurity Magazine, 2024).

As a result of a process of manipulation by military professionals, young people commit sabotage with or without discernment, and are later sentenced to prison for their actions.

A slightly different form of simple sabotage is represented by the lack of cooperation of citizens with state authorities, the apparently accidental omission of tasks, the erroneous entry of data in the process of drafting documents, or the delay in the delivery of products or services (ATP 3-05.1, 2013, pp. 3-7).

The advanced form of non-cooperation, which also has a strong subversive effect, materializes through a form of active resistance

of the population (*rebellion*) (FM 3-24 MCWP 3-33.5, 2014, p. 5-1) which requires a form of coordination and planning at the central level.

The armed rebellion of the employees of the paramilitary company Wagner in June 2023 is the most conclusive example of such a situation. Motivating the lack of ammunition and conditions on the Ukrainian front, the Wagner leader mobilized the members of the formation to participate in a form of spontaneous strike, through which they defied the state authorities and initiated a march to Moscow, with the aim of negotiating from positions of strength with the decision-makers (ABC News, 2023). The protest generated chaos on the Ukrainian front, having a negative impact on the morale of the Russian troops, respectively a positive impact on the morale of the Ukrainian troops.

Sabotage can have a powerful subversive effect, with impressive results also on the political environment. However, taking into account that the Wagner rebellion was triggered by logistical needs on the front and not by a clear intention to affect the defence capacity of the Russian Federation, it can be said that this case does not represent a sabotage mission in the true sense of the word unless it was premeditated.

Such situations can very easily turn into violent clashes between the masses of people and the police, and the political environment is forced to engage in some form of dialogue with the leaders of the rebellion or to seek peaceful methods of resolving the problem, so that tensions do not escalate.

Under these circumstances, the participants in such a large-scale movement (25,000 servicemen)[1] cannot be held individually liable, especially in the context in which the Russian Federation had established a state of war and needed the servicemen to return to the front. The contractors' rebellion constituted an act of desertion with catastrophic effects for the front in Ukraine and for the state's efforts to manage the war.

This example reveals that sabotage can have a powerful subversive effect, with impressive results also on the political environment. However, taking into account that the Wagner rebellion was triggered by logistical needs on the front and not by a clear intention to affect the defence capacity of the Russian Federation, it can be said that this case does not represent a sabotage mission in the true sense of the word unless it was premeditated.

❖ **Complex sabotage** is carried out following an extensive planning process involving specialists from multiple fields, and the person who is to carry out the mission must benefit from specific training. While simple sabotage can be carried out with limited material

[1] More details at: https://abcnews.go.com/International/wagner-groups-rebellion-putin-unfolded/story?id=100373557.

resources, complex sabotage requires obtaining special materials, such as ammunition or explosives.

Another critical stage in the execution of complex sabotage missions refers to the process of prioritizing and selecting targets (targeting). Given the risk and scope of such a mission, the targeting process is beneficial for increasing the efficiency of military operations, respectively the qualitative management of material and human resources. The main tool used during this analysis is the CARVER matrix (Criticality, Accessibility, Recuperability, Vulnerability, Effect, Recognizability). Through this tool, potential targets are evaluated and it is established what results can be obtained at the strategic level, by engaging the targets with tactical level elements.

To illustrate the direct proportionality between the quality of the targeting process and the results of strategic sabotage, reference will be made to the explosion on 08.10.2022 that disabled an element of Russia's critical infrastructure – the Kerch bridge (Crimea). The mentioned sabotage activity was claimed by the Ukrainian intelligence service, in response to the invasion of the Russian Federation (Radio Free Europe, 2022). In the context in which, at the time of the explosion, all the efforts of the Russian Federation were directed towards the front in Ukraine, the effect was multiplied exponentially and manifested itself in most areas of the PMESII (Political, Military, Economic, Social, Informational, Infrastructure) spectrum.

As a result of the unavailability of road and rail infrastructure that lasted for about a month, Russia faced difficulties in supplying troops fighting in southern Ukraine (Kherson) and was forced to seek alternative routes to meet logistical needs on the front.

As a result of the unavailability of road and rail infrastructure that lasted for about a month, Russia faced difficulties in supplying troops fighting in southern Ukraine (Kherson) and was forced to seek alternative routes to meet logistical needs on the front. At the same time, the freedom of movement of Russian troops was significantly reduced, forcing them to allocate additional resources to the area.

Equally important, the cost of restoring the bridge forced Russia to allocate funds and manpower in that direction, putting additional pressure on the budgetary system. Moreover, the morale of the Russian population was affected by the unpredictability of the situation, and the Ukrainians, by executing a large-scale mission deep inside enemy territory, sent a message with strong symbolic significance to the Kremlin political environment, namely that the Crimean Peninsula is Ukrainian territory.

❖ **Complex Sabotage in the Cyber Domain**. If during *Operation Jedburgh*, from the territory of occupied France during the Second World War (CIA, 2015), Allied forces soldiers were parachuted deep into enemy territory to physically destroy its communications network, currently, similar effects are achieved through IT professionals.

An hour before the Russian Federation launched its invasion of Ukraine, the telecommunications company Viasat experienced significant technical difficulties. As a result, for several hours, Viasat Inc's KA-SAT satellite network was unable to provide internet services to users on the territory of Ukraine, including the armed forces. Three months later, on 10.05.2022, the *United Kingdom (UK) National Cyber Security Centre* released information that the technical problems of the telecommunications system were the result of a cyber attack, carried out by Russia, with the aim of destabilizing the command-and-control process of the Ukrainian armed forces during the *"special military operation"* (UK National Cyber Security Centre, 2022).

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There is thus an upward trend in the integration of new technologies into contemporary conflicts, in order to amplify the effects of sabotage.

TERRORIST SABOTAGE – CONCEPTUAL DISTORTION

A separate perspective on the forms of sabotage in the war in Ukraine is provided by the authors Litvinov et al. (2022) in their work *National Political Forces of Ukraine as a source of threats of sabotage and terrorist activities on the territory of Russia*. It is important to note that the information presented should be treated with scepticism, relevant being the delimitation of the editors towards the vision of the authors (Ib., p. 121).

With direct reference to the war in Ukraine[2], Russian authors contaminate the definition of the concept of sabotage by combining it with a different concept – terrorism. As a result, sabotage, which represents a type of mission that does not exceed the moral limits of armed conflict, receives an illegal and immoral connotation: *"terrorist sabotage"* (Ib.).

[2] Although the Russian Federation attacked Ukraine on 24 February 2022, the Kremlin representatives initially used the term Special Military Operation until 22 March 2024, https://www.lowyinstitute.org/the-interpreter/why-russia-has-only-now-declared-war-ukraine.

In this context, it is fundamental to mention one of the widely accepted definitions of terrorism, which refers to the instillation of fear, through the use of violent means, in order to achieve a political objective (FM 3-24 MCWP 3-33.5, 2014, p. 5-2).

Therefore, the difference between the two concepts is that sabotage aims at the intentional destruction of any material, space, person or facility that contributes to the state's national defence system, and terrorism aims to achieve a political objective by attacking the physical and moral integrity of the civilian population.

In an attempt to analyse this concept as objectively as possible, it is necessary to refer to one of the situations that was classified by the Kremlin as the result of terrorist activity – the assassination of Vladlen Tatarsky in April 2023. The Russian military vlogger was killed by the explosion of a statuette he had received as a gift during a meeting. Ukraine has not claimed responsibility for this attack to date, but Darya Trepova, who was sentenced to 27 years in prison for handing the statuette to the vlogger, stated that she carried out the mission following instructions received from a Ukrainian citizen, but believed that the statuette contained a communications interception device (Aljazeera, 2024).

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A similar event occurred in August 2022, when Daria Dughina, the daughter of one of the main supporters of the war ideology in Ukraine, was killed following the explosion of the car she was driving (NPR, 2022).

The lack of clear evidence from the Russian Federation that could prove Ukraine's involvement in the execution of the two assassinations and the lack of claim by Ukraine for the attacks leave room for speculation, but the two assassinations may represent moral lapses by combatants during the war, given that the people targeted by the explosions were civilians and did not directly contribute to the national defence capacity or the war effort of the Russian Federation.

At the same time, the persons targeted by the two assassinations can be classified as supporters and moral authors of the war in Ukraine. Through their effort to ideologically feed the Russian collective mind with information favourable to the continuation of the war, they indirectly contributed to the war effort of the Russian Federation.

Such attacks have a strong subversive effect on the morale of the troops, therefore, there are arguments that can classify the two assassinations as acts of sabotage and not terrorist attacks. As an aggressor state, the Russian Federation must bear the consequences of the invasion it launched against Ukraine, and the acts of sabotage are part of the Ukrainian counteroffensive, which is morally acceptable.

The perspective according to which the state has a moral duty to defend itself *"by all means"* is also illustrated by Erskine (2004), who refers to the activity of intelligence services as follows: *"the defence of the interests of the national state as a moral duty, holding that the state is compelled to use specific aggressive methods – for example, employing spies and maintaining military forces. Such practices (…) are imperative. Hence, the national state ‹may not do otherwise› because it should be defended by all means."* (Erskine, 2004, p. 364).

The Russian Federation is aware that Ukraine's sabotage actions have proven to be extremely effective and, for this reason, it is carrying out a broad campaign of disinformation and conceptual distortion of sabotage, with the aim of gaining the support of international public opinion and discouraging Ukraine from carrying out further missions in this spectrum.

It highlights the diametrically opposed views of the two combatants regarding the morality of sabotage actions on the battlefield. On the one hand, Ukraine is trying to affect the combat capability of the Russian Federation by executing sabotage actions that produce effects at a strategic level with minimal involvement of human and material resources. Ukraine has claimed only the sabotage actions over which it does not suspect a violation of moral norms and has denied involvement in sabotage activities specific to the grey area, in which the boundary between moral and immoral is very sensitive. Ukraine thus assumes the risk of fuelling the Russian Federation's narratives regarding the Nazi and terrorist tendencies of the Ukrainian state.

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SABOTAGE IN THE WAR IN UKRAINE – COMPARATIVE ANALYSIS

The article uses a research methodology based on the comparative analysis of the most significant sabotage missions assigned to Ukraine during the current war in which it is participating. The criteria on which the analysis has been carried out are (1) principledness – strict compliance with the Law of Armed Conflict/LoAC and international humanitarian law (IHL); (2) utility – the compromise according to which the ends justify the means; (3) the risks assumed on the executor of the mission – direct approach, by using one's own forces, or indirect approach, by recruiting and training a saboteur, and (4) limitation of collateral damage.

The objective of this analysis is to identify and develop a tool that will contribute to assessing the level of morality of sabotage actions, according to the previously mentioned criteria.

Due to the fact that the war in Ukraine is ongoing and the protection of classified information contributes to the security of operations on the battlefield, much of the information regarding the sabotage missions in which the two state actors were involved has not been made public. Consequently, in the development of the comparative analysis, secondary sources, such as press releases, have been mainly used, which also represents the main limitation of the research.

A point of view regarding the morality of sabotage actions is represented by Walzer's vision, which mentions that saboteurs fight for a just cause, but because they fight behind the front line, on enemy territory, they cannot benefit from the same rights as ordinary combatants.

A point of view regarding the morality of sabotage actions is represented by Walzer's (1977) vision, which mentions that saboteurs fight for a just cause, but because they fight behind the front line, on enemy territory, they cannot benefit from the same rights as ordinary combatants: *"It is widely agreed that such agents possess no war rights, even if their cause is just".* (Ib., p. 183).

A different perspective on intelligence activities, applicable also to the field of sabotage, is that ethics in sabotage is an oxymoron. Bellaby offers a strong argument against this hypothesis, namely, the right to self-defence: *"the just cause for engaging in intelligence activities may also be understood in terms of self-defence against a specific threat"* (Bellaby, 2012 in Rønn, 2016, p. 775). Therefore, counter-offensive sabotage actions carried out by Ukrainians on Russian territory can be justified from a moral point of view, especially sabotage carried out

on the Ukrainian territories that were illegally annexed by the Russian Federation.

Sabotage and intelligence activities share two major characteristics: their purpose is to prevent a greater evil, and both are discrete activities that often use other people to accomplish their missions. For this reason, the work of Frisk and Johansson (2020), who analysed the ethics of intelligence, represents a starting point in the pragmatic approach to assessing the morality of sabotage actions.

Frisk and Johansson draw a parallel between intelligence activity and a theoretical scenario, *the trolley dilemma*, intended to stimulate reflection on the value of human life and to highlight the extreme consequences of making a decision, respectively of inaction. The problem starts from the assumption that the reader controls a trolley heading towards five people tied to the railway. He can operate a lever to redirect the trolley onto a secondary line to which only one person is tied *(**P**reventing harm).* The lack of a decision on the part of the reader will lead to the death of five people *(**A**llowing harm)*, and his intervention will sacrifice one person to save five *(**D**oing harm).* The problem of this exercise is called PAD, based on the initials of the three major dilemmas in the scenario – Preventing, Accepting and Doing *"harm"*.

Sabotage and intelligence activities share two major characteristics: their purpose is to prevent a greater evil, and both are discrete activities that often use other people to accomplish their missions.

By analogy, in the case of the war in Ukraine, sabotage is acceptable if it aims to prevent a greater harm *(**P**reventing Harm)*, and in this case, the purpose of sabotage missions is to affect the enemy's war effort. Sabotage imposes a form of acceptance of risk to one's own person, if it is executed directly by a member of the armed forces *(**A**llowing harm)* and can be executed indirectly, by recruiting and training a third person to carry out the mission *(**D**oing harm)*. At the same time, these actions can be executed for (**O**)ffensive purposes – on the territory of the Russian Federation, or (**D**)efensive – on the territories illegally occupied by the Russian Federation (Donetsk, Kherson, Luhansk, Zaporizhzhia, Crimea).

Figure 1 is a schematic representation of the ethical dilemma faced by military decision-makers when planning a sabotage mission.

Figure 1 distinguishes between the level of morality specific to a number of eight possible types of sabotage missions executed through

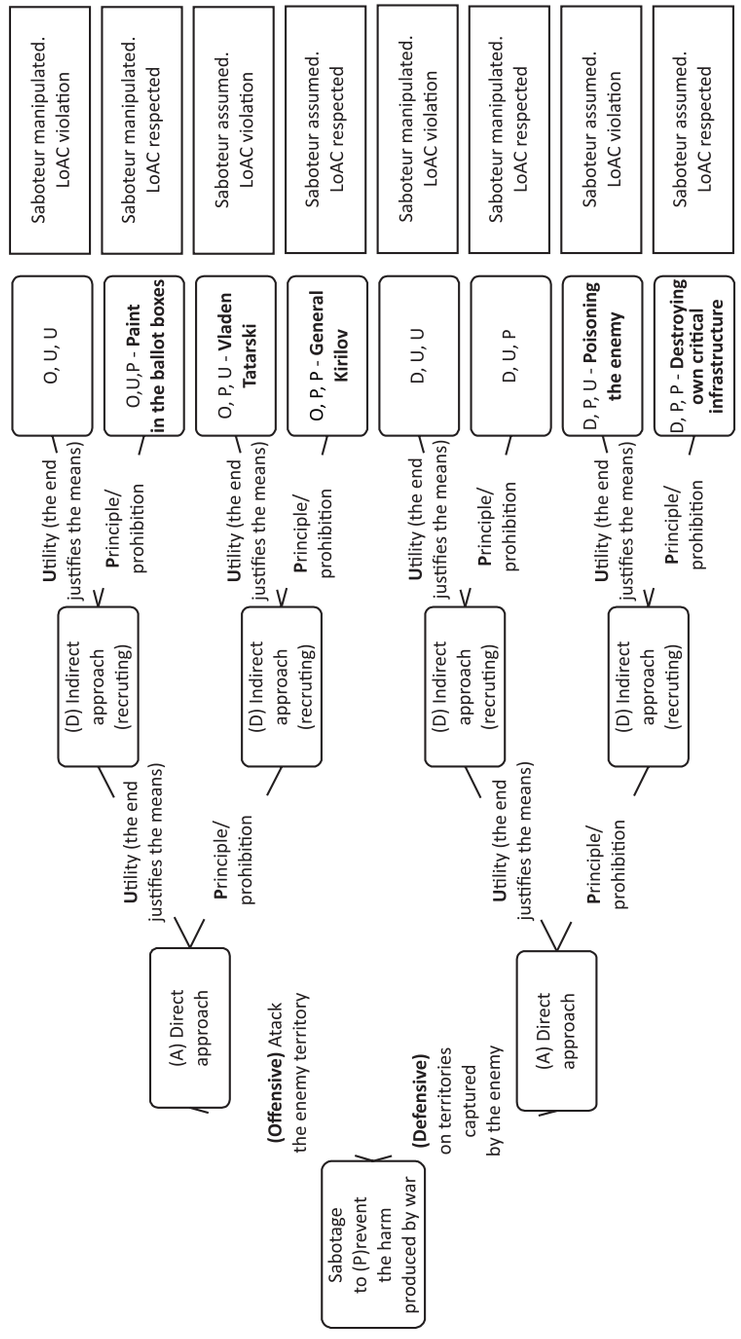

Figure 1: The PAD approach visualised as a decision tree for identifying 12 ethical strategies of sabotage (adapted after Frisk and Johansson)

an indirect approach (recruited saboteur), respectively four possible variants of a direct approach. The direct approach has not been analysed, because it presents much fewer ethical dilemmas than in the case of the indirect approach. In this regard, a comparative analysis was carried out of concrete cases of sabotage attributed to Ukraine during the war in which it takes part, where the risk of the sabotage mission was transferred by the armed forces to third parties. The eight scenarios were analysed based on the selected criteria, and were subsequently evaluated and hierarchically placed according to the level of morality, as follows:

❖ *D, P, P (Defensive, Principle, Principle)* – represents a defensive action (on territory captured by the enemy), executed by a saboteur who was recruited on the basis of respecting certain principles (without manipulating the saboteur) and trained to act within the resistance group. He agrees to collaborate in order to execute sabotage actions with strict observance of the principles or norms in the field of LoAC&IHL and with the avoidance of collateral damage. His motivation is purely ideological.

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The most significant example refers to the destruction of one's own critical infrastructure, in such a way that the enemy cannot use it to carry out military actions: the destruction of bridges (mandatory crossing points), the railway or the electricity supply network.

Multiple situations have been identified in which Ukrainians in the territories occupied by the Russian Federation initiated sabotage actions against their own critical infrastructure, in order to limit the initiative of the Russian armed forces and to demonstrate their revolt against the invader. In November 2024, members of the resistance group destroyed elements of the railway infrastructure in Zaporizhzhia in order to affect the supply process for troops on the front line (The new voice of Ukraine, 2024). This is the noblest form of sabotage, as a result of the fact that the saboteur is part of the resistance group and consciously decides to contribute to affecting the enemy's war effort, through punctual kinetic actions, behind the front line, with strict adherence to certain principles.

❖ *D, P, U (Defensive, Principle, Utility)* – consists of defensive actions, executed by a saboteur who was recruited based on respecting

certain principles (without manipulating the saboteur) and trained to act within the resistance group, and who considers himself entitled to make concessions from principles or norms in the field of LoAC&IHL to accomplish the mission (the end justifies the means).

In August 2023, the mayor of Kherson, Vladimir Saldo, who was artificially installed in this position by representatives of the Russian Federation, died after consuming food poisoned by a member of the Ukrainian resistance group (Telegraph, 2022). Although the sabotage action was not directed against a military leader, it had a strong impact on the morale of the Russian military occupying the Ukrainian territories.

In December 2023, 24 Russian servicemen died after consuming food and alcoholic beverages received as gifts from members of the resistance group. According to information in the public space, they were intentionally contaminated with toxic substances (arsenic) in order to eliminate the Russian servicemen (Kyivpost, 2023).

In December 2023, 24 Russian servicemen died after consuming food and alcoholic beverages received as gifts from members of the resistance group. According to information in the public space, they were intentionally contaminated with toxic substances (arsenic) in order to eliminate the Russian servicemen.

❖ *D, U, U (Defensive, Utility, Utility) & D, U, P (Defensive, Utility, Principle)* – represents situations in which the saboteur is manipulated to execute sabotage missions on enemy-occupied territories, in compliance with, respectively in violation of, principles or norms in the field of LoAC&IHL.

During the comparative analysis, no concrete examples of defensive sabotage were identified, executed through saboteurs manipulated by the armed forces of Ukraine to execute missions, and the main reason is that the population on the Ukrainian territories occupied by the Russian Federation does not need to be manipulated to support the resistance group. They are willing to execute defensive sabotage missions for ideological reasons, in order to weaken the war effort of the invaders and recover their territories.

❖ *O, P, P (Offensive, Principle, Principle)* – refers to offensive actions (on enemy territory) carried out by a saboteur who was recruited on the basis of respecting certain principles (without manipulating the saboteur) and trained to act on enemy territory. He agrees to collaborate in order to carry out sabotage actions in strict compliance with the principles or norms of the LoAC&IHL and with the avoidance of collateral damage. His motivation is purely ideological.

The case of the assassination of Lieutenant General Ivan Kirillov by an Uzbek citizen is representative of this scenario. The saboteur stated that he was recruited through online messaging applications and agreed to carry out the mission for financial reasons. The sabotage mission was publicly assumed by the Ukrainian intelligence services (SBU), which announced that the general was responsible for war crimes against Ukrainians, through the use of chemical weapons prohibited by international conventions. The explosion, triggered by an improvised explosive device (IED), killed both the general and his aide (BBC, 2024). It is important to note that the explosion can be classified as legitimate because it did not cause collateral damage to civilians and did not violate the specific principles of the LoAC&IHL. Furthermore, it targeted a military leader who was directly contributing to the war effort of the Russian Federation.

A saboteur agrees to work together to carry out sabotage actions and believes it has the right to deviate from LoAC&IHL for the accomplishment of the mission (use of any means to achieve the goal). Here we can recall the case of the Russian military vlogger Vladlen Tatarsky.

❖ *O, P, U (Offensive, Principle, Utility)* – it includes offensive-type actions executed by a saboteur who was recruited on the basis of compliance with certain principles (without manipulation of the saboteur) and trained to act on enemy territory. It agrees to work together to carry out sabotage actions and believes it has the right to deviate from LoAC&IHL for the accomplishment of the mission (use of any means to achieve the goal). Here we can recall the case of the Russian military vlogger Vladlen Tatarsky, mentioned in a previous paragraph. At least 50 people were injured in the blast.

The situation gives clues as to the possible agreement of the saboteur in order to assume the risk of collateral damage and, implicitly, of violation of LoAC&IHL by sabotage action (Radio Free Europe, 2024).

❖ *O, U, P (Offensive, Utility, Principle)* – represents an offensive action for the performance of which the saboteur is manipulated (does not agree or is not aware of the result of his actions), but no specific principles or norms of LoAC&IHL are violated and no collateral damage is caused.

During the presidential elections held in the Russian Federation in March 2024, approximately 214 ballot boxes were vandalized by arson or by putting green paint in the ballot boxes. Also in this context, a person threw a Molotov cocktail at a polling station. The authors of these acts are responsible for committing acts of sabotage aimed

at exerting additional pressure on the political environment, in the context of the war in Ukraine. According to the representative of the Central Election Commission of the Russian Federation, some of the individuals who carried out these acts of sabotage stated that they were paid. As a result of the fact that the simple sabotage activities took place in multiple locations and were not isolated cases, the Russian authorities believe that these were not simple gestures of protest by citizens, but a much larger action, coordinated from outside (CNN World, 2024).

❖ *O, U, U (Offensive, Utility, Utility)* – consists of offensive actions for the performance of which the saboteur is manipulated, and he violates principles or norms in the field of LoAC&IHL, against his will or without being aware of the result of his actions. This represents the lower limit of morality within sabotage actions, because in order to fulfil the mission, all three criteria that are the basis of the assessment are simultaneously neglected.

The only relevant situation for this type of sabotage missions that was identified during the conflict in Ukraine is not based on a mission coordinated and executed by Ukraine, but by the Russian Federation. Nevertheless, the example is representative of the situation under analysis and is worth mentioning.

At the end of 2024, Infosecurity Magazine published information according to which the Russian Federation developed attractive games for young people and children in Ukraine (including some under the age of 15[3]), in which they were manipulated to perform sabotage-specific tasks, such as causing fires and directing enemy fire by photographing critical infrastructure elements (Infosecurity Magazine, ib.).

At the end of 2024, Infosecurity Magazine published information according to which the Russian Federation developed attractive games for young people and children in Ukraine (including some under the age of 15), in which they were manipulated to perform sabotage-specific tasks, such as causing fires and directing enemy fire by photographing critical infrastructure elements.

The scenarios presented above highlight that the morality of sabotage actions can be assessed through a comparative analysis based on four relevant parameters (1) principle; (2) utility; (3) risks assumed on the executor of the mission; and (4) limitation of collateral damage. These parameters allowed the evaluation and ranking

[3] According to Article 38 of the Convention on the Rights of the Child, states are prohibited from conscripting young people under the age of 15. It is especially true in this situation, when the young people used by the Russian Federation were not conscripted into the armed forces, but manipulated to carry out sabotage and intelligence activities in enemy-occupied territory.

of specific sabotage actions attributed to Ukraine during the war in which it took part, where the risk of the sabotage mission was transferred by the armed forces to third parties.

CONCLUSIONS

Ukraine has carried out a wide range of sabotage missions against the Russian Federation, but they cannot be classified in an absolute manner as moral or immoral, due to the particularities of each case. However, Ukraine's sabotage actions can be assessed by comparison and can be classified into one of the eight levels of morality described above.

Technological evolution has significantly contributed to minimizing the collateral damage caused by sabotage missions, but at the same time, it has increased the freedom of movement of intelligence services, which can carry out recruitment and manipulation activities of saboteurs from a distance.

Technological evolution has significantly contributed to minimizing the collateral damage caused by sabotage missions, but at the same time, it has increased the freedom of movement of intelligence services, which can carry out recruitment and manipulation activities of saboteurs from a distance. Although technology is integrated into sabotage actions, the human factor is still relevant in the recruitment, planning, targeting and decision-making process.

These aspects reveal the importance and current relevance of the ethics of sabotage both during the mission planning process and in the execution phase, with the conviction that values such as honour and dignity are two of the main characteristics of decision-makers in the military environment.

The ambiguity of the battlefield confirms that the approach to establishing the ethical level of sabotage actions must start from the hypothesis that such a mission falls into the grey area, where the boundary between treacherous and honourable is very sensitive. However, several clear characteristics have been identified that contribute to the inclusion of sabotage in the sphere of morality: (1) Execution of sabotage against an aggressor. (2) Prevention of a greater evil. (3) Compliance with LoAC&IHL and (4) Lack of manipulation in the recruitment process of a saboteur.

In order for a sabotage action to approach a maximum ethical quotient, it is necessary that the mission respects all four characteristics mentioned above. Otherwise, sabotage involves a moral regression and can be classified as treacherous, immoral or dishonourable for the saboteur.

We consider that this work has achieved its main objectives, those of clarifying the relevance of ethics in sabotage missions in relation to the current war in Ukraine and, moreover, of providing some clear directions for evaluating the morality of these missions.

ROMANIAN MILITARY THINKING

BIBLIOGRAPHY:

1. ABC News (2023). *Russian rebellion timeline: How the Wagner uprising against Putin unfolded and where Prigozhin is now*, https://abcnews.go.com/International/wagner-groups-rebellion-putin-unfolded/story?id=100373557, retrieved on 8 January 2025.
2. Aljazeera (2024). *Russian court jails woman for 27 years over killing of pro-Kremlin blogger,* https://www.aljazeera.com/news/2024/1/25/russian-court-jails-woman-for-27-years-over-killing-of-pro-kremlin-blogger, retrieved on 15 January 2025.
3. BBC (2024). *General killed in Moscow a legitimate target, says Ukraine*, https://www.bbc.com/news/articles/cm2ek388yxzo, retrieved on 15 January 2025.
4. CIA (2015), https://www.cia.gov/stories/story/surprise-kill-vanish-the-legend-of-the-jedburghs/, retrieved on 22 January 2025.
5. CNN World (2024). *Russia opens criminal cases after protesters pour dye in ballot boxes and start fires with voting underway*, https://edition.cnn.com/2024/03/15/europe/russia-elections-protests-dye-intl/index.html, retrieved on 15 January 2025.
6. Erskine, T. (2004). *As Rays of Light to the Human Soul – Moral Agents and Intelligence Gathering*. Intelligence and National Security, vol. 19, no. 2. pp. 359-381, https://www.academia.edu/8388903/As_Rays_of_Light_to_the_Human_Soul_Moral_Agents_and_Intelligence_Gathering, retrieved on 10 January 2025.
7. Frisk, R., Johansson, L. (2020). *From Samurais to Borgs: Reflections on the Importance of Intelligence Ethics*. International Journal of Intelligence and Counter Intelligence, DOI: 10.1080/08850607.2020.1734768, https://www.researchgate.net/publication/340611380_From_Samurais_to_Borgs_Reflections_on_the_Importance_of_Intelligence_Ethics, retrieved on 10 January 2025.
8. Infosecurity magazine (2024). *Russia Recruits Ukrainian Kids for Sabotage and Reconnaissance*, https://www.infosecurity-magazine.com/news/russia-recruits-ukrainian-children/, retrieved on 15 January 2025.
9. Kyivpost (2023). *Partisans Kill 24 Russian Soldiers with Poisoned Treats,* https://www.kyivpost.com/post/25019, retrieved on 15 January 2025.

10. Litvinov, N.D., Sal'Nikov, M.V., Lavrov, O.L., Mironov, I.K., Nagirnyak, Yu.I, Ovchinnikov, V.V. (2022). *National Political Forces of Ukraine as a source of threats of sabotage and terrorist activities on the territory of Russia.* Saint-Petersburg: Legal science: history and the presence.
11. Neculcea, C. (2020). *Generațiile războaielor – Convențional și neconvențional în evoluția războaielor.* In *Gândirea militară românească*, no. 2. București: Statul Major al Apărării.
12. NPR (2022). *The daughter of 'Putin's brain' ideologist was killed in a car explosion*, https://www.npr.org/2022/08/21/1118666607/daria-dugina-car-blast-daughter-putin-ally, retrieved on 15 January 2025.
13. Radio Free Europe (2022). *Ukraine's SBU Claims Responsibility for October Crimea Bridge Blast*, https://www.rferl.org/a/ukraine-sbu-crimea-bridge-blast/32521472.html, retrieved on 15 January 2025.
14. Radio Free Europe (2024). *Appeal by Woman Imprisoned for Killing Pro-Kremlin Blogger Rejected*, https://www.rferl.org/a/trepova-appeal-murder-pro-kremlin-blogger-rejected/32955007.html, retrieved on 15 January 2025.
15. Richterova, D., Grossfeld, E., Long, M., Bury, P. (2024). *Russian Sabotage in the Gig-Economy Era*. In *The RUSI Journal*, vol. 169, no. 5. pp. 10-21, https://www.tandfonline.com/doi/epdf/10.1080/03071847.2024.2401232?needAccess=true, retrieved on 25 December 2024.
16. Rønn, V.K. (2016). *Intelligence Ethics: A Critical Review and Future Perspectives*. International Journal of Intelligence and Counter Intelligence, 29:4, pp. 760-784, https://www.researchgate.net/publication/303948883/Intelligence_Ethics_A_Critical_Review_and_Future_Perspectives, retrieved on 22 January 2025.
17. The Interpreter (2024). *Why Russia has only now declared war on Ukraine,* https://www.lowyinstitute.org/the-interpreter/why-russia-has-only-now-declared-war-ukraine, retrieved on 7 January 2025.
18. The new voice of Ukraine (2024). *Partisan sabotage cripples Russian rail supply*, https://english.nv.ua/russian-war/partisan-sabotage-in-zaporizhzhya-disrupts-russian-supply-lines-to-the-front-50467140.html, retrieved on 15 January 2025.
19. The Telegraph (2022). *Russian-appointed Kherson mayor 'was poisoned by chef',* https://www.telegraph.co.uk/world-news/2022/08/07/russian-appointed-kherson-mayor-poisoned-chef/, retrieved on 15 January 2025.
20. UNICEF (1989). *Convention on the Rights of the Child.* General Assembly resolution 44/25 of 20 November 1989, https://www.unicef.org/child-rights-convention/convention-text, retrieved on 15 January 2025.

21. United Kingdom National Cyber Security Centre (2022). *Russia behind cyber attack with Europe-wide impact an hour before Ukraine invasion,* https://www.ncsc.gov.uk/news/russia-behind-cyber-attack-with-europe-wide-impact-hour-before-ukraine-invasion, retrieved on 4 January 2025.
22. US Department of the Army (2013). ATP 3-05.1. *Unconventional Warfare*. Washington D.C.
23. US Department of the Army (2014). FM 3-24 MCWP 3-33.5. *Insurgencies and countering insurgencies.* Washington D.C.
24. US Department of the Army (2019). FM 6-27/MCTP 11-10C. *The commander's handbook on the law of land warfare*. Washington D.C.
25. US Department of the Army (2021). ATP 3-05.1. *Unconventional Warfare*. Washington D.C.
26. Walzer, M. (1977). *Just war and unjust wars*. Basik Books: New York.
27. https://abcnews.go.com/International/wagner-groups-rebellion-putin-unfolded/story?id=100373557, retrieved on 22 January 2025.
28. https://www.lowyinstitute.org/the-interpreter/why-russia-has-only-now-declared-war-ukraine, retrieved on 22 January 2025.

ROMANIA'S SUSCEPTIBILITY TO HYBRID THREATS RELATED TO DISINFORMATION – THE NECESSITY OF DEVELOPING A NATIONAL STRATEGY TO COUNTER FAKE NEWS, ALONG WITH THE REQUISITE FRAMEWORK FOR ITS EFFECTIVE IMPLEMENTATION –

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This paper provides an analysis of the current efforts at both national and international levels to prevent and combat disinformation, with the goal of highlighting Romania's vulnerability to this phenomenon and proposing institutional, coordinated, and unified measures for its effective management.

Following a brief introduction to the contemporary security context, along with a concise overview of the recent evolution of disinformation, the paper proceeds to define and explain the key concepts within this field.

The analysis then examines the international landscape, focusing on the efforts of global organizations to address disinformation, as well as showcasing examples of countries that have successfully implemented institutional measures to tackle this issue.

At national level, the paper evaluates the responses from government institutions, academia, civil society, international organizations, the media, and private sector initiatives dedicated to combating disinformation.

The paper concludes with a set of key findings and recommendations, emphasizing the need for unified action in managing disinformation through the establishment of a national strategy. It further proposes the creation or expansion of dedicated structures to implement this strategy, along with the development of the necessary mechanisms to prevent and counter the analysed phenomenon.

Keywords: fake news; disinformation; hybrid threats; narrative; Russia;

Motto:
"Falsehood flies, while truth comes limping after it".
Jonathan Swift

INTRODUCTION

The Russian Federation's invasion of Ukraine marks a pivotal moment in the early 21st century from both a security and defence perspective, profoundly impacting the geopolitical landscape of the Black Sea region and extending its reverberations globally. Universally recognized as a key event that will shape the geopolitical future for decades, the war in Ukraine continues to captivate international attention due to its polarizing nature and the combination of traditional conflict methods with recent forms of aggression, including non-kinetic operations that can be classified as hybrid warfare.

The Russian Federation's invasion of Ukraine marks a pivotal moment in the early 21st century from both a security and defence perspective, profoundly impacting the geopolitical landscape of the Black Sea region and extending its reverberations globally.

According to various analyses compiled in a 2020 report by the US Department of State, the groundwork for hybrid threats was laid by Russian Federation entities, such as the Main Intelligence Directorate of the Russian Armed Forces (GRU) and the Internet Research Agency (IRA) – a private entity with strong ties to the Russian government – beginning with the invasion of Crimea in 2014. The invasion, preceded by the so-called *"little green men"*[1] operation, was marked by an element of surprise, facilitated by a pre-existing environment heavily influenced by coordinated disinformation campaigns, making it easy to manipulate public perception and gain strategic advantage.

While battlefield disinformation, in various forms, has been employed throughout history, particularly during the global conflicts of the early 20th century and the post-Second World War period, the hybrid operations in Crimea and their continuation during the 2022

[1] The term was initially used by the locals in Crimea to describe Russian soldiers who appeared around Ukrainian military bases prior to the effective annexation of the peninsula. The term was later adopted by the international press and became widely used within NATO after being employed by the NATO Supreme Allied Commander (SACEUR) at the time to describe the ambiguous and subversive nature of these troops in the forceful takeover, with minimal resistance, of Crimea from the moment these troops appeared in February 2014. (A.N.).

invasion of Ukraine represent a significant escalation, heavily heavily supported by advanced technologies. The mentioned development has caught the North Atlantic Alliance off guard, both at the institutional level and within individual member states, which have largely struggled to address the scale of the phenomenon. Many NATO structures dedicated to countering disinformation were, at that moment, either outdated or, in some cases, non-existent.

CONCEPTUAL BOUNDARIES

In the context of hybrid threats, which are considered forms of aggression by nations striving to become global power centres without possessing the necessary economic, social, or military capabilities, the phenomenon of spreading fake news and, by extension, disinformation, is increasingly gaining importance among structures responsible for national security and defence.

In the context of hybrid threats, which are considered forms of aggression by nations striving to become global power centres without possessing the necessary economic, social, or military capabilities (Hybrid CoE, 2023), the phenomenon of spreading fake news and, by extension, disinformation, is increasingly gaining importance among structures responsible for national security and defence. The reasons for this growing focus are varied, but the most significant include the societal risks posed by this phenomenon, such as the erosion of citizens' trust in the state's ability to effectively respond to external aggression, or the detrimental impact that disinformation, in its various forms, has on the management of military operations at the tactical level. An example in this regard is the *"Lisa"* case in Germany, which was replicated in Lithuania during the deployment of a German Battle Group, where German soldiers were falsely accused, through social media posts, of committing sexual assaults during military activities (Schultz, 2017).

From the outset, we aim to address the definition of *fake news*, given the complexity of this term and the various nuances under which it can manifest. This type of content, which is *"neither fully false, nor fully true"* (Bârgăoanu, 2019), is often distorted to such an extent that the technological filters developed to prevent it are rendered ineffective. Thus, to cover the broad spectrum given by the use of both completely false and partially false (or partially true) news, we will continue to use the notion of *fake news* (Bălan, 2023, p. 18), understanding by it that type of news that erroneously describes (intentionally or unintentionally) a fact or phenomenon from everyday reality.

One of the most widely recognized classifications of disinformation identifies three primary categories, with the English language offering greater flexibility in capturing the linguistic nuances associated with this concept. According to Corbu et al. (2021), these categories include *disinformation*, which refers to the intentional dissemination of false information with the intent to mislead. It is followed by *misinformation*, which involves the transmission of incorrect information without a clear intent to deceive. Finally, *malinformation* refers to the presentation of true information that is irrelevant to the public interest, used solely to cause harm or moral damage. An example in this regard is the use of personal information, such as an individual's sexual orientation (Wardle, Derakhshan, 2018), in discussions related to the professional qualifications.

One of the most widely recognized classifications of disinformation identifies three primary categories, with the English language offering greater flexibility in capturing the linguistic nuances associated with this concept: disinformation, misinformation, malinformation.

In the context of combating disinformation, two primary categories of countermeasure efforts can be distinguished. The first is represented by the concept of *prebunking* (Nolan, Kimball, 2021), which involves exposing false narratives before they gain traction (prevention). The second category is *debunking* (Kvetanova et al., 2020), which refers to efforts aimed at countering disinformation after it has spread (response). For both approaches – interventions conducted before or after the dissemination of *fake news* – the key challenge lies in appropriately calibrating the response. An overzealous or premature reaction may inadvertently amplify the spread of false information, counteracting efforts to mitigate the phenomenon.

The latest approaches in the field of Strategic Communication (StratCom) currently focus on identifying comprehensive formulas for analysing and evaluating the information environment (Information Environment Assessment/IEA) seen as an effort that combines highly qualified human resources (*data analysts* – data scientists) and modern technological tools (software for monitoring and automatic analysis of large volumes of data – *data mining, machine learning*).

Additionally, within the StratCom departments of the commands under the NATO Command Structure, a new line of effort is progressively taking shape, specifically focused on securing unanimous agreement among the member states for coining the *cognitive domain* as the sixth operational domain of NATO, alongside *land*, *air*, *maritime*, *cyber* and *space*. The sustained lobbying of Allied StratCom

specialists towards the military and political leadership of the Alliance to obtain the unanimous agreement necessary for this endeavour is also facilitated by the recent completion of the newest concept in the sphere of strategic communication – the *cognitive warfare (CogWar)*, the related document being currently on approval process at the level of the command structures of the North Atlantic Alliance (NATO ACT, 2022).

Currently, within the StratCom community in NATO, there is an ongoing debate about the opportunity to introduce a sixth operational domain – the cognitive domain – alongside the land, air, maritime, cyber, and space domains. To implement this initiative, it is essential to clearly define the concept of *cognitive warfare* (CogWar), with the NATO Allied Command Transformation (NATO ACT) being the structure responsible for overseeing this process (NATO ACT, 2022).

These countermeasures, developed in response to major social crises widely recognized for their significant disinformation component, have evolved in a heterogeneous manner. Each country or international organization has adapted its procedures to suit local specifics and obligations to international organizations.

THE CURRENT INTERNATIONAL SITUATION

An analysis of how states and international organizations address the phenomenon of disinformation must consider the significant impact it has had on national security in various countries, with the illegal annexation of Crimea and the subsequent outbreak of the war in Ukraine serving as the most prominent example. It is also crucial to examine the effects of disinformation on public health, as demonstrated during the COVID-19 pandemic, as well as its influence on political decisions through subversive methods, as seen in the election of Donald Trump as President of the United States of America for his first mandate and the process of the United Kingdom's exit from the European Union (BREXIT).

Currently, following a period of reflection during which government institutions, civil society, the academic community, and the private sector have analysed the phenomenon of disinformation in all its forms, we are at a point where countermeasures are gaining increasing attention. These countermeasures, developed in response to major social crises widely recognized for their significant disinformation component, have evolved in a heterogeneous manner. Each country or international organization has adapted its procedures to suit local specifics and obligations to international organizations. As a result,

coherent approaches have emerged, both legislatively and procedurally, in countries such as the United States of America, France, the United Kingdom, Germany, and the Baltic States. Authorities in these countries have launched extensive projects focused on detecting disinformation and implementing necessary measures – some of which are coercive – to limit its spread.

Regarding *International Organizations*, whether political-military, economic, or those dedicated to maintaining peace and security, they have rapidly developed procedures, norms, rules, and doctrines to facilitate the monitoring of the information landscape and ensure a prompt response, both directly via their own communication channels and through media and social networks. For instance, the United Nations (UN) has initiated a series of activities, including awareness campaigns, collaborations with national authorities, and the development of media education programs. Similarly, the European Union (EU) has not only developed analogous platforms but also issued normative acts designed to serve as a foundation for similar legislative initiatives in member states.

Similarly, disinformation is recognized in NATO's new Strategic Concept as *a tool employed by both state and non-state actors to undermine democracy, institutions, and social cohesion within member countries* (2022, p. 5). In response, the Alliance has proposed the development of capabilities to counter these threats. Consequently, the issue of combating disinformation is addressed at multiple levels within the organization, including the maintenance of an online platform designed to dismantle hostile narratives[2] – *Setting the Record Straight* (NATO, 2024). This initiative is complemented by the dissemination of NATO's own messages across all available channels, including in English, French, and more recently, Russian (with the Russian diaspora as the target audience). These efforts are supported by a series of measures aimed at managing large social networks, with the goal of identifying the most effective *fact-checking* solutions. The objective of these actions is to limit the spread of *fake news* on these platforms as soon as it emerges.

Disinformation is recognized in NATO's new Strategic Concept as a tool employed by both state and non-state actors to undermine democracy, institutions, and social cohesion within member countries. In response, the Alliance has proposed the development of capabilities to counter these threats.

[2] A specific narrative developed to discredit or defame a particular target (NATO's approach to countering disinformation, 2023).

In this context, Ukraine's experience in the information war waged by the Russian Federation since 2014, both directly and through *proxies*[3], is particularly instructive. A study by the RAND Corporation (Ukrainian Resistance to Russian Disinformation: Lessons for Future Conflict, 2024) discusses, in the first phase, the measures implemented by Ukrainian authorities prior to the outbreak of war in February 2022. They included the establishment of government and civil society institutions dedicated to combating disinformation and the implementation of preventive actions with the support of the national intelligence community. The same study also highlights a series of actions taken following the Russian invasion, focused on countering hostile narratives disseminated across three distinct areas: within Ukraine, within Russia, and towards the international community. Among the most important lessons learned from Ukraine's experience in the fight against disinformation, the study identifies the need to recognize the new operational theatre created by information warfare, strengthen institutions tasked with combating disinformation, establish common working procedures with civil society, and increase investments in the capabilities offered by such partnerships.

A study by the RAND Corporation discusses, in the first phase, the measures implemented by Ukrainian authorities prior to the outbreak of war in February 2022. They included the establishment of government and civil society institutions dedicated to combating disinformation and the implementation of preventive actions with the support of the national intelligence community.

NATIONAL CONTEXT

At the governmental level, initial steps toward the procedural foundation for combating disinformation began after the adoption of NATO's Strategic Communication Policy (StratCom) in May 2016, followed by the Romanian Armed Forces StratCom concept in October 2017. This effort, led by the Ministry of Foreign Affairs and the Ministry of National Defence, sought to establish a national strategic communication framework to integrate concrete measures for countering disinformation. The discussions were rooted in similar doctrines already implemented within NATO and the Romanian Armed Forces, and were further informed by the expertise of communication specialists from ministries and government agencies responsible for security and defence.

[3] External (third-party) actors or groups used by countries or organizations to achieve their goals without direct involvement (Hybrid CoE, 2023).

The White Paper on Defence (2021) recognizes disinformation as one of the hybrid threats facing Romania, alongside cyberattacks and other forms of non-military aggression. Anticipating the growing scale of this threat, the Ministry of National Defence, through the Information and Public Relations Directorate, launched the *Inforadar* platform in the fall of 2018 to combat *fake news*. This platform is considered a best practice example at both governmental level and within NATO member countries.

Additionally, the Ministry of Foreign Affairs has spearheaded a national initiative to develop a *National Strategic Communication Strategy*, online behaviour guides, and a public reporting mechanism for *fake news* cases, under the aegis of the National Cyber Security Directorate (NCSD). Expert analyses have also been conducted within the Euro-Atlantic Resilience Centre (e-ARC).

In the *academic sector*, several universities and research centres have demonstrated considerable efforts in identifying and addressing disinformation. Communication departments have shown particular interest in this field, carrying out various initiatives aimed at raising awareness of the phenomenon both within the academic community and beyond. These initiatives play a crucial role in theoretically understanding how disinformation spreads in both physical and virtual spaces. They also contribute to disseminating this knowledge among undergraduate, master's, and doctoral students, ensuring that the awareness of disinformation reaches a broader public through its educational and societal roles.

Civil society and non-governmental organizations have also been highly active in combating disinformation and *fake news*, showcasing a high level of expertise and a strong commitment to forming partnerships with governmental institutions. In this context, we can mention *Global Focus*, a non-governmental organisation that focuses on using automated tools to detect *fake news* based on digital footprints in the online environment. Moreover, the *Anti-fake platform*, developed by the *"Eurocomunicare" Organisation,* offers a range of projects centred on media education for both students and journalists.

Last but not least, it is relevant to mention the *New Strategy Centre* think tank, which, through its experts, promotes the importance of disinformation awareness at conferences and high-level meetings.

ROMANIAN MILITARY THINKING

The White Paper on Defence (2021) recognizes disinformation as one of the hybrid threats facing Romania, alongside cyberattacks and other forms of non-military aggression. Anticipating the growing scale of this threat, the Ministry of National Defence, through the Information and Public Relations Directorate, launched the Inforadar platform in the fall of 2018 to combat fake news. This platform is considered a best practice example at both governmental level and within NATO member countries.

This group emphasizes the crucial aspects to consider when devising strategies to combat disinformation.

The Romanian media's approach to combating disinformation and *fake news* is somewhat ambivalent. Some media organizations show genuine concern for countering the phenomenon through partnerships with IT companies to verify information in real-time as well as through the direct collaboration of journalists and the news sources (to verify the accuracy of the information from the source).

On the other hand, some segments of the media prioritize attracting large audiences, often at the expense of rigorous news verification. The focus on sensationalism, event dynamics and strategy to target a large audience are sometimes used to justify bypassing the critical stage of verifying information from multiple sources before releasing it to the public.

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In the *private sector*, companies are increasingly aware of the significant impact disinformation can have, especially regarding reputation management and associated operational and financial risks. Their strategies focus on technical solutions such as early detection of bots and trolls, as well as monitoring online brand reputations to avoid associating with sources generating false information. Public-private partnerships are also promoted, such as multinational brands' affiliation with the European Union Code of Practice against Disinformation (European Union, 2021) and collaboration with the National Directorate for Cybersecurity. Additionally, telecommunications companies are involved in developing media education programs in schools.

IT businesses play a distinct role in tackling the challenges of combating *fake news*, primarily through collaborations with other stakeholders. They include partnerships with the media to implement fact-checking tools, developing cybersecurity solutions to detect troll networks and disinformation propagated through automated processes (e.g., Bitdefender), creating AI-based content verification solutions (e.g., ThinkOut), and preventing cyberattacks aimed at facilitating disinformation spread (e.g., CrowdStrike). These initiatives help shape a diverse landscape of actions dedicated to preventing and combating disinformation in the business sector, contributing added value to national efforts. The emphasis on innovative technologies strengthens these efforts and maximizes the potential advantages they provide.

In conclusion, it is clear that, at the national level, Romania's expertise in combating disinformation and its practical initiatives are comparable, in terms of technological and academic capabilities, to those of countries such as the United States of America, the United Kingdom, France, Germany, and the Baltic States. Media education programs are considered essential for dismantling disinformation from the early stages of education, with several initiatives already working towards integrating critical thinking into school curricula.

Furthermore, numerous *fact-checking initiatives* have been launched in collaboration with public and private institutions that have already implemented and utilized such solutions. At the level of public discourse, there is a clear interest in developing the necessary tools to combat disinformation, recognizing its destructive impact on society and its various segments, as continuously highlighted by the media and online communication channels.

CONCLUSIONS AND PROPOSALS

Romania's expertise in combating disinformation and its practical initiatives are comparable, in terms of technological and academic capabilities, to those of countries such as the United States of America, the United Kingdom, France, Germany, and the Baltic States.

Following the emergence of disinformation as it is recognized today, characterized by technological amplification and a strong ideological charge, a period of awareness-raising efforts at all levels of society began. However, resistance to these efforts, managed and funded by both state and non-state actors, was fuelled by the commercial nature of social media algorithms. The mentioned dynamics led to the unnecessary prolongation of the awareness phase, allowing the proliferation of disinformation to be further entrenched and refined, thereby enabling its unchecked spread.

As noted in the previous chapter, international initiatives to combat disinformation have become increasingly numerous and are beginning to yield visible results. Many media institutions and press agencies now verify information before dissemination. At the national level, a diversity of initiatives has emerged. However, a key gap remains – there is a lack of national coordination, both conceptually and materially. These initiatives continue to operate in a fragmented, uncoordinated manner, and could be described as *academic silos* (Donovan, 2020). The concept of *isolated research* is not new; a study conducted under the aegis of the European Union, as early as 2018, recommended the abandonment of isolated research (Independent

High-Level Expert Group on Fake News and Online Disinformation, 2018, p. 27), advocating for the unification of media education programs to integrate all available expertise in civil society, academia, and professional institutions within the EU.

The current geostrategic context and security climate necessitate swift adaptation to ongoing changes, whether they are economic, social, political, or, particularly, security-related. The dynamics observed over the last decade have highlighted the anachronism of structures and concepts based on outdated *status quos*, such as the paradigms that arose from the Cold War and collapsed in the early 1990s.

The recent technological revolution, combined with the exponential expansion of social networks that have become central to interpersonal interactions, has created a highly complex and unpredictable information environment. The sheer abundance of information, facilitated by an increase in information sources, complicates the identification of relevant information, both in the physical and virtual realms.

Moreover, the recent technological revolution, combined with the exponential expansion of social networks that have become central to interpersonal interactions, has created a highly complex and unpredictable *information environment*. The *sheer abundance of information* (Toffler, 1970, p. 350), facilitated by an increase in information sources, complicates the identification of relevant information, both in the physical and virtual realms. In this context, technology, coupled with human expertise in managing large volumes of data, offers a viable solution.

Given the challenges outlined above and the imperative to implement concrete measures to counter disinformation through a unified *national effort*, we propose that the government make a decisive step toward developing a *comprehensive national strategy to combat disinformation*. This *strategy* should integrate the expertise from various sectors of society, aiming to create a holistic understanding of the information environment in Romania, as well as external information that may affect the country through hybrid threats.

To ensure the legal consistency and scope of the proposed s*trategy*, it is essential for it to be adopted as a standalone law or be integrated into a defence-related law through an appropriate legislative amendment. This approach will allow the *strategy* to extend beyond administrative regulations and establish rights and obligations for citizens, such as the right to correct[4] information provided by any content-generating entities, including individuals who transmit

[4] The right to be informed – a fundamental right guaranteed by the Constitution of Romania (2003) through Articles 30 and 31 – refers to the obligation of mass media and public and private institutions to provide accurate information (A.N.).

information to others such as *influencers*, who currently operate in a minimally regulated environment (Khamis, Ang, Welling, 2017). The *strategy* should also define key social relationships, addressing aspects related to civil liability, social protection, criminal law, property law, and commercial relations.

The *strategy* should aim to establish cooperative relationships with public and private institutions, non-governmental organizations, academia, and independent experts, all of whom should be co-opted into a national project dedicated to combating disinformation and other information-related threats. To avoid the duplication of efforts, it is crucial that the *strategy* should efficiently manage available resources and align the objectives of all participating institutions within the project.

Once the unifying concept is consolidated and the necessary human and material resources are assessed, a further essential step would be the creation of a dedicated *structure* to operationalize these concepts, transforming them into concrete norms and procedures for application. This *structure* could be modelled after a directorate and operate under the direct subordination of the Government, ensuring its independence and equidistance from other public activities (ministries or government agencies). Depending on the assessment of specialists and available resources, this *structure* could be integrated into existing bodies managing hybrid threats in Romania and the Euro-Atlantic space, such as the National Cybersecurity Directorate or the Euro-Atlantic Resilience Centre, expanding their responsibilities accordingly.

Ongoing research into the spread of fake news must become a permanent feature of future efforts, given that the technological evolution we are experiencing is still in its early stages. In this regard, it is vital for the academic sector to remain a key partner in this national effort, ensuring continuity in research and staying abreast of new developments in the field.

Ongoing research into the spread of *fake news* must become a permanent feature of future efforts, given that the technological evolution we are experiencing is still in its early stages. In this regard, it is vital for the academic sector to remain a key partner in this *national effort*, ensuring continuity in research and staying abreast of new developments in the field.

While the issue of disinformation is not new, awareness of the phenomenon is now widespread across all levels of society. We observe numerous public speeches, calls for action, and requests from civil society to authorities to address this issue, whose persistence undermines the credibility of government institutions. The long-term

consequences of this erosion of trust are difficult to predict. Therefore, it is critical that authorities should take prompt action to mitigate the phenomenon before it reaches a scale that renders any subsequent prevention or countermeasure efforts ineffective.

BIBLIOGRAPHY:

1. Bălan, C. (2023). *Identificarea, catalogarea și analizarea emoțiilor induse de știrile false în rândul audiențelor, prin utilizarea unor soluții de tip sentiment analysis și data mining* (Doctoral Thesis). București: Școala Națională de Studii Politice și Administrative.
2. Bârgăoanu, A. (2018). *Fake news – Noua cursă a înarmării*. București: Evrika Publishing House.
3. *Carta Albă a Apărării/White Paper on Defence* (2021). Bucureşti: Ministerul Apărării Naționale.
4. *NATO Strategic Concept* (2022). Madrid.
5. *Constituţia României/Constitution of Romania* (2003). Bucureşti: Parlamentul României.
6. Corbu, N., Bârgăoanu A., Durach, F., Udrea G. (2021). *Fake News Going Viral: The Mediating Effect of Negative Emotions*. Media Literacy and Academic Research, vol. 4 (2), p. 61.
7. Donovan, J. (2020). *The breakdown: Joan Donovan on domestic misinformation*. Berkman Klein Center for Internet & Society, https://cyber.harvard.edu/story/2020-12/breakdown-joan-donovan-domestic-misinformation, retrieved on 25 September 2024.
8. European Commission (2018). *Directorate-General for Communications Networks, Content and Technology, A multi-dimensional approach to disinformation* – Report of the Independent High-Level Group on fake news and online disinformation. Publications Office, https://data.europa.eu/doi/10.2759/739290, retrieved on 28 September 2024.
9. Helmus, T.C., Holynska, K. (2024). *Ukrainian Resistance to Russian Disinformation: Lessons for Future Conflict*. RAND Corporation, https://www.rand.org/%20pubs/research_reports/RRA2771-1.html, retrieved on 22 November 2024.
10. Hybrid CoE (2023). *COI Hybrid Influence*, https://www.hybridcoe.fi/coi-hybrid-influencing/, retrieved on 28 September 2024.
11. Khamis, S., Ang, L., Welling, R. (2017). *Self-branding, 'micro-celebrity' and the rise of Social Media Influencers*. Celebrity Studies, 8(2), pp. 191-208, https://doi.org/10.1080/19392397.2016.1218292, retrieved on 22 November 2024.
12. Kvetanová, Z., Kačincová, A., Švecová, P., Švecová, M. (2021). *Debunking as a Method of Uncovering Disinformation and Fake News.* In: Višňovský, J., Radošinská, J. (Eds.) (2021). *Fake News Is Bad News – Hoaxes, Half-truths and the Nature of Today's Journalism*, IntechOpen. DOI: 10.5772/intechopen.93738.

13. NATO ACT. *Cognitive Warfare. Protecting the Alliance Against the Threats of Cognitive Warfare* (2023), https://www.act.nato.int/activities/cognitive-warfare/, retrieved on 6 January 2025.
14. NATO (2023). *NATO's approach to countering disinformation*, NATO.int., https://www.nato.int/cps/en/natohq/topics_219728.htm, retrieved on 30 January 2025.
15. NATO (2024). *Setting the Record Straight*. NATO.int., https://www.nato.int/cps/en/natohq/setting-the-record-straight.htm, retrieved on 26 September 2024.
16. Nolan, S.A., Kimball, M. (2021). *What Is Prebunking?* In *Psychology Today*, https://www.psychologytoday.com/us/blog/misinformation-desk/202108/what-is-prebunking, retrieved on 30 January 2025.
17. Schultz, T. (2017). *Lithuania pushes back on fake news*. DW, https://www.dw.com/en/why-the-fake-rape-story-against-german-nato-forces-fell-flat-in-lithuania/a-37694870, retrieved on 30 January 2025.
18. Toffler, A. (1970). *Future Shock*. New York: Bantam Books.
19. U.S. Department of State (2020). *GEC Special Report: Pillars of Russia's Disinformation and Propaganda Ecosystem*, https://www.state.gov/russias-pillars-of-disinformation-and-propaganda-report/, retrieved on 30 September 2024.
20. European Union (2021). *Code of Practice on Disinformation*, https://ec.europa.eu/info/publications/code-practices-disinformation_en, retrieved on 25 September 2024.
21. Wardle, C., Derakhshan, H. (2017). *Thinking about 'information disorder': formats of misinformation, disinformation, and mal-information*. Journalism, 'Fake News' & Disinformation, Council of Europe, https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-researc/168076277c, retrieved on 23 September 2024.

THE SMALL STATE IN INTERNATIONAL RELATIONS – REGIONAL SECURITY ARRANGEMENTS OF FINLAND AND ROMANIA IN THE INTERWAR PERIOD –

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The study analyses the concept of a small state, its role in international relations and the way it can ensure its security in relation to the great actors. The concept of a small state emerged in the post-war period, being definitely imposed in the 60s-70s of the 20th century. There are two important schools of thought in this research area. The first is the positivist approach that defines the small state starting, mainly, from the geographical criteria – surface, population, resources etc. The second introduces, along with the physical-geographical criteria, the geopolitical framework, namely the way the respective state influences European and world political affairs as well as the decisions of other states. Regardless of the approach paradigm, the small state is not necessarily a victim of the great powers, having its definite role in the dynamics of international relations and the main goal of ensuring its survival in a most often anarchic international environment.

Moreover, the study provides an analysis of the regional security strategies of Romania and Finland, two states located far from each other in the interwar period, showing that Romania tried to compensate for the security deficit by concluding regional alliances with Poland (1921), the Little Entente (1920-1921) and the Balkan Entente (1934), while Finland was very reluctant to such formulas. It joined neither the Baltic Entente nor the Nordic Group, but collaborated with them.

As the entire international order established by the Paris Peace Conference collapsed at the end of the fourth decade of the 20th century, Romania and Finland found themselves at the discretion of the two great totalitarian powers – Germany and the Soviet Union. Their conduct during the years of the Second World War influenced their post-war destiny.

Keywords: Romania; Finland; small power; buffer state; regional security arrangements;

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FEATURES OF THE INTERNATIONAL SITUATION IN THE INTERWAR PERIOD

The First World War, also known as the *"Great War"*, brought major changes in the life of the old continent. Four great empires disappeared – Austro-Hungarian, Ottoman, Russian and German – which had long been important actors in international life. It created a political vacuum, which was taken full advantage of by the peoples who had been integrated into those great state structures, most often against their will. Through a process of national emancipation, more than once accompanied by violent internal movements and military conflicts, the political map of Europe was radically modified. New states were formed – Czechoslovakia, Estonia, Finland, Latvia, Lithuania. Poland rebuilt itself after the divisions of 1772, 1793 and 1795 and subsequent experiments, others completed their state construction by reuniting all the kindred people under the same institutional roof. It was the case, first of all, of Romania, but also of the Kingdom of Serbs, Croats and Slovenes (since 1929, Yugoslavia).

On the ruins of the former empires, specific state constructions were born – Austria and Hungary in the case of the Austro-Hungarian empire; The Weimar Republic, the successor of the Second Reich; Soviet Russia (the Soviet Union starting on 30 December 1922), which took on the messianism and imperialism of the tsars, to which was added the ideological expansionism crystallized in the doctrine *"World Communist Revolution"*; The Republic of Turkey, the modern creation of Kemal Pasha, known as Atatürk.

Developments in the international situation *"the 20-year truce"*, according to the expression of Marshal Ferdinand Foch, commander of the Allied forces on the Western Front from April 1918 until the end of the conflict, stood out for certain distinct features: the inability of the victorious countries (France and Great Britain) to enforce compliance with the provisions of the peace treaties concluded in 1919-1920, under the conditions of the US withdrawal from European affairs;

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the weakness of the League of Nations, an international organization created at the initiative of US President Woodrow Wilson to manage crises and prevent the outbreak of a new world conflict; the revisionist and revanchist conduct, increasingly virulent, as the years went by, of the defeated (Germany, Hungary, Bulgaria), of the excluded (the Soviet Union, although Moscow nuanced its position, accepting, for opportunistic reasons, the thesis of *"collective security"* (extensively, in Constantiniu, 2010) and of some dissatisfied winners (Italy and Japan); the *"conciliation policy"* of the Franco-British tandem in relation to those tendencies, the intensification of the arms race and the modification of strategic paradigms in military construction etc.[1].

The years between the two world wars were marked by numerous initiatives, within and outside the League of Nations, aimed at preserving peace, stability and political-territorial order.

The years between the two world wars were marked by numerous initiatives, within and outside the League of Nations, aimed at preserving peace, stability and political-territorial order. Their enumeration would be too extensive for this study, but we mention a few of them: the Geneva Protocol (1924-1925); The Locarno Conference and Pact (1925); Germany's admission to the League of Nations (1926); The Briand-Kellogg Pact (1928); the Moscow Protocol (1929); Aristide Briand's plan to achieve a European federation (1929); the Conference on Disarmament (1932-1935) etc.

As can be seen, most of them were consummated in the third decade, making room, in the following decade, for the crises that generated major tensions in the interwar international system and that, in the end, led to the collapse of the political-territorial order established on the banks of the Seine in 1919-1920. The road

[1] From the very rich bibliography dedicated to the evolution of international relations in that period, we note, for example, the following volumes: Moisuc, V. (2002). *Istoria relaţiilor internaţionale până la mijlocul secolului al XX-lea*. Bucureşti: Editura Fundaţiei România de Mâine; Alter, P. (2004). *Problema germană şi Europa*, translation: Irina Cristea, foreword: Florin Constantiniu. Bucureşti: Editura Corint; Johnson, P. (2005). *O istorie a lumii moderne. 1920-2000*, translated by Luana Schidu, 2nd revised ed. Bucureşti: Editura Humanitas; Duroselle, J.B. (2006). *Istoria relaţiilor internaţionale, vol. I, 1919-1947,* translation Anca Airinei. Bucureşti: Editura Ştiinţelor Sociale şi Politice; MacMillan, M. (2006). *Les artisans de la paix. Comment Lloyd George, Clemenceau et Wilson ont redessiné la carte du monde*, translated by André Zavriew, with the support of Centre National du Livre. Paris: JC Lattès; Gray, C.S. (2010). *Războiul, pacea şi relaţiile internaţionale. O introducere în istoria strategică*, translated by Ramona Lupu. Editura Polirom, pp. 127-152; *Encyclopedia of World History. Crisis and Achievement 1900 to 1950*, vol. V (2008). New York; Bold, Em., Ciupercă, I. (2010). *Europa în derivă (1918-1940). Din istoria relaţiilor internaţionale*, 2nd revised ed., general index Alexandrina Ioniţă. Iaşi: Casa Editorială Demiurg; Carr, E.H. (2011). *Criza celor douăzeci de ani (1919-1939). O introducere în studiul relaţiilor internaţionale*, translated by Cătălin Dracşineanu. Editura Polirom etc.

to the final catastrophe was punctuated by many events, such as: the occupation of Manchuria by the Japanese Empire (1931); the accession to power of the Nazis led by Adolf Hitler (1933); the reintroduction of compulsory military service in Germany (1935); Italy's aggression against Ethiopia (1935-1936); the occupation of the Rhineland by Hitler (1936); the Spanish Civil War (1936–1939); the Sino-Japanese War (1937); the occupation of Austria (1938); the Munich agreement (29 September 1938) and the fateful Soviet-German agreement of 23 August 1939, between Germany and the Soviet Union, preamble to the outbreak of the Second World War.

It has been rightly concluded that there are two contrasting decades. In the first of them, despite all the existing crises and tensions, the spirit of collaboration prevailed, with hopes that collective security would be materialized and peace would be saved. In the second decade, the abundance and virulence of crises highlighted that peace was no longer a certainty, and war was looming on the horizon.

A great power is the state that has a considerable capacity for political, economic, cultural and military influence at global level. The term great power was first used by Count Ernst Friedrich Herbert zu Münster, in August 1815, with direct reference to the states that defeated Napoleon.

THE SECURITY OF THE SMALL STATE. THEORETICAL AND METHODOLOGICAL MILESTONES

In international politics, regardless of the historical period, the decisive role is played by the great actors, the great powers, although the concept belongs more to the realist and neorealist paradigm, widely shared by the theoreticians of international relations[2].

In essence, a *great power* is the state that has a considerable capacity for political, economic, cultural and military influence at global level (Serebrian, 2006, p. 169). The term *great power* was first used by Count Ernst Friedrich Herbert zu Münster (1766-1839), in August 1815, with direct reference to the states that defeated Napoleon. At that time, the Congress of Vienna (1915) defined five great powers: Great Britain, France, Austria, Russia and Prussia. Subsequent developments, such as the rise of the USA, Germany and Japan, led to their number rising to eight before the First World War – the USA, Germany, Great

[2] For the mentioned aspects, see also: Morgenthau, H.J. (2007). *Politica între naţiuni. Lupta pentru putere şi lupta pentru pace*, translated by Oana Andreea Bosoi, Alina Andreea Dragolea, Mihai Vladimir Zodian. Editura Polirom, pp. 43-55; Goldstein, J.S., Pevenhouse, J.C. (2008). *Relaţii internaţionale*, translated by Andreea-Ioana Cozianu, Elena Farca, Adriana Ştraub. Editura Polirom, pp. 95-140; Vasquez, J.A., Elman, C. (2012). *Realismul şi balanţa de putere*, translated by Crisia Miroiu. Editura Polirom, pp. 44-78, 137-150, 190-222 etc.

Britain, France, Austria-Hungary, the Russian Empire, Japan and Italy. In the interwar period, the USA, the USSR, Great Britain, France, Italy, Germany and Japan were considered great powers. Besides them, considering the concept of territorial state in the international system, imposed after the Thirty Years' War (1618-1648), there were also a number of smaller formations, generically called *small states (powers)* (Maass, 2017).

The concept of *small state security* emerged in the post-war period, the most extensive research being carried out between the '60s and '70s of the last century, when it was definitively imposed. Research in the field has been distinguished by a variety of approaches[3]. One of the most important problems was and remains the concept of a small state. In this field, two schools of thought are distinguished. The first of them is the positivist approach, which defines the small state starting mainly from geographical criteria – area, population, resources etc. Simon Kuznets, Nobel Prize winner in economics, said that one can speak of a small state when it has less than 10 million inhabitants[4].

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These criteria, however, do not cover reality well enough. Here is a significant example: Sweden has an area of 450,000 square kilometres, and Japan has 372,000 square kilometres. The former is considered a relatively small state, while the latter is considered a great power, with a chance of occupying a seat on the UN Security Council.

Other analyses, considered realistic, introduce, along with the physical-geographical criteria, the geopolitical framework, namely the way in which the respective state influences European and world political affairs, as well as the decisions of other states. In Anglo-Saxon literature, it is used the term *"small power"*, which in a certain sense better covers reality. Robert L. Rothstein, an important American analyst in the field, considers that the small power is the state that recognizes it cannot ensure its security by using its own capacities and it must rely on the help of other states, institutions, alliances (Rothstein, 1968, p. 16). The insufficiency of the small power in ensuring its own security must be recognized by the other states involved in international politics. It would represent, along with the physical-geographical dimensions, one of the main differences between a large and a small power.

The opinion is also expressed that the analysis of the security of the small powers is irrelevant, because international politics is the prerogative of the great powers. But their survival is largely similar to that of a large state. Also, sometimes, in the clashes and in the permanent struggle for hegemony between the great powers, the small state can play an important role.

The analysis of the security of a small power and, implicitly, of its geopolitical and geostrategic position at a given moment involves the use of two well-defined levels – *"given characteristics"* and *"circumstantial characteristics"*. *"Given characteristics"* represent elements of a physical-geographical order (surface, population, natural resources, nature and structure of neighbourhoods etc.). The second level is circumscribed to the geopolitical and geostrategic elements, namely the place and role of the state in the set of international relations, the nature of relations with regional, continental and global power centres[5].

The analysis of the security of a small power and, implicitly, of its geopolitical and geostrategic position at a given moment involves the use of two well-defined levels – "given characteristics" and "circumstantial characteristics".

If the first level of analysis has a relatively static character, the second is predominantly dynamic, international developments being able to impose changes in the interest of the major actors in the state in question. Therefore, events can project the small state into the forefront of world politics, a situation that can have great servitudes, but also some advantages.

Sometimes, the small state can end up in the position of a buffer state. Such a state is a weak power, placed between two or more more stronger states, maintained or sometimes created with the aim of reducing the conflict between them (Wight, 1998, p. 168).

[3] From the wide debate on the small state, we mention the following: Baker Fox, A. (1959). *The Power of Small States: Diplomacy in World War II*. Chicago: Chicago University Press; *Small states in world politics: Explaining foreign policy behavior* (2003), ed. J.A.K. Hey. Lynne Rienner Publishers, Boulder, pp. 1-11; *Small states in international relations* (2006), ed. Christine Ingebritsen, Iver Neumann, Sieglinde Gsthöl, Jessica Beyer. University of Washington Press; *Small states and international security: Europe and beyond* (2014), ed. Clive Archer, Alyson Bailes, Anders Wivel. London, Routledge; *The Concept of the State in International Relations, Philosophy, Sovereignty and Cosmopolitanism* (2015), ed. Robert Schuett and Peter M.R. Stirk. Edinburgh: Edinburgh University Press etc.

[4] There are other perspectives on the small state. The World Bank considers a small state to be an entity that has less than 1.5 million inhabitants. Based on this characteristic, it is estimated that there are 50 such states in the world, www.diplomacy.edu, retrieved on 22 August 2022.

[5] See the classic work of realism: Hans J. Morgenthau, *op. cit.* (note 2), pp. 67-202. For the neorealist version, the most important author is Kenneth N. Watz, *Teoria politicii internaționale /Theory of international politics* (2006), translated by Nicoleta Mihăilescu, introductory study by Lucian-Dumitru Dîrdală. Editura Polirom, pp. 147-180.

As a rule, a buffer state is created in a region and in a period characterized by a *"power vacuum"*, as happened with the Pontus-Baltic isthmus at the end of the First World War, when the simultaneous dissolution of the Russian, Austro-Hungarian and German empires created the possibility of the affirmation of smaller states.

Buffer states are usually divided into oscillating, neutral, and satellite. Oscillating is the buffer state that promotes a policy that prudently encourages the rivalries of the big players, in the hope that it will be able to survive better. Neutral buffer states do not have their own active and visible policy, thus trying to go unnoticed in the international arena. A buffer state becomes a satellite when foreign policy is controlled by one of the important geopolitical actors. If the strong state intervenes directly in domestic politics, then we can speak of a protectorate. The case of Slovakia and Croatia in the Second World War are illustrative of this status.

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As A.J.P. Taylor, author of a famous work on the origins of the Second World War (Taylor, 1999, p. 173), points out, a tradition has been formed in European history. Great Britain and France were supporters of the creation of buffer states, and the Germans, seconded by the Russians, considered that the division of states or the existence of buffer states were the best solution for achieving peace between the great powers. The most significant example for the latter case is Poland, a buffer state between Germans and Russians. It was divided, in the course of three stages (1772, 1793, 1795), by Prussia, Russia and Austria.

At the end of the First World War, France and Great Britain accepted the reconstitution of Poland, which regained its status as a buffer country between Germany and Russia. On 23 August 1939, as I mentioned, through the Ribbentrop-Molotov agreement, the two great powers decided on the fourth partition of Poland, materialized by the treaty of 28 September 1939.

It should also be noted that the scope of buffer states is different, to some extent, from that of small states. As a rule, the small state should be in the vicinity of one or more great powers, which exercise or try to exercise the strictest possible control. But the quality of buffer state can also be held by a somewhat larger state, as was the case of interwar Poland, mentioned above.

Each major geopolitical actor, at the height of power, absorbed one or more buffer states. If the dominant power suffered a defeat or went through a certain eclipse of its power, it had to make concessions to the incorporated state, which even went so far as to achieve independence. In this context, Finland is a classic case in the history of international relations. It was incorporated into the Swedish kingdom for a long time. The rise of Russia, as a great power in the Baltic basin, placed Finland as a buffer formation between it and Sweden. The competition was won by the Russian Empire which, in 1809, through the Peace of Friederikshamm, annexed Finland (Dragomir, Miloiu, 2011, pp. 102-105). After a century or so, in 1917, Russia's implosion created conditions for it to accede to the status of independence.

Establishing the security strategies of a small state is one of the most important problems, given its low influence in the overall international relations. It involves an intense activity carried out both domestically and internationally. The analysis requires taking into account several variables (Knudsen, 1995, pp. 141-149).

Establishing the security strategies of a small state is one of the most important problems, given its low influence in the overall international relations. It involves an intense activity carried out both domestically and internationally. The analysis requires taking into account several variables.

The first of them is **the strategic or geostrategic importance of the small state, from the perspective of the main actors of international life**, namely how it is seen by one or the other of the dominant powers and to what extent it arouses the interest of the closest one. Given the disproportion of forces, the small state will consider itself permanently threatened. Practically, the question that will arise is to what extent the small state can be used by a great power against one or more rivals. In this case, the small state will be seen as a possible adversary and may end up in a situation where it will have to endure the punitive actions of a great power. It is the classic *"security dilemma"*, formulated by John Griffits in the '50s (apud Griffits, 2003, pp. 41-46).

For large and small states, the *"security dilemma"* is presented in practically the same parameters, the assessment of potential threats being a key factor for any kind of security strategy. The essence is that smaller states, because of their limited possibilities, are at the disposal of the major actors of international life.

Returning to Finland and Romania, the object of our analysis, we will say that the Soviet Union was the great power that proved to be, by virtue of historical tradition, the most interested in the evolution of the two countries. Historians have demonstrated most eloquently

the continuity of doctrine and ideology in matters of imperialism between tsarism and communism[6]. Stalin, quoting Peter the Great, would have said that the ladies of St. Petersburg could not sleep as long as Finland's guns were under foreign control (cf. Knudsen, p. 142). As for Romania, the Kremlin saw it as a real obstacle to achieving much older goals – reaching Central Europe and the Straits (Casso, 2003).

A second variable is **related to the voltage level between the great powers**. In other words, the probability of an armed conflict between them. In periods of maximum tension, which can even lead to war, the strategic position of the small state suddenly acquires a special importance. In this situation, the great power concerned may come to act against the small state in order to paralyze its possible hostile reactions or to prevent the use of its territory by another competing great power.

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The third variable is **the phase of the power cycle in which the closest of the great powers is found**. As Robert G. Gilpin shows, every major international actor goes through cycles of power, so that in the 19th and 20th centuries the world witnessed a succession of hegemonies (Gilpin, 1981, pp. 10-11). The most important were, however, the British in the 19th century and the American one for the following century.

For the small state, the cycle of the nearest power is essential. If it is also a neighbour, the problem becomes more complicated. Usually, the existence of a smaller power on the border of a major actor is a limit to the latter's own expansion. The existence of a small state, under these conditions, represents a compromise, even temporarily accepted by the great power, determined by the relationship between the ambition to control the small state and the costs of this control.

[6] Among the most recent studies on this topic, we point out: Marchizul de Custine, A.L.L. (2007). *Scrisori din Rusia. Rusia în 1839*, editor, foreword Pierre Nora, translated from French by Irina Negrea. Bucureşti: Editura Humanitas (classical paper related to the Russian Empire); Silion, B. (2004). *Rusia şi ispita mesianică. Religie şi ideologie.* Bucureşti: Editura Vremea XXI; Ţâcu, O. (2004). *Problema Basarabiei şi relaţiile sovieto-române în perioada interbelică (1919-1939*). Chişinău: Editura Prut Internaţional; Bold, E., Locovei, R.O. (2008). *Relaţii româno-sovietice (1918-1941). Iaşi: Casa Editorială Demiurg; Mironov, A.-M. (2013). Vremea încercărilor. Relaţiile româno-sovietice 1930-1940*, foreword by Constantin Buşe. Bucureşti: Institutul Naţional pentru Studiul Totalitarismului; Mihai, F.R., Buga, V. (coordinators) (2020). *Problema Basarabiei în relațiile româno-sovietice 1918-2018*, foreword by Ioan Scurtu. București: Editura Litera etc.

Another important factor intervenes – the moment when the small state on the border of a great power was formed. If the small state gets individualized when the great power is at its peak, the chances of becoming viable increase greatly. If, on the contrary, the small state is formed or gains its independence at the moment when the great power is at the lowest point of its power, it will have difficulty in subsisting. The great power, once it overcomes the eclipse, will tend to recover what it lost in the period of decline (Knudsen, p. 144).

Finland gained its independence at the time of the dissolution of the Russian Empire, which had ruled it for over a century. The new regime installed in Petrograd, being in an extremely difficult situation, was forced to recognize the new political-territorial reality.

The case of Romania is partially identical, Bessarabia joining the Romanian Kingdom against the background of the same events. The new Soviet regime never recognized the belonging of the province between the Prut and the Dniester to Romania, so in 1918-1924 it organized numerous aggressive actions, the most important of which was the *"rebellion"* in Tatar-Bunar[7].

The small state is formed or gains its independence at the moment when the great power is at the lowest point of its power.

As a result, Finland gained its independence, and Romania enlarged its eastern border at a time of eclipse of the Russian power. The Bolshevik regime in Petrograd and, later, in Moscow considered that both countries took advantage of Russia's *"weakness"* to obtain political and territorial advantages, impossible under normal conditions.

In conclusion, the two countries had a *"problem"*, throughout the interwar period, with the Soviet Union, a country that managed to consolidate itself internally, to be recognized on the international arena and to become, in the fourth decade, an important player on the European continent and in the world. As the Soviet Union consolidated its status, Finland's and Romania's international standing became more and more fragile.

Another important factor for the security of the small state is **the policy promoted by the great rival powers towards it**. Faced with the pressure of the big neighbouring power, the small state tends

[7] For further details, see also: Tătărescu, Gh. (1996). *Mărturii pentru istorie,* Sanda Tătărescu-Negroponte (ed.), foreword by Nicolae-Şerban Tanaşoca. Bucureşti: Editura Enciclopedică, pp. 75-109; Rauș, N., Neacșu, Gh., Moraru, D. (2017). *O agresiune sovietică la adresa României; Tatar Bunar în documente și în presa vremii*. Târgoviște: Editura Cetatea de Scaun; *Tatar Bunar 1924. Documente* (2024), Ion Giurcă, Liviu Corciu (eds.). București: Editura Militară.

to protect itself by appealing to large competing actors. It leads the ruling elite of the powerful neighbour to look at the small state with suspicion and, more than once, with hostility. The same feelings are nurtured by the elite of the small state. Therefore, unequal power relations create mistrust, historical memory and unsettling prospects for the future, poisoning mutual relations.

Another aspect is also discussed. Sensing the danger that a competing great power will use the small state against its interests, the neighbouring great power is thus compelled to be prepared for any kind of situation. Including for a preventive intervention against the small state, in order to prevent another power from gaining an advantage there.

The end of the First World War brought a premiere in the history of international relations, the creation of the League of Nations. Its existence was viewed with great confidence by smaller states, as they hoped that it would be an instrument that would protect them from the interference of the great powers.

Finally, another important variable is **the existence of a multilateral security framework**, through the cooperation of all actors, large and small, on the international scene. From this point of view, the end of the First World War brought a premiere in the history of international relations, the creation of the League of Nations. Its existence was viewed with great confidence by smaller states, as they hoped that it would be an instrument that would protect them from the interference of the great powers.

If the smaller states looked with optimism at the existence of a multilateral security framework, such as the League of Nations or the United Nations, after the Second World War, the great powers appreciated them only in relation to the way in which they could achieve their interests. If a great power considered that such a framework (organization) prevented their materialization, then it ceased to participate in it.

For example, in the interwar period, the USA, although promoters of the League of Nations, no longer participated in its activity, and Germany, later accepted as a member, left the organization, because the Berlin regime considered that it had become an obstacle in promoting interests. Likewise, the Soviet Union was admitted to the Geneva organization and then was excluded at the end of 1939.

The variables analysed above must be understood as cases that condition each other, that interact with each other. From their connection, stable or unstable states of affairs result, which can be beneficial or unsuitable for any state, large or small. The factors, taken

together, define the political security environment, characterized from the perspective of the small state, by inequality of power. Depending on it, on the analysis it makes, the political elite of the small state can decide what strategies it accepts in order to preserve its state entity. It is good to specify that the small state cannot and should not be condemned to a passive acceptance of everything that surrounds it. It may be able, in some circumstances, to influence, however, within certain limits, the international security environment. In other words, the small state, if it wants to preserve its individuality, to survive, has the obligation to act, not just to react[8].

In interaction, not all variables are of equal importance. For example, the strategic (geostrategic) position can be an important factor in the inequality of power, but without the tension between the major actors, it does not appear to be decisive. Therefore, the main operational variable is the voltage between the great powers. It actively interacts with the phase of the cycle of power, both of which shape the course of things, the evolution of events.

In this case, small states have few possibilities to intervene, but the duty of the political elites is to lucidly analyse the international environment and to establish those directions of action that generate as few negative effects as possible.

The small state cannot and should not be condemned to a passive acceptance of everything that surrounds it. It may be able, in some circumstances, to influence, however, within certain limits, the international security environment. In other words, the small state, if it wants to preserve its individuality, to survive, has the obligation to act, not just to react.

THE REGIONAL SECURITY ARRANGEMENTS OF ROMANIA AND FINLAND IN THE INTERWAR PERIOD

In the interwar period, the geopolitical position of Romania and Finland was characterized by a series of common features, but also by some marked differences. The first category included the neighbourhood with Russia. Both countries, however, were in the front line of the offensive of the new regime, established on 25 October/ 7 November 1917, launched in the *"name of the world communist revolution"*. The result was a civil war in Finland and a low-intensity conflict on the Dniester (1918-1924), to use a modern term, widely used today. Finland managed to normalize its relations with the Soviet

[8] For the theoretical aspects, see also: Miroiu, A. (2005). *Balanţă şi hegemonie. România în politica mondială 1913-1989*, foreword by Mihail E. Ionescu. Bucureşti: Editura Tritonic, pp. 67-77; Walt, S.M. (2008). *Originile alianţelor*, translated by Camelia Boca, introductory study by Şerban Cioculescu. Iași: Institutul European.

state through the Treaty of Tartu (Dorpat) (14 October 1920) (Dragomir, Miloiu, pp. 223-224).

Romania had a series of talks with Soviet Russia in various capitals to resume diplomatic relations, but they were not completed (Cojocaru, 2018). It was only in 1934, with a delay of 15 years compared to Finland, that this stage was reached (*Romanian-Soviet Relations, Documents*, vol. I, 1917-1934, 1999, pp. 248-150). Both countries, however, remained at war with the Third International (the Comintern), created in March 1919 as a world communist party, with the mission of leading the international proletariat to the victory of the *"world communist revolution"*. Moscow used, with relative success, the communist parties (considered sections of the Comintern) of the two states, which became, from the very moment of their establishment, instruments in the hands of the Soviet Union.

Finland was placed on a secondary strategic direction, with only the south of its territory being of greater interest to Russia. The peace with Finland did not entail great geopolitical and geostrategic losses for Moscow, while the renunciation of Bessarabia, by recognizing the unification with Romania, meant a postponement of the achievement of a very important goal. This fact influenced, in a decisive manner, the Romanian-Soviet relations throughout the interwar period.

The Romanian state was located on the strategic axis that led to the Balkan Peninsula, to the Straits (in particular), and to the Eastern Mediterranean. The domination of these regions has been one of the most important goals of Russian diplomacy since the end of the 17th century.

On the other hand, Finland was placed on a secondary strategic direction, with only the south of its territory being of greater interest to Russia. The peace with Finland did not entail great geopolitical and geostrategic losses for Moscow, while the renunciation of Bessarabia, by recognizing the unification with Romania, meant a postponement of the achievement of a very important goal. This fact influenced, in a decisive manner, the Romanian-Soviet relations throughout the interwar period.

Other significant differences between the two countries were added. Romania was, in those years, part of the French security system, along with other neighbours – Poland and Czechoslovakia. At the same time, two other neighbours – Hungary and Bulgaria – were pursuing a revisionist policy, and the relations with Germany, especially after the Nazis came to power, were tense.

Finland, however, apart from its powerful eastern neighbour, did not have such problems with Sweden, although the linguistic dispute cast a shadow on bilateral relations.

Despite the geographical distance and the lack of traditions of knowledge and cooperation, Romania and Finland proceeded to mutual recognition and establish diplomatic relations, although their course was a winding one.

In the period between the two world wars, Romania and Finland, starting from their geopolitical position and their own potential, which highlighted similarities and differences, sought to ensure their security and promote their interests abroad in a specific manner, without collaborating too intensely. From this point of view, the efforts of the ruling class in Bucharest and Helsinki were, to a large extent, parallel.

Along with the multilateral formulas of international cooperation, such as, for example, the League of Nations, and the relations with the great powers, especially with the neighbouring or close ones (USSR, Germany), the Romanian and Finnish diplomacies promoted, with particular degrees of intensity, the idea of regional security arrangements.

Materializing such an orientation, the Romanian diplomacy conformed to the principle summarized by Nicolae Titulescu: *"From the national, through the regional, to the universal"*. Throughout the interwar period, the dimension of regional cooperation in Romania's foreign policy was an important component, concluding, in the early 1920s, the alliance with Poland and the Little Entente.

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The alliance with Poland, concluded on 3 March 1921, was of particular importance, because it protected the eastern border against an unprovoked attack by the Soviet Union, the most dangerous opponent of the two countries[9]. That was also the reason why the alliance was improved or renewed several times. The first time,

[9] The alliance between Romania and Poland benefits from a consistent bibliography, of which we note: Popescu, M.C. (2001). *Relațiile militare româno-polone în perioada interbelică*. Editura Sigma; Anghel, F. (2008). *Construirea sistemului "Cordon Sanitaire". Relații româno-polone 1919-1926*, 2nd ed. Târgoviște: Editura Cetatea de Scaun; *Despre relațiile polono-române de-a lungul timpului în anul Centenarului Independenței Poloniei și Marii Uniri a României* (2019). Suceava; Hrenciuc, D. (2020). *Patriarhul Miron Cristea vs relațiile româno-polone în anii '30. Contribuții.* Cluj-Napoca: Editura Mega; Nowak, K., Walczak, H. (2020). *Jeden naród o dwóch sztandarach. Przymierze polsko-rumuńskie(1919) 1921-1926. Dokumenty i materiale/Un singur popor cu două drapele. Alianța polono-română (1919)1921-1926*. Warsaw; *România și Polonia: un secol de alianță/Romania and Poland a Century of Alliance. Documente/ Documents*, coordinators: Rîjnoveanu, C.-S., dr., Pavelescu, Ș., dr. (2021). București: Editura Militară; *România și Polonia în avanpostul securității europene. Tradiție și continuitate (1919-2022),* coordinators: Prisăcaru, D., Otu, P., Iorgulescu, M. (2023). București: Editura Militară, Centrul Tehnic-Editorial al Armatei.

it took place on the occasion of Józef Pilsudski's visit to Romania (14-16 September 1922), during which the chiefs of the two staffs, Generals Constantin Christescu and Tadeusz Rozwadovski, signed a new military convention. Compared to the previous document, only Article 1 was modified, which specified that, if one of the signatories was attacked, under conditions that constituted a *casus belli*, the untacked state undertook to enter the war immediately.

On 26 March 1926, the Foreign Ministers of the two countries, I.G. Duca and Józef Wielowiejski, signed the *Treaty of Guarantee between Romania and Poland,* which meant a renewal of the 1921 one. On the same occasion, a Technical Arrangement was signed that resumed the provisions of the 1922 convention. It is worth noting that the political treaty established the formula *erga omnes*, but it was no longer found in the military convention, which established the granting of assistance only against an unprovoked attack from the east. The duration of the treaty was five years, and it could be denounced after two years, with six months' notice.

In the middle of the fourth decade, namely in the period 1932-1936, the Romanian-Polish alliance went through difficult, tense moments. First of all, there was the failure to conclude the Romanian-Soviet non-aggression pact, for which Poland, together with France, put great pressure on Bucharest.

At the expiration of the validity period, the Romanian-Polish alliance was renewed. The event took place on 15 January 1931, in Geneva, the documents being signed, on the Romanian side, by Prime Minister Gh.G. Mironescu, and on the Polish side, by Foreign Minister August Zaleski. According to the Treaty of Guarantees, which reproduced for the most part the Convention of 26 March 1926, Poland and Romania undertook to respect each other and to maintain their territorial integrity and political independence against any aggressor, the formula *erga omnes* finding a more nuanced expression.

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Then, it was the policy promoted by Nicolae Titulescu, of rapprochement with the Soviet Union, which is circumscribed to the Paris-Prague-Moscow triangle. That option worsened bilateral relations because, if successful, Poland, which was in dispute with Czechoslovakia over the Teschen region, would have been left alone between Germany and the USSR. There were also the personal rivalries between Nicolae Titulescu and Józef Beck, which amplified the misunderstandings. Basically, in the years 1932-1936, the alliance functioned with great difficulty. A sign of the mentioned tension, unprecedented in relations with the neighbour to the north, was the fact that, in 1936, the General Staff, within the framework of strategic planning, elaborated, for the first time, an operations plan against Poland (*Romanian Military Strategy in the Modern Era*, 1999, p. 119). After the removal of Nicolae Titulescu from the position of Minister of Foreign Affairs, relations were revived, but they did not reach the levels of the first interwar decade.

It should also be mentioned that Romanian diplomacy did not give up on Take Ionescu's older plan, that of achieving an alliance of the countries of the Ponto-Baltic isthmus, which would include Finland, the Baltic States, Poland, Romania and, possibly, Greece and Turkey.

In the instructions given by Nicolae Titulescu to Raoul Bossy on his departure for Helsinki, he asked him to carefully follow the formula of a bloc of the Baltic neighbours of the Soviet Union: *"It is a very delicate place because of Finland's proximity to Russia and the forming of the Baltic Entente. That is why*, Titulescu told him, *we need a balanced man like you there, all the more so, since we will soon enter into official relations with the Soviets".* (Bossy, 1993, p. 231). The guideline was that *"the block should be enlarged, so that Romania can also participate in it*". (Ib., p. 236). Bossy will closely follow the evolution of the *"Baltic Entente"*, but the connection with Romania will not be achieved.

The Romanian-Polish alliance fell apart, without being able to enter into force, as a result of the Ribbentrop-Molotov Pact (Mareș, 2010). On 1 September 1939, Poland was attacked by Germany, in which case Romania had no obligation. On 17 September 1939, the Soviet Union also attacked the Polish state, already defeated by the Wehrmacht. According to the contractual provisions, Romania was supposed to provide assistance, military included, to its former neighbour to the north. But at that time, Poland no longer existed as a state, and the Polish authorities did not even ask for the agreement to be implemented. On the night of 17 to 18 September 1939, the high Polish authorities (president, government, supreme commander

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of the armed forces) crossed into Romania. Another 100,000 citizens (60,000 military and 40,000 civilians) followed them in the coming hours and days[10].

Another very important alliance, also created at the beginning of the ’20s and which continued to function in the fourth decade of the last century, was the Little Entente, made up of Romania, Yugoslavia and Czechoslovakia (Ionescu, 1921; Campus, 1997; *România și Mica Înțelegere. Alianța defensivă la centenar/Romania and the Little Entente. The defensive alliance at the centenary*, 2021). In the evolution of this regional alliance, a significant event was the signing, on 16 February 1933, in Geneva, of the Organization Pact. On behalf of Romania, the document was signed by Nicolae Titulescu, on behalf of Czechoslovakia, by Eduard Beneš, and on behalf of Yugoslavia, by Bogoljub Jevtič.

According to Nicolae Titulescu, the Organization Pact transformed the Little Entente into an important actor on the European scene, giving it the character of a unified international body. As if foreseeing the future evolution of events, Titulescu offered the spiritual leadership of the reorganized Little Entente to Italy, but Benito Mussolini refused the offer.

The pact provided for the creation of a Permanent Council, composed of the foreign ministers of the three countries (or special delegates), as the governing body of the common policy, the decisions being taken unanimously. The Council met at least three times a year and could decide that the representation or defence of the point of view of the Little Entente, in various matters of international life, should be entrusted to a single delegate. It also stipulated the establishment of an Economic Council to coordinate the economic policy of the three countries, a permanent secretariat, with headquarters for one year in the capital of the incumbent president. It also had a permanent section at the League of Nations. Also, the existing military conventions between the three partners were extended indefinitely.

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[10] Poles in Romania after 1939 (1996). Craiova, *Polscy Uchodźcy w Rumuni 1939-1947. Dokumenty z Naraodowych Archiwów Rumunii/Polish refugees in Romania 1939-1947. Documents from the National Archives of Romania (2013). Warsaw, Bucharest etc.*

The worsening international situation affected the functionality and viability of the Little Entente. Yugoslavia, led by the government of Milan Stoiadinovič (1935-1939), began to detach itself from its alliance partners. Responding to pressure from Berlin and Rome, Yugoslavia concluded the Treaty of Friendship and Non-Aggression with Bulgaria (24 January 1937) and then the Treaty of Friendship and Neutrality with Italy (25 March 1937). The two treaties were appreciated in Romanian historiography as the first steps on the road to the disintegration of the Little Entente (cf. Retegan, 1997, p. 122).

The Czechoslovak crisis of 1938-1939 sanctioned the death of this regional defensive organization. In the report 1293/27 October 1938, the 3rd Operations Section of the General Staff showed that the Little Entente, although formally not disbanded, was, in fact, non-existent due to the amputation of Czechoslovakia (AMNR, Collection 948, 3rd Operations Section, file no. 455, p. 7). There was a sad truth – *“a sure lesson from recent events is that the value of alliances and military political commitments in peacetime are very relative”* (Ib., p. 11). The dissolution of Czechoslovakia, in mid-March 1939, determined the cessation of the existence of the Little Entente, which, for almost two decades, was a priority for Romanian foreign policy.

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In the fourth decade, Romania completed its system of regional alliances by creating the Balkan Entente[11]. On 9 February 1934, the foreign ministers of Greece, Yugoslavia, Romania and Turkey signed the Balkan Entente Pact in Athens. For Romania, the importance of the new alliance must be seen in the light of the problem of ensuring security on the eastern border. It was hoped that Turkey, through the good relations it had with the Soviet regime, would succeed in smoothing the way for a Romanian-Soviet agreement. The first two articles defined the essence of the organization. Article 1 stated: *“Romania, Turkey, Yugoslavia and Greece mutually guarantee the security of all Balkan borders”.* (Titulescu, p. 398). The second article

[11] This regional alliance has benefited from consistent analyses, among which we mention: Popişteanu, C. (1971). *România şi Antanta Balcanică. Momente şi semnificaţii de istorie diplomatică.* Bucureşti: Editura Politică; Campus, E. (1972). *Antanta Balcanică.* Bucureşti: Editura Academiei R.S.R.; Idem (1980). *Din política externă a României 1913-1947.* Bucureşti: Editura Politică; Calafeteanu, I. (1980). *Diplomaţia românească în sud-estul Europei 1939-1940.* Bucureşti: Editura Politică; Oşca, Al., Nicolescu, Gh. (1994). *Tratate, convenţii militare şi protocoale secrete, 1934-1939.* Piteşti: Editura Vlasie; Oşca, Al. (2024). *Pactul Balcanic. Acțiune diplomatică și cooperare militară*. București: Editura *Ștefadina* etc.

read as follows: *"The High Contracting Parties undertake to consult on the measures to be taken in the event of eventualities which may affect their interests, as defined by this Agreement. They undertake not to take any political action towards any other Balkan country which is not a signatory to this Agreement without prior mutual consent and not to take any political obligation towards any other Balkan country without the consent of the other Contracting Parties"* (Ib.).

The pact was accompanied by an *"annex protocol",* which was part of it. The document contained references to the non-aggressive character of the alliance, to the possibilities of putting the provisions into practice, to the conclusion of military conventions, to the maintenance of the *territorial status quo* (Ib., pp. 399-401).

Romania considered that the new alliance should be a continuation of the Little Entente, in order to secure the rear and flanks of the Romanian strategic device, which would have been engaged with the main forces towards the centre of Europe. Yugoslavia shared the Romanian vision, but was preparing to inaugurate a new course, through agreements with Germany and Italy. Turkey appreciated the Balkan Entente in strictly regional terms, being practically in conflict with the Romanian thesis.

Particularly important to Romania was the secret annex to the pact, which largely shattered illusions about securing the eastern border. At the time of signing, Tevfik Rüstü Bey, Turkish Foreign Minister, made the following statement: *"On behalf of the Government of the Republic of Turkey, I have the honour to declare to you that under no circumstances will Turkey be considered as engaged to take part in any acts directed against the Union of the Soviet Socialist Republics"* (Ib., p. 401).

In the activity of the organization there are three major periods. The first of them is chronologically fixed from its establishment to the middle of 1936, in which an attempt was made to harmonize the multiple controversies between the members of the alliance. The Turkish reserve was joined by that of Greece, which announced that *"it cannot, under any circumstances, in the execution of the commitments assumed by the pact, wage war against one of the great powers"* (Oșca, Nicolescu, p. 120).

The visions of the four allies were different. Romania considered that the new alliance should be a continuation of the Little Entente, in order to secure the rear and flanks of the Romanian strategic device, which would have been engaged with the main forces towards the centre of Europe. Yugoslavia shared the Romanian vision, but was preparing to inaugurate a new course, through agreements with Germany and Italy. Turkey appreciated the Balkan Entente in strictly regional terms, being practically in conflict with the Romanian thesis.

Finally, Greece had an even smaller strategic vision, its main concern being to avoid a war with Italy.

The second stage, that of effective military collaboration, was until the end of 1938. During this period, the military conventions were concluded – first the tripartite one (6 November 1936), between Romania, Yugoslavia and Turkey, and then the fourfold (quadripartite) one, concluded on 10 November 1936. During the two years, conferences of the chiefs of the general staffs and exchanges of military delegations were held, plans of operations were drawn up etc.

It should be noted that, politically, the Balkan Entente tried to accommodate itself to the new realities in Europe. The most significant moment was the signing of the Thessaloniki Agreement with Bulgaria (31 July 1938). The two signatory parties undertook to refrain from the use of armed force in their relations.

The events of the autumn of 1938 and the spring of the following year also left their mark on the relations between the partners of the Balkan Entente. In the third stage of its existence, 1938-1940, military contacts became rare, political dialogue became less consistent, and each contracting party gave priority to its specific interests. The Alliance survived the outbreak of the Second World War, but it was of no use in Romania's drama in the summer of 1940.

In the interwar years, Romania's security arrangements, seen from the perspective of regional alliances, seemed to coagulate into a perfect system. The Romanian state had to cover three strategic directions to defend, in other words, three border segments – east, west and south. That was also the order of importance established by the General Staff. Each of them was secured by a defensive alliance. In the event of an attack by the Soviet Union, the alliance with Poland came into force. If Romania endured an aggression on the western border, it automatically enjoyed the protection of the Little Entente. Finally, a possible attack by Bulgaria determines the materialization of the Balkan Pact.

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Theoretically, the model was almost infallible, but, faced with the dramatic evolution of the international situation, it did not work. As a result, Romania remained politically and militarily isolated, which facilitated its dismemberment in the summer of 1940.

Romania's regional alliances in the interwar period, their lack of efficiency in terms of ensuring security, brings into question an important principle in international relations – the impossibility of small and medium-sized countries to achieve lasting alliances on their own. The Convention with Poland, the Little Entente and the Balkan Entente were formed without the participation of a great power. That was also their great weakness, because they could be *"played"* by the important actors of the international scene.

Unlike Romania, which had also based its security on promoting regional cooperation, Finland had been very reluctant to such an idea. The political circles in Helsinki, regardless of the political colour, considered that it was counterproductive, from the perspective of security interests, to join blocs of states opposed to each other. Finland therefore rejected the idea of a Baltic alliance, led by Poland, the Parliament refuting the agreement concluded by Rudolf Holsti in Warsaw.

The alliance with Poland was burdened by its problems with Germany. Under the Little Entente, Czechoslovakia had great difficulties with the same Germany, and Yugoslavia with Italy. In the Balkan Entente, the interests of the members were equally divergent. Turkey wanted to avoid any confrontation with the Soviet Union, and Greece with Italy.

By virtue of its obligations, although it had no territorial disputes with Germany and Italy, Romania took upon itself the enmities of its allies. Conversely, it did not benefit from effective protection against the most dangerous adversary – the Soviet Union. Neither Czechoslovakia nor Yugoslavia made any commitment in that regard, and Turkey explicitly stated, at the time of signing the Pact, that it did not want a conflict with the Soviet Union. From this point of view, both alliances – the Little Entente and the Balkan Entente – proved ineffective.

There is also another important aspect – the lack of strong support from Great Britain and France, the guarantors of the Versailles system. They regarded those regional organizations as mere instruments for achieving their interests. As they changed, more than once, during the interwar period, the support fluctuated from stage to stage, ending up being ignored. It was the case of the Little Entente, a member of it, Czechoslovakia, being amputated in Munich, without the alliance being consulted. In that case, the great powers practiced security by compensation, the restoration of the understanding between them being made at the expense of a smaller country.

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However, Finland continued to cooperate with the Baltic States[12]. In 1925 a new Baltic conference was organized in Helsinki, during which, at the proposal of the Finnish delegation, the text of a convention of conciliation and arbitration between the five Baltic states was drafted. Basically, the provisions of the Geneva Protocol of 20 October 1920, which stipulated the recourse to arbitration for all disputes between the signatories, except for territorial problems, were expanded at regional level. It was the first concrete result of the collaboration of the countries of the Baltic region, although it should be mentioned that Latvia did not ratify the agreement (AMAE, Special Files Collection, file no. 185, p. 65)[13].

The Fourth Baltic Conference was to be prepared by Estonia, which wanted to push things further and complete the Helsinki Agreement with a solemn pact, which followed the fundamental obligations of the League of Nations Pact. It was also intended to institutionalize the conference of the Baltic countries, their representatives to meet every two years. Participation was open to any state, subject to the consent of the signatory governments. The Estonian project was opposed by several states, including Finland, so that, by the beginning of the fourth decade, the *"Baltic Entente"* was out of the sphere of concern of the diplomats in this region (National Archives, Council of Ministers Collection, file no. 15(83)/1937, pp. 37-38).

In the 1930s, Finland maintained its option of non-employment in regional formulas, but there were some mutations compared to the previous period. The country was faced with two possibilities – to commit to a Baltic Entente or to turn to the Scandinavian bloc, made up of Sweden, Norway and Denmark.

In the 1930s, Finland maintained its option of non-employment in regional formulas, but there were some mutations compared to the previous period. The country was faced with two possibilities – to commit to a Baltic Entente or to turn to the Scandinavian bloc, made up of Sweden, Norway and Denmark. Finland had interests in both regions, but also servitudes that fuelled fears.

[12] Between 1921 and 1926, Finland participated in 31 Baltic conferences, held in various localities (Riga, Helsinki, Tallinn, Warsaw, Moscow, Geneva) (Cf. Dragomir and Miloiu, *op. cit.*, pp. 261-262).

[13] See also the study by Dașcovici, N. (1926). *Pactul siguranței baltice, Polonia, România/ Baltic Security Pact*, Poland, Romania, in *"Societatea de Mâine"*, year III, no. 33-34, pp. 550-552. Dașcovici appreciated that: *"In the midst of external dangers and contradictory inclinations, Finland sought to make a policy of perfect balance and neutrality between the different hostile or divergent groups".*

The project of the *"Baltic Entente"* was rediscovered against the background of negative developments in international life, in which the Nazi party taking power in Germany played an important role. The most active were Latvia and Estonia, which feared both Berlin's expansionism and Moscow's pressures (AMAE, Special Files Collection, file no. 185, pp. 7-8). Lithuania viewed those initiatives with great reservations, as it was afraid that the future entente would not show solidarity with Poland regarding the city of Vilnius. After a series of negotiations and contacts, on 29 August 1934, in Riga, the treaty of understanding and collaboration between the Baltic states was concluded. The document was signed on 12 September, the same year, in Geneva (National Archives, Council of Ministers Collection, file no. 15(83)/1937, p. 40-53; AMAE, Special Files Collection, vol. 185, pp. 172-259).

From Helsinki, Raoul Bossy informed the Bucharest headquarters that, although the Finnish government had not received any official invitation, the unofficial press hastened "to recall the decision taken by Finland not to participate in any way in the attempts to achieve a Baltic Entente".

Through the very place chosen, the city that hosted the headquarters of the League of Nations, it was intended to set the framework for cooperation between the three Baltic countries. They undertook to provide political and diplomatic support in their foreign relations. A periodic conference of foreign ministers was established, which was to meet twice a year, with the president being the representative of the host country. It was also stipulated that any contentious issue should be settled amicably (Miloiu, 2003, p. 185). The Baltic Entente was open, Article 7 being worded as follows: *"This Treaty shall remain open to the accession of third States, such accession being effected only by mutual agreement of the High Contracting Parties"* (AMAE, Collection 71/Finland, 1920-1944, file no. 1, p. 179). Such a clause was inserted for the eventuality of Finland and Poland joining it.

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However, the authorities in Helsinki did not neglect relations with the Baltic countries. The strongest relations existed between Finland and Estonia, the peoples of the two countries being related, and the weakest with Lithuania.

In the years 1934-1936, Finland's ties with the Baltic States were quite close, with countless political-diplomatic, military, and cultural contacts taking place. However, the Finnish government *"does not want to give the impression that it identifies with the politics of the three Baltic states, whose interests are not the same as its own"* (Ib., p. 421). Until the end of the interwar period, although it flirted with the Baltic Entente, Finland did not join this regional organization.

The international crises of 1938-1939 determined, as in the case of the Little Entente, the considerable weakening of the Baltic Entente. The small countries in this region were *"swallowed up"* by the Soviet Union by applying the secret provisions of the Molotov-Ribbentrop Pact. The Baltic Entente illustrated, once again, the lack of viability of alliances between small states.

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A project that was much discussed in European capitals in the mid-1930s, and in which both Finland and Romania were involved, was that of the *"Eastern Pact",* called in some documents *"Eastern Locarno".* The idea belonged to Paris, namely to Louis Barthou, the foreign minister, who wanted to involve the Soviet Union into European security arrangements. The plan was completed at the beginning of June 1934, after the failure of the Conference on Disarmament[14]. It basically contained three treaties. The first of them, also called the *"A"* treaty, was a mutual guarantee between neighbours, which also included military aid, in case of aggression, between the USSR, Germany, Czechoslovakia, Poland, Latvia, Estonia and Finland, which could be joined by other states, for example, Lithuania. The second treaty, also called *"B",* was one of Franco-Soviet assistance, the USSR adhering to the Locarno Pact, and France to the Eastern one. Finally, the third document was a general declaration, according to which the first two treaties were drafted in the spirit and letter of the Covenant of Organization of the League of Nations. All three treaties were to enter into force when the Soviet Union was admitted to the Geneva forum (Duroselle, 2006, pp. 132-133).

The materialization of the mentioned project depended on the agreement of Germany and Poland, but the two countries refused to adhere to that formula. As can be seen, only Finland was among

[14] In the spring of 1934, the French dignitary made a trip to a number of Eastern states, visiting, among others, Poland (April) and Romania (2-23 June).

the countries that were to be part of the future security arrangement, Romania being excluded.

Nicolae Titulescu claimed the merit of having introduced Romania into the envisaged *"Eastern Locarno",* using, among other things, the good offices of E. Beneš, the Minister of Foreign Affairs and future President of Czechoslovakia (Titulescu, 1994, pp. 118-119).

As for Finland's membership of that European security arrangement, the authorities in Helsinki viewed the French initiative with distrust. *"The Finnish government"*, Raoul Bossy said in September 1934, *"maintains its attitude without hesitation: it refuses to participate in the pact, considering that this formula would not offer it any new element of security, but could, on the contrary, drag it into conflicts that do not concern it"* (AMAE, Collection 71/Finland, 1920-1944, file no. 1, p. 159). However, the same diplomat notes that the interest and passion with which the public opinion and the press commented on the initiative to create the Eastern Pact demonstrated that, contrary to the official attitude, Finland viewed it with interest (Ib., p. 161). The formula of the *"Eastern Pact",* after its rejection by Germany and Poland, left the sphere of interest of the two diplomacies.

Nicolae Titulescu claimed the merit of having introduced Romania into the envisaged "Eastern Locarno", using, among other things, the good offices of E. Beneš, the Minister of Foreign Affairs and future President of Czechoslovakia.

If Finland viewed the Baltic Entente with great reservations, refusing to take part in the project, the same cannot be said about the Scandinavian collaboration, where the Helsinki authorities were much more active. The importance of cooperation with the Nordic countries increased as the League of Nations lost its credibility.

But this orientation in Finland's foreign policy also ran into quite great difficulties. In the first place, if Finland perceived the Soviet Union as the greatest danger to its integrity and looked with a certain sympathy towards Germany, Sweden felt threatened by the latter. Secondly, the problem of the Swedish minority and language became, in the middle of the fourth decade, very acute for Finnish society. In 1934, the Kivimäki government, under pressure from the unionist and agrarian parties, but especially from the nationalist movement I.K.L. (the former Lapua movement), tried to reduce the share of courses taught in Swedish at the University of Helsinki (Ib., pp. 233-244/ Raoul Bossy's report of 5 January 1935). That action practically divided Finnish society in two, and the disputes were particularly heated.

In the end, the government project was amended, *"Finnishing"* resulting in modest results.

Despite those internal and external constraints, Finland resolutely moved towards cooperation with the Nordic countries. In the autumn of 1933, it joined the Oslo Group, formed in 1930, which included Sweden, Denmark, Norway, Belgium, the Netherlands and Luxembourg. The Oslo Group had customs and trade objectives, but it also acquired an increasingly pronounced political character. After all, the member states, through close cooperation, hoped to strengthen their neutrality (Hentilä, Jussila, Nevakivi, 1999, p. 230). Finland also participated, for the first time, in the autumn of 1934, in the Stockholm meeting of the foreign ministers of the Nordic countries.

During the summer of 1935, the Finnish government led by Kivimäki obtained the agreement of the political parties in the country, with the exception of the I.K.L., for close cooperation with the countries of the Oslo Group. As an expression of this orientation, political, cultural and military contacts between the Scandinavian countries and Finland intensified.

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In July 1936, against the background of the Abyssinian crisis, the states of the Oslo Group published a joint declaration, in which they reserved the right to decide, each individually, whether or not to participate in the sanctions stipulated by Article 16 of the Covenant of the League of Nations.

Nor did the internal political changes of 1937, when President Per Evind Svinhufvud lost the elections to Kyösti Kallio, change the orientation towards the Scandinavian countries. The strengthening of collaboration had been achieved, among other things, by abolishing visas and introducing a travel identity card in the Nordic countries.

At the end of May 1938, during a meeting of foreign ministers, the Nordic countries signed a proclamation of joint neutrality, the content of which was based on a declaration published by the Scandinavian countries in 1912 (Ib., p. 240).

The growing tension in international relations reactivated the problem of the Aaland Islands, solved, through a compromise, by the League of Nations in 1921. In May 1937, Rudolf Holsti, the Minister of Foreign Affairs, sent to his Swedish counterpart, Rickard Sandler, a draft drawn up by the Finnish General Staff, proposing that Finland

and Sweden should coordinate their efforts to ensure the protection of the mentioned islands.

Sweden was hesitant to accept the Finnish suggestions, believing that the problem could not be solved without the Soviets. However, in July 1938, the Finnish and Swedish military authorities developed a project to defend the Aaland Islands. The intergovernmental agreement was concluded in Stockholm (hence the name *"Stockholm Protocol")* at the beginning of January 1939, the signatory on behalf of Finland being Eljas Erkko, appointed foreign minister in place of Rudolf Holsti.

In the summer of 1939, the tendency of the Scandinavian countries, mainly Sweden, to diminish cooperation with Finland in order to preserve their neutrality was evident. At the beginning of June 1939, the Swedish government declared that it was abandoning the project concerning the Aaland Islands, the reason given being the negative attitude of the USSR.

The entry into force of the Stockholm Protocol was dependent on the approval of the League of Nations and the signatory states of the 1921 agreement. To speed up its entry into force, Finland and Sweden invited the Soviets to sanction the agreement. Moscow categorically refused, although its other guarantors (Great Britain, France, Germany, Italy, Denmark, Poland, Latvia, Estonia) approved it. Paralysed by the Soviet Union's categorical refusal, the League of Nations abstained from any decision.

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At the same time, Sweden proved to be extremely cautious about war material. After long and arduous negotiations, the government in Stockholm accepted, in August 1939, by virtue of the principle of reciprocity, to cede to Finland or another Nordic country the surplus of its arms production. The condition was that the host country commit to remaining neutral in the event of war.

The outbreak of the Second World War, on 1 September 1939, left Finland without the protective shield of the Oslo Group, without the support of the Scandinavian countries, especially Sweden. As in the case of Romania, Finland's regional security arrangements had no value at critical moments. Both countries remained at the discretion of the Soviet Union and Germany. The consequences were devastating.

CONCLUSIONS

Romania and Finland, in their political and territorial conformation in the interwar period, were among the small states, although there were certain differences between them. Finland's area was larger than Romania's. Romania, on the other hand, was a much larger state than Finland in terms of population and economic and military potential. However, both had a subordinate role in relation to the great actors of international life of the time – Great Britain, Germany, France, Italy, the Soviet Union, the USA.

The fundamental problem was to ensure the security through which to achieve survival as state entities. That goal was set with particular acuity in the fourth decade, a period in which the Versailles system entered a deep crisis from which it would never be able to escape. Therefore, in Helsinki and Bucharest there was a certain feverishness in the search for the most effective security arrangements.

To the challenges of an increasingly hostile international environment, the responses that the two countries tried to give have many similarities, but also quite a few differences. Both states remained faithful to the League of Nations, an organization with a universalist vocation, which had aimed to preserve international peace and stability and prevent a new world war.

To the challenges of an increasingly hostile international environment, the responses that the two countries tried to give have many similarities, but also quite a few differences. Both states remained faithful to the League of Nations, an organization with a universalist vocation, which had aimed to preserve international peace and stability and prevent a new world war. They generally supported the initiatives of the Geneva forum, which were in line with the achievement of the objectives included in the Pact. At the same time, they were deeply dissatisfied and worried by the weaknesses manifested on the occasion of the Chinese crisis and, especially, the Abyssinian crisis. However, in both capitals there were certain hopes for the revival of the organization, which, however, did not materialize.

The failure of the League of Nations forced the two countries to find new solutions. One of them was the preservation of relations with the Soviet Union (in the case of Finland) and their resumption and improvement (in the case of Romania). Moreover, Bucharest considered it opportune to rally to the French proposals and to try to conclude a treaty of mutual assistance with Moscow.

From this point of view, Finland and Romania tried the option of understanding with the most dangerous adversary, in the hope of appeasing its expansionist appetite, of facing its force of attraction. As the evolution of events showed, such a strategy was ultimately

a failure. If, in terms of relations with the eastern neighbour, there were enough similarities, in the relations with the other great powers there were some differences between Helsinki and Bucharest. Romania remained faithful to the Franco-British tandem, the belief of the Romanian ruling circles being that France and Great Britain would not abandon Eastern Europe. The Munich Agreement (29 September 1938) struck a blow to that conviction, but it was preserved until the end of May 1940.

At the same time, King Carol II and the governments of that period (Tătărescu, Octavian Goga, A.C. Cuza, Miron Cristea, Armand Călinescu) rejected Germany's advances. As the influence of Great Britain and France in South-Eastern Europe had steadily diminished since the middle of the fourth decade, Romania, together with other countries in the region, found itself at the disposal of the two great totalitarian powers.

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Finland, according to the policy of neutrality, remained outside France's European projects (*"Oriental Locarno",* the pact of mutual assistance with the Soviets etc.) and looked with some sympathy at Germany, without reaching under its tow. The result was the same as in the case of Romania, in August-September 1939, Finland being at the discretion of the political game between Stalin and Hitler.

There were significant differences between Bucharest and Helsinki in terms of regional cooperation. Romania appreciated it as an important way to promote its interests, as a credible and effective security instrument. In the interwar period, the Romanian authorities renewed the alliance with Poland, contributed to the reorganization of the Little Entente and to the creation of the Balkan Entente. But those regional organizations did not withstand the strong crises of the years 1938-1940 and succumbed, without achieving the goals for which they were created.

Finland, on the other hand, had been very reluctant about regional cooperation. It refused to join the Baltic Entente, fearing that the organization would be used by Poland to accede to the status of hegemon in the Baltic Sea. It turned to the Scandinavian group, developing a wide network of links with the states of the region, especially with Sweden.

In the moments of crisis in the autumn of 1939, however, the Nordic group was not of much use to Finland, which faced the aggression of the Soviet colossus alone. As in the case of Romania, regional security arrangements were ultimately ineffective.

That series of failures, regarding the security arrangements of Finland and Romania, which represented, on a broader level, an expression of the *"drift of Europe",* was a confirmation of the lack of geopolitical opportunity of the small states, most often forced to bear the history made by the big ones.

BIBLIOGRAPHY:

1. Alter, P. (2004). *Problema germană şi Europa*, translation: Irina Cristea, foreword: Florin Constantiniu. Bucureşti: Editura Corint.
2. Anghel, F. (2008). *Construirea sistemului "Cordon Sanitaire". Relaţii româno-polone 1919-1926* (2008), 2nd ed. Târgovişte: Editura Cetatea de Scaun.
3. AMNR/Romanian National Military Archives, Collection 948, Secţia 3 Operaţii, file no. 455, p. 1, 7, 11.
4. AMAE/Archives of the Ministry of Foreign Affairs, Collection Dosare speciale/Special Files, file no. 185, pp. 7-8 (Mihail Sturdza's report no. 142 on 28 March 1933), p. 65, pp. 172-259; Collection 71/Finland, 1920-1944, file no. 1, p. 42, p. 159, p. 161, p. 179, pp. 233-244 (Raoul Bossy's report on 5 January 1935).
5. Arhivele Naționale/National Archives, Collection Consiliul de Miniştri, file no. 15(83)/1937, pp. 37-38, pp. 40-53.
6. Baker Fox, A. (1959). *The Power of Small States: Diplomacy in World War II*. Chicago: Chicago University Press.
7. Bold, E., Ciupercă, I. (2010). *Europa în derivă (1918-1940). Din istoria relaţiilor internaţionale*, 2nd revised and updated ed., general index Alexandrina Ioniţă. Iași: Casa Editorială Demiurg.
8. Bold, E., Locovei, R.O. (2008). *Relaţii româno-sovietice (1918-1941)*. Iaşi: Casa Editorială Demiurg.
9. Bossy, R. (1993). *Amintiri din viața diplomatică (1918-1940), vol. I, 1918-1937*, Stelian Neagoe (ed. and foreword) București: Editura Humanitas.
10. Calafeteanu, I. (1980). *Diplomaţia românească în sud-estul Europei 1939-1940* (1980). Bucureşti: Editura Politică.
11. Campus, E. (1972). *Antanta Balcanică.* Bucureşti: Editura Academiei R.S.R.
12. Campus, E. (1980). *Din politica externă a României 1913-1947.* Bucureşti: Editura Politică.

13. Campus, E. (1997). *Mica Înțelegere*, 2nd ed. București: Editura Academiei Române.
14. Carr, E.H. (2011). *Criza celor douăzeci de ani (1919-1939). O introducere în studiul relaţiilor internaţionale*, translated by Cătălin Dracşineanu. Editura Polirom.
15. Casso, L. (2003). *Rusia şi bazinul dunărean*, foreword by Apostol Stan, translated from Russian and introductory study by Şt.Gr. Berechet. Bucureşti: Editura Saeculum Vizual.
16. Cojocaru, Gh.E. (2018). *Disputa sovieto-română de la Viena: 27 martie-2 aprilie 1924*. Chișinău: Editura Litera.
17. Constantiniu, L. (2010). *Uniunea Sovietică între obsesia securităţii şi insecurităţii*, foreword by acad. Dinu C. Giurescu. Bucureşti: Corint.
18. Marchizul de Custine, A.L.L. (2007). *Scrisori din Rusia. Rusia în 1839*, Pierre Nora (ed. and foreword), translated from French by Irina Negrea. Bucureşti: Editura Humanitas (classical paper for the knowledge of the Russian Empire).
19. Dașcovici, N. (1926). *Pactul siguranței baltice, Polonia, România*, in *"Societatea de Mâine"*, year III, no. 33-34.
20. *Despre relațiile polono-române de-a lungul timpului în anul Centenarului Independenței Poloniei și Marii Uniri a României* (2019). Suceava.
21. Dragomir, E., Miloiu, S. (2011). *Istoria Finlandei*. Târgoviște: Editura Cetatea de Scaun.
22. Duroselle, J.B. (2006). *Istoria relaţiilor internaţionale, vol. I, 1919-1947,* translated by Anca Airinei. Bucureşti: Editura Ştiinţelor Sociale şi Politice.
23. *Encyclopedia of World History. Crisis and Achievement 1900 to 1950*, vol. V (2008). New York.
24. Gilpin, R.G. (1981). *War and Change in the World Politics.* Cambridge: University Press Cambridge.
25. Goldstein, J.S., Pevenhouse, J.C. (2008). *Relaţii internaţionale*, translated by Andreea-Ioana Cozianu, Elena Farca, Adriana Ştraub. Editura Polirom.
26. Gray, C.S. (2010). *Războiul, pacea şi relaţiile internaţionale. O introducere în istoria strategică*, translated by Ramona Lupu. Editura Polirom.
27. Griffits, M. (2003). *Relaţii internaţionale. Școli, curente, gânditori.* București: Editura Ziua.
28. Hentilä, S., Jussila, O., Nevakivi, J. (1999). *Histoire politique de la Finlande XIXe-XXe siècle.* Paris: Fayard.
29. Hrenciuc, D. (2020). *Patriarhul Miron Cristea vs relațiile româno-polone în anii '30. Contribuții.* Cluj-Napoca: Editura Mega.
30. Ionescu, T. (1921). *Mica Înțelegere*. București: Cartea Românească.
31. Johnson, P. (2005). *O istorie a lumii moderne. 1920-2000*, translated from English by Luana Schidu, 2nd revised ed. Bucureşti: Editura Humanitas.

32. Knudsen, O.F., dr. (1995). *Analizarea securităţii statului mic: rolul factorilor externi în NATO. Ce este? Ce va fi? Noua Europa şi securitatea statelor mici.* Bucureşti: R.A. Monitorul Oficial.
33. Maass, M. (2017). *Small States in World Politics: The Story of Small State Survival, 1648-2016*. Manchester University Press.
34. MacMillan, M. (2006). *Les artisans de la paix. Comment Lloyd George, Clemenceau et Wilson ont redessiné la carte du monde*, translated from English by André Zavriew, with the support of Centre National du Livre. Paris: JC Lattès.
35. Mareș, N. (2010). *Alianța româno-polonă. Între destrămare și solidaritate (1938-1939*). București: Editura Biblioteca Bucureștilor.
36. Mihai, F.-R., Buga, V. (coord.) (2020). *Problema Basarabiei în relațiile româno-sovietice 1918-2018*, foreword by Ioan Scurtu. București: Editura Litera.
37. Miloiu, S. (2003). *România şi ţările baltice în perioada interbelică*. Târgovişte: Editura Cetatea de Scaun.
38. Miroiu, A. (2005). *Balanţă şi hegemonie. România în politica mondială 1913-1989*, foreword by Mihail E. Ionescu. Bucureşti: Editura Tritonic.
39. Mironov, Al.-M. (2013). *Vremea încercărilor. Relaţiile româno-sovietice 1930-1940*, foreword by Constantin Buşe. Bucureşti: Institutul Naţional pentru Studiul Totalitarismului.
40. Moisuc, V. (2002). *Istoria relaţiilor internaționale până la mijlocul secolului al XX-lea*. București: Editura Fundaţiei România de Mâine.
41. Morgenthau, H.J. (2007). *Politica între naţiuni. Lupta pentru putere şi lupta pentru pace*, translated by Oana Andreea Bosoi, Alina Andreea Dragolea, Mihai Vladimir Zodian. Editura Polirom.
42. Nowak, K., Walczak, H. (2020). *Jeden naród o dwóch sztandarach. Przymierze polsko-rumuńskie (1919) 1921-1926. Dokumenty i materiale/ Un singur popor cu două drapele. Alianța polono-română (1919) 1921-1926*. Polonia: Varșovia.
43. Oșca, Al. (2024). *Pactul Balcanic. Acțiune diplomatică și cooperare militară*. București: Editura *Ștefadina*.
44. Oşca, Al., Nicolescu, Gh. (1994). *Tratate, convenţii militare şi protocoale secrete, 1934-1939.* Piteşti: Editura Vlasie.
45. *Polonezi în România după anul 1939* (1996). Craiova.
46. *Polscy Uchodźcy w Rumuni 1939-1947. Dokumenty z Naraodowych Archiwów Rumunii/Refugiați polonezi în România 1939-1947. Documente din Arhivele Naționale ale României* (2013). Warsaw, București.
47. Popescu, M.C. (2001). *Relaţiile militare româno-polone în perioada interbelică*. Editura Sigma.
48. Popişteanu, C. (1971). *România şi Antanta Balcanică. Momente şi semnificaţii de istorie diplomatică.* Bucureşti: Editura Politică.

49. Rauș, N., Neacșu, Gh., Moraru, D. (2017). *O agresiune sovietică la adresa României; Tatar Bunar în documente și în presa vremii*. Târgoviște: Editura Cetatea de Scaun.
50. *Relațiile româno-sovietice, Documente, vol. I, 1917-1934* (1999). București: Editura Enciclopedică (Document no. 246).
51. Retegan, M. (1997). *În balanţa forţelor. Alianţe militare româneşti interbelice.* Bucureşti: Editura Semne.
52. *România și Mica Înțelegere. Alianța defensivă la centenar/Romania in the Little Entente. The Defensive Alliance* (2021), coordinators: Rîjnoveanu, C.-S., dr., Liciu, D., dr., Pavelescu, Ș.-L., dr. București: Editura Militară.
53. *România și Polonia în avanpostul securității europene. Tradiție și continuitate (1919-2021)* (2023), coordinators: Prisăcaru, D., Otu, P., Iorgulescu, M. București: Editura Militară, Centrul Tehnic-Editorial al Armatei.
54. *România și Polonia: un secol de alianță/Romania and Poland: a Century of Alliance. Documente/Documents* (2021), coordinators: Rîjnoveanu, C.-S., dr., Pavelescu, Ș., dr. București: Editura Militară.
55. Rothstein, R.L. (1968). *Alliances and Small Powers.* New York.
56. Serebrian, O. (2006). *Dicţionar de geopolitică*. Editura Polirom.
57. Silion, B. (2004). *Rusia şi ispita mesianică. Religie şi ideologie* (2004). Bucureşti: Editura Vremea XXI.
58. *Small states and international security: Europe and beyond* (2014), ed. Clive Archer, Alyson Bailes, Anders Wivel. London: Routledge.
59. *Small states in international relations* (2006), ed. Christine Ingebritsen, Iver Neumann, Sieglinde Gsthöl, Jessica Beyer. University of Washington Press.
60. *Small states in world politics: Explaining foreign policy behaviour* (2003), ed. Jeanne A.K. Hey. Publisher Lynne Rienner, Boulder.
61. *Strategia militară românească în epoca modernă* (1999). București: Editura Nummus.
62. Taylor, A.J.P. (1999). *Originile celui de-Al Doilea Război Mondial,* translation and notes: Lucian Leuștean, afterword: I. Ciupercă. Iași: Editura Polirom. 2nd ed. in 2022, Editura Polirom.
63. *Tatar Bunar 1924. Documente* (2024), Ion Giurcă, Liviu Corciu (eds.), București: Editura Militară.
64. Tătărescu, Gh. (1996). *Mărturii pentru istorie,* Sanda Tătărescu-Negroponte, (ed.), Nicolae-Şerban Tanaşoca (foreword). Bucureşti: Editura Enciclopedică.
65. *The Concept of the State in International Relations, Philosophy, Sovereignty and Cosmopolitanism* (2015), ed. Robert Schuett, Peter M.R. Stirk. Edinburgh: Edinburgh University Press.
66. Titulescu, N. (1994). *Politica externă a României 1937*, George C. Potra, Constantin Turcu, Ion M. Oprea (eds.). București: Editura Enciclopedică.

67. Ţâcu, O. (2004). *Problema Basarabiei şi relaţiile sovieto-române în perioada interbelică (1919-1939*). Chişinău: Editura Prut Internaţional.
68. Vasquez, J.A., Elman, C. (2012). *Realismul şi balanţa de putere*, translated by Crisia Miroiu. Editura Polirom.
69. Walt, S.M. (2008). *Originile alianţelor*, translated by Camelia Boca, introductory study by Şerban Cioculescu. Iaşi: Institutul European.
70. Watz, K.N. (2006). *Teoria politicii internaţionale*, translated by Nicoleta Mihăilescu, introductory study Lucian-Dumitru Dîrdală. Editura Polirom.
71. Wight, M. (1998). *Politica de putere,* Hedley Bull, Carsten Holbraad (eds.), Tudor Florin (trans.). Bucureşti: Editura Arc.
72. www.diplomacy.edu, retrieved on 22 August 2022.

ROMANIAN MILITARY THINKING

NUCLEAR AND RADIOLOGICAL TERRORISM: THREATS TO (INTER) NATIONAL SECURITY

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The study presents a general perspective on the evolution of the weapons of mass destruction. The atomic bomb, which emerged in the context of the Second World War, ceased to be, shortly, the monopoly of a single power. There are two known cases of atomic bombings – on Hiroshima and Nagasaki –, which resulted in Japan's exiting the second world conflagration.

Nuclear bombs have never been used since then, which is explained by the fact that the great powers have realized that the implementation of these weapons would lead to a planetary disaster in which they would have no strength to gain. The tendency of a terrorist organization to seize nuclear bombs further jeopardizes international security.

In the context of the outbreak of the Russian-Ukrainian war in February 2022, a unique situation in history occurred, when foreign armed forces occupied a nuclear power plant, thus threatening the entire global security system.

Keywords: terrorism; nuclear weapons; Ukraine; radiology; Russian Federation;

HISTORICAL MILESTONES

Terrorism continues to be one of the great scourges of contemporaneity. The aim of terrorism is to generate states of intimidation, anxiety, neutralization, and assassination (Văduva, 2002, p. 4), regardless of its physiognomy (informational, media, cyber, financial, religious etc.). Nuclear and radiological terrorism represents one of the recurring global problems. It poses a direct and indirect threat to most of the Earth, resulting in inherent consequences in all areas.

Humanity experienced a new phase of threats that was previously unknown to history in the middle of the 20th century. We are talking about weapons of mass destruction, the use of atomic bombs, equipped with a device that releases in an explosive manner the nuclear energy formed by fissile materials (plutonium, uranium) and triggers a chain reaction, uncontrolled and manifested by a large amount of heat and radioactive dust, thus producing great material and human destruction. The first controlled nuclear fission experiment took place in December 1942. In August 1944, the *"Manhattan Project"* started producing nuclear weapons in Los Alamos, New Mexico. It took a year to complete and two million dollars were invested. The USA had three atomic bombs designed and produced by a mix of Anglo-American-Canadian teams.

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The first atomic bomb was tested on 26 July 1945, at Alamogordo (New Mexico, USA). The other two bombs were used to force the Japanese to capitulate in the Second World War, not knowing that other bombs did not actually exist. On 6 and 9 August 1945, atomic bombs were dropped on Hiroshima and Nagasaki, which worked through uranium fission, plutonium being used only subsequently. The two weapons of mass destruction killed 150,000 people and more suffered from radiation. It prompted Japan's exiting the war, which led to the completion of the second world conflagration.

The atomic bomb has become a force reality for the superpowers of the world. On 11 June 1945, James Franck, Nobel Prize laureate

in Physics (1925), warned US authorities that the USA atomic monopoly could last only a few years and was in favour of avoiding the use of the bomb against Japan. The USA lost the monopoly of the atomic bomb in 1949 when the USSR created its own weapon of mass destruction. On 3 October 1952, Britain detonated the first atomic bomb in Australian waters. France has owned atomic bomb since 1960, and China since 1964. Subsequently, India (1974), Pakistan (1998), Israel and North Korea (2006) also became nuclear powers.

The hydrogen bomb is an even more powerful nuclear weapon than the atomic one. It was first obtained by the United States of America in 1952 as a weapon of mass destruction created by the nuclear fusion of hydrogen isotopes. It soon came into possession of the USSR (1953), United Kingdom (1957), China (1967), and France (1968). It was never used during the Cold War, but it became a symbol of the apocalypse. Another element of the total disaster became the neutron bomb, a weapon with increased radiation. The power of this bomb is that it kills people, leaving the buildings untouched. In 1977, the USA obtained a more powerful weapon, the hydrogen bomb with beryl, which increases radioactive power. In the mid-80s, the Soviet nuclear arsenal was double that of the USA.

The disaster at Chernobyl Nuclear Power Plant, on 26 April 1986, brought a major change in the public's perception of the major consequences of Europe's most disastrous ecological calamity in the history of nuclear power generation, being estimated at the highest level – the seventh.

The disaster at Chernobyl (Ukraine today, then part of the Soviet Union) Nuclear Power Plant, on 26 April 1986, brought a major change in the public's perception of the major consequences of Europe's most disastrous ecological calamity in the history of nuclear power generation, being estimated at the highest level – the seventh. The amount of radioactive material spread in the atmosphere was 200 times higher than that of Hiroshima and Nagasaki (Xenofontov, 2011, pp. 70-71; Bandi, 2023, pp. 94-103).

The nuclear bomb prefigured the political situation during the Cold War. The consequences that the nuclear weapon could have triggered were the main barrier that stopped the decision-maker from implementing them. It was realized that activating the weapon of mass destruction would not create the victorious and defeated dichotomy, but would set up a disastrous scenario for all mankind.

At the end of the Cold War, the United States of America and the Russian Federation, which had the largest number of nuclear warheads, worked together to remove and secure the remaining nuclear weapons in the former Soviet territory. According to researcher Eliza Gheorghe,

the major powers (USA, Russian Federation and China) tended to stop nuclear proliferation by limiting transfers and fixing safeguards on nuclear technologies. This activity has been marked by two structural factors: *the overall distribution of power* and *the intensity of the security rivalry between them*. The more intense the rivalry between the major powers in the bipolar and multipolar system is, the less effective the limitation of proliferation could be (Moniz, 2023, pp. 5-6; Gheorghe, 2019, pp. 88-127).

THE ISSUE OF PROPER ADMINISTRATION AND USE OF NUCLEAR PRODUCTS

The pressing problems facing the world's states lie in the proper administration and use of nuclear products. Similarly, it is important to combat nuclear terrorism, illicit trafficking of nuclear materials by strengthening an international nuclear safety insurance structure.

From a technological perspective, the creation of a nuclear bomb is a difficult problem for terrorist groups, but not an impossible one. Between 1990 and 2010, 18 cases of nuclear material theft were known. Several attempts by the al-Qaeda terrorist organization to acquire nuclear material or nuclear expertise were found (RRA, 2010). A threat to global security is the possession of nuclear products by terrorist organizations such as the Islamic State. Currently, nuclear security threats are intensifying – from theft and sabotage to powerful storms, fuelled by climate change, political instability and war, thus emphasizing the need to protect nuclear facilities and materials in the world.

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The 2016 Nuclear Threat Initiative (NTI) report considers Pakistan, India, Israel, Iran and North Korea as states with poor nuclear material safety and high sabotage attempts. The 2023 NTI index reveals a number of worrying problems related to the evolution of events. States and areas with nuclear materials for military purposes and nuclear installations had made almost no progress since 2020 towards improving the security culture and preventing threats from within; plutonium stocks in civilian nuclear power plants that could be used for military purposes had increased rapidly; in 34% of the countries and areas with nuclear facilities there were no regulatory requirements in place to protect nuclear infrastructure in the event of a natural or man-made disaster; in the same countries and areas, the support

for political and legal measures to improve security was declining; minimal progress had been made in securing radioactive sources against those that could steal them to build dirty radioactive bombs (Moniz, p. 6).

NUCLEAR WEAPONS POSSESSORS: CURRENT STATE

If, at the end of the 80s, more than 50,000 nuclear warheads were accumulated on Earth, in 2023, according to the international organization *Nuclear Threat Initiative/NTI*[1], it was found that the number of nuclear weapons in the world was 13,100 (https://www.nti.org/area/nuclear/).

At the beginning of 2024 it was estimated that the nine nuclear states (USA, Russian Federation, United Kingdom, France, China, India, Pakistan, North Korea and Israel) jointly owned 12,121 nuclear weapons, of which 9,585 were considered to be on high alert; 3,904 of those warheads were active, including about 2,100 on high alert.

According to data provided by the Stockholm Peace Research Institute, at the beginning of 2024 it was estimated that the nine nuclear states (USA, Russian Federation, United Kingdom, France, China, India, Pakistan, North Korea and Israel) jointly owned 12,121 nuclear weapons, of which 9,585 were considered to be on high alert; 3,904 of those warheads were active, including about 2,100 on high alert. Most nuclear weapons resources are owned by the Russian Federation (5,580) and the USA (5,044), and the smallest – North Korea (50) (Sipri Yearbook 2024, p. 12). It is estimated that 22 other countries have nuclear materials that are usable as weapons, potentially vulnerable to theft (NTI, 2024).

From a quantitative perspective, there is a reduction in the number of nuclear warheads in the world. It is due to the fact that the USA and the Russian Federation initiated an extensive process of dismantling end-of-life nuclear warheads. From a qualitative point of view, however, we note that both the USA and the Russian Federation are undertaking extensive and expensive actions to replace and modernize nuclear warheads, systems for launching missiles, aircraft and submarines, as well as nuclear weapons production facilities. China's nuclear weapons arsenal is expected to continue to grow over the next decade. China will have more intercontinental ballistic weapons than Russia or the USA. However, China's total stockpile of nuclear warheads is still much lower than that of Russia or the USA. China currently has 410 nuclear weapons. Similarly, India, Pakistan, the United Kingdom tend to increase their nuclear weapons stockpiles. North Korea's

[1] The *Nuclear Threat Initiative/NTI* is a global nonprofit security organization focused on reducing nuclear and biological threats that are endangering humanity (A.N.).

nuclear program remains a pillar of its nuclear policy. In 2022, North Korea conducted more than 90 ballistic missile tests, the highest rate of testing in a single year. Israel maintains its policy of *"nuclear ambiguity"* by not disclosing the exact number and characteristics of its nuclear weapons (Sipri Yearbook, pp. 12-13).

DIALOGUES ON STRATEGIC NUCLEAR SAFETY ISSUES

From an institutional perspective, international organisations in the field are expected to respond to global challenges to nuclear safety. International Atomic Energy Agency (IAEA), established in 1957 (Thomas, 2002, p. 27), is the leading global institution with the mission to prevent nuclear proliferation and aims to initiate actions to prevent nuclear threats to humanity. Unfortunately, in recent years, it has been a reduction in support for the role played by the IAEA in strengthening the global framework for nuclear safety and security. To meet global challenges of managing threats on the nuclear terrorism dimension, the UN has initiated a number of conventions in the field.

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Periodically, on the agenda of international fora, the subject of nuclear safety becomes a recurrent one. During the Barack Obama administration, starting in 2010, once every two years, it was organized the nuclear security summit *"A world without nuclear weapons"*. The meetings were also marked by a series of interstate communication incidents. At the first edition of the summit, Israeli Prime Minister, Benjamin Netanyahu, upset by the fact that the question of his country's suspected nuclear arsenal was to be addressed, decided not to attend the forum (RRA, 2010). In spring 2016, representatives of 53 states met in Washington at the nuclear safety summit. It is worth mentioning that the meeting was not attended by all the states that possess nuclear weapons, such as the Russian Federation and Pakistan. The former president of Romania, Klaus Iohannis, was present to the meeting. In his speech, he put a special emphasis on the security architecture of the Black Sea and announced Romania's commitments on this subject as follows: *"strengthening national capabilities for nuclear forensic investigations; improving the safety of nuclear and radioactive materials transport by implementing a pilot system for tracing the circulation and transport of radioactive sources; development and implementation of a national training course on nuclear safety culture; new voluntary contribution to the Nuclear Security Fund of the International Atomic*

Energy Agency" (CECCAR, 2016). At the same time, former head of the Romanian state wanted to specify that Romania is part of the *"limited system of states with relevant nuclear capabilities, possessing the entire nuclear fuel cycle"* (Ib.).

The importance of arms control agreements and commitments was stated at the beginning of 2022, in a joint statement by the leaders of the five permanent members of the UN Security Council (China, France, Russian Federation, United Kingdom and USA/Group 5) *"on the prevention of nuclear war and the avoidance of an arms race"*. On 3 January 2022, the five permanent members of the UN Security Council issued a joint statement on the need to prevent nuclear war. Following the invasion of February 2022, by one of the nuclear powers – the Russian Federation – over the neighbouring state – Ukraine –, a country devoid of weapons of mass destruction, it was a substantial setback in bi-and multilateral cooperation on nuclear arms control. By the end of 2022, dialogue in Group 5 countries was suspended and the communication process was limited to expert-level contacts.

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In August 2022, the international community failed to reach an agreement at the tenth conference revising the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The lack of consensus was largely attributed to the position taken by the Russian Federation. As two consecutive review conferences ended without consensus results or recommendations, the parties agreed to set up a working group to further strengthen the process of revising the nuclear Non-Proliferation Treaty before the planned conference for 2026.

NUCLEAR SECURITY IN EASTERN EUROPE AREAL

A sensitive issue of nuclear security is the eastern European space, marked by corruption, pauperization, democratic fragility, an area estimated to be one of the most vulnerable to organized crime networks, including illicit trafficking in nuclear materials and radiological sources. These vulnerabilities are intensified by the escalation of the war in Ukraine and the maintenance of the separatist regime on the left bank of the Dniester.

According to the Budapest Memorandum of December 1994, Ukraine gave up its nuclear armament inherited from the Soviet Union, estimated to be the world's third nuclear arsenal. In exchange for signing the nuclear Non-Proliferation Treaty, the USA and the UK

offered the Ukrainian state guarantees on the security of borders. The Treaty led to the exit from international isolation of Ukraine, which was ranked third in receiving foreign aid from the USA, after Israel and Egypt. Although in 1996 the Russo-Ukrainian Treaty of Friendship was signed, guaranteeing the territorial integrity of Ukraine, the Russian Federation has flagrantly violated these commitments (Plokhy, 2018, pp. 360-361). In the context of the large-scale Russian-Ukrainian war started on 24 February 2022, the Russian armed forces put under real threat the nuclear power plants in Ukraine, implicitly, endangering the entire region with a potentially devastating radiological leak.

On 4 March 2022, the world remained appalled by the fact that the Russian armed forces occupied the nuclear power plants Zaporizhzhia and Chernobyl in Ukraine. The Russian forces fired shells with powerful explosives around the Zaporizhzhia nuclear power plant, causing a plant explosion with a loss of off-site power supply. Thus, it had to rely on short-term emergency diesel generators to cool the reactors and spent fuel. Russian forces also physically and psychologically abused the Zaporizhzhia and Chernobyl personnel, degrading their ability to operate nuclear facilities safely.

In the decision to forcibly occupy Zaporizhzhia, the city with the largest nuclear power plant in Europe, Russia risked generating a large-scale radiological contamination, endangering human life and health, as well as environmental security across the region.

In the decision to forcibly occupy Zaporizhzhia, the city with the largest nuclear power plant in Europe, Russia risked generating a large-scale radiological contamination, endangering human life and health, as well as environmental security across the region.

The Russian Federation tended to use Ukrainian nuclear power plants as shelters for human resources, ammunition and for creating command posts for its troops. Similarly, it relied on controlling 60% of Ukraine's electricity production, thus directly influencing the economy of this state. The Kremlin resorted to blackmailing European states with possible radioactive leaks, to discourage their support of Ukraine (Nițulescu). It should be noted that Zaporizhzhia is included by the Russian Federation in the plan of secession of Ukraine in the buffer state of Novorossiya, a recital that would have allowed Russians to have access to land in Crimea and the districts to the left of the Dniester (Plokhy, p. 378). Currently, the nuclear power plant in Ukraine no longer produces electricity, being a military base of Russian troops.

For the authorities and personnel of nuclear facilities in Ukraine, the war has created unprecedented challenges in terms of nuclear safety and safeguards. Never before have nuclear power stations been

subjected to artillery or missile bombardments from a belligerent state or occupied by military forces. It was a situation few had anticipated, because nuclear facilities were not designed to defend against armed intervention or to operate safely in a war zone. The military conflict has undermined nuclear safety and security in a number of ways, from undermining the security culture to introducing threats from a nuclear facility (The NTI Nuclear Security Index 2023, p. 42).

On 6 October 2022, the then-President Joe Biden, warned world public opinion on a *"Armageddon"* as a result of the Russian Federation's use of nuclear weapons in Ukraine. Against the background of the escalation of the Russian-Ukrainian war, the IAEA organized several missions of technical experts for Ukraine, establishing, on 13 December 2022, a permanent structure of nuclear safety experts at all four nuclear power plants in Ukraine. The IAEA also proposed a conceptual framework of *"seven indispensable components of nuclear safety"* to address threats to nuclear installations in wartime (Sipri Yearbook, pp. 14, 23).

Insecurity actions at nuclear stations in Ukraine, followed by domestic events in Russia, have raised alarm signals about the control of central authorities over the nuclear arsenal.

A fierce blow to the ecosystem of multilateral nuclear security institutions was delivered in 2022, when the global initiative to combat nuclear terrorism was suspended due to the invasion of the Russian Federation into Ukraine.

CONCLUSIONS

It is a fundamental reality that the neglect of nuclear risks in any state or area endangers global safety. A single act of nuclear terrorism would have devastating consequences from a political, economic and humanitarian perspective, which would reverberate around the world. It would also undermine civil nuclear energy and its important role in mitigating global climate change.

In this respect, it is imperative that the major powers should organize new global or regional initiatives focused on reducing the risk of sabotage or nuclear theft.

As I have mentioned in this approach, a fierce blow to the ecosystem of multilateral nuclear security institutions was delivered in 2022, when the global initiative to combat nuclear terrorism was suspended due to the invasion of the Russian Federation into Ukraine.

Thus, in the context of the large-scale escalation of the Russian-Ukrainian war started on 24 February 2022, states of anguish about the intensification of the military conflict up to the onset of a nuclear conflagration are activated.

BIBLIOGRAPHY:

1. Bandi, I. (2023). *"Iradiații deturnate": reacția conducerii politice și administrative din Ungaria la dezastrul nuclear de la Cernobîl*. In *Moldoscopie*, no. 1 (98), pp. 94-103. ISSN 1812-2566.
2. CECCAR Busines Magazine (2016). *Declarația de presă a Președintelui României, domnul Klaus Iohannis, susținută la finalul Summitului privind Securitatea Nucleară din Washington D.C., Statele Unite ale Americii*, https://www.ceccarbusinessmagazine.ro/terorismul-nuclear-noua-amenintare-mondiala-a121/, retrieved on 12 July 2024.
3. Gheorghe, E. (2019). *Proliferation and the Logic of the Nuclear Market*. In: *International Security*, 43 (4), pp. 88-127. ISSN 0162-2889.
4. Moniz, E.J. (2023). *Foreword*. In: *Falling Short in a Dangerous World*. Sixth edition. Washington, July, pp. 5-6, https://www.ntiindex.org/wp-content/uploads/2023/07/2023_NTI-Index_Report.pdf, retrieved on 14 October 2024.
5. Nițulescu, G. *Centrala nucleară Zaporojia a devenit o "bază militară rusă", potrivit unui oficial ucrainean*, https://adevarul.ro/stiri-externe/europa/centrala-nucleara-zaporijia-a-devenit-o-baza-2247373.html, retrieved on 23 September 2024.
6. *Nuclear Threat Initiative (2024)*, https://www.nti.org/area/nuclear/, retrieved on 3 October 2024.
7. Plokhy, S. (2018). *Porțile Europei. O istorie a Ucrainei*, translated from English by Smaranda Câmpeanu. București: Editura Trei. ISBN 978-606-198-324.
8. Radio România Actualități/RRA (2010). *Premierul israelian boicotează summitul de la Washington*, https://www.romania-actualitati.ro/stiri/in-lume/premierul-israelian-boicoteaza-summitul-de-la-washington-id9551.html, retrieved on 16 April 2024.
9. SIPRI YEARBOOK 2024. *Armaments, Disarmament and International Security SIPRI YEARBOOK 2024*. Summary, https://www.sipri.org/sites/default/files/2023-06/yb23_summary_en_1.pdf, retrieved on 9 January 2025.
10. *The dangers are real*, https://www.nti.org/area/nuclear/, retrieved on 24 January 2025.
11. *The 2023 NTI Nuclear Security Index* (2 July 2023). Falling Short in a Dangerous World, sixth edition, Washington, D.C., https://www.ntiindex.org/wp-content/uploads/2023/07/2023_NTI-Index_Report.pdf, retrieved on 18 September 2024.
12. Thomas, P. (2002). *Enciclopedia Războiului Rece.* București: Univers Enciclopedic. ISBN 973-9436-749.
13. Văduva, Gh. (coord.). (2002). *Terorismul. Dimensiune geopolitică și geostrategică. Războiul terorist. Războiul împotriva terorismului*. București, https://cssas.unap.ro/ro/pdf_studii/terorismul.pdf, retrieved on 23 August 2024.
14. Xenofontov, I. (2011). *Societatea postcernobâl*. In *Akademos*. Revista de Ştiinţă, Inovare, Cultură şi Artă, no. 1(20), pp. 70-76. ISSN 1857-0461.

ROMANIAN
MILITARY
THINKING

CHINA'S COGNITIVE WARFARE FOR THE PEACEFUL RECOVERY OF TAIWAN

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Cognitive warfare – controlling the behaviours and mental states of others by manipulating environmental stimuli – is becoming an increasingly common topic of interest in the global security landscape. China's cognitive war on Taiwan, following the exploitation of Taiwan's vulnerabilities and the capitalization on conflicting ones, leaves Taipei with a finite number of cognitive interventions.

Neuro-strike, a weapon in the arsenal of the People's Liberation Army, falls within the realm of intelligent warfare or Chinese algorithmic cognitive warfare. Alongside scalar weapons that use longitudinal electromagnetic energy, they have the ability to disrupt the brain functions of opponents and alter their opinions in the direction pursued by the People's Republic of China.

Keywords: Chinese cognitive warfare; intelligent warfare; algorithmic cognitive warfare; scalar weapons; Neuro-strike;

INTRODUCTION

Cognitive warfare poses a real threat to democracies by circumventing freedom of expression and spreading disinformation. While information warfare is comprised of electronic warfare, command and control warfare, psychological warfare using manipulation, information-based warfare, economic information warfare, hacker warfare and cyber warfare (Libicki, 1995), the cognitive element is essential in the information and cyber space (Hung, Hung, 2022). Public relations, propaganda and public diplomacy have also been used over time to manipulate knowledge. Information warfare aims to control the flow of information through social networks to human decision-makers, influencing them emotionally and epistemically. Cognitive warfare aims to control the reactions of individuals and groups to the information presented, manipulating environmental stimuli to induce mental states and desired behaviours in both enemies and allies.

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Cyber warfare can attack critical infrastructures, spread disinformation or access and take over enemy information through distributed denial-of-service attacks. More than information warfare, cognitive warfare aims to overcome the control of mass communication techniques, interfering with the brain and accessing neurological resources. The flow of information, the change in behaviours through manipulation and coercion are pursued to distort the perceptions of enemies, integrating economic warfare, diplomacy and military operations specific to hybrid warfare. Although information warfare, cyber warfare, cognitive warfare, and hybrid warfare all contain operations of influence that affect human cognition (see *figure 1*), only cognitive warfare aims to control the brain through weapons provided by neuroscience (Ib.)

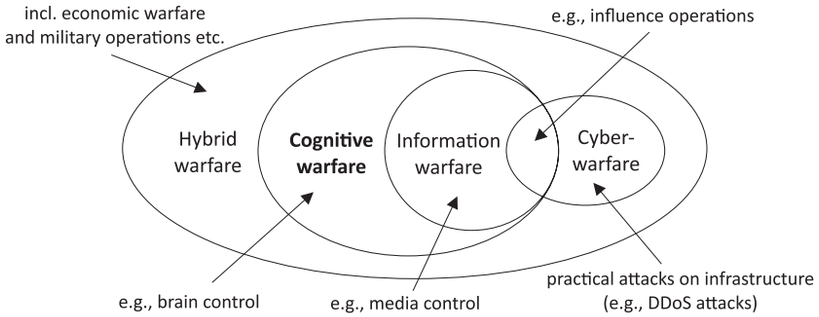

Figure 1: The relationship between cognitive, hybrid, information and cyber warfare (Ib.)

Although information warfare, cyber warfare, cognitive warfare, and hybrid warfare all contain operations of influence that affect human cognition, only cognitive warfare aims to control the brain through weapons provided by neuroscience.

The purpose of this article is to popularize some concepts that are less frequently addressed in the specialized literature: intelligentized warfare or algorithmic cognitive warfare; Neuro-strike, the weapon developed by China, intended for brain control, based on directed energy with electromagnetic beams or microwaves; the stealth capability and the ability to pass through matter and any medium of scalar weapons, a type of non-kinetic weapons that propagate longitudinal electromagnetic waves or zero-energy waves; the final part will address the case study method, having as subject the cognitive warfare waged by the People's Republic of China (PRC) against Taiwan.

The objectives of the article consist in presenting some recent military notions that have emerged as well as in bringing to public knowledge the current state of Chinese technology and the way the PRC is waging cognitive warfare in the 21st century. The research method is qualitative, analysis based on specialized literature on the latest developments necessary for waging a war in the 21st century. The case study is focused on an area of maximum interest, namely Taiwan, due to its geostrategic position between the East China Sea and the South China Sea (Taiwan Strait, international waterway, important in the transport of goods worldwide), due to the chip and semiconductor industry (Taiwanese companies TSMC and United Microelectronics Corporation (UMC) are the largest chip producers in the world), and last, but not least, due to China's ambitions to reunify with Taiwan, declared Chinese territory through the *One country, two systems Policy.*

THE INTELLIGENTIZED WARFARE – COGNITIVE ALGORITHMIC WARFARE

ROMANIAN MILITARY THINKING

Since 2019, the PRC Defence White Paper has emphasized the emergence of intelligentized warfare and the need to shift from mechanized to informational force through intelligent network capabilities (5G, Cloud Computing, Big Data) and intelligent weapons (AI-enabled weapon systems). The People's Republic of China is adding the cognitive domain as a future battle domain to the maritime, land, space, air, cyber, and electromagnetic domains; it is also adding the cognitive dimension to the other dimensions of warfare, namely the physical and informational dimensions (Center for Joint Warfare Studies, 2022).

The intelligentization of warfare refers to the modification and domination of the battlefield by Artificial Intelligence and emerging and disruptive technologies, such as robotics and neuroaugmentation. Brain-machine interfaces, wearable devices, exoskeletons, gadgets implanted in human bodies will enhance intelligentized warfare, a military concept introduced by the Chinese Communist Party in 2019 to define the replacement of war waged exclusively by humans against other humans with war waged by robots/machines against humans or war between machines/robots (Gadzala Tirziu, 2024). The four defining features of the intelligentized warfare are: *cognitive warfare, the use of swarm tactics, improved information processing capabilities* and *rapid decision-making* (Ib.), used to achieve a first objective, bringing Taiwan under the control of the People's Republic of China without resorting to conventional conflict. If successful, the achievement of other more ambitious goals, such as world hegemony, could follow.

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Although the party has not given an official definition of intelligentized warfare, Chinese military strategists have described it as *"integrated warfare conducted on land, sea, air, space, electromagnetic, cyber, and cognitive arenas, using intelligent weapons and equipment and their associated operating methods, supported by the Internet of Military Things (IoMT) information system"* (Ib.). The operationalization of this concept could combine military intimidation with information warfare. Chinese strategist Pang Hong Liang has proposed infiltrating advanced unmanned systems, resembling small animals, into the premises

of opposing presidents or commanders (about whom detailed personal information would have been collected in advance), in order to intimidate or annihilate them. Beijing already holds the personal data of 21.5 million American citizens from the US Office of Personnel Management, as well as sensitive data on 100,000 US Navy officers. Through the data of thousands of European officials, discussions about Europe-China ties have been influenced (Ib.). If data from the Global South is less accessible, similar volumes of personal information may have been gathered, taking into account the Chinese modus operandi. The US Naval Institute's monthly magazine, *Proceedings*, published a *"2026 War Scenario"* showing that the US Navy will be cognitively outmatched, as thousands of US Navy servicemen, using Chinese-influenced TikTok, could be manipulated into refusing to fight (Ib.).

Each individual's thoughts, information, and beliefs inform the decisions they make and have the power to change the outcome of the battle. That is the reason why, after the invasion of Ukraine by the Russian Federation in 2022, People's Liberation Army strategists and Chinese national security leaders updated cognitive warfare, coining the term "algorithmic cognitive warfare".

Each individual's thoughts, information, and beliefs inform the decisions they make and have the power to change the outcome of the battle. That is the reason why, after the invasion of Ukraine by the Russian Federation in 2022, People's Liberation Army (PLA) strategists and Chinese national security leaders updated cognitive warfare, coining the term *"algorithmic cognitive warfare"* – whereby artificial intelligence (AI) algorithms influence individuals at various levels, targeting the hearts and minds of enemies (Lange, 2024).

Through the enormous amounts of data (either stolen or bought from data providers) that are fed to algorithms to monitor and exploit the relationships, mental state and preferences of individuals, it is possible to deliver the exact content capable of influencing the people being watched at any given time. Many Chinese influence operations have not had the intended result, as the ideological content does not resonate with the general public, but rather the content related to the daily lives of voters, such as those released during Taiwan's January 2024 elections, or the divisive ones with alleged users arguing about political topics, such as the Chinese state security services pretending to be American users arguing on various political topics in a TikTok video watched for over 1.5 million times (Ib.).

Operators can evaluate the outcome and effectiveness of the operation by collecting data and creating content. The social media recommendation algorithm itself ensures that the desired content

reaches the target audience at the desired time. The concerns about the cybersecurity risks of Chinese social media apps such as TikTok have led to TikTok being banned in the USA and some countries in Europe and Asia, ByteDance being in close contact with the Chinese government. NATO and the European Commission have banned members and employees from using TikTok on work phones, as have other governments around the world (Navlakha, 2024).

Human knowledge is the epicentre of future warfare as, through direct interference or subconscious control of the adversary's mind, confusion, mental damage or hallucinations, enemies could be led to surrender or accept Beijing's demands without negotiation or fight. Powerful weapons are being built or are already in use for total cognitive domination, among which Neuro-strike holds a privileged place.

NEURO-STRIKE

The People's Liberation Army is considering manufacturing high-tech weapons to disrupt the brain functions of opponents and change the opinions of foreign rulers or other populations to serve its interests. Attack or brain control weapons use microwaves or directed energy with electromagnetic beams (Barbu, 2024), ranking the Chinese Communist Party (CCP) and the People's Liberation Army as world leaders through the Neuro-strike Program. In December 2021, the US Department of Commerce imposed sanctions on China's Academy of Military Medical Sciences and 11 other related entities for allegedly using brain control weapons (Gertz, 2023).

Neuro-strike, based on non-kinetic technology, impairs cognitive functions, reduces awareness and can cause neurological damage. The People's Republic of China places psychological warfare and neurological attack at the core of its asymmetric warfare strategy against the United States of America and its allies in the Indo-Pacific, the Sino-Indian border, Taiwan, the South and East China Seas.

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Not only electromagnetic or microwave weapons form the neuro-strike spectrum, but also human-computer interfaces to control populations and weapons capable of inducing cognitive damage, all working to achieve Xi Jinping's desire to implement a new world order. The US military predicts a Chinese military assault on Taiwan by 2027,

an assault in which brain warfare weapons would be used in the short term as part of China's *anti-access/area denial* military strategy for the Indo-Pacific (Ib.).

Another scenario is immunizing PLA troops with a bacterial strain propagated to enemy forces to eliminate resistance, followed by neurological strikes that cause fear or cognitive incoherence leading to inaction, like the US *Wandering Soul* operation in the Vietnam War. This propaganda and psychological warfare operation sought to induce the desertion of Việt Cộng soldiers. Tapes of recordings of Buddhist funeral music, altered voices, simulating those of deceased comrades-in-arms, unable to find peace in the absence of funeral rites, haunting like ghosts urging them to go home to avoid being killed, were broadcast from American helicopters at night to deprive the Việt Cộng soldiers of sleep (Humphrey, 2023).

The Strategic Support Force, a special unit of the Chinese military created in 2015 and tasked with conducting cerebral warfare, was disbanded in 2024 by President Xi to integrate the cyber, space, electronic, psychological warfare capabilities of the People's Liberation Army.

The Strategic Support Force (SSF), a special unit of the Chinese military created in 2015 and tasked with conducting cerebral warfare, was disbanded in 2024 by President Xi to integrate the cyber, space, electronic, psychological warfare capabilities of the People's Liberation Army. Instead of the Strategic Support Force, President Xi inaugurated the Information Support Force to coordinately apply the networked information system, which would increase his chances of winning in modern warfare. The SSF has been divided into three units: the Aerospace Force, the Information Support Force and the Cyberspace Force, which will answer directly to the Central Military Commission, headed by Xi (Marinescu 2024).

Countering cognitive warfare requires ethical regulation of military neuroscience, technological innovations capable of detecting deepfakes, and geopolitical solutions for better governance. In a neuroscientific approach to national security, psychological factors (cognitive dissonance, assimilation, availability heuristics in belief formation) and environmental factors (effects of liberalism and social networks in the context of globalization) can increase the damage of cognitive warfare (Hung, Hung). The public is advised to be cautious about the information they read and the regulation of the tech giants.

SCALAR WEAPONS

Scalar weapons are also part of the electromagnetic weapons spectrum, with the difference that they are longitudinal, not transverse or microwave, like those that form the Neuro-strike spectrum. Scalar waves or Tesla waves/zero energy waves differ from conventional transverse electromagnetic waves (radio waves, microwaves and visible light) since they do not oscillate sinusoidally, but remain in a fixed standing wave shape.

Non-lethal weapons using scalar wave technology can incapacitate enemies, with or without long-term damage. While one advantage lies in the possibility of selecting the number of victims, as well as collateral damage, the disruption of neural functions, along with the invalidation of electronic equipment, poses a major problem.

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While conventional electromagnetic waves fail to penetrate any medium or barrier, scalar waves have the unique ability to pass through matter with ease (underwater, in dense urban environments, underground, in bunkers), including the Earth itself, ensuring secure communication over long distances, with submarines or with troops deployed far away, on enemy territory (Serei, 2023).

Another military application of scalar waves is stealth technology. If conventional stealth technology absorbs and redirects electromagnetic waves (e.g., radar waves), minimizing the reflection and detectability of an object with some limitations, scalar waves can create total invisibility by bending or distorting light around an object. Optical camouflage would allow invisible vehicles, ships and aircraft to be undetectable by conventional radar and surveillance systems. Scalar waves through quantum encryption techniques offer the possibility of instantaneous, secure transmission of sensitive information over a vast area, as scalar waves are not bound by time and space constraints. Scalar waves have the ability to influence tectonic activities and geological structures. The possibility of controlling and inducing seismic events by manipulating scalar waves could represent deterrent capabilities or protective countermeasures against these attacks (Ib.).

International agreements and ethical considerations are indispensable in determining the responsible use of scalar wave technology. Scalar waves, which usually go unnoticed, are attracting

interest in their use for information and energy technology due to their special attributes: scalar wave transmission at 1.5 times the speed of light; wireless transmission of electricity; the reaction of the receiver to the transmitter; the inefficiency of using a Faraday cage to protect against scalar waves; free energy transcends space and time (Meyl, 2001, p. 1).

Scalar beam weapons were invented by Nicola Tesla (1856 or 1857-1943) in 1904, with many nations secretly developing beam weapons after the researcher's death in 1943. Today, scalar weapons have become so powerful that they can produce, by satellite, hurricane-like destruction, earthquakes, tsunamis, or flash freezes – the instant killing of every living thing on Earth over long distances. Scalar weapons can also cause intense heat, induce hypnotic mind control over large numbers of people or read minds from distance (Zohuri, 2019, p. 19). Due to their pressure wave nature and ability to carry enormous energy, scalar waves can, undetected, remove anything from its place in time and space faster than the speed of light by crossing two or more beams together. Furthermore, any target the scalar weapon is aimed at is in danger of annihilation, even if it is in a bunker on the opposite side of the earth. If any of the major countries with scalar weapons (Russian Federation, United States of America, People's Republic of China) were to attempt a nuclear missile attack, it could be destroyed with scalar technology before it leaves its place of origin (Ib.).

The continuous electromagnetic pulse Tesla plasma globe could destroy the target's electronics, while the hotter Tesla globes could vaporize the missile or activate the nuclear warhead of a moving missile, creating a nuclear explosion.

Scalar waves above 60 Hz can be very harmful. A scalar beam sent from one transmitter to the target, coupled with another beam sent from another transmitter, could allow the scalar beams to blast the missile before launch, but also *en route*, if the coordinates are known. Tesla hemispherical shields or Tesla globes of luminous plasma emanating from crossed scalar beams can wrap missiles or aircraft. The continuous electromagnetic pulse (EMP) Tesla plasma globe could destroy the target's electronics, while the hotter Tesla globes could vaporize the missile or activate the nuclear warhead of a moving missile, creating a nuclear explosion. Flying debris can be attacked by smaller Tesla Orbs. A Tesla shield can be used to prevent any unwanted foreign body from entering the state's airspace (Ib.).

Possession of scalar wave technology represents an advantage that can be used in cases of utmost importance to the Chinese state, such as reunification with Taiwan.

THE CASE STUDY OF THE COGNITIVE WARFARE WAGED BY CHINA AGAINST TAIWAN

The cognitive warfare insinuated itself more and more, gaining momentum with the development of information and communication technologies. The cognitive warfare waged by the People's Republic of China against Taiwan was also manifested through development aid or *"South-South cooperation".* Within the rivalry between Beijing and Taipei, decolonization in the South Pacific, starting with Samoa in 1962 and ending with Palau in 1994, gave China and Taiwan the opportunity to seek diplomatic recognition from friendly countries through chequebook diplomacy (Grey, 2020).

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Until 2008, Taiwan maintained diplomatic relations with six countries, while the People's Republic of China maintained diplomatic relations with eight countries. The loss of the presidency in Taiwan in 2016 by the Kuomintang led to a collapse in Taiwan's relationship with Kiribati and the Solomon Islands, leaving it with only four diplomatic allies in the region – Nauru, Tuvalu, Marshall Islands and Palau. The People's Republic of China provided US $1.62 billion to Pacific Island countries between 2011 and 2019, outranking New Zealand and being surpassed only by Australia. At the Pacific Island Economic Development and Cooperation Forum, China offered aid packages, with President Xi Jinping making two visits in recent years (Ib.).

The People's Republic of China has discredited the way the leadership in Taipei has managed the COVID-19 crisis (Hung, Hung), representing yet another facet of cognitive warfare. Several government departments and party agencies, such as the United Front Work Department, the Taiwan Affairs Bureau of the State Council, the People's Liberation Army and the Propaganda Department, aim to promote China-Taiwan unification, cooperation and suppress anti-independence views.

China threatened to take over Taiwan by force in the event of the latter's pursuit of independence in China's 1993 White Paper – *"Taiwan*

Issue and Chinese Unification". Chinese missile testing near Kaohsiung and Keelung during the Taiwan Strait Crisis (1995-1996) raised concerns in Taiwan that it could turn into war (Tzu-Chieh, Tzu-Wei, 2022). The definition of the relationship between Taiwan and China by President Lee Teng-hui in 1999 as a *"state-to-state relationship"* has led to the intensification of Chinese activities. Military aircraft crossed the median line of the Taiwan Strait in 2020 because of the improvement of Taiwan-USA relations (Hung, Hung).

China is increasing its influence through economic benefits from bilateral exchanges across the Taiwan Strait, offering free travel and arrival reception services or discounts on travel to China. Places for Taiwanese students at Beijing University and Tsinghua University, along with funding and awards for scholars ("Thousand Talents Plan" and "Changjiang Scholars Program") are transforming the interests of Taiwanese, enslaving them to China's influence.

In 2017, following the Taiwan National Security Survey, only 41.3% of Taiwanese believed that China would attack Taiwan following independence, a percentage that increased in 2020 to 61.8% following intimidation by the People's Liberation Army in response to the warming USA-China relations. The percentage of Taiwanese who would support independence if China attacked as soon as Taiwan declared independence rose from 26.3% in 2017 to 37.8% in 2020. The proportion of Taiwanese who would support independence if China did not attack when declaring independence rose from 60.2% in 2017 to 71.2% in 2020, indicating that China's military intimidation could backfire. China has published a list of supporters of Taiwan independence, but also reports on opinion leaders, causing fear and dividing Taiwan (Ib.).

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If China's positive propaganda did not yield the intended results in the affective and epistemic sense, negative propaganda is more effective

through affective incitement that outranks epistemic manipulation. The attention and cognitive resources that the Taiwanese population devotes to China's bellicose actions deprives the country of leaning toward constructive solutions to society's problems. Voters uninformed or uninterested in domestic and foreign politics, often young or middle-aged, are more susceptible to misinformation and easier to attack epistemologically. In contrast, older people, experienced people and extremists, with high antecedents and strong active inferences, are much harder to manipulate, but are emotionally vulnerable and thus can be induced to alter their cognitive content. Political conservatives are among China's favourite targets because they are more inclined toward negative stimuli and tend to report more fake news (Ib.).

ROMANIAN MILITARY THINKING

Artificial intelligence is at the forefront of the brain warfare through technology capable of delivering the right information to each individual.

CONCLUSIONS

China is interested in expanding its sphere of cultural influence on the Taiwanese target audience, but also in the West, and in delivering tailored informational content. Traditional Chinese characters glorified in pre-repression Hong Kong and Taiwan are a new cultural anchor for China, predisposed to launch cognitive operations against Taiwan through posting art news and technology sites in Hong Kong. Attempts are also being made to attract Taiwan's students and youth as part of the cognitive warfare. Artificial intelligence is at the forefront of the brain warfare through technology capable of delivering the right information to each individual (Ib.).

If the Taiwanese government has built a rapid response mechanism against disinformation, no less important is the modification of the social structure with the help of policies and laws to make it less vulnerable to attacks.

As countermeasures, the following can be mentioned: structural intervention or external regulation of the social environment with which the brain interacts, and cognitive intervention or internal improvement of the cognitive system against disinformation. If the Taiwanese government has built a rapid response mechanism against disinformation, no less important is the modification of the social structure with the help of policies and laws to make it less vulnerable to attacks. Among the measures, we list: maintaining fair competition for content providers, improving transparency, raising barriers for attackers and local collaborators, encouraging democratization in China.

BIBLIOGRAPHY:

1. Barbu, A.M.D. (2024). *The Cognitive Electronic Warfare in the Age of Artificial Intelligence*, vol. 2: Proceedings 2024 *"Romania and the New Dynamics of International Security"*, National Defence College, https://revista.unap.ro/index.php/XXI_NDC/article/view/2032/1982, pp. 20-21/ https://doi.org/10.53477/2784-2487-24-02., retrieved on 8 December 2024.
2. Center for Joint Warfare Studies (2022). *Chinese Cognitive Domain Warfare*, https://cenjows.in/wp-content/uploads/2022/05/Chinese-Cognitive-Domain-Warfare-dt-05-Feb-2020.pdf?fbclid=IwY2xjawHmL6tleHRuA2FlbQIxMAABHb3JlWxWui-AJRgt2DjuNYcx875EuGrDik9HyyHnZRWqja-5mXqq5VQmhw_aem_Qld3APu40sTrtA8Wvglggg, retrieved on 14 December 2024.
3. Gadzala Tirziu, A. (2024). *Inside China's cognitive warfare strategy*, GIS, https://www.gisreportsonline.com/r/china-cognitive-warfare/?fbclid=IwY2xjawHmL6VleHRuA2FlbQIxMAABHb3JlWxWui-AJRgt2DjuNYcx875EuGrDik9HyyHnZRWqja-5mXqq5VQmhw_aem_Qld3APu40sTrtA8Wvglggg, retrieved on 8 December 2024.
4. Gertz, B. (2023). *China crafts weapons to alter brain function; report says tech meant to influence government leaders*. In *The Washington Times*, https://www.washingtontimes.com/news/2023/jul/6/chinas-military-leading-world-brain-neurostrike-we/., retrieved on 15 December 2024.
5. Grey, D. (2020). *Australia and New Zealand Face up to China in the South Pacific*, GIGA Focus Asia, no. 3, ISSN: 1862-359X, https://www-giga--hamburg-de.translate.goog/en/publications/giga-focus/australia-and-new-zealand-face-up-to-china-in-the-south-pacific?_x_tr_sl=en&_x_tr_tl=ro&_x_tr_hl=ro&_x_tr_pto=sc, retrieved on 15 December 2024.
6. Humphrey, C. (2023). *The Ghostly Legacies of America's War in Vietnam. The United States tried to use Vietnamese beliefs to terrify enemy soldiers*. In *Foreign Policy*, https://foreignpolicy.com/2023/09/16/vietnam-war-psyops-ghosts/., retrieved on 27 December 2024.
7. Hung, T.C., Hung, T.W. (2022). *How China's Cognitive Warfare Works: A Frontline Perspective of Taiwan's Anti-Disinformation Wars.* In *Journal of Global Security Studies*, vol. 7, no. 4, https://doi.org/10.1093/jogss/ogac016., retrieved on 27 December 2024.
8. Lange, L. (2024). *Algorithmic Cognitive Warfare: The Next Frontier in China's Quest for Global Influence*, SCSP, 21 November, https://scsp222.substack.com/p/algorithmic-cognitive-warfare-the?fbclid=IwY2xjawHmL7tleHRuA2FlbQIxMAABHZJl1K5B0kvtMpEbI_WYgMlA_Fj4_3O7-NrCAKH2cR1HGDXllH0hze4Mqg_aem_lk_9E0sOIb7pyfCLuBMBOQ, retrieved on 14 December 2024.

9. Libicki, M.C. (1995). *What Is Information Warfare?* National Defense University Institute for National Strategic Studies. Washington DC, https://apps.dtic.mil/sti/tr/pdf/ADA367662.pdf, retrieved on 27 December 2024.
10. Marinescu, F. (2024). *Xi Jinping a desființat Forța de Sprijin Strategic, cu scopul declarat de a ajuta armata Chinei să lupte și să câștige în războiul modern*, 29 April, g4media, https://www.g4media.ro/xi-jinping-a-desfiintat-forta-de-sprijin-strategic-cu-scopul-declarat-de-a-ajuta-armata-chinei-sa-lupte-si-sa-castige-in-razboiul-modern.html., retrieved on 4 January 2025.
11. Meyl, K.C. (2001). *Scalar Waves: Theory and Experiments 1*, https://www.researchgate.net/publication/242200443_Scalar_Waves_Theory_and_Experiments_1, retrieved on 4 January 2025.
12. Navlakha, M. (2024). *Which countries have banned TikTok?,* Mashable, 25 April, https://mashable.com/article/tiktok-ban-countries, retrieved on 4 January 2025.
13. Serei, I. (2023). *Applications of Scalar Waves in Defense and Security Technologies,* Fluid Mech Open Acc 10 (2023): 311, https://www.hilarispublisher.com/open-access/applications-of-scalar-waves-in-defense-and-security-technologies.pdf?fbclid=IwY2xjawHk_H1leHRuA2FlbQIxMAABHXRnJn4wtelByq6NvfNeDRGWXQZ5XqbwXXUOw3Y6SltAnCjWENGX5x7ysw_aem_ulIUk2xVf3bFz0zMLOk_-A, retrieved on 14 December 2024.
14. Zohuri, B. (2019). *Scalar Wave Energy as Weapon in Book: Directed-Energy Beam Weapons*, June, DOI: 10.1007/978-3-030-20794-6_6, https://www.researchgate.net/publication/334074508_Scalar_Wave_Energy_as_Weapon, retrieved on 8 December 2024.

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INTEGRATING ARTIFICIAL INTELLIGENCE INTO OPERATIONAL RESEARCH – NEW HORIZONS FOR NATIONAL SECURITY –

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The article analyzes the role of artificial intelligence (AI) and operational research in national security, highlighting their contributions to optimizing decision-making processes and risk management. AI facilitates rapid data analysis, threat forecasting, and automated crisis responses, while operational research improves resource allocation and conflict management. This paper presents the integration of advanced operations research and artificial intelligence (AI) techniques in drone operations, highlighting how these fields contribute to the optimization of flight operations. It explores the use of optimization algorithms for route planning and management of drone fleets, as well as the implementation of AI for their autonomization, improving efficiency, performance, and cost of operations. The article highlights this interconnectedness that transforms operational processes, providing intelligent and scalable solutions.

Keywords: operational research; artificial intelligence; vulnerabilities; national security; algorithms;

INTRODUCTION

In the digital age, national security has evolved significantly, given that threats no longer come only from traditional armed conflicts, but also from complex and often invisible areas, such as cyber attacks, information warfare and natural disasters managed through advanced technologies. The concept of *national security* has now expanded to include not only the physical defence of a nation, but also the protection of critical infrastructure, sensitive data and economic and political integrity. As technologies rapidly advance, national security is becoming increasingly dependent on the use of IT solutions and artificial intelligence (AI), which can analyse and anticipate emerging threats much more effectively than traditional methods.

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This progress is influencing international relations and global cooperation structures, intensifying competition between world powers. The USA and the EU are consolidating their position as normative leaders in the field, while China and Russia are seeking to integrate AI in a sustainable and secure way to enhance their military, economic and strategic capabilities. At the same time, states are faced with the challenge of preventing unacceptable risks to critical infrastructure and essential digital systems in a globalized world. Any military activity involves organizing forces and coordinating them according to time, space and strategic objectives. The combat power of a dominant component influences the entire combined force, and operational success depends on effective organization and leadership. A major challenge is the accessibility of artificial intelligence technologies, which can be quickly adapted to improve security or to counteract previous versions. In this context, a deep understanding of the capabilities of all actors involved, of the intentions of the adversaries and of the specifics of the operational environment is essential. Also crucial is the analysis of the interdependence between the different areas and dimensions of the conflict. Given the complexity of military activities, from logistics to direct combat engagements,

a careful assessment of the main challenges and conditions for ensuring the security of the armed forces is necessary, especially in the context of the increasing lethality of modern weapons and combat systems.

Operational research and artificial intelligence play an essential role in this context, transforming the way strategic decisions are made in national security. Operational research, through mathematical models and advanced simulations, allows for the analysis and optimization of resources in a more efficient way, thus helping to manage complex situations and plan more precise responses to threats. In parallel, artificial intelligence is bringing about a significant change, through its ability to process large volumes of data in an extremely short time, to identify hidden patterns and to anticipate risks, helping decision-makers to respond quickly and effectively to various scenarios.

National security operations research is an essential branch of decision science that uses mathematical and statistical techniques to analyse and optimize processes and resources for strategic and operational purposes. This operational research is applicable in a wide range of areas of national security, including defence, intelligence, crisis management, and critical infrastructure protection.

The objective of this article is to analyse modern methods used to optimize national security, focusing on operational research and artificial intelligence technologies as fundamental tools in improving the decision-making process. It presents how these innovative techniques are implemented to protect national interests, ensuring that nations are prepared to respond effectively to a wide range of threats using drones.

OPERATIONAL RESEARCH METHODS IN DRONE OPERATIONS

National security operations research is an essential branch of decision science that uses mathematical and statistical techniques to analyse and optimize processes and resources for strategic and operational purposes. This operational research is applicable in a wide range of areas of national security, including defence, intelligence, crisis management, and critical infrastructure protection.

The definition of operational research is closely related to the systematic analysis of complex processes to find optimal or near-optimal solutions under conditions of uncertainty and limited resources. It relies on mathematical, statistical, and computational methods to model and analyse situations involving multiple choices, usually under conditions of risk and uncertainty. In the context of national security, operational research is used to evaluate the effectiveness of different scenarios and to support the development of strategies to respond quickly

and effectively to national or international crises. A fundamental aspect of operational research is the use of mathematical models and algorithms for risk analysis and resource allocation. As in the field of national security, risks can come from multiple sources, such as armed conflicts, cyber attacks, natural disasters, or terrorism. Optimization models, simulation models and forecasting models are used to analyse these risks, assess their impact on security and determine the most effective possible responses. Resource optimization algorithms can help to efficiently allocate equipment and personnel in emergency situations, ensuring that resources are used efficiently and that reaction time is minimized. Conflict simulation models can be used to analyse different war scenarios and to evaluate the effectiveness of defence tactics and strategy. They can contribute to the development of more effective defence plans that minimize losses and maximize success in the face of a threat. In intelligence, operational research can be used to optimize information collection and analysis, identifying the most important sources of information and allocating resources effectively to prevent and combat threats. Data analysis algorithms can help detect patterns and anticipate adversary behaviour, thus contributing to strategic decision-making based on relevant and accurate information. In terms of crisis management, operational research can inform the planning and coordination of rapid responses. For example, in the case of a terrorist attack or a natural disaster, operational research can be used to assess available resources and determine the most efficient ways to allocate them, so as to minimize damage and loss of life. Resource distribution optimization models can be applied to ensure that aid is delivered quickly and equitably to those who need it. Also, during a crisis, simulation models of the evolution of events can help authorities anticipate the development of the situation and adapt strategies in real time to respond to emerging challenges. Drones are experiencing a continuous development. They are not a myth of national security; they have become a necessity. Unmanned Aircraft Systems have also been deployed in all military services, ranging from man-portable micro-UAVs (Unmanned Aircraft) to medium-sized tactical systems and large unmanned aircraft. The continued development of this technology, together with improvements in sensors, batteries, and navigation systems, will open up new possibilities for use

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Today's security environment is characterized by significant changes not only in terms of the relevance of regional and global actors but also in the characteristics of the environment in which confrontations take place, as well as in terms of the objectives for optimal management of the problem. As a result, Romania is obliged to adapt to the geopolitical and geostrategic conditions in the wider Black Sea region.

and improved performance. Today's security environment is characterized by significant changes not only in terms of the relevance of regional and global actors but also in the characteristics of the environment in which confrontations take place, as well as in terms of the objectives for optimal management of the problem. As a result, Romania is obliged to adapt to the geopolitical and geostrategic conditions in the wider Black Sea region. Operational research adds value to Unmanned Aircraft Systems by optimizing cost and efficiency, features that are based on advanced optimizations such as linear programming, Monte Carlo simulation, and a wide range of genetic algorithms (Dragomir, 2017-i). These various genetic algorithms, combined with artificial intelligence, solve tasks of high complexity in the area of energy reduction, route optimization, and drone fleet coordination. The expectation theory underpins transport time optimization and optimal management of aircraft resources, being thus logistically useful (Dragomir, 2017-j). Reduced energy consumption facilitates rigorous flight planning for the inspection of critical infrastructures such as power lines, dams, bridges, and points of economic interest in a minimum time.

Tasks and resources are allocated through task and resource selection algorithms, knowing which drones are best suited for particular missions. Drones and drone swarms are provided with algorithms inspired by the collective behaviours of insects to coordinate the movements of large groups of drones, which is beneficial in search and rescue operations or military applications. Using these advanced optimization methods, drones can work together efficiently, avoiding collisions and maximizing spatial coverage in reconnaissance operations or synchronized attacks. Stochastic models represent that part of operational research that helps to make average decisions under risk and uncertainty, and military environments share this aspect (Dragomir, 2017-d). They are used to assess the likelihood of certain scenarios, such as the unfolding of attacks or the occurrence of threats (Dragomir, 2017-b). By analysing risks and possible outcomes, these models allow drones to plan appropriate responses (Dragomir, 2017-c). Network flow modelling and linear programming techniques are often used for resource allocation and complex logistics planning to ensure efficient supply during military operations, especially in conflict-restricted areas (Dragomir, 2017-h). In support of low-cost resupply decisions, multi-criteria analysis comes with the evaluation of alternatives based on several criteria when planning operations or allocating resources according to factors such as cost, risk, or efficiency (Dragomir, 2017-g). To get the clearest possible picture of the risks and opportunities associated with each decision, operational research comes up with the technique of Monte Carlo simulations, in which military scenarios are modelled in order to analyse the effectiveness of the air defence system against drone attacks (Dragomir, 2017). Game theory supplements the war scenario with optimal conflict strategies. In the case of drones, cyber conflicts are often modelled because, by anticipating the adversary's actions, appropriate defence responses can be developed (Yang, Liu, 2022). Based on this analysis, prevention and response strategies are developed.

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ARTIFICIAL INTELLIGENCE ALGORITHMS ON BOARD THE UAS

The specialized literature describes the equipping of force structures with unmanned aircraft systems (UAS) intended to collect data and information of military interest. *Table 1* centralizes the categories of AI algorithms and associates them with the area of applicability of the software present on board a UAS, thus making a correlation with the degree of usefulness of the drone.

Table 1: Categories of AI algorithms used on board UAS
(author's adaptation based on Kour, Jha, 2023)

Algorithm category	Method/algorithm	Applicability
Navigation and Route Planning Algorithms	Algorithms A and Dijkstra	Use to find the shortest routes between points of interest, avoiding obstacles.
	RERT (Rapidly-Exploring Random Tree) and ORERT (Optimized RERT)	Algorithms used for route planning in complex and dynamic environments.

Algorithm category	Method/algorithm	Applicability
Obstacle Avoidance Algorithms	DWA (Dynamic Window Approach)	Algorithm that plans short-term movements to avoid collisions with moving obstacles.
	Potential Field Method	It creates a *"force field"* around obstacles, allowing the UAV to navigate around them.
Computational recognition algorithms and object recognition	Convolutional Neural Networks (CNN)	Used to detect and classify objects in images and video captured by UAVs.
	YOLO (You Only Look Once) and SSD (Single Shot Multibook Detector)	Real-time object detection algorithms for applications such as surveillance and monitoring.
Data Fusion Algorithms	Kalman Filters and Particle Filters	Used to combine data from multiple sources (e.g., GPS, IMU, cameras) for an accurate estimation of the UAV's position and motion.
	SLAM (Simultaneous Localization and Mapping)	Algorithms that allow UAVs to build maps of their environment and localize themselves at the same time.
Machine learning and reinforcement learning algorithms	Deep Q-Learning is Proximal Policy Optimization (PPO)	Reinforcement learning algorithms used to improve autonomous flight performance through experience and exploration.
	Classification and regression algorithms	Use to analyse and interpret collected data, such as identifying suitable landing terrains or estimating environmental parameters.

Algorithm category	Method/algorithm	Applicability
Control and stabilization algorithms	Proportional-Integral-Derivative (PID) Control	Used for stabilization and flight control of UAVs.
	Predictive Control Model (PCM)	Advanced control algorithm that optimizes UAV movements to meet dynamic and environmental constraints.
Speech recognition and processing algorithms	Recursive Neural Networks (RNN)	Voice command recognition.
	Long Short-Term Memory (LSTM)	Interaction with human operators.
Cybersecurity and data protection algorithms	AI-based intrusion detection systems	Algorithms that monitor and identify abnormal or malicious activities in UAS networks.
	Advanced cryptography	Using AI to improve encryption techniques and protect data transmitted between UAVs and control stations.
Multi-sensor fusion algorithms	Fusion algorithms based on neural networks	Combining data from different sensors (optical, thermal, LIDAR) to create a more complete and accurate understanding of the environment.
	Deep learning techniques	Used to improve the interpretation and fusion of data from various sources.

While AI brings a high degree of autonomy and functionality to UASs, its implementation must be accompanied by stringent cybersecurity measures and extensive testing to reduce vulnerabilities.

While AI brings a high degree of autonomy and functionality to UASs, its implementation must be accompanied by stringent cybersecurity measures and extensive testing to reduce vulnerabilities (Dragomir, 2017-a; Garling, Nilson, 2022; Li, Zheng, 2021). Investments in robust systems and continuous monitoring processes are essential

to maximize AI benefits and minimize associated risks (Mor, 2019; Tan, Yao, 2023; Zhang, Chen, 2023). Adversaries can exploit AI networks through adversarial attacks, in which they introduce data designed to trick the system (e.g., subtly altered images to avoid detection) thus registering attacks on neural networks (Dragomir, 2017-f; Han, Jiang, 2020; Yang, Nang, 2023). If AI algorithms are not configured to unexpected situations, such as there is over-reliance on autonomy, UASs can make decisions that compromise the mission (Dragomir, 2017-e; Kour, Jha, 2023; Martin, Wang, 2021). As vulnerabilities, we can list delays in processing critical information, manipulation of training data by injecting corrupted data into the learning process through cyber-attacks, and spoofing (Nguyen, Patel, 2020; Zhang, Chen, 2023; Aitech, 2020). GPS spoofing or jamming attacks can severely affect the autonomous navigation of a UAS, leading to course deviation or even crash. Communication vulnerabilities between the drone and the control station can be exploited to take control of the UAS.

Over the past few decades, technology has advanced at a rapid pace, and autonomous systems, such as Lethal Autonomous Weapons Systems (LAWS) and some categories of drones, have been developed to make rapid decisions on the battlefield, without the direct intervention of a human operator.

THE NEED FOR REGULATION AND INTERNATIONAL COOPERATION IN THE USE OF EMERGING TECHNOLOGIES

The use of artificial intelligence in the field of national security raises a number of ethical issues and dilemmas that are difficult to manage, with a significant impact on fundamental human rights and on the way armed conflicts are managed. One of the greatest ethical concerns is related to autonomous decisions in armed conflicts. Over the past few decades, technology has advanced at a rapid pace, and autonomous systems, such as Lethal Autonomous Weapons Systems (LAWS) and some categories of drones, have been developed to make rapid decisions on the battlefield, without the direct intervention of a human operator. It may seem effective in managing some conflicts, but it raises fundamental questions related to the responsibility and control over the actions of automated systems. Moreover, these weapons can be used in ways that violate international humanitarian law, which regulates the use of force in armed conflicts and protects civilians and prisoners of war. Thus, the use of AI in this context raises not only concerns about efficiency, but also about morality and human rights. Another significant ethical dilemma arises from the use

of AI for mass surveillance and monitoring of citizens using drones. Advanced technologies such as facial recognition, behavioural analysis and communication processing allow governments to monitor almost every aspect of their citizens' daily lives, from their physical movements to their online interactions. While such technologies can be useful in combating crime or terrorism, they create a surveillance society, in which privacy is compromised and the state can exercise excessive control over individual behaviour and choices. As artificial intelligence becomes an increasingly central tool in national security strategies, it becomes obvious that the creation of clear and effective regulatory frameworks is essential to prevent the misuse of this technology and to ensure a balance between security needs and respect for the fundamental rights of citizens. International organizations such as the UN have begun to address this issue, but there are still gaps in international law regarding the use of lethal autonomous weapons in armed conflicts. Autonomous weapons, which can make decisions to attack without human intervention, pose a significant risk, as there is no clear legal framework to regulate their use and establish responsibility in case of errors or abuse. It is necessary to develop treaties and agreements at a global level that strictly regulate the use of these weapons, to prevent possible abuses and to ensure that their use respects the principles of international humanitarian law. Another important point is international collaboration against cyberattacks, which represent a major threat in the digital age. States must cooperate internationally not only to combat cyberattacks, which can target critical infrastructure, but also to prevent the use of AI by terrorist groups or hostile states. Cyber threats do not respect borders and can have serious consequences for national and international security. It is essential for states to establish mechanisms for international cooperation, which include information sharing, coordination of responses and the application of clear sanctions for cyberattacks. Global monitoring systems must also be created to detect and prevent misuse of emerging technologies. Finally, to ensure the responsible use of AI in national security, it is crucial that governments and international organizations should establish mechanisms for transparency and accountability. They must include oversight and audit measures to verify how AI is used for security purposes, ensuring

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Autonomous weapons, which can make decisions to attack without human intervention, pose a significant risk, as there is no clear legal framework to regulate their use and establish responsibility in case of errors or abuse. It is necessary to develop treaties and agreements at a global level that strictly regulate the use of these weapons, to prevent possible abuses and to ensure that their use respects the principles of international humanitarian law.

that it complies with ethical and legal norms. It is important that any decision based on AI should be explainable and subject to external scrutiny, to prevent errors and abuses. Clear standards of accountability for decisions made by automated systems must also be established, so that there could be no ambiguity about who is responsible in the event of failure. Appropriate regulation of the use of AI in the field of national security to prevent risks and abuses, as well as to ensure that these technologies are used in a responsible and ethical manner, international collaboration and compliance with global legal norms are essential to building a balanced global security framework that protects both national interests and fundamental human rights.

CONCLUSIONS

Artificial intelligence contributes to automating processes, analysing data in a faster and more efficient way, and predicting risks, all of which having a significant impact on national security.

Artificial intelligence and operational research are essential pillars in optimizing national security and supporting strategic decisions in the face of increasingly complex and diversified threats. AI contributes to automating processes, analysing data in a faster and more efficient way, and predicting risks, all of which having a significant impact on national security. Operational research, with a focus on mathematical models and resource optimization, also underpins the efficient allocation of resources in crisis situations and risk management, being a tool for analysing and making strategic decisions in the fields of defence, intelligence, and crisis management. In this context, combining the two fields brings considerable benefits.

The directives aimed at integrating AI into national defence strategies are multiple and promise to revolutionize the way in which states protect their national security. These directions include the development of autonomous defence systems capable of responding in real time to emerging threats, improving cyber monitoring and protection, and optimizing the planning and coordination of military operations through advanced data analysis. In addition, the integration of AI can support the process of detecting and preventing terrorist attacks or combating cybercrime through algorithms that can identify unusual patterns and signal possible risks. As technology evolves, AI will become increasingly present within security structures, with the potential to address the increasingly complex challenges of this era. Integrating operational research with artificial intelligence opens new perspectives for drone autonomy. Predictive modelling and machine learning enable rapid adaptation to environmental conditions and optimization of decisions in real time. It makes drone applications more versatile and efficient, from emergency deliveries to natural disaster management.

In conclusion, operational research is an indispensable foundation for maximizing the potential of drones, helping to make them essential tools for a variety of domains. Operational research combined with artificial intelligence continues to revolutionize the field of military security, ensuring a faster and more effective response to modern threats.

BIBLIOGRAPHICAL REFERENCES:

1. Aitech (2020, December/January). *Artificial intelligence efforts for military drones.* Avionics – digital ed., https://interactive.aviationtoday.com, retrieved on 12 January 2025.
2. Dragomir, F. (2017-a). *Artificial Intelligence Techniques Cybersecurity*, in *Proceedings of International Scientific Conference Strategies XXI*, vol. 3, pp. 147-152.
3. Dragomir, F. (2017-b). *Application of the method of covering zeros in decision-making foundations, International Scientific Conference Strategies XXI. The Complex and Dynamic Nature of the Security Environment*, pp. 342-347.
4. Dragomir, F. (2017-c). *Effectiveness of the use of forces and means of fighting*, ib., pp. 342-352.
5. Dragomir, F., Alexandrescu, G. (2017-d). *The axiomatic character of decision,* in *Bulletin of "Carol I" National Defence University*, Vol. 6, pp. 16-22.
6. Dragomir, F. (2017), Dragomir, F. (2017-e). *Modelling of decisional problems*, in *Bulletin of "Carol I" National Defence University*, vol. 1, pp. 72-75.
7. Dragomir, F. (2017-f), *Applications of Artificial Intelligence in Decision-Making*, in *Bulletin of "Carol I" National Defence University*, vol. 4, pp. 56-61.
8. Dragomir, F. (2017-g). *Eficacitatea unui sistem de întreținere a pierderilor*, in *Analele – Seria de științe militare*, vol. 9, pp. 97-105.
9. Dragomir, F. (2017-h). *Mathematical Models Specific to the Military Domain*, in *Strategic Impact*, no. 64, pp. 62-67.
10. Dragomir, F. (2017-i). *Aplicații de programare liniară*, in *Buletinul Universității Naționale de Apărare "Carol I"*, vol. 4, pp. 59-64.
11. Dragomir, F. (2017-j). *Efficiency action soldier using theory graphs*, in *Bulletin of "Carol I" National Defence University*, vol. 2, pp. 48-55.

12. Gärling, P., Nilsson, M. (2022). *Artificial Intelligence Applied to Drone Control: A State of the Art*. In *International Journal of Robotics and Automation*, 37(4), pp. 211-226, https://doi.org/10.1201/9780367334370, retrieved on 2 February 2025.
13. Han, Z., Jiang, L. (2020). *Path planning algorithms for autonomous UAVs in dynamic environments*. In *Journal of Robotics*, 21(4), pp. 372-385, https://doi.org/10.1007/s12838-020-00291-0, retrieved on 22 January 2025.
14. Kour, H., Jha, S. (2023). *Enhancing drone autonomy using AI-powered algorithms*. In *Journal of Aerospace Engineering*, 36(5), pp. 52-63, https://doi.org/10.1061/(ASCE)AS.1943-5525.0000930, retrieved on 11 February 2025.
15. Li, W., Zheng, Z. (2021). *Enhancing UAV swarm tactics with edge AI: Adaptive decision making in changing environments*. MDPI Sensors, 21(13), 4432, https://doi.org/10.3390/s21134432 retrieved on 2 February 2025.
16. Martin, J., Wang, Q. (2021). *UAV swarm intelligence: Recent advances and future trends*. In *Journal of Swarm Intelligence*, 17(3), pp. 334-355, https://doi.org/10.1007/s11721-020-00186-2, retrieved on 22 January 2025.
17. Mor, D. (2019). *Artificial Intelligence efforts for military drones*. Avionics – Digital ed., 22(1), pp. 58-72, https://interactive.aviationtoday.com, retrieved on 17 February 2025.
18. Nguyen, T., Patel, S. (2020). *Research on unmanned aerial vehicle path planning: challenges and opportunities*. Aerospace Systems, 8(2), pp. 28-45, https://doi.org/10.1117/12.2547178, retrieved on 2 February 2025.
19. Patel, R., Thakur, P. (2021). *AI-based algorithms for autonomous drone navigation in real-time environments.* Robotics, 8(5), pp. 112-128, https://doi.org/10.1007/s11432-021-3432-x, retrieved on 22 January 2025.
20. Tan, R., Yao, F. (2023). *Artificial Intelligence in drone applications: Special issue*. In *Journal of Unmanned Systems*, 15(2), pp. 11-35, https://doi.org/10.1007/s40787-023-00192-7, retrieved on 22 January 2025.
21. Tan, X., Li, H. (2022). *Reinforcement learning for UAV path optimization*. In *Journal of Computational Intelligence*, 15(6), pp. 654-671, https://doi.org/10.1007/s10207-022-02059-5, retrieved on 12 January 2025.
22. Yang, H., Liu, X. (2022). *An optimization framework for efficient vision-based autonomous drone navigation*. In *Journal of Robotics*, 38(1), pp. 79-94, https://doi.org/10.1007/s11340-022-00475-x, retrieved on 17 February 2025.
23. Yang, J., Wang, T. (2023). *AI-driven multi-agent systems for autonomous drone swarms: design and control*. In *Artificial Intelligence Review*, 62(3), pp. 2451-2472, https://doi.org/10.1007/s10462-023-10078-w, retrieved on 22 January 2025.

24. Zhang, D., Liu, Y. (2021). *Machine learning in drone navigation and obstacle avoidance*. In *Journal of Artificial Intelligence*, 34(7), pp. 492-506, https://doi.org/10.1109/JAI.2021.3232290, retrieved on 22 January 2025.
25. Zhang, Y., Chen, L. (2023). *Hybrid machine learning and reinforcement learning framework for adaptive UAV obstacle avoidance*. Robotics and Autonomous Systems, 162, 103315, https://doi.org/10.1016/j.robot.2022.103315, retrieved on 2 February 2025.

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ROMANIA'S ENERGY STRATEGY – THE BALANCE BETWEEN HARD POWER AND ENERGY DIPLOMACY –

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Energy security is a fundamental element of a state's stability, especially for countries in Eastern Europe, where Russia has consolidated its influence through its energy resources. Romania, located in the Black Sea region, faces specific challenges arising from regional dependence on Russian gas and the associated geopolitical risks. In this context, the application of the smart power concept, developed by Joseph Nye, becomes essential for ensuring national energy security. Energy security is a key pillar of national stability, particularly in Eastern Europe, where reliance on external energy resources can be used as a geopolitical leverage.

Romania strengthens its energy security through a combination of hard power strategies (diversification of energy sources, expansion of nuclear capacity, investments in renewables) and energy diplomacy (strategic partnerships with Western states and integration into European energy networks). This article analyzes the measures implemented and the challenges faced, highlighting the need for a balanced approach to reduce energy vulnerabilities.

Keywords: energy security; smart power; energy diplomacy; energy independence; regional geopolitics;

INTRODUCTION

Energy security has become one of the main concerns of European states in the context of rising geopolitical tensions and the use of energy as a tool of political influence. In particular, Europe's dependence on natural gas imports from Russia has been a major vulnerability, strategically exploited by Moscow to exert influence in the region. In this context, Romania faces the challenge of protecting its energy independence, modernizing its infrastructure, and diversifying its supply sources.

The concept of *smart power*, theorized by Joseph Nye, provides a relevant analytical framework for Romania's energy strategies. It involves the simultaneous use of *hard power* (coercive power based on material resources and strategic capabilities) and *soft power* (influence based on attractiveness, cooperation, and international partnerships). Thus, Romania can strengthen its energy position through both economic and technological measures (developing domestic production capacities) and diplomatic strategies by forming alliances with Western states.

Europe's dependence on natural gas imports from Russia has been a major vulnerability, strategically exploited by Moscow to exert influence in the region.

The main objective of this article is to analyse, through a holistic approach and using qualitative research methods, the measures adopted by Romania to ensure its energy security and counteract Russia's influence in the Black Sea region.

ROMANIA'S ENERGY SECURITY – ELEMENTS OF HARD POWER

Romania, strategically located on the eastern border of the European Union and in the proximity of the Black Sea, faces significant challenges in ensuring energy security, especially in the context of the influence exercised by the Russian Federation in the region. Energy security, defined as *"modality of energy supply, at adequate and stable prices, through protected critical infrastructures, and helping to support the economic performance"* (*Strategia de dezvoltare*

a României în următorii 20 de ani/Romania's Development Strategy for the next 20 years, 2015), is an essential component of Romania's national security.

A study conducted by *"Carol I"* National Defence University highlights that *"Russia has become a threat to Romania's energy and economic security"* (Băhnăreanu, 2014). This influence is exerted through control over energy resources and transport infrastructure, as well as through the use of energy prices as a political pressure tool.

To counter these challenges, Romania has adopted a series of strategic measures aimed at improving energy security and reducing dependence on energy imports. According to *Strategia Energetică a României 2025-2035*, the key objectives include diversification of energy sources, increasing energy efficiency, and developing energy infrastructure (*Strategia Energetică a României 2025-2035, cu perspectiva anului 2050/Romania's Energy Strategy 2025-2035*, 2024).

Romania has adopted a series of strategic measures aimed at improving energy security and reducing dependence on energy imports. According to Strategia Energetică a României 2025-2035/Romania's Energy Strategy 2025-2035, the key objectives include diversification of energy sources, increasing energy efficiency, and developing energy infrastructure.

These measures focus on both strengthening domestic production capacities and integrating Romania into European energy networks, ensuring a stable and secure energy supply. However, investments in production capacities have been limited in recent decades. Meanwhile, Russia, through its energy companies and political influence, has exerted pressure on Black Sea region countries, using energy as a *hard power* instrument. Additionally, hybrid warfare actions have been identified, including cyberattacks on critical infrastructure and the use of non-governmental organizations (NGOs) to influence political decisions in the energy sector. In this context, Romania aims to strengthen its energy security by diversifying its energy sources, thereby reducing dependency on imports and increasing energy autonomy. According to *Strategia Energetică a României 2025-2035*, one of the main objectives is *"diversification of energy supply sources and routes, through the involvement of all regional partners"* (*Strategia Energetică a României 2025-2035*, ib.).

One of the most important projects for achieving this objective is the exploitation of natural gas from the Black Sea, which represents a strategic opportunity for utilizing domestic resources and reducing dependency on gas imports. Romania has significant reserves in the Black Sea continental shelf, and their exploitation could bring major economic and geopolitical benefits.

According to *Planul Național Integrat în domeniul Energiei și Schimbărilor Climatice 2021-2030/National Integrated Plan in the Field of Energy and Climate Change 2021-2030*, the necessity of *"swift implementation of the legal framework necessary for final investment decisions in the exploitation of natural gas resources from the Black Sea area"* is emphasized (*Planul Național Integrat în domeniul Energiei și Schimbărilor Climatice 2021-2030*, 2020). In this regard, Romania has adopted essential legislative changes, such as the Offshore Law (https://www.enpg.ro/romanias-offshore-wind-potential-policy-pathways-for-sustainable-development/), to encourage investment in the exploration and exploitation of offshore deposits. Exploiting these resources could transform Romania into a regional energy supplier, ensuring both internal supply and the possibility of exporting gas to European markets. Estimates suggest that the Black Sea deposits could cover Romania's internal consumption for the coming decades and would significantly contribute to budget revenues through taxes and royalties imposed on investors. To facilitate the exploitation of the Black Sea gas resources, Romania has invested in natural gas transport infrastructure. A key project in this regard is the BRUA (Bulgaria-Romania-Hungary-Austria) pipeline, which will enable Romania to connect to European gas transport corridors, reducing dependency on imports from Russia and strengthening integration into the European Union's energy market (https://isc.gov.ro/Proiectul%20BRUA.html). In addition to BRUA, Romania is also exploring other alternative routes for transporting gas extracted from the Black Sea, considering the possibility of developing interconnections with Greece and Turkey, which would provide access to liquefied natural gas (LNG) terminals in the Mediterranean.

The BRUA (Bulgaria-Romania-Hungary-Austria) pipeline will enable Romania to connect to European gas transport corridors, reducing dependency on imports from Russia and strengthening integration into the European Union's energy market.

Alongside natural gas, Romania is investing in expanding nuclear and renewable energy production. In this context, we can mention Romania's Energy Strategy that outlines the construction of new nuclear reactors at Cernavodă and the development of small modular reactors (SMR) in partnership with the United States of America, also emphasizing the need to increase renewable energy production capacities, particularly wind and solar energy, in line with commitments made under the European Green Deal.

These initiatives not only reduce Romania's carbon footprint but also contribute to enhancing the resilience of the national energy system by diversifying the energy mix. Romania is determined to increase the percentage of renewable energy in total energy consumption, in compliance with the commitments made within the European Union. *Planul Național Integrat în domeniul Energiei și Schimbărilor Climatice 2021-2030/The National Integrated Plan in the Field of Energy and Climate Change 2021-2030* underlines, in this sense, the importance of developing new renewable energy capacities and integrating with other markets in the region. These actions demonstrate Romania's determination to diversify its energy sources and enhance its energy security through both *hard power* initiatives, aforementioned, and *soft power* strategies.

Planul Național Integrat în domeniul Energiei și Schimbărilor Climatice 2021-2030/ The National Integrated Plan in the Field of Energy and Climate Change 2021-2030 underlines the importance of developing new renewable energy capacities and integrating with other markets in the region. These actions demonstrate Romania's determination to diversify its energy sources and enhance its energy security through both hard power initiatives, aforementioned, and soft power strategies.

SOFT POWER – ENERGY DIPLOMACY AND STRATEGIC PARTNERSHIPS

In parallel with the *hard power* measures, Romania has developed an energy diplomacy strategy aimed at strengthening its position on the European energy market and attracting strategic investments. These efforts are aimed at diversifying supply sources, attracting investment and integrating into regional and European energy networks.

One example is the strategic partnership with the United States of America, launched on 11 July 1997, *"during the visit to Bucharest of the US President"* (MAE, Romania-USA Strategic Partnership, 2024), which has evolved significantly in the energy sector. As part of this partnership, joint projects have been developed, such as the construction of reactors 3 and 4 in Cernavodă and the implementation of small modular reactors (SMR) in Doicești. These initiatives not only increase Romania's energy capacity but also strengthen bilateral relations with a strategic ally. Additionally, Romania is actively involved in the *Three Seas Initiative* (https://www.mae.ro/node/49437), a platform that promotes connectivity in energy, transport, and digitalization among countries in Central and Eastern Europe. This initiative facilitates the development of energy infrastructure and the diversification of supply sources, thus reducing dependence on external suppliers. According to an article in *Contributors.ro*, *"energy diplomacy has become a central pillar of the strategic partnership between Romania and the USA, including joint projects in the nuclear and natural gas sectors"* (Felea, 2018).

Furthermore, Romania is expanding its cooperation with other European states and international organizations to diversify its energy sources and strengthen its energy security. Romania enhances its energy security through strategic partnerships with Azerbaijan, aiming at diversifying natural gas supply sources and developing regional energy infrastructure. A notable example is the collaboration between Romgaz and the Azerbaijani company SOCAR, which signed a Memorandum of Understanding to explore the development opportunities of a liquefied natural gas (LNG) project in the Black Sea. This project, formerly known as AGRI (Azerbaijan-Georgia-Romania Interconnector), involves the construction of an LNG terminal in Georgia, the transportation of LNG across the Black Sea, and a regasification station in Romania, thereby facilitating the transportation of gas from the Caspian region to Europe (MAE, Romania-Azerbaijan Strategic Partnership, 2024). Additionally, Romania and Azerbaijan are collaborating on the development of the Green Corridor, a project that involves the construction of a 1,100 km submarine cable to transport electricity produced by wind farms in Azerbaijan to Europe, through Georgia and Romania. This project aims to diversify energy sources and strengthen the European Union's energy security (Ib.).

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These diplomatic efforts and strategic partnerships reflect Romania's commitment to ensuring its energy security by integrating into regional and international networks, diversifying supply sources, and attracting investments in energy infrastructure.

COMBATING HYBRID THREATS AND SAFEGUARDING CRITICAL INFRASTRUCTURES

In the current security environment, Romania faces complex hybrid threats targeting critical infrastructures, especially in the energy sector. Hybrid threats represent a combination of conventional and unconventional methods, including cyberattacks, disinformation, and sabotage, aimed at destabilizing the normal functioning of society

and undermining national security. According to a study published in the Romanian military journal *Gândirea militară românească/ Romanian Military Thinking*, the Black Sea region is particularly vulnerable to such threats due to the complexity and lack of a functional regional security architecture (Vevera, Georgescu, Cîrnu, 2022).

To counter these threats, Romania has implemented a series of measures aimed at strengthening the protection of critical infrastructures. A key aspect is the development of a robust legislative and institutional framework that allows for the identification and protection of these infrastructures. It requires an integrated approach that includes strategies, procedures, and programs for prevention, preparation, response, and recovery in the event of disasters and emergencies. Furthermore, Romania collaborates closely with international organizations and external partners to strengthen its defence capabilities against hybrid threats. An example in this regard is Romania's involvement in the European Centre of Excellence for Countering Hybrid Threats, established in Helsinki, which supports member states in developing effective strategies and policies to address these challenges (https://www.hybridcoe.fi/).

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Romania has adopted specific measures to enhance the resilience of the energy sector against hybrid threats. They include risk assessments, the implementation of advanced technological solutions for detecting and preventing cyberattacks, and the development of continuity plans in case of major incidents. Thus, combating hybrid threats and protecting critical infrastructures are strategic priorities for Romania. Through the development of an appropriate legislative framework, international collaboration, and the implementation of specific measures in vulnerable sectors, Romania strengthens its capacity to face these complex challenges and ensure national security.

CONCLUSIONS

Romania has implemented significant measures in relation to national security. However, in our opinion, it is necessary that protection mechanisms and cybersecurity legislation should be continually strengthened. Moreover, the involvement in international initiatives and the development of innovative solutions, such as modular nuclear reactors, demonstrates the state's commitment to a sustainable and safe energy transition. Although Romania is making significant progress in securing its energy independence, there are still major challenges, such as external pressures on strategic decisions and the risk of corruption in the implementation of large energy projects. Adopting stricter transparency measures and strengthening collaborations with trusted partners will be essential in this regard.

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Looking ahead, Romania should continue investing in the modernization of its energy infrastructure and intensifying its cooperation within the EU and NATO to maximize its energy security. Furthermore, the development of green technologies and the implementation of a coherent public education strategy on energy security can help reduce long-term vulnerabilities. The application of *smart power* will be key to Romania's success in ensuring energy stability and security in an increasingly complex geopolitical environment.

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In conclusion, strengthening energy security should be accompanied by sustained efforts in regional energy diplomacy. Romania should take on an active role in developing a more solid energy cooperation framework in Eastern Europe, thus contributing to the stability and security of the entire region. Through a strategic approach and the implementation of coherent policies, Romania can become a leading energy player at the European level.

BIBLIOGRAPHY:

1. Bănănăreanu, C. (2008). *Riscuri și amenințări în domeniul resurselor energetic strategice*. București: Universitatea Națională de Apărare "Carol I", https://cssas.unap.ro/ro/pdf_studii/riscuri_si_amenintari_in_domeniul_resurselor_energetice_strategice.pdf, retrieved on 6 February 2025.
2. Centrul de Prevenire a Conflictelor și Early Warning (2024). *Securitatea în regiunea extinsă a Mării Negre*, https://www.cpc-ew.ro/pdfs/securitatea_in_regiunea_mn.pdf, retrieved on 6 February 2025.
3. Dumitrescu, C. (2016). *Abordări de securitate internă ale României în contextul strategiei pentru securitate energetică a Uniunii Europene*. In the proceeding of the Scientific Conference *"New Challenges related to EU's Internal Security".* București: Academia de Poliție "Alexandru Ioan Cuza".
4. FAOLEX (n.d.). *Securitatea energetică și performanța economică*. UN Food and Agriculture Organization, https://faolex.fao.org/docs/pdf/rom202403.pdf, retrieved on 6 February 2025.

5. Felea, C. (2018). *România este în plin "război de frontieră". În ce măsură conștientizăm?*, https://www.contributors.ro/romania-este-in-plin-razboi-de-frontiera-in-ce-masura-con%c8%99tientizam/, retrieved on 6 February 2025.
6. Institutul European din România (2024). *Orientări privind securitatea energetică a României*, https://ier.gov.ro/wp-content/uploads/publicatii/Studiul_2_-_Securitatea_energetica_RO.pdf, retrieved on 7 February 2025.
7. Institutul European din România (2024). *Rolul mecanismelor regionale de cooperare în contextual geopolitic actual*, https://ier.gov.ro/wp-content/uploads/2024/01/Studiul-SPOS-nr.-3_Mecanisme-regionale-de-cooperare_final.pdf, retrieved on 7 February 2025.
8. Ministerul Afacerilor Externe/Ministry of Foreign Affairs/MAE (2024). Parteneriatul Strategic între România şi Republica Azerbaidjan/ Romania-Azerbaijan Strategic Partnership, https://www.mae.ro/node/5322, retrieved on 6 February 2025.
9. MAE (2025). Parteneriatul strategic România-SUA/Romania-USA Strategic Partnership, https://www.mae.ro/node/4944, retrieved on 7 February 2025.
10. Ministerul Energiei/Ministry of Energy (2024). *Strategia Energetică a României 2025-2035, cu perspectiva anului 2050/ Romania's Energy Strategy 2025-2035*, https://energie.gov.ro/wp-content/uploads/2024/06/Strategia_Energetica_vf_rev_1206-1-1.pdf, retrieved on 6 February 2025.
11. Păcuraru, C.G. (2018). *România – Energie și Geopolitică*. București: Editura Top Form.
12. Păcuraru, C.G. (2023). *Conflicte înghețate și componenta hibridă a războiului energetic al Rusiei*, https://www.contributors.ro/conflicte-inghetate-si-componenta-hibrida-a-razboiului-energetic-al-rusiei/, retrieved on 7 February 2025.
13. *Planul Național Integrat în domeniul Energiei și Schimbărilor Climatice 2021-2030/National Integrated Plan in the Field of Energy and Climate Change 2021-2030* (2020), https://energie.gov.ro/wp-content/uploads/2023/11/Anexa-HG-PNIESC.pdf, retrieved on 8 February 2025.
14. *Strategia de dezvoltare a României în următorii 20 de ani/Romania's Development Strategy for the next 20 years* (2015), https://old.biblacad.ro/publicatii_proprii/2016/Maria%20Carmen%20Nadia%20PETRE_Strategia%20AR_ppt_Conferinta%20ABR_2016.pdf, retrieved on 7 February 2025.
15. Vevera, A.V., Georgescu, Al, Cîrnu, C.E. (2022). *Abordarea amenințărilor hibride din regiunea Mării Negre din perspectiva cadrului de protecție a infrastructurilor critice*, in *Gândirea militară românească*, pp. 62-79.

16. https://isc.gov.ro/Proiectul%20BRUA.html, retrieved on 6 February 2025.
17. https://www.enpg.ro/romanias-offshore-wind-potential-policy-pathways-for-sustainable-development/, retrieved on 6 February 2025.
18. https://www.hybridcoe.fi/, retrieved on 6 February 2025.
19. https://www.mae.ro/node/49437, retrieved on 7 February 2025.

HOW INFORMATION SYSTEMS ARE RESHAPING NATIONAL SECURITY STRATEGIES

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Information systems play a key role in modern national security strategies, providing advanced tools for threat management and strategic decision-making. The rapid flow of information influences the geopolitical balance, and the effective use of information technology has become a priority for governments and security institutions. As real-time access to data has increased, as the ability to analyze massive volumes of information and automate the decision-making process fundamentally transforms the way the state protects national interests, advanced technologies are integrated into national security systems. Also, the increase in interconnectivity between different security services and government institutions leads to the creation of interoperability and reaction time in emergency situations. The article presents an analysis of how information systems influence national security strategies, highlighting both their benefits and the challenges they generate.

Keywords: interoperability; information warfare; artificial intelligence; information systems; human rights;

INTRODUCTION

Technology offers a significant advantage in data collection and analysis, allowing for the anticipation and neutralization of threats before they manifest themselves. However, with this increased dependence on technology, there are also risks related to cybersecurity, information protection, and the misuse of sensitive data, which determine the development of appropriate policies and regulations that ensure the balance between security and respect for fundamental human rights.

Information systems represent an essential pillar in modern national security strategies, providing innovative solutions to protect the interests of states and citizens. They are in a constant adaptation with the development of security infrastructures and mechanisms, allowing for international collaboration in this area. Investments in technology, the development of analytical capabilities and the strengthening of data protection are fundamental aspects for ensuring effective national security in this century. The lack of a rapid and efficient exchange of information can lead to delays in making critical decisions and to an insufficient response to crises. Therefore, states are increasingly investing in the development of information infrastructures that allow for the secure sharing of data between defence, intelligence and law enforcement institutions. Models for integrating information systems differ depending on the structure of each state and the level of international cooperation. In many countries, national security depends on integrated networks that connect command and control centres, intelligence agencies and military structures for effective coordination. In the same spectrum, internationally, strategic alliances such as NATO, and partnerships between intelligence agencies allow for the rapid exchange of information and real-time analysis of threats. The implementation of common data platforms and the use of artificial

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intelligence to correlate and interpret information are becoming the used solutions to increase the response capacity of states. International standards such as those developed by the United Nations, the European Union or NATO play a crucial role in ensuring interoperability between the security systems of different states. Although these standards are concisely defined, the challenges remain significant, especially due to technological, political and legal differences. The lack of a unified regulatory framework for information exchange as well as the concerns about data protection and national sovereignty can make system integration difficult. Technological vulnerabilities and risks associated with cybersecurity also represent major obstacles to creating secure and efficient information infrastructures. Establishing common standards, developing secure information exchange platforms and adopting the latest technologies are necessary steps for effective defence against emerging threats.

Modern interoperability models involve the creation of common platforms where data can be securely accessed by relevant agencies, while respecting the rules on the protection of sensitive information.

INTEGRATION AND INTEROPERABILITY OF INFORMATION SYSTEMS IN NATIONAL AND INTERNATIONAL SECURITY

Modern national security can no longer operate in isolation, but depends on a complex network of collaboration between domestic agencies and international partners. Threats are increasingly diverse and unpredictable, and rapid information exchange is crucial for crisis prevention and management. From combating terrorism and organized crime to managing natural disasters, effective integration of information systems allows for better coordination and a faster response to security challenges.

A key aspect of this integration is the connection of information systems used by defence, intelligence, and law enforcement institutions. In many countries, these entities operate on separate infrastructures, which can make data exchange difficult and reduce reaction time. Modern interoperability models involve the creation of common platforms where data can be securely accessed by relevant agencies, while respecting the rules on the protection of sensitive information (Ahmad, Qureshi, 2023). International partnerships, such as those

within NATO or the European Union, have led to the implementation of common information networks that facilitate coordination between different security structures. Terrorism, organized crime, information warfare and hybrid conflicts require a rapid and secure exchange of information between security institutions from different states, and the lack of close collaboration can lead to operational gaps, delays in decision-making and failures in preventing major crises. As a consequence, one of the main reasons why international cooperation is crucial is the transnational typology of security threats (Dragomir, 2024). Terrorist groups and criminal networks do not operate within the borders of a single state, but use global infrastructures for financing, recruitment and coordination. Therefore, no national agency can manage these challenges alone and the exchange of information between security agencies from different countries allows for the early identification of threats, the prevention of attacks and the coordination of the response in crisis situations. Examples in this regard are international structures, such as Interpol and Europol, which facilitate cooperation between states in investigating and neutralizing common threats, providing a secure platform for sharing operational data. Another essential component of effective cooperation is the interoperability of information systems used by intelligence agencies. Therefore, many international alliances develop common secure networks for sharing classified information, such as the *"Five Eyes"* system (USA, UK, Canada, Australia, New Zealand) or NATO platforms for managing security data. Such infrastructures allow a real-time flow of information, facilitating strategic decision-making. In addition to data exchange, international cooperation also involves the development of common defence and security strategies. Military alliances and international security structures, such as NATO and the UN, promote joint exercises, crisis simulations and training programmes to ensure a coordinated response to global threats. For example, joint exercises on cyber defence and critical infrastructure security help member states improve their ability to react to hybrid and asymmetric attacks. Despite the obvious benefits of collaboration, there are also numerous challenges that need to be overcome, such as the lack of trust between states caused by political, historical and strategic differences.

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Some governments are reluctant to share sensitive information, fearing data leaks or its use for purposes that run counter to national interests. To overcome these obstacles, it is essential to create clear legal frameworks and procedures that regulate the exchange of information and its use exclusively for collective security purposes.

❖ **The Importance of Standardization and Common Protocols in Information Exchange**

Standardization and the use of common protocols in information exchange are essential for ensuring an efficient and coordinated national security environment. As threats evolve rapidly, the interoperability of information systems is crucial for the rapid and coordinated response of security agencies. Without clear standards, each institution or state could use different technologies and structures, which would create barriers to communication and slow down the decision-making process.

Within NATO, the use of unified standards for data transmission and storage allows for efficient coordination between member states, reducing the risk of errors caused by the incompatibility of national systems.

Whether it is law enforcement, intelligence services or defence structures, the use of common data formats and secure channels allows for rapid access to essential information. For example, within NATO, the use of unified standards for data transmission and storage allows for efficient coordination between member states, reducing the risk of errors caused by the incompatibility of national systems.

Another essential aspect of standardization is communications security. The lack of common protocols can lead to exploitable vulnerabilities by hostile actors, which compromises the integrity of transmitted data. By establishing international standards for encryption and authentication, sensitive information can be protected against cyberattacks and unauthorized interception. For example, the European Union and NATO implement security protocols based on advanced encryption and multi-factor authentication to prevent unauthorized access to classified information networks.

In addition to technical aspects, standardization also plays an important role in defining operational procedures for managing crises and emergencies. There are clear rules on how information should be shared and analysed. That is why many international organizations

have developed guidelines and standard procedures for responding to terrorist threats, hybrid attacks or natural disasters. These frameworks of action allow for a faster and more effective response to events with an impact on national security.

Despite the obvious advantages, the standardization process faces numerous challenges, especially due to the differences between national policies and strategic interests of each state. Some countries are reluctant to adopt common protocols for fear of losing control over their own security infrastructures. Also, the integration of international standards requires significant investments in the modernization of existing infrastructure and in the training of personnel who manage information systems. In addition to these aspects, cybersecurity plays a critical role, as any vulnerability in an interconnected system can be exploited by hostile actors to compromise information networks. In the future, the development of information infrastructures for security must follow directions that maximize the efficiency and security of data exchange. The use of artificial intelligence and machine learning to analyse large volumes of information can considerably improve the response capacity of security agencies. Also, the development of quantum communications and advanced encryption technologies will allow for more effective protection of sensitive data. Standardization and the use of common protocols in the exchange of information are fundamental to strengthening national and international security. They facilitate effective communication between agencies, reduce the risks associated with technological vulnerabilities, and allow for a rapid response in crisis situations. Although their implementation can be a complex and costly process, the long-term benefits far outweigh the challenges, contributing to the creation of a more robust security environment that is more adaptable to the challenges of the future.

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Standardization and the use of common protocols in the exchange of information are fundamental to strengthening national and international security.

❖ **Technological and Legal Challenges in Ensuring Interoperability**

Interoperability of information systems is essential for national security, but the implementation process faces multiple challenges, both technologically and legally. As states and international institutions

try to create integrated networks for information exchange, they face difficulties related to the compatibility of existing infrastructures, the protection of sensitive data and legislative differences. These challenges must be addressed to enable an efficient and secure exchange of information between security agencies and international partners.

From a technological point of view, one of the biggest problems is the lack of a homogeneous infrastructure. Many government agencies and security structures use information systems developed at different times, with varying technologies, which makes it difficult to integrate them into a common framework. Some of these systems are not compatible with modern platforms, which makes it difficult to exchange information in real time. Also, the use of different data storage and processing architectures can lead to inconsistencies in the interpretation of information, affecting decision-making ability.

In the European Union, the General Data Protection Regulation (GDPR) imposes strict restrictions on the transfer of data to third countries, which can complicate the exchange of information with states that do not comply with the same standards.

Another technological challenge is ensuring the cybersecurity of interconnected systems. When multiple agencies or states share information over common networks, the risk of this data being intercepted or compromised increases exponentially. Security infrastructures must be robust enough to prevent cyberattacks, and encryption and authentication protocols must be standardized to ensure data protection. However, some states are reluctant to adopt common technological solutions, fearing of the potential vulnerabilities that could be exploited by hostile actors.

From a legal perspective, legislative differences between states represent a major obstacle to ensuring interoperability. Each country has its own regulations on data protection, access to classified information, and individual rights of citizens. These differences can make it difficult to share information between partners, as national legislation may prohibit the transmission of certain types of data to external entities. For example, in the European Union, the General Data Protection Regulation (GDPR) imposes strict restrictions on the transfer of data to third countries, which can complicate the exchange of information with states that do not comply with the same standards.

Another legal issue is related to national sovereignty and control over strategic information. Many states believe that information sharing within international networks could reduce national autonomy in managing internal security. Therefore, they hesitate to participate in extended interoperability initiatives or impose strict limits on the type of information that can be shared. This lack of trust can slow down the implementation of effective interoperability solutions and create gaps in collective security, causing states to adopt different approaches, which complicates the integration of networks. In the absence of formal agreements on the use and protection of shared information, there is a risk that data transmitted between partners will be misused or exposed to external threats. To overcome these challenges, extensive cooperation between states and security agencies is needed, in terms of both modernizing technological infrastructures and harmonizing the legislative framework. The development of international standards that are accepted by all parties involved could facilitate information sharing and reduce the risks associated with interoperability. Also, the creation of mechanisms for verifying and auditing the security of systems could strengthen trust between partners and allow for a more efficient integration of information networks in the field of national and international security.

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Another challenge is represented by the legislative differences in terms of data protection and electronic surveillance. In the European Union, for example, the GDPR imposes strict restrictions on the collection and use of personal information, which can complicate cooperation with states that do not comply with the same privacy standards. Here too, it is necessary to harmonize national legislation to allow for an efficient exchange of information, without compromising the rights and freedoms of citizens. Investments in common security infrastructures and the creation of clear legal frameworks are essential for strengthening this collaboration and for effectively adapting to all the challenges of the future.

INFORMATION WARFARE AND AI TECHNOLOGIES USED

Information warfare has become an essential component of state security strategies, in an increasingly interconnected and technology-dependent global context. This type of conflict takes place in cyberspace and digital environments, covering a wide range of information manipulation techniques. Information warfare involves the use of information to influence the perceptions and behaviours of individuals, groups or entire nations, with the aim of destabilizing, weakening the authority of governments or manipulating public opinion in favour of a certain strategic interest.

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Essentially, information warfare involves control over the flow of information and statements that are transmitted to the public. One of the fundamental tools of this type of warfare is disinformation that aims to mislead the audience (Dragomir-Constantin, 2025-a). This process can be extremely effective when carried out in a crisis context, where the public is more vulnerable and more prone to accepting incorrect information, often out of a desire to quickly understand a complex situation. Disinformation can be widely applied through traditional media channels, but especially through online social media platforms, which allow for the rapid spread and amplification of messages, often without their source being properly verified.

Another aspect of information warfare is digital propaganda (Dragomir-Constantin 2025-b). Unlike disinformation, which aims to mislead with false information, propaganda is based on the selection and manipulation of true information to support a particular political or ideological agenda. Digital propaganda uses modern means of communication to create a favourable narrative, which can mobilize masses of people, influence political elections, or destabilize regimes. In this sense, social networks are used not only to spread information, but also to create online communities that support certain points of view and actively work to promote them. For example, a propaganda message can be amplified through coordinated campaigns of fake accounts or botnets that contribute to creating an erroneous image of a political or social situation, making it appear more favourable to a certain group.

Psychological operations represent another method used in information warfare. They are coordinated activities aimed at influencing the perceptions, attitudes and behaviours of a target audience through the use of sophisticated information manipulation techniques. The aim is to induce a strong emotional reaction, which changes public opinion or destabilizes certain social or political groups. In the modern context, artificial intelligence (AI) technologies play a central role in the development of these operations (Zhang, Wang, 2023). AI allows the processing of an enormous volume of data to identify the psychological vulnerabilities of the target population and to personalize messages based on the previous reactions and behaviours of users (Ib.). Thus, AI algorithms are able to create and disseminate messages that are adapted to the specific profile of each person, whether it is a news consumer or a voter. These personalization techniques are extremely effective in manipulating opinions and can have a significant impact on political choices, radicalization, or social polarization (Ngguyen, 2024).

AI allows the processing of an enormous volume of data to identify the psychological vulnerabilities of the target population and to personalize messages based on the previous reactions and behaviours of users.

In addition, AI technologies allow for the automation and expansion of influence operations, making them much faster and harder to detect. By using machine learning algorithms, malicious actors can analyse the behaviours and preferences of users on social media platforms, generating messages that resonate with their pre-existing beliefs and ideas. Thus, not only can information be controlled, but the public's reaction can also be anticipated, making information warfare much more effective and subtle. AI can also help create deepfakes – fake but convincing images and videos that can be used to discredit individuals or institutions, thus amplifying political or social conflicts.

In the face of these advanced techniques of information manipulation, states and international organizations must develop technological and legislative capacities to combat the negative effects of information warfare (Khraisat, Kanaan, 2023). Monitoring and regulating social media platforms, protecting personal data, and raising public awareness about the risks of disinformation are just some of the measures that can be implemented to protect modern societies. It is also essential that government agencies and the private sector should

collaborate to create technological infrastructures that allow for the rapid detection of manipulation campaigns and help counter them.

Information manipulation through disinformation, digital propaganda and psychological operations poses a serious threat to global political, social and economic stability. Countering these techniques is not only a matter of national security, but also a collective global responsibility. Efforts to protect information integrity must include not only the development of cyber defence technologies, but also public education on the risks of information manipulation, thus encouraging a more conscious and critical use of available information.

A deepfake could create a video of a political leader giving an inflammatory speech or making outrageously false statements, causing confusion and undermining public trust in political leaders or government institutions. This visual and auditory manipulation is often extremely difficult to detect by the human eye or even by traditional detection algorithms, making deepfakes a very effective tool in information warfare.

Artificial intelligence has evolved into an extremely powerful tool in information warfare, with the ability to rapidly create and disseminate fake information. One of the most worrying uses of AI in this context is the generation of fake content, such as deepfakes, manipulated images and videos, which can be used for large-scale disinformation. These technologies not only allow the creation of extremely realistic materials, but also rapidly amplify messages, often through social networks and other digital platforms, causing them to spread at a pace almost impossible to control. Deepfakes are a classic example of how AI can generate fake content that appears authentic. Using advanced machine learning techniques such as generative adversarial neural networks (GANs), AI can manipulate images and videos, altering key aspects of them, such as people's faces or voices, to make it appear that they said or did something they did not. A deepfake could create a video of a political leader giving an inflammatory speech or making outrageously false statements, causing confusion and undermining public trust in political leaders or government institutions. This visual and auditory manipulation is often extremely difficult to detect by the human eye or even by traditional detection algorithms, making deepfakes a very effective tool in information warfare.

Another type of fake content created through AI is the generation of manipulated images and photos, which are used to support false narratives or to create the impression of an event that never happened. For example, during a conflict or political crisis, fake images can be created to show a violent event or atrocity that did not happen,

which can fuel panic, hatred, and violence. These images can be manipulated to include false details, such as non-existent weapons, fabricated victims, or altered locations, thereby contributing to distorting reality and influencing public opinion in a harmful way.

Fake videos, in addition to deepfakes, are another form of AI-generated content. These can include fake interviews, recordings of conversations between political leaders or military officers, or even private conversations between citizens that are manipulated to create the impression of misconduct or conspiracy. AI can also be used to modify existing video sequences, removing or adding elements to change the context or original message. For example, a video can be cut and edited to create a statement that supports a particular ideology, which can affect both a person's public image and the political stability of a state. One of the most dangerous aspects of AI-generated fake content is that this type of information not only spreads quickly, but can also penetrate deeply into the collective consciousness. As people have constant access to information via the internet, it is increasingly difficult for individuals to discern between truth and lies, especially when the fakery is carried out at an extremely sophisticated level. AI technologies can also create fake content continuously, so that information warfare becomes almost a constant battle between those who create it and those who try to detect it. In this race, detecting deepfakes and other types of fake content becomes a huge challenge, and traditional cybersecurity and information verification systems are not always fast enough to counteract their effects.

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To combat these threats, a concerted effort is needed between governments, international organizations, and technology companies to develop advanced solutions to detect deepfakes and other forms of fake content.

Propaganda automation, through the use of bots and algorithms to amplify messages and influence public opinion, is also a key component of modern information warfare.

Sentiment analysis and manipulation with AI algorithms that analyse users' emotions and behaviours to tailor propaganda messages allow to decipher not only the words used by users,

but also the tone, context, and emotions behind them. These algorithms can identify psychological traits of individuals, such as fear, anger, pride, or sadness, and adapt the content conveyed to stimulate or modify these reactions. For example, algorithms can detect a state of frustration or fear in online posts and target messages that amplify those feelings, thereby leading the user to a desired behaviour or reaction. An example of sentiment manipulation through AI analysis can be seen in disinformation campaigns aimed at creating panic or encouraging hatred in a particular social or political context. In these cases, messages are tailored to exploit the emotional vulnerabilities of a population, provoking a stronger visceral reaction than a simple presentation of factual information. For example, during international crises or conflicts, algorithms can distribute messages that exaggerate dangers, reinforcing the feeling of insecurity and collective anxiety. These tactics can lead to the creation of a climate of panic and fear, which makes individuals and groups more susceptible to manipulation and less willing to seek alternative sources of information. Moreover, AI can tailor propaganda messages to influence specific user behaviours, including their electoral choice or support for political actions. Algorithms are able to identify and exploit users' cognitive biases, providing them with messages that align with their existing beliefs, and amplifying and channelling them in a desired direction. This phenomenon is known as the *"digital echo chamber"*, where users are only exposed to information that confirms their opinions, and AI amplifies this cycle by recommending messages that maximize the emotional impact on users. In addition to sentiment analysis, algorithms can also learn complex behavioural patterns, with the ability to predict user reactions under certain conditions and adapt messages accordingly. For example, an AI algorithm can identify a user who is prone to responding to hateful or fear-based messages and create a message that responds to these behavioural traits, thereby increasing the effectiveness of the manipulation campaign. This type of extreme message personalization makes propaganda much more subtle and difficult to detect, which makes it even more dangerous for social stability and cohesion. The impact of this technology

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on national security is significant. The manipulation of public sentiment and behaviour can destabilize political institutions, divide society, and undermine trust in government and fundamental state institutions. Moreover, the use of AI to manipulate collective emotions can lead to extreme polarization of public opinion and a radicalization of social and political behaviours. It can create a climate conducive to extremism and internal conflict, facilitating external interference and undermining national stability. To combat these threats, it is essential that governments and international institutions should collaborate to develop regulations and technologies that monitor and prevent emotional manipulation in information warfare. It is also necessary for citizens to be educated to recognize AI-based manipulation tactics and to develop critical thinking skills, in order to be able to identify and reject messages that are not only false, but also strategic in emotionally influencing their behaviour.

In conclusion, the use of AI to analyse and manipulate sentiment represents an extremely sophisticated form of information warfare, with a considerable impact on national security. This technology offers the possibility of influencing opinions and behaviour in a much more effective and subtle way than traditional propaganda methods, which makes protection against it a priority for any state that wants to defend its democracy and social cohesion. This form of manipulation can target both the individual and the masses, and the effects can be devastating for social cohesion, political stability and national security. The impact of information systems on national security strategies is undeniable. They have revolutionized the way states respond to global threats, but they have also brought new challenges that require constant attention. Investments in the protection of these systems must be continuous, and technological development must go hand in hand with respect for the fundamental principles of democracy and human rights. Only in this way can we build a future in which national security and innovation coexist harmoniously, protecting both the state and its citizens.

The impact of information systems on national security strategies is undeniable. They have revolutionized the way states respond to global threats, but they have also brought new challenges that require constant attention.

CONCLUSIONS

Information systems have become an indispensable component of national security strategies, revolutionizing the way governments identify and manage threats. Real-time access to relevant data and the ability to analyse massive volumes of information allow for more effective risk anticipation, increasing the ability of states to respond quickly and in a coordinated manner to emerging challenges.

Another major benefit is the interconnectivity between security institutions, which improves interoperability and optimizes decision-making processes. Automation and integration of advanced technologies into security infrastructures facilitate not only rapid response to crises, but also the development of better-founded preventive policies. However, the digitalization of national security comes with significant challenges, such as cyber risks, vulnerabilities in critical infrastructures, and ethical dilemmas regarding surveillance and data protection. The successful implementation of these systems depends on the balance between technological innovation, appropriate regulation and adaptable security strategies. Information systems are not only transforming traditional methods of defence and security, but also redefining geopolitical relations and the way in which states protect their interests. The effective management of these technologies will be a decisive factor in maintaining national and international stability and security. The future of national security will depend not only on technological advances, but also on the ability of decision-makers to integrate innovations in a responsible, sustainable and strategic manner.

The interconnectivity between security institutions improves interoperability and optimizes decision-making processes. Automation and integration of advanced technologies into security infrastructures facilitate not only rapid response to crises, but also the development of better-founded preventive policies.

BIBLIOGRAPHY:

1. Ahmad, S., Qureshi, M. (2023). *An analysis of cloud security frameworks, problems and proposed solutions*. Network, 3(3), 422-450, https://doi.org/10.3390/network3030045, retrieved on 2 February 2025.
2. Dragomir, F.L. (2024). *The potential for intensifying Austria's opposition to Schengen Enlargement*. In *European Journal of Accounting, Finance & Business*, 12(2), fromhttps://accountingmanagement.ro/index.php?pag=showarticle&issue=35&year=2024&brief=3516, retrieved on 22 January 2025.

3. Dragomir-Constantin, F.-L. (2025-a). *Thinking Patterns in Decision-Making in Information Systems*. New Trends in Psychology, 7(1), pp. 89-98, https://dj.univ-danubius.ro/index.php/NTP/article/view/3255, retrieved on 22 January 2025.
4. Dragomir-Constantin, F.-L. (2025-b). *Thinking Traps: How High-Performance Information Systems Correct Cognitive Biases in Decision-Making.* New Trends in Psychology, 7(1), pp. 99-108, https://dj.univ-danubius.ro/index.php/NTP/article/view/3257, retrieved on 2 February 2025.
5. Khraisat, A., Kanaan, M. (2023). *A comprehensive review of cyber security vulnerabilities, threats, and attacks in cloud computing*. Electronics, 12(6), 1333, https://doi.org/10.3390/electronics12061333, retrieved on 23 February 2025.
6. Nguyen, H.T., Nguyen, V.T. (2024). *Artificial intelligence in cybersecurity: A review and a case study*. Applied Sciences, 14(22), 10487, https://doi.org/10.3390/app142210487, retrieved on 2 February 2025.
7. Zhang, L., Xu, J. (2023). *A critical cybersecurity analysis and future research directions for the Internet of Things (IoT)*. Sensors, 23(8), 4117, https://doi.org/10.3390/s23084117, retrieved on 2 February 2025.
8. Zhang, Y., Wang, F. (2023). *A comprehensive framework for cyber behavioural analysis based on a hybrid approach*. Applied System Innovation, 3(3), 32, https://doi.org/10.3390/asi3030032, retrieved on 2 February 2025.

THE STRATEGIC IMPORTANCE OF THE DANUBE IN ATTENTION TO THE ROMANIAN GENERAL STAFF AT THE END OF THE SECOND WORLD WAR

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By presenting a document from the "Manuscripts" Collection of "King Ferdinand I" National Military Museum, drawn up in the context of the end of the Second World War and the beginning of negotiations for the peace treaty, which was to be signed by Romania in Paris, on 10 February 1947, this article brings to the fore the issue of the Danube and the interests of our country in the area. Prepared by the Historical Service, a structure subordinate to the Romanian General Staff, the mentioned document, which is typewritten, is structured in two distinct parts.

The first part, using several historical, economic, statistical and legal data, addresses topics such as: the works carried out by the European Danube Commission and the Danube Maritime Directorate, as well as the history of the works carried out at the Iron Gates, the future projects for the promotion of the Danube, the economic importance of the river, the history of navigation on it and its political and legal regime during the time.

The second part, which has the coat of arms of Romania embossed on the cover, includes the appendices. They consist of sketches and maps, some of them hand-made, as well as provisions of the treaties and conventions relating to the Danube regime among which we mention: the Treaty of Paris (1856), the Treaty of London (1871), the Treaty of Berlin (1878), the Treaties of Saint-Germain and Neuilly (1919), the Treaty of Trianon (1920), as well as the Conference in Barcelona (1921), the Montreux Convention (1936), and the Sinaia Agreement (1938).

Keywords: Danube; navigation; Romanian General Staff; Second World War; "King Ferdinand I" National Military Museum;

INTRODUCTION

Knowing all the details related to a certain subject important to Romania's interests, regardless of the historical period, has been a constant for the Romanian authorities, this fact being necessary for the decisions taken to be in accordance with the requirements and objectives of the Romanian society, both in the short and in the long term.

At the end of the Second World War, in the context of the negotiations for the signing of the peace treaty that officially put an end to that conflict, the issue of the Danube came to the attention of the Romanian General Staff/M.St.M. Thus, the Historical Service, a structure under its authority, developed a document entitled *"The Danube. Documentary Study"*, which contained information, analyses and recommendations for the Romanian negotiators.

Preserved in the *"Manuscripts"* collection of *"King Ferdinand I"* National Military Museum, the mentioned document comprises two parts: one typed, which summarizes a multitude of historical, geographical, economic, statistical and legal information, as well as a presentation of the position of the various states, at the end of the war, in terms of navigation on the Danube and also in the straits of the Black Sea; the second part, presents a series of maps and sketches, many of them hand made, which illustrate and complete certain aspects on the topic of the Danube importance.

Photo 1: Front page – the first part of the document (M.St.M., Mss. 618)

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Although it is not dated, from the analysis of the contents of this document, it can be seen that it was drawn up towards the middle of 1946, before the beginning of the proceedings of the Paris Peace Conference, on 29 July 1946. In addition, throughout the document, several suggestions regarding certain aspects that Romania should necessarily introduce as clauses in the treaty are underlined as *"only in this way will the Danube be able to have the value to which it is entitled in the existence of Europe"* (M.St.M., Mss. 618, tab 24).

On 29 July 1946, Georges Bidault, the Minister of Foreign Affairs in France, as the representative of the host country, opened the proceedings of the Peace Conference. During those works, held between 29 July and 15 October 1946 in Paris, in the Luxembourg Palace, the draft peace treaties with Italy, Romania, Hungary, Bulgaria and Finland were debated. 32 states participated in the Conference, in the first place the five great powers – USSR, USA, Great Britain, France and China, which played a decisive role in decision-making.

Photo 2: Cover page – the second part of the document (Ib.)

Photo 3: Front page – the second part of the document (Ib.)

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The official delegation of Romania that went to Paris consisted of *"the head of the delegation, 13 main delegates, 2 general secretaries, secretarial staff, journalists and other people"*[1]. Among its members

[1] For more details regarding the context of this historical event, see: Hitchins, K. (1994), *Romania 1866-1947*, București, Editura Humanitas, pp. 525-526.

we mention: Gheorghe Tătărescu, Vice Chair of the Government and Minister of Foreign Affairs and head of the delegation, Gheorghe Gheorghiu-Dej, Minister of Communications and Public Works, Lucrețiu Pătrășcanu, Minister of Justice, Ștefan Voitec, Minister of National Education, Ion Gheorghe Maurer, Minister undersecretary of state, Dr Florica Bagdasar, the Minister of Health, Elena Văcărescu, Șerban Voinea, General Dumitru Dămăceanu[2], Mihai Ralea, the Minister of Romania in the USA, Richard Franasovici, the Minister of Romania in Great Britain, Simion Stoilov, the Minister of Romania in France, Horia Grigorescu, the Minister of Romania in The Hague and other people.

On 9 August 1946, the Romanian government published a statement entitled *"Romania's Attitude at the Peace Conference"*, a document that reiterated the main objectives of our country: recognition of co-belligerent status, resolution of territorial issues, improvement of military provisions, especially the conditions regarding the limitation of armaments and its armed forces, full freedom in economic policy, requests for reparations and restitution not to be greater than those established by the Armistice Convention on 12 September 1944 etc. Regarding the Danube regime, the declaration stated that the peace treaty could not solve this issue, and the riverain countries had to find a later solution.

[2] General Dumitru Dămăceanu (1896-1978) was the only military within the delegation sent to Paris in 1946 and in February 1947, the government delegation that signed for Romania the Treaty of Peace with Allied Powers. He had been active in the Mounted Guards Regiment, had been the attaché to Italy and Albania between 1936 and 1938, had fought in the Second World War and had played an important role in the events of 23 August 1944. After the establishment of the communist regime, he was expelled from the armed forces, demoted, a lawsuit was brought against him, and after his detention, in the 60s, he was rehabilitated, his reserve ranks being restored, and on 19 August 1974, he was promoted to the rank of army general. In his Qualification Sheet for the period 1 November 1946-31 October 1947, signed by Army General Mihail Lascăr, the Minister of National Defence, it is stated that Major General Dumitru Dămăceanu, who was undersecretary of state at the Ministry of National Defence *"was part of the Romanian Delegation for the conclusion of the Paris Peace Treaty, supporting the interests of our Armed Forces before the Military Commission, through written memoranda and oral presentation"*; for the previous period, 1 November 1945-31 October 1946, also in the Qualification Sheet of this officer, General C.Vasiliu Răşcanu said: *"He was sent as a delegate of the Armed Forces with the delegation that was in Paris for the conclusion of the peace treaty. Quite a difficult mission, through which he distinguished himself as a man of great value and a good defender of the cause of our country. He advocated before the Peace Conference with great prestige and very well the cause of the Armed Forces. Praise was given for the way he supported the Armed Forces cause both in the Council of Ministers and in the Assembly of Commanders of Armed Forces Large Units"*, National Military Archives of Romania (ANMR), *M.Ap.N. Personnel Department, File no. 32 Dămăceanu Ion*, pp. 76-77, p. 74.

Indeed, no consensus was reached on the Danube issue, but the Council of Foreign Ministers established, on 6 December 1946, that, within six months of the entry into force of the peace treaties with Romania, Bulgaria and Hungary, a new conference must be convened to discuss a new convention on the navigation regime on the Danube. The conference format must include the representatives of the seven Danube states, as well as France, Great Britain and the United States of America.

On 10 February 1947, the Romanian delegation, consisted of Gheorghe Tătărescu, the head of the delegation, Lucrețiu Pătrășcanu, Ștefan Voitec and General Dumitru Dămăceanu, signed the text of the Peace Treaty with the Allied and Associated Powers at the Quai d'Orsay, in the Hall of the Clock, and, on 23 August 1947, the Romanian Parliament unanimously ratified the treaty, although, as declared on that occasion Gheorghe Tătărescu, the Minister of Foreign Affairs, it contained *"many heavy clauses and many unfair clauses"*[3]. From the point of view of international law, by signing the Peace Treaty, Romania came out of the armistice regime with the Allied Powers and became an independent and sovereign state. Indeed, the Allied Control Commission ceased to exist, and the activity of the Romanian government was no longer *"monitored"* and penalized by the representatives of the USA, the Soviet Union and Great Britain. In reality, Romania's international status did not improve, as the country remained practically under Soviet occupation.

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The Paris Peace Treaties of 1947 did not refer to the conference that was to establish the regime of the Danube, but contained an article that emphasized that *"navigation on the Danube must be free and open to all nation-states, commercial ships and goods of all states on equal terms regarding ports, navigation fees and trade conditions"* (M.St.M., Mss. 618, tab 24, ib.).

[3] In the issue of war reparations, the great material and human destruction suffered by the Romanian space during the battles to expel the German-Hungarian forces from the country was ignored; at the same time, it was established the payment to the USSR of the huge sum of 300 million dollars, payable in eight years, starting on 12/13 September 1944, in oil products, cereals, wood, sea and river ships, various machines. The basis of calculation was to be the US dollar, at the level of 1938, which, due to inflation, represented an obvious injustice, which greatly increased the imposed amount. Romania, thanks to the military contribution from the Allies after 23 August 1944, received back Northern Transylvania, but lost Bessarabia, Northern Bucovina and Herța Land to the Soviet Union and Southern Dobrogea to Bulgaria.

On 4 August 1948, the representative of the USSR, Andrei Vishinski, proposed a draft of the future Danube Convention, which stipulated, among other aspects, the free navigation on the Danube, the ban on the navigation of warships of all non-river states on the Danube, and the existence of a single commission, which would exercise its authority from Ulm to the discharge into the Black Sea. The commission was to deal with the supervision of the provisions contained in the future convention, to prepare the budget, the general plan of works etc. The members of the commission were to be representatives of the riverain states, without them being precisely defined. Each state was to establish, on its own section of the river, the taxes and sanitary and river police regulations. Trans-shipment facilities in the ports could only be used with the prior consent of the owner. Two separate administrations were established, one Romanian-Yugoslav and the other Romanian-Soviet, for the Iron Gates and the mouths of the Danube, respectively. The establishment of a body to settle disputes between non-signatory countries of the future convention was omitted. Austria was to join the commission after the signing of the state treaty, all previous provisions that legally regulated navigation on the Danube were to become obsolete, and the assets of the former commissions were to become the property of the new Danube Commission (the two annexes of the draft). Although the draft gave more authority to the riverain states, it was only an appearance, because in reality they were controlled by Moscow. The convention regarding the Danube regime was to be signed on 18 August 1948, in Belgrade. The accepted draft convention had many points of view common to both the Western and the Soviet vision: the creation, in principle, of a unitary Danube regime for the entire international course of the Danube within a single Commission; both proposals advanced the freedom of navigation of the Danube; both sides wanted the new Commission to act with less jurisdiction compared to the powers of the European Commission of the Danube/ ECD. The American proposal required that, in accordance with the provisions of Article 25, the Danube Commission be in association with the United Nations, that the meetings of the Commission be open to representatives of the United Nations as observers, and that disputes be subject to settlement in accordance with Article 42 of the UN Charter. However, the Convention did not refer to the United Nations

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and advanced an ad hoc Conciliation Commission as a way to resolve disputes, according to the provisions of Article 45. According to Article 47, the convention entered into force as soon as the instruments of ratification of the six states were deposited. The additional protocol of the convention cancelled all the obligations of the International Danube Commission and those of the European Danube Commission regarding the credits granted by Great Britain, France, Russia and other states without compensation. The same protocol stated that the provisions of the Paris Convention of 23 July 1921 as well as the former documents that laid the foundations of the Danube regime were null and void.

According to the Convention, the 11 riverain states ensured that they carried out the necessary activities to maintain and improve navigation conditions and undertook not to obstruct or hinder navigation on the navigable channels of the Danube. The Danube Delta would come under the control of a Soviet-Romanian sub-commission, and the Iron Gates under the authority of a Romanian-Yugoslav sub-commission.

The conference in Belgrade represented a new chapter in the history of the river, as the idea of free navigation on the Danube was agreed, under the exclusive control of the riverain states. According to the Convention, the 11 riverain states ensured that they carried out the necessary activities to maintain and improve navigation conditions and undertook not to obstruct or hinder navigation on the navigable channels of the Danube. The Danube Delta would come under the control of a Soviet-Romanian sub-commission, and the Iron Gates under the authority of a Romanian-Yugoslav sub-commission. The delegations of the 11 participating countries (Austria in an advisory capacity) were led by: Felix Orsini Rosenberg for Austria, Evghenii Kamenov for Bulgaria, Erik Molnar for Hungary (ambassador of the country in Belgrade), Ana Pauker for Romania (Minister of Foreign Affairs), Charles Peake for Great Britain (representative of the country in Belgrade), Cavendish Cannon for the USA (ambassador in the Yugoslav capital), Andrei Vishinski for the USSR, Adrien Thierry for France (ambassador in Belgrade), Vladimir Clementis for Czechoslovakia (foreign minister), Ales Bebler for Yugoslavia (deputy foreign minister) and Baranovski, the deputy prime minister of Ukraine.

THE IMPORTANCE OF THE DANUBE ISSUE

Returning to the presentation of the Danube issue within the mentioned document in the heritage of the National Military Museum, we can note a deep and detailed analysis of numerous aspects related to the history of this topic as well as some economic and statistical data related to the economic importance of this waterway for the Romanian state.

In the introductory chapter, a series of geographical data concerning the sources, route, important tributaries and their navigable routes, flow, dikes etc. are presented in great detail. From the point of view of navigability, it is stated that the Danube was divided into 12 sectors, which are also described in detail, with a series of observations made on the 10th sector, between km 1,049 and 930 Moldova Veche-Turnu Severin (119 km), also known as the Iron Gates, about which it is said: *"This sector is the most important, because it controls the entire route Vienna-Black Sea..., is the only remaining great obstacle to the connection between the North Sea and the Black Sea"* (Ib., tab 7). In the argumentation accompanying this comment, the difficult navigation conditions are revealed due to the numerous rocks, close to each other, the shallow depths, the strong currents, 18 km/h and often in the transverse direction to the direction of advance, the insufficient width of the channels that do not allow ships to cross, as well as the time lost by breaking and restoring the convoys that pass there and *"the onerous cost per ton"* that is required for passage. Although it is recalled that numerous efforts were made after the Congress of Berlin, in 1878, to improve the navigation conditions in this sector, the persistence of these difficulties is noted, but it is specified that: *"Grandiose works in project phase nevertheless predict the solution of these difficulties"* (Ib., tab. 8). Moreover, details regarding the history of the works carried out at the Iron Gates represent the topic of chapter III of the first part of the document.

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Another special mention is made in relation to the presentation of the 12th sector, from km 171 to km 0, the one entitled *Maritime Danube*, the last sector of the Danube, with the three branches: Chilia, Sulina and Sf. George. Regarding this sector, it is specified: *"The importance of this sector exceeds all others, because here is the problem of maintaining the exit to the sea, a problem with many aspects, which for almost a century was the Gordian knot of the Danube issue and it is certain that it will be again, because not only technical obstacles have to be overcome, but also numerous political problems have their key here"* (Ib.) It is also stated that: *"This region forms the object of the following study and will be looked at in all aspects ..., in order to emphasize once more the vital importance of the Danube for Romania and Europe"* (Ib.)

The second chapter, entitled *"Out to the Sea"*, presents the history of the works carried out under the auspices of the European Commission of the Danube, those accomplished by the Directorate of the Maritime Danube, as well as those performed both at Gura Sulina and on the Sulina River Canal. The activity of the European Commission of the Danube is detailed and appreciated, bringing to attention the fact that, at the basis of those works, there were hydrographic data collected by a series of engineers: *"At the time when, following the Paris Treaty, the ECD was established, the Delta and the branches of the Danube were unexplored regions. There were no accurate maps, no hydrographic data. Although, following the studies conducted by the British Government, executed by Commander Spratt*[4]*, before 1856, there were some hydrographic data, otherwise very important, and the complete elevation of the region was the work of the Chief Engineer of the Commission, Charles Hartley*[5]*. Of real use in the completion of this work were the preliminary designs for the improvement of the Sulina and St. Gheorghe, developed in 1856 by the Austrian engineers G. Wex*[6] *and Fl. Passetti*[7]*, plus the works of M. Nobiling*[8]*, who,*

[4] T.A.B. Spratt arrived at Sulina on the ship *"Medina"* of the British Admiralty, as captain, in the summer of 1856, being considered intelligent and well versed in navigational matters; he made, that year, for the first time, a map that revealed the true shape of the delta coast; see Stancu, Șt. (2014). (2014). *România și Comisia europeană a Dunării. Diplomație. Suveranitate. Cooperare Internațională*. Galați: Editura Muzeului de Istorie Galați, p. 73.

[5] Charles Hartley (1825-1915), a British civil engineer, known as the *"Father of the Danube"*, was the one who carried out a series of mapping works of this river. He also worked on the construction of the port of Sutton, the Suez Canal, the Port of Odessa, the Mississippi River Delta etc. During the Crimean War (1853-1856), he was the deputy commander of the Anglo-Turkish gendarmerie corps at Kerch. Between 1856 and 1872, he was appointed chief engineer of the works carried out to improve navigation at the mouths of the Danube by the European Commission of the Danube, established after the Crimean War, following the Paris Peace Treaty of 1856. The representative of Great Britain in that commission was Major John Stokes, who requested that three engineers should be made available to him, including himself. After 1872, he was the consulting engineer of that Commission until 1907; for details of his biography see: Hartley, C.W.S. (1989). *A Biography of Sir Charles Hartley, Civil Engineer (1825-1915), The Father of the Danube*. Edwin Mellen Press, Lempter, 2 vols.

[6] Austrian engineer Gustav Wex was the one who opposed the idea of developing the Chilia branch as a navigable canal, because, due to the high flow, it carried large amounts of alluvium, which would have caused problems for the mouths of the river; see *Lucrările tehnice efectuate pe Dunărea maritimă (1918-1938), p. 139.*

[7] Engineer Fl. Pasetti shared the same opinion as Gustav Wex, his option being St. George branch. See Ib., p. 139

[8] Engineer A. Nobiling, director of hydraulic works on the Rhine, drew up a report on 25 June 1857 for the European Commission of the Danube; see County Directorate of Galati National Archives (D.J.A.N.G), Collection *Comisia Europeană a Dunării. Protocoale*, 1857, pp. 61-62, apud Ștefan Stancu, *op. cit.*, p. 74 (footnote no. 4).

as temporary assistant to the Prussian delegate, explored the mouths of the three branches in the summer of 1857" (M.St.M., Mss. 618, tab 9). Also, some things related to the activity of the commission are mentioned: the choice of the city of Tulcea as the main headquarters, the construction of workshops in Sulina, of a telegraph line of about 200 km between Sulina, Tulcea and Galați.

Photo 4: Map of the Danube regime before the Paris Treaty of 1856, presented in the annexed part of the document (Ib.)

After obtaining the necessary data, in 1858, the problem arose of choosing a solution for the exit to the sea, the option being between Sulina and Sf. Gheorghe branches, as the Chilia branch had numerous other branches and a secondary delta. A commission of technicians meeting in Paris, on 25 August 1858, opted for Sf. Gheorghe branch, on the condition that a 16-foot (4.88 m) deep canal lock should be built. In December 1858, the European Commission of the Danube took responsibility for the improvement of Sf. Gheorghe branch, the works being estimated at 17.5 million francs. The large sum of money and the competition with the new English line Cernavodă-Constanța caused the canal to be delayed, but work was undertaken on the Sulina canal. In the continuation of the document, the works from Sulina are presented chronologically, with a lot of technical details. Between 1858 and 1861, the temporary damming works that took place are mentioned, their cost amounting to 2,165,535 francs. Between 1866 and 1871, the execution of temporary works was a success leading to the increase of the depth to 8 feet. The commission decided to complete those works, as well as to build wooden quays, an administrative building and a hospital for sailors, Bara Sulina reaching 19 feet (5.79 m) in 1871.

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Between 1873 and 1894, the works maintained a constant depth of 20.5 feet (6.25 m), with little variation. In the period 1894-1930, alignment works are also mentioned, but also dredging works at the mouth, for which the Commission purchased a bucket dredger, *"Percy-Sanderson"*, whose cost amounted to 1,007,365 francs, a large suction dredger, *"Dimitrie Sturza"*, whose cost was 1,295,000 francs, which kept the bar at 24 feet (7.31 m) as well as the suction dredger *"Carol Kuhl"* in 1912 for work on the lower canal of Sulina.

Photo 5: Map with the Danube regime after the London Treaty of 1883, presented in the annexed part of the document (Ib.)

During the First World War, it is stated that the works at the mouths of the Danube were *"massively"* subsidized by the Romanian government, but were interrupted, because the material was used for dredging Chilia and Oceacov, for strategic and political reasons. The takeover of the material of the European Commission of the Danube by Russia was done on the basis of a lease contract, which, however, was not fully respected, and upon the return of the ECD, the new government installed in Moscow handed over the floating material and the taken dredges.

Between 1921-1930, the priority was dredging in order to reach a suitable depth, given the already mentioned interruption of the works during the war, followed by the extension of the existing dikes. Since 1926, the collaboration between the European Commission of the Danube and the specialized technical bodies of Romania is mentioned, which conducted a series of hydrographic studies in stages with a view to the access to the sea. In 1927, the contribution of the works carried out by the Hydrographic Service of the Royal Navy, which measured and studied the regime of sea currents in the Chilia-Gura Portiței area, was added. After the discussions in Sinaia, on 18 August 1938,

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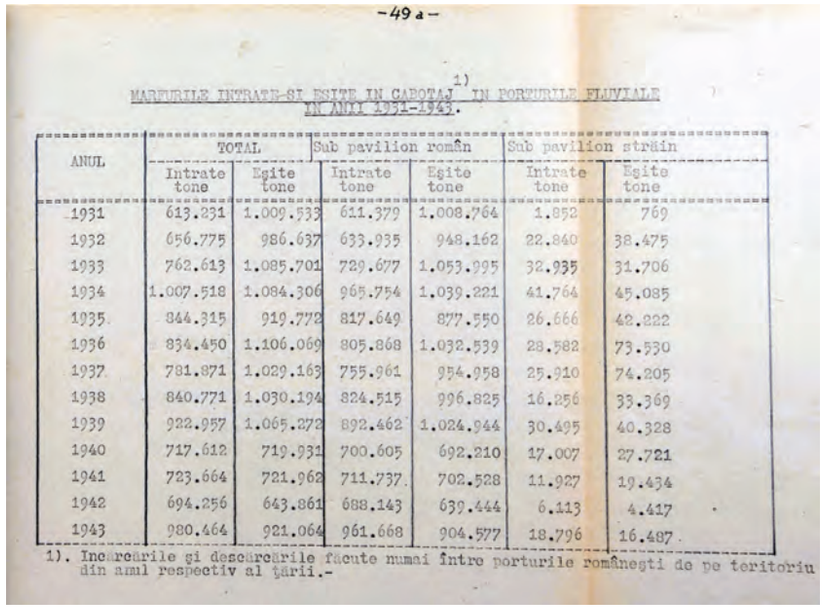
the technical attributions at the mouths of the Danube were taken over from the Commission by Romania. Starting on 13 May 1939, the technical service of the ECD was taken over by the Danube Maritime Directorate (DMD), its objectives being: maintaining navigation on the Sulina branch until a new exit to the sea was achieved, choosing an optimal solution in that regard and preparing the works for execution.



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MARFURILE INTRATE SI ESITE IN CABOTAJ IN PORTURILE FLUVIALE IN ANII 1931-1943. 1)

ANUL	TOTAL		Sub pavilion român		Sub pavilion străin	
	Intrate tone	Egite tone	Intrate tone	Egite tone	Intrate tone	Egite tone
1931	613.231	1.009.533	611.379	1.008.764	1.852	769
1932	656.775	986.637	633.935	948.162	22.840	38.475
1933	762.613	1.085.701	729.677	1.053.995	32.935	31.706
1934	1.007.518	1.084.306	965.754	1.039.221	41.764	45.085
1935	844.315	919.772	817.649	877.550	26.666	42.222
1936	834.450	1.106.069	805.868	1.032.539	28.582	73.530
1937	781.871	1.029.163	755.961	954.958	25.910	74.205
1938	840.771	1.030.194	824.515	996.825	16.256	33.369
1939	922.957	1.065.272	892.462	1.024.944	30.495	40.328
1940	717.612	719.931	700.605	692.210	17.007	27.721
1941	723.664	721.962	711.737	702.528	11.927	19.434
1942	694.256	643.861	688.143	639.444	6.113	4.417
1943	980.464	921.064	961.668	904.577	18.796	16.487

1). Incarcările şi descarcările făcute numai între porturile româneşti de pe teritoriu din anul respectiv al ţării.-

Photo 6: The situation of the entry and exit of goods in river ports between 1931 and 1943, presented in the annexed part of the document (Ib.)

Between 1942 and 1943, it is stated that, despite the difficulties encountered by the political context, works were carried out that ensured navigation on the Sulina canal. The conclusion of the chapter was that an important issue was imposed in the foreground, namely that, until the achievement of a way of access to the sea on St. Gheorghe branch, the existence of good navigability conditions on Sulina branch depended on the natural phenomena of growth of Stari Stambul branch, with the entire system of works to stop it, and the abandonment with or without intention of that system immediately attracted and compromised navigation on Sulina branch. Therefore, the document states: *"The peace agreement with the USSR will definitely have to contain clauses to ensure the maintenance*

An important issue was imposed in the foreground, namely that, until the achievement of a way of access to the sea on St. Gheorghe branch, the existence of good navigability conditions on Sulina branch depended on the natural phenomena of growth of Stari Stambul branch, with the entire system of works to stop it, and the abandonment with or without intention of that system immediately attracted and compromised navigation on Sulina branch.

of the works after Stari Stambul, which is a border region between us and the USSR, because only in this way will the Danube be able to have the value to which the existence of Europe has a right" (Ib., tab 24).

The next chapter, *"History of the Works at the Iron Gates"* delves into the evolution of improvements to navigation at the Iron Gates. The first works that had been carried out since the time of the Romans (a diversion channel and a tow road on the right bank), the cleaning works of the river bed downstream of Orșova carried out in 1834, to facilitate navigation, the works accomplished after the Congress of Berlin, by Austria-Hungary, which, despite some economic difficulties, entrusted them to the Berliner Diskonta Gesellschaft are mentioned; started on 15 September 1890, those works were completed in the fall of 1898. However, in September 1896, the Portile de Fier/Iron Gates channel was traversed by the ship *"Franz Joseph"*, with Emperor Franz Joseph, King Carol I of Romania and the King of Serbia on board, finding that the proposed goal of giving a depth of 2 m at the cataracts and 3 m in the channel had been fulfilled. The document also underlines the enormous economic impact that the construction of dams, with related locks, and hydroelectric plants would have here, including for our country: *"This electricity (approx. 450,000 H.P. would return to Romania), which would mean, through the reduced price at which it would come per kw/h (approx. 1 centime gold), the possibility of transforming the entire region into an industrial plant…"* (Ib., tab 27).

The general European component of the river's importance is analysed in the chapter entitled: "Future projects for the value of the Danube within the economic policy of Europe". The advantages that some works (part of which had already started) would bring for Europe, which would connect the large European hydrographic basins: achieving an economic balance between the industrial and agricultural regions, the intensification of traffic on the Danube.

From a strictly navigational point of view, it was stated that, in the case of the completion of such a project, the time needed to cross the sector would be considerably reduced: *"It is enough to compare the 52 hours needed for the crossing by a 3,600-ton convoy, pulled by a 1,500 H.P. tugboat, in the present situation, and the time of 17 hours (including the time lost by passing the locks) which the same convoy, pulled by a tug of only 500 H.P. would take"* (Ib.).

The general European component of the river's importance is analysed in the chapter entitled: *"Future projects for the value of the Danube within the economic policy of Europe"*. The advantages that some works (part of which had already started) would bring for Europe, which would connect the large European hydrographic basins: achieving an economic balance between the industrial and agricultural regions, the intensification of traffic on the Danube, the consecration of important naval communication nodes on the Danube, the shortening of distances etc. The detailed projects were: Rhine-Main-Danube Canal, Danube-Oder-Elbe-Vistula Canal, Polish Canals, Romanian Danube Canals (Bucharest-Danube Canal, Cernavodă-Constanța Canal). Regarding the shortening of distances, it was shown that the completion of the Danube-Oder-Elbe-Vistula Canal works, estimated according to the project at 940 million Austrian gold crowns, would have meant a reduction of 3,656 km between Sulina and Rotterdam, 3,270 km between Sulina and Hamburg, 2,920 km between Sulina and Stettin and 3,290 km between Sulina and Danzing. Regarding the Bucharest-Danube Canal, the document specifies that the work had an estimated cost, in 1930, of about 3 billion lei and would have been granted by the Parliament as early as 1929, but, because of a lack of funds, it had not progressed to the construction phase, remaining in the project stage. At the same time, it is emphasized the economic importance that its construction would have had for Bucharest and its surroundings, the improvement of the entire communication system of the country, the decongestion of the access lines to the capital.

Regarding the shortening of distances, it was shown that the completion of the Danube-Oder-Elbe-Vistula Canal works, estimated according to the project at 940 million Austrian gold crowns, would have meant a reduction of 3,656 km between Sulina and Rotterdam, 3,270 km between Sulina and Hamburg, 2,920 km between Sulina and Stettin and 3,290 km between Sulina and Danzing.

The three projects proposed for this objective are briefly presented, each with their advantages and disadvantages: *"Eng. Vasilescu[9] and Pavel[10] Project – which captures about 23,400 H.P. on the outskirts of Bucharest – variant 1 and 15,400 H.P. option II – The navigable channel is on almost the entire Bucharest-Oltenița distance, parallel to C.F. Project Eng. Al. Davidescu[11] – captures 38,000 H.P. – it connects with the Danube but in a wild point and is far from C.F. – It has vast irrigation possibilities – Eng. Leonida[12] and Canella[13] – capture*

[9] Engineer Gr. Vasilescu. In 1927, it was decided to abandon any projects with reference to the Sulina way out, proposing that, in the future, the studies should focus only on the transformation of the Sulina canal into a sea canal, locked, equipped with a new exit to the sea, south of the then mouth; see David, Al. (2010). *Lucrările tehnice efectuate pe Dunărea maritimă (1918-1938)*, in *Analele Universității "Dunărea de Jos" Galați*, Istorie, vol. IX, p. 139.

[10] Dorin Pavel, renowned hydrologist.

[11] Engineer Al. Davidescu proposed to Bucharest City Hall, in 1913, the construction of the Bucharest-Fierbinți (Ialomița) canal and another one, which would have united Sabarul with Motiștea, and in 1927, he would bring his improved project back to the attention of the city councils, see Popov, M., 1998*, Momente din istoria controversatului Canal Dunăre-București,* in *"Muzeul Național"*, no. 10, p. 89.

[12] Engineer Dimitrie Leonida, after the First World War, was the one who was actively involved in arguing the need for a canal to connect Bucharest with the Danube.

[13] Ricardo Canella, reputed specialist in hydraulics, collaborated in the interwar period with engineer Dimitrie Leonida, on the same idea; their project was supported by Cincinat Sfințescu.

approx. 28,000 H.P. – It is only a small part parallel to C.F. Oltenita and neglects the possibility of irrigation" (M.St.M., Mss. 618, tab 31)[14]. The purpose of the Cernavodă-București Canal was to ensure a new way of access to the Black Sea, but also to shorten the road to the East by about 400 km. The document says that its length was only 60 km, but it certainly constituted a great advantage for the national economy and reduced the sums added to the price of exported goods, giving the opportunity to compete in foreign markets with a chance of success. The Hungarian ministerial advisor Hajos would have developed a project in this sense during the German occupation from 1916-1918, the cost of which was estimated at about 3.8 billion (114 million gold crowns) in 1916. Another project had been carried out by the engineers Bârglazan[15] and Smigelschi[16] and included the construction of a canal from Constanța to Cernavodă, with a depth of 8 m and a width of 100 m, the project also meaning the supply of the energy captured from the river's waters of 80,000 H.P. and over 50,000 ha given to culture, the cost being 14 billion lei (in 1930).

In 1929, the Romanian Parliament was to approve the draft of a law for the construction of the canal, the explanation of reasons being made by Virgil Madgearu, but the crisis of 1929 prevented its implementation.

"The last project, which had started before the war entered the constructive phase, provided for the exit of this canal at Taşaul. Lake Taşaul was to be transformed into a large port... for the export of oil and the tactical and strategic needs of the war fleet. The arrangements for the new port, although began at a brisk pace, were interrupted by the events which led to the outbreak of the war" (M.St.M, Mss. 618, tab 32). In 1929, the Romanian Parliament was to approve the draft of a law for the construction of the canal, the explanation of reasons being made by Virgil Madgearu, but the crisis of 1929 prevented its implementation. At the same time, our document draws attention to a certain position of the USSR, which the construction of such a canal would have generated: *"As for the political future, we believe that this canal could be the subject of future diplomatic discussions, because, to some extent, it would isolate Russia from the main economic traffic line of the Danube. It would be a situation that would certainly give rise to demands from the USSR, which, taking into account the policy pursued for two centuries, wants the southern border to rely at least on the exit to the sea of the most important economic artery of Europe – the Danube"*. (Ib., tab 33).

All the economic aspects related to the economic importance of the river are summarized in a small chapter. It is stated, first, that the average annual traffic in Romanian waters between 1931 and 1943 was 9 million tons of goods and 540,000 passengers, of which 31,000 by sea and 508,000 on the Danube and other navigable waters. After presenting some statistical data regarding imports and exports between different Danube states, the document emphasizes an interesting aspect, namely the need to create an economic union of all the riverain states: *"Since an important coefficient of the total value of the import and export of each Danube state is absorbed by the other Danube states, an economic union of all the Danube states, which complement each other so perfectly, would create the ideal climate for the development of all these countries and is safe and secure of eternal peace in this region, which was once characterized as a hotbed of conflict"* (Ib., tab 45). After reviewing other past ideas on this topic, two reasons why this idea was not successful are identified, one secondary and one primary. The secondary one referred to the fear that England and France had that such economic union, once achieved, would balance the economic needs of the Danube states through direct exchanges, closing an important market for the two great powers. As for the main reason, it was said that: *"Nazi and Fascist expansionist policies saw in this bloc a serious obstacle to the achievement of their goals"* (Ib., tab 46).

"Today, in 1946, on the eve of peace, the situation has changed. Two great powers have disappeared from Europe: Italy and Germany. What is more, together with them, a good part of the German industry that had a massive outlet in the Danube countries also disappeared... The outlet left vacant by the disappearance of Germany is of great importance".

As for the existing European context at the time when the analysis was conducted within the document we are considering, it was stated: *"Today, in 1946, on the eve of peace, the situation has changed. Two great powers have disappeared from Europe: Italy and Germany. What is more, together with them, a good part of the German industry that had a massive outlet in the Danube countries also disappeared... The outlet left vacant by the disappearance of Germany is of great importance"* (Ib., tab 47). The problem that is analysed a little more extensively is that of which political entity after the war was to replace the void left

[14] For details on the history of projects related to this idea, see Popov, *op. cit*., pp. 89-95, note no. 11.

[15] Engineer Aurel Bărglăzan, graduate of the Polytechnic, class of 1928, university professor, member of the Romanian Academy, is considered the founder of the Romanian school of hydraulic machines.

[16] Engineer Octavian Smighelschi collaborated with engineer Aurel Bărglazan to identify technical solutions for better navigability of the Black Sea-Danube Canal.

by the lack of industrial products that had until then been provided by Germany, given that the statistics presented in this material indicated that the volume of commercial transactions with Germany was, for the Danube states, between 20% and 60%. According to the document, the question that arose in the new context was: *"Who will take over this market? Who will be able to completely replace Germany...?", under the conditions in which it was shown that: "The industrial products brought by Germany in the past are imperatively needed especially now, when all these countries are in full reconstruction"* (Ib.).

Very interesting is the answer given in this document, an answer that covered several hypotheses. One of the hypotheses was that Czechoslovakia and Austria would be able to partially take the place of Germany, in the near future, but only partially, most of it being questioned. In this sense, it was stated: *"It is possible that it will be taken over by the Anglo-Americans or that it will still belong to Germany, but to a Germany controlled by the 4 great powers. In the first hypothesis, a dominant position in the economic life of a state also means a political influence. It would not suit the USSR. The second hypothesis, in the same way, strikes at Russian interests, which seem to be contrary to the economic existence of a Germany, even if it is absolutely pacified. As we see, the USSR is in the paradoxical situation of not being able to accept any of these solutions, and also unable to offer any solution. As for a possible substitution of it in Germany's economic role for the Danube countries, it is out of the question. Russia itself has great needs for industrial products, for which it offers the same agricultural products as the Danube countries. Two possibilities remain: –Russia to be a direct negotiator on foreign markets and the distribution body, then, for all the Danube countries. But it would be equivalent to a total economic enslavement. The current progressive mentality being against political and economic strangulation, we exclude this hypothesis. The second was debated in the previous days. The economic union of the Danube countries"* (Ib., tab 48).

"The need to achieve an economic cooperation of the Danube states does not lose any of its importance or topicality, but, on the contrary, appears as the most reliable solution for the consolidation of both peace and economic development in this region".

In the end, the conclusion was: *"In the light of these aspects – as seen –, the need to achieve an economic cooperation of the Danube states does not lose any of its importance or topicality, but, on the contrary, appears as the most reliable solution for the consolidation of both peace and economic development in this region"* (Ib.).

In the continuation of the document, after a brief analysis of the difficulties related to the maritime trade of the Danube (both natural and economic), it was said that: *"the pursuit of a naval program of provision and continuous care in order to achieve an exploitation that gives the maximum yield must be the chief concern of the state. In these improvement measures, the protection and encouragement that the State must give to private initiative must not be neglected. Only in this climate of free competition will it be possible to obtain the optimal conditions for the development of Romanian exports"* (Ib., tab 52).

CONCLUSIONS

In the concluding chapter, the importance of this river as well as of the principle of free navigation is reiterated once again, being, at the same time, emphasized the idea that the in-depth study of the clauses in the previous treaties regarding this aspect *"will make the mistakes of the past be used as lessons for the future in this area. Not resolving them fairly will always leave an open door for new misunderstandings and thus for new conflicts that may end with a gun in hand"* (Ib., tab 55).

Another conclusion was that, being a riverain state for a long part of the river and its mouths, the role played by Romania had to be of the first order in the future. It was also stated that the problem of the mouths of the Danube was correlated with that of the Black Sea, because *"the breath of our trade"* depended on the two. At the same time, regarding the mouths of the Danube, it was stated that: *"The past shows us that, whenever we were masters of them, our State was strong, and the trade of the Romanian countries experienced flourishing periods, and conversely, whenever they were not ours, we experienced times of political decay and economic ruin"* (Ib., tab 56). In this sense, the year 1916 was given as an example, after the occupation of 2/3 of the country, when trade completely stagnated, due to the transformation of the Danube into a *"road of the interests of only these countries (Germany, Austria-Hungary) to the Black Sea"*. Another point emphasized was that the closure of the Black Sea Straits or restrictions on the matter would mean *"the cessation of all economic activity and ties between peoples"* (Ib.).

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Also as a conclusion, the need to have knowledge on this topic and its importance for Romania was emphasized, because *"our current interests and what the future holds for us"* depend on *"how it will be supported and resolved at the peace conference"*, along with the support of the other Romanian objectives, resulting in *"our future economic and political progress or regression"* (Ib.) An example was also given of what the ignorance of our interests in this matter meant, namely an event that happened in 1917, when this part of the country was still under the control of the Central Powers: *"Through a telegram sent to a Romanian authority by Gen. Mackensen, it was demanded that the Romanian sanitary installations at the mouth of the Danube should be made available to Germany, with the intention of removing Romania from this right won on the Danube. The communication, being transmitted to a department, was executed immediately on the initiative of the General Secretariat, without asking for the approval of the higher or competent bodies, which could perhaps have removed this new task imposed on Romania... The above would have had quite serious consequences, if the Armistice of 1918 had not solved the problem by defeating those who were grabbing everything for themselves"* (Ib., tab 57).

Talleyrand referring to the importance of the Danube, said that: "Le center de gravité du monde n'est ni sur L'Elbe, ni sur L'Adige; il est la bas, aux frontiéres de L'Europe, sur le Danube". The document specifies that "these words, uttered by a political figure like Talleyrand in the 19th century, can form an undisputed truth for 1946 as well".

Also here is a quote from Talleyrand[17]'s memoirs, which, referring to the importance of the Danube, said that: *"Le center de gravité du monde n'est ni sur L'Elbe, ni sur L'Adige; il est la bas, aux frontiéres de L'Europe, sur le Danube".* The document specifies that *"these words, uttered by a political figure like Talleyrand in the 19th century, can form an undisputed truth for 1946 as well"* (M.St.M., Mss. 618, tab 57).

Regarding the connection between the mouths of the Danube and the Sea as well as its importance, the words of King Carol I of Romania, in the speech he gave on the occasion of the inauguration of the first vessel of the Romanian Maritime Service, are brought to attention as follows: *"Our future is on the Sea"*[18].

[17] Charles-Maurice de Talleyrand-Périgord (1754-1839) was a French politician and diplomat who held a number of important positions, such as adviser, ambassador, foreign minister, president of the Council of Ministers. He was the one who represented France at the Congress of Vienna in 1815.

[18] The importance that King Carol I of Romania attached to the regime of this river emerges from his memoirs in different contexts, especially that of the signing of the Treaty of Berlin, in 1878; see: *Memoriile Regelui Carol al României. De un martor ocular*, vol. IV, 1878-1881 (1994). București: Editura *Machiavelli*, pp. 139-169.

The final chapter continues with several tables presenting a series of statistical data relating to the import and export by water in the period 1931-1943, by various categories: cereals, petroleum products and derivatives, wood, ores, food, coal etc., a table by nationality of the ships loaded in the port of Sulina, in the period 1 January-31 December 1938. Another table attached shows the number of postal and passenger ships leaving the Danube in the same period.

Also in the final part of the first part of the document is presented the subchapter entitled *"History of the regulation of navigation on international rivers"*. Starting from some general considerations regarding this aspect, related to the Egyptians, the Roman and medieval periods, as well as reiterating the principles of the French Revolution, the document lists the most important regulations regarding navigation on the Danube, contained in various international treaties (the Paris Convention of 1856, the London Treaty of 1871, the Berlin Treaty of 1878, the London Conference of 1883, the Bucharest Treaty of 1918, the Peace Treaties of 1918) etc.

Another sub-chapter is dedicated to the situation of navigation on the Danube and in the Black Sea straits in 1946, *"in light of the political groping and the meetings of the foreign ministers and their deputies until 29 July 1946, when 21 nations met at the Paris Conference"* (M.St.M, Mss. 618, tab 104). It is actually a sort of detailed report of the diplomatic meetings and discussions between the various parties on the subject of Danube navigation in the context of the Paris Conference. According to the mentioned archival document, *"The focus on this issue has been especially since June, being discussed by the Deputy Foreign Ministers during the meeting held in Paris on 5 June"* (Ib.), the discussions ending without any conclusion. Then, the visit to London of the Austrian foreign minister, Karl Gruber[19], two weeks before the meeting of foreign ministers in Paris, is reminded, who presented the British foreign minister, Ernest Bevin[20], with a seven-point

In his speech in the House of Commons, in 1946, Ernest Bevin, the British Foreign Secretary, said: "We hope to sail to Odessa, the Black Sea and Constanta in all freedom, but we do not ask for military bases. Our desire is the free movement of vessels and world trade".

[19] Karl Gruber (1909-1995), an Austrian politician and diplomat. Shortly after the end of the Second World War, he became Minister of Foreign Affaires in Austria, a position he held until 1953. He was also Austria's Ambassador to the United States of America, between 1954-1957 and 1969-1972, to Spain, between 1961-1966, to the Federal Republic of Germany in 1966, and to Switzerland, between 1972-1974.

[20] Ernest Bevin (1881-1951) served as Secretary of State for Foreign and Commonwealth Affairs from 1945 to 1951, an opponent of communism and a supporter of the creation of NATO.

memorandum, which included his country's point of view, at point 4 being provided: *"The reopening of river traffic on the Danube for all the Danube States, from the source to the Danube's discharge into the sea"*, specifying that the Danube was closed to Austrian vessels. It is reminded the speech in the House of Commons of the British Foreign Secretary, Ernest Bevin, who said: *"We hope to sail to Odessa, the Black Sea and Constanta in all freedom, but we do not ask for military bases. Our desire is the free movement of vessels and world trade".* (M.St.M., Mss. 618, tab 104). Obviously, the entire speech of the minister is not presented, only certain ideas being selected, among which the fact that, at the time, there was no regular traffic on the Danube, as well as the position of the Danube states in the context of the Paris Conference: *"It was observed, in recent statements, that it could not be considered fair for some non-Danube States to dictate the Danube issue and to impose a regime, because they have no concern for the interests of the Danube States"* (Ib., tab 105). In the same speech, the minister specified that the position adopted by Great Britain in Paris was that of the need to restore commercial freedom and navigation on the Danube and other routes, as well as to protect the commercial rights of states interested in the principle of open ports. The document then continues with Turkey's position, presenting, in this regard, the clarifications made by Radio Ankara, on 6 June 1946, after the speech of the British Foreign Minister in the Chamber: *"opposing, once again, the request of the USSR to be granted naval bases in the Dardanelles, the British Government sides with Turkey in the matter of the Straits..., according to the stipulations of Montreux, any request for revision of this convention must be notified to all the high contracting parties three months before the expiration of the current period. This period ends in November 1946. A decision must therefore be taken before August current year, otherwise the convention will automatically be extended for another five years"* (Ib.). Turkiye considered the Montreux Convention the only legal basis on which the review of the existing regime could be founded. Another state whose position is analysed in the document is Hungary. It is recalled that Ferenc Nagy[21], the Prime Minister of Hungary, who was in Washington on 14 June 1946, shared

In the same speech, Ernest Bevin specified that the position adopted by Great Britain in Paris was that of the need to restore commercial freedom and navigation on the Danube and other routes, as well as to protect the commercial rights of states interested in the principle of open ports.

[21] Ferenc Nagy (1903-1979), Hungarian politician, held the position of Prime Minister of Hungary between 4 February 1946 and 31 May 1947.

the British point of view regarding the international control of the Danube. It was also specified that, on 15 June 1946, during the meeting in Paris, at the Luxembourg Palace, of the four foreign ministers of the Great Powers, a month after another meeting of them, on 16 May 1946, the Danube issue was brought up again, meanwhile occurring the capture of the German fleet on the Danube in the American zone. It is recalled, in this context, the comment from Radio Moscow, on 17 June 1946, which reflected the Soviet point of view: *"Great Britain's claims on this matter are unjustified and this problem can be solved by the Danube states themselves, without any further foreign intervention"* (M.St.M., Mss. 618, tab 106).

Another event presented in the document is the meeting of the four foreign ministers on 25 June 1946, when the question of free navigation on the Danube was brought back into discussion, V. Molotov[22]'s position being repeated, namely that the navigation regime on the Danube is a matter that must be regulated between the Danube countries and that there are no reasons for this matter to be included in the peace treaties. The other three foreign ministers maintained their point of view, namely that this clause should be included in the peace treaties and that the Danube countries express their opinion at the conference of the 21 nations.

Also in this chapter it is emphasized that, between 16 May and 16 June, before the beginning of the conference of the four foreign ministers, their deputies met 20 times. The document went on to specify that, in the following meeting, when the discussions on the Danube navigation issue were resumed, the English and American delegates insisted on the introduction of special clauses in the treaties with Romania, Hungary and Bulgaria, obliging them to maintain a different regime regarding the Danube navigation. It was opposed by the delegate of the USSR, who stated that this issue also concerns Czechoslovakia and Yugoslavia and not only the states with which peace treaties must be concluded, because, without their inclusion, it is impossible to solve the issue. Czech Minister Jan Garrigue Masaryk[23]

V. Molotov's position was that the navigation regime on the Danube is a matter that must be regulated between the Danube countries and that there are no reasons for this matter to be included in the peace treaties.

[22] Veaceaslav Molotov (1890-1986), one of the most important Soviet leaders, who, at that time, held the position of Minister of Foreign Affaires in USSR, a position held until 1949, when he was replaced by Andrei Vishinski.

[23] Jan Garrigue Masaryk (1886-1948), Czech diplomat and politician, who, between 1940 and 1948, was the Minister of Foreign Affaires of Czechoslovakia.

is also said to have told the press on his return from London that he rallied to the Soviet point of view. The document also briefly presents other proposals made during the discussions, on 27, 28, 29 June 1946, by either one side or the other, all without any result. Then, the meetings of the four foreign ministers since the end of the conference are mentioned, which also did not lead to any results.

In this context, the statement of Ernest Bevin, Secretary of State for Foreign and Commonwealth Affairs, dated 11 July 1946, was also mentioned, in which he emphasized that, if the problem of free navigation on the Danube was not resolved, he would not sign any treaty with any former satellite state. Next, the document that is the subject of this study stated the following: *"This thorny issue remains to be debated in the conference of the 21 nations, which will meet on 29 July current year in Paris, and, during the two months that it will last, a solution will be reached that will satisfy the vital interests of our country"* (M.St.M., Mss. 618, tab 109). It was also shown that the presence of V.A. Alexander[24], First Lord of the British Admiralty in Paris, at the Conference of 21 nations *"denotes that the question of navigation on the Danube will be one of the most important problems that the conference will have to deal with"* (Ib., tab. 109).

The final appendices refer to specific provisions regarding the Danube regime from certain treaties, protocol conventions etc., the last ones being the Sinaia Convention of 1938 and the Agreement regarding the entry of Germany into the ECD and this country as well as Italy's joining the Sinaia arrangement, in 1939.

The second part of this document, on the cover of which the royal coat of arms is still in relief, includes the annexes of the document, including several maps: a general map of the Danube, several maps with the mouths of the Danube, maps representing the river after the change of regime following several treaties, a general map of the Black Sea, but also of the Bosphorus and Dardanelles straits. Most of these maps are drawn by hand, and from a chronological point of view, the closest are: a map representing Gura Sulina, from 1943, one of Sf. Gheorghe branch, from 1942, and a general map of the Danube, from 1940. The final appendices refer to specific provisions regarding the Danube regime from certain treaties, protocol conventions etc., the last ones being the Sinaia Convention of 1938 and the Agreement regarding the entry of Germany into the ECD and this country as well as Italy's joining the Sinaia arrangement, in 1939.

[24] Albert Victor Alexander (1885-1965), British Labour politician who, between 1945 and 1946, was First Lord of the Admiralty, and between 1946 and 1950 was Minister of Defence.

In conclusion, this document represents a genuine synthesis of the Danube issue, its ways out, but also the Black Sea, reflecting the concerns of the Romanian authorities regarding the detailed knowledge of this subject in the context of the end of the war and the start of peace negotiations. At the same time, it emphasizes, once again, the political, geostrategic and economic importance of this river both for Romania and for the other riverain states.

Another noteworthy aspect is that the document brings to attention some ideas whose topicality surprises us, such as the creation of an economic union of the Danube states or the creation of canals to connect different European points for an easier transit of goods.

BIBLIOGRAPHY:

1. Arhivele Naționale Militare Române/National Military Archives of Romania/ANMR, *M.Ap.N. Direcția Personal, File no. 32 Dămăceanu Ion*, tabs 74, 76-77.
2. David, Al. (2010). *Lucrările tehnice efectuate pe Dunărea maritimă (1918-1938)*, in *Analele Universității "Dunărea de Jos" Galați*, Istorie, vol. IX, p. 139.
3. Direcția Județeană a Arhivelor Naționale Galați/Galați County Directorate of the National Archives/DJANG, Collection *Comisia Europeană a Dunării. Protocoale*, 1857, tabs 61-62.
4. Hartley, C.W.S. (1989). *A Biography of Sir Charles Hartley, Civil Engineer (1825-1915), The Father of the Danube*. Lempter: Edwin Mellen Press, 2 vol.
5. Hitchins, K. (1994). *România 1866-1947*. București: Editura Humanitas, pp. 525-526.
6. *Lucrările tehnice efectuate pe Dunărea maritimă (1918-1938)*, p. 139.
7. Marele Stat Major/Great General Staff/M.St.M., Serviciul Istoric/Historical Service. *Dunărea. Studiu documentar. Geografic. Economic. Politic*. București: Muzeul Militar Național *"Regele Ferdinand I"*, Collection *"Manuscrise"*, no. Mss. 618, tabs 7, 8, 9, 24, 27, 31, 32, 33, 45, 46, 47. 48, 52, 55, 56, 57, 104, 105, 106, 109.
8. *Memoriile Regelui Carol al României. De un martor ocular*, vol. IV. 1878-1881. București: Editura Machiavelli, pp. 139-169.
9. Popov, M. (1998). *Momente din istoria controversatului Canal Dunăre-București,* in *"Muzeul Național"*, no. 10, pp. 89-95.
10. Stancu, Șt. (2014). *România și Comisia europeană a Dunării. Diplomație. Suveranitate. Cooperare Internațională*. Galați: Editura Muzeului de Istorie Galați, p. 73.

ROMANIAN
MILITARY
THINKING

CZECHOSLOVAK CRISIS OR THE MOST TENSE MOMENT IN THE HISTORY OF ROMANIAN-SOVIET RELATIONS

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Romania's posture in the Czechoslovak crisis, the supporting attitude that Nicolae Ceaușescu showed towards the leadership in Prague and the independence that the Romanian leader expressed in foreign policy made it possible for him to predict that a similar invasion would take place at the borders of Romania immediately after the invasion of Czechoslovakia.

As a result, Romania took several measures to defend the national territory, and the Romanian people were alerted to the real war. Thus, the Romanian armed forces began to mobilize, the secret services launched specific operations, the Romanian people were enlisted, the territory of Romania was prepared and a new military doctrine was initiated, all those actions being intended to defend the national territory.

Keywords: 1968 Czechoslovak crisis; Nicolae Ceaușescu; military measures; Romanian armed forces; national territory;

INTRODUCTION

The arrival of Alexander Dubček[1] and his team to the leadership of Czechoslovakia, although it was seen by the Czechoslovak people as the most favourable way for the economic recovery of the country, raised a deep concern among the leaders of the Warsaw Treaty Organization/ Warsaw Pact member states. Apart from Bucharest, in the other capitals of the organization there was a fear that Czechoslovakia would betray the communist cause and embrace capitalism, falling into the trap of Western imperialism. That concern was supported by the idea that Czechoslovakia had a common border with the Federal Republic of Germany/FRG, and Dubcek had an interest in rekindling diplomatic relations with both the FRG, as well as the other capitalist states. In fact, Czechoslovakia had just signed a contract during that period to build a highway that was supposed to link the towns of Nuremberg and Prague (AMAE, file no. 1238/1968, p. 56). It was clear that the Czechoslovaks were no longer content with the little offered by the USSR and the communist ideology.

Czechoslovakia had entered, in the last years of the regime of Anton Novotny (since 1960), an economic crisis that reduced the level of comfort with which the Czechoslovak people were accustomed. The situation immediately produced social movements and split-ups within the Czechoslovak Communist Party. In that context, starting in 1965, a reformist wing was formed inside the party.

TRANSITION TO A NEW TYPE OF SOCIALISM. PRELIMINARIES OF THE WARSAW PACT TROOPS INVASION OF CZECHOSLOVAKIA

Czechoslovakia had entered, in the last years of the regime of Anton Novotny (since 1960), an economic crisis that reduced the level of comfort with which the Czechoslovak people were accustomed. The situation immediately produced social movements and split-ups within the Czechoslovak Communist Party. In that context, starting in 1965, a reformist wing (Cașu) was formed inside the party, having as members, among others, Alexander Dubček, Josef Smrkovský, Ota Šik, Martin Dzúr, Otokar Ritîrj, Oldrich Cernic and Ludvík Svoboda (Pascaru, 2023, p. 325).

[1] Alexander Dubček (1921-1992) was a Slovak politician, secretary of the Communist Party of Czechoslovakia.

The reformists aimed at transforming the communist regime in Czechoslovakia into a more bearable regime, a regime with *"human face".* It was extremely difficult to hide the reality that some neighbouring states, such as the FRG and Austria, countries with which Czechoslovakia could once compete in terms of living standards, had become well above the standard of living of Czechoslovakia. The Czechoslovak people, although obstructed by censorship, got information about the evolution of neighbouring countries, finding out that the standard of living was better and it was freedom there, which was only adding frustration. The reformist wing took power in the party and in the Czechoslovak state with the Plenary session of the Czechoslovakian Communist Party in January 1968. A new government was established under the leadership of Oldrich Cernic, with Ludvík Svoboda as president, instead of the very powerful Novotný, and Alexander Dubček as general secretary of the party.

Novotný was no longer supported by the Kremlin, as he criticized the change in Moscow's leadership in the fall of 1964. The first accusations began to emerge when those loyal to Moscow were replaced with members of the reforming camp, leading to the Soviet Union's feeling of losing control of the Czechoslovak state.

In April 1968, a *"Program of Action"* was implemented to recover the Czechoslovak society and economy. That programme, imposed by Czechoslovak reformists, provided for the following: a greater freedom of the press, free speech and cultural freedom, the possibility for the Czechoslovakian citizen to come up with initiatives on economic development, freedom of citizens to establish political clubs (Stykalin, 2005, p. 26), freedom of movement of the population, limitation of influence and power of the political police (StB), a multiparty political system, the freedom of the citizen to access political life, economic reforms aimed at reviving the economy etc. With regard to the press, it is true that the state no longer had control over it.

The arrival of Dubček as the head of the Czechoslovakian state did not have any significant repercussions in Moscow, Berlin, Warsaw, Budapest, or Sofia. Novotný was no longer supported by the Kremlin, as he criticized the change in Moscow's leadership in the fall of 1964 (Diplomacy: Spring in Prague). The first accusations began to emerge when those loyal to Moscow were replaced with members of the reforming camp, leading to the Soviet Union's feeling of losing control of the Czechoslovak state. Throughout 1968, several meetings were held between the leaders of Czechoslovakia and those of the Warsaw Treaty Organization member states, such as those in Budapest, Bratislava, Moscow, Karlovy Vary, Dresda and Komarno. In all those meetings,

the Soviets only reproached and accused, and the Czechoslovaks listened. Romania was not invited to any of those meetings, although it was a member of the organization.

Tensions continued to rise, and with the *"Sumava"* military application, in June 1968, the Soviets brought numerous troops to the borders of Czechoslovakia. On 21 August, over 500,000 troops belonging to the USSR, DRG, Hungary, Bulgaria and Poland invaded Czechoslovakia. The communist leadership was raised and sent to Moscow, and the Soviet armed forces were set on Czechoslovak territory, where they remained until the fall of communism (Oșca et al., 1999, p. 34). With Gustáv Husák at the head of the country, Dubček's reforms were removed. Czechoslovakia was brought back under obedience and occupation.

However, the Czechoslovak crisis had a great significance for Romania as well, and in the following we will see what that moment meant for the recent history of the Romanian people.

AUTONOMOUS POLICY PROMOTED BY ROMANIA IN RELATIONS WITH THE USSR SINCE THE '60s

In full political crisis, on 15 August 1968, Nicolae Ceaușescu paid an official visit to Prague, occasion on which he renewed the Romanian-Czechoslovak Treaty of Friendship, which had just completed its 20-year validity period (AMAE, 1968, fasc. 1, p. 44, apud Preda, 2009, p. 275). Yugoslav leader Josip Broz Tito (1892-1980) did the same thing earlier that month. The Kremlin leadership, seeing the visits of the two leaders to the Czechoslovak capital at distances of only a few days, may have asked two questions. The first one: *"Would Romania, Yugoslavia and Czechoslovakia seek the revival of the Little Entente from the interwar period?"*, namely an alliance within the Warsaw Treaty. And the second question may sound like this: *"Could Romania, Czechoslovakia and Yugoslavia create a nucleus of the communist world, to which other states from the Soviet sphere of control could adhere?".* These two questions may well have accelerated the decision that Czechoslovakia would be invaded to put an end to the liberal trend that swept this country. It is worth mentioning that neither Dubček nor any other communist leader that came to power with the Czechoslovakian CP in January 1968 stated that they wanted to abandon the communist

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ideology or, worse, to leave an alliance whose leader was Moscow. They just wanted to build own socialism (Oșca et al., p. 41).

The construction of socialism by each individual state, depending on its specificity, needs and possibilities, without the need for the intervention of *"a big brother"*, was also the leitmotif of Nicolae Ceaușescu's politics. It should be noted that, in Romania, Nicolae Ceaușescu had long applied some political ideas that Dubček aimed for the development of socialism in his country. Nicolae Ceaușescu's politics, however, had repeatedly attracted criticism of the Kremlin. In fact, 1968 proved to be the hottest year in Romania's relations with the Soviet Union.

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Romania had begun a careful and subtle departure from Moscow as soon as Soviet troops left the Romanian territory in the summer of 1958. In the time of Gheorghe Gheorghiu-Dej, other episodes followed, which showed that Romania completely stopped obeying the orders of the Kremlin, all culminating with the *"declaration of independence"* of April 1964. Among those moments we can list: the abolition of *"Maxim Gorki"* Research Institute in Bucharest, the decision to introduce Western languages into Romanian education or the refusal to adopt the Valev Plan. In the summer of 1962, when the leader Nikita Khrushchev paid an official visit to Romania, he expressed, in his characteristic way, rebuking everyone in the leadership of Romania, dissatisfaction with Romania's attitude (Scurtu, 2022). We have to mention that, during 1962-1964, the USSR had infiltrated its undercover agents in the Romanian territory, just as it had infiltrated the states that the socialist camp considered enemy: USA, FRG, France, UK etc. (Troncotă). Also related to espionage actions, we specify that, starting in the '60s, after the moment of glory of Mihai Caraman, not all the information gathered by Romanian agents on mission in the territories of states considered enemies, but only Romanian syntheses and opinions reached to Moscow, after being thoroughly analysed (Pascaru, 2018, p. 88). It greatly disturbed the Kremlin, which led to some strain on bilateral relations.

Relations continued to strain with the arrival of Nicolae Ceaușescu at the head of the Romanian state. Although they knew Ceaușescu to be far more rebellious and disobedient than his predecessor, the Soviets

did not oppose his coming to power, although they could have easily imposed a submissive and zealous leader, such as Gheorghe Apostol. In his memoirs, Apostol mentions that even Gheorghe Gheorghiu-Dej would have named him successor, a few days before leaving this world (Apostol, 2022, p. 174).

The first tense moment in the Romanian-Soviet relations in the Ceaușescu era was in 1967, with the signing of the embassy-level relations between Romania and the FRG. The Soviets harshly criticized the action of Romania. Not long ago, Romania strained relations with the Soviet Union by its position on the Arab-Israeli war of the same year. Not only did it not break relations with Israel, as did all the states in the Soviet sphere of control, but it helped Israel with Soviet ammunition for the Soviet tanks they captured following attacks on the territories of Arab states (Buga, 2015, p. 2).

Since 1956, with the destalinization initiated by Nikita Sergeyevich Khrushchev at the Congress of the Communist Party of the Soviet Union in February, an ideological war between the Soviet Union and China began in the socialist camp. In that geopolitical context, Romania strengthened relations with China at the highest level. It would make Romania, around 1968, be perceived by Moscow as one of China's most important friends, which ignited even more the already tense relations between the two sides. In May 1968, the French president Charles de Gaulle came to Bucharest on an official visit, which was again interpreted as an offense against the Kremlin (Stanciu, 2011, p. 129). Relations with France also materialized through the acquisition of French helicopters by Romania. When they wanted to study them, the Soviets faced a categorical refusal from the Romanian officials. All those successive moments led to the unprecedented strain of relations between the two states.

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Romania's position on the Czechoslovak crisis, the supportive attitude that Nicolae Ceaușescu manifested towards the leadership in Prague, and the independence that the Romanian leader expressed in foreign policy made him consider, immediately after the invasion of Czechoslovakia, that a similar invasion could take place on the border of Romania take place.

AN OUTLINE OF A SOVIET INVASION OF ROMANIA. MEASURES TAKEN BY THE REGIME IN BUCHAREST TO DEFEND THE NATIONAL TERRITORY

The first clear signs that Moscow pursued an action similar to that of Czechoslovakia came from the Romanian intelligence services (ANIC, file no. 129/1968, pp. 155-161, apud Betea, 2018, p. 91), that informed the Bucharest leadership, on 5 August 1968, that the Soviets brought some troops to the Romanian borders, immediately after the *Sumava* ended. Nicolae Ceaușescu did not pay attention to that information, considering that the intelligence services fell into the trap of disinformation and suggested them to investigate further. Before that news, also through the secret services, an information arrived in Bucharest that in the next period Czechoslovakia would be invaded, after which Romania would follow. The information came from a Polish officer, who was a member of the Warsaw Pact's narrow circle, where crucial decisions were discussed and where Romania, although it was a member of the pact, did not have access. Through the liaison officer Ion Bichel, the Polish officer warned Romania that it was in the Kremlin's sight. It happened in May 1968 (Watts, 2011, p. 367).

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Information about the invasion of Romania came also from the Dutch espionage which, in November 1968, announced to Bucharest that the invasion was preparing for 22 November 1968, 4 o'clock in the morning (Ib., p. 362); also for November, information came from the British Foreign Office, which announced that *"Soviets prepare for quick military action against Romania. We believe it is right for Romanians to be informed about our appreciation. This must be done at the highest possible level and in strict confidentiality."* (Ib.), it was shown in the discussions within the Foreign Office. In parallel with those reports, some statements by European communist leaders such as Todor Zhivkov further strained the situation. He stated the following: *"We are obliged to take measures to introduce order in Czechoslovakia as well as in Romania. After that we will also introduce order in Yugoslavia."* (Ib., p. 361).

The call from Prague to Bucharest, announcing the invasion of Czechoslovakia, alerted the Romanian authorities. *"Now it is my turn!"*, Ceaușescu would have said (Pacepa, 2014, p. 147). In the following

hours, the Political Bureau of the Central Committee of the Romanian Communist Party met urgently to establish Romania's position. After long discussions, which lasted all night between 20/21 August 1968, Romania took the position to criticize in harsh terms the invasion of Czechoslovakia. The next day, in front of the Central Committee, a large number of people witnessed the energetic speech of the Romanian communist leader. In harsh terms, Nicolae Ceaușescu criticized the invasion of Czechoslovakia, speaking in favour of diplomacy and non-interference in the internal affairs of other states. At the same time, Ceaușescu announced the arming of the population to defend the national territory, Romania being ready to fight, to meet the invaders with fire. At the military parade on 23 August 1968, 51 battalions of patriotic guards, equipped and armed, marched in front of the USSR Embassy in Bucharest (Gheorghe, Soare, 1999, p. 47).

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On 21 August 1968, the Order of the Ministry of the Armed Forces no. OK 00355 announced the real state of war alarm in which Romania was found. The next day, the Minister of the Armed Forces issued the directive for the troops to open fire without waiting for the orders of the superiors, if the invading troops entered the territory of Romania and overstepped a certain alignment (Retegan, 2004, pp. 12-13).

On the hot days we refer to, namely 20-25 August 1968, more troops arrived at the borders of Romania, on the territories of the SSR Moldova, Ukraine, Hungary, Bulgaria, as well as in the Black Sea. Simultaneously with bringing those troops to the borders of the country, both in Bucharest and in other large cities in Romania, the number of tourists had risen sharply. Most were unmarried men, aged between 25 and 40, with an athletic body, who were actually soldiers (Ib.). Apart from those aspects, a fierce anti-Romanian campaign was initiated by the Hungarian minority in Transylvania, who dreamed of a union of Transylvania with Hungary.

What measures could be taken under those conditions? The military leadership in Bucharest made a common front with the state leadership, seeking both internal and external aid. Internally, it was decided to urgently establish several military units, for all groups of forces, to cover the entire national territory, especially the key points such as Focșani Gate and Ardeal (Ib.) More attention

was paid to the defence of Oltenia, as Nicolae Ceaușescu hoped to create a passageway for the Romanian armed forces on Yugoslav territory. We will see, in the following, the position of Josip Broz Tito regarding the situation of Romania.

Returning to the establishment of new military units, we list some of those created: an order of the Minister of the Armed Forces announced, on 11 September 1968, the establishment of the 57th Tank Division, subordinated to the 2nd Army (AMNR, file no. 2696/1968, vol. I, p. 80) and, on 24 September 1968, another order of the minister announced the establishment of the 67th Mechanized Division (Brăila), the 81st Mechanized Division (Dej) and the 70th Aviation Division (Timișoara) (Ib., p. 82). On 17 October, the Ministry of the Armed Forces ordered the establishment of the 2nd Mountain Brigade (Rădăuți) and, a year later, the establishment of the 4th Mountain Brigade, with the garrison at Curtea de Argeș, and the 1st Mountain Brigade, with the garrison at Bistrița (Uszkai). All those military large units were composed of subordinate structures such as regiments, divisions and battalions.

Another measure initiated by the political leadership in Bucharest for national defence was the preparation of the national territory to face an invasion. The analysis of the communication routes, the situation of roads, railways and bridges, and everything that could be used by the Romanian armed forces to wage war with the invaders.

In addition to the establishment of those military large units and units covering the entire Romanian territory, it was ordered the deployment of troops from one side to another of the national territory. It was the case of the 88th Tulcea Dragons Division, deployed in Giurgiu (AMR, file no. 2696/1968, ib., p. 91), among other such cases. Special attention was paid to the reorganization of military education (Stănescu, 2009, p. 63). The political leadership in Bucharest realized that there was an urgent need for a new military thinking, a new class of people able to lead an army, but it could not be done overnight.

Another measure initiated by the political leadership in Bucharest for national defence was the preparation of the national territory to face an invasion. The analysis of the communication routes, the situation of roads, railways and bridges, and everything that could be used by the Romanian armed forces to wage war with the invaders. The Armed Forces leadership asked the Ministry of Agriculture for a report mentioning all forests, all waters and all geographical elements that can be used in a defence campaign (AMNR, file no. 2783/1969, p. 3). It was also started the construction, as a matter of urgency, of ammunition and food depots (Ib.).

All the force groups in the Romanian Armed Forces entered the state of alert. Romania was ready to defend its territory and, when I say Romania, I refer not only to the Romanian Armed Forces, but also to the Patriotic Guard troops. The year 1968 also meant the imposition of a new military doctrine of the Romanian people, that of the *"War of the Entire People for the Defence of the National Territory"*[2] .

In the context of that ardent period, an extremely difficult and meticulous mission was carried out by the intelligence services. Both the espionage and the counter-espionage had the mission to gather information on Romania from the territories of the possibly aggressor states (the *"Badea"* problem) and to expose the agents infiltrated in key points of the leadership, working for state services *"Badea"* (Photo 1-5).

The code name *"Badea"* represents the five states that invaded Czechoslovakia and were pursuing the same thing in Romania. It is worth noting that the Securitate's counterintelligence service revealed several GRU[3] agents in Romania who were in the leadership of the Romanian Armed Forces: Ioan Șerb – commander of the 2nd Army, Vasile Petruț – commander of the Border Guard troops, Floca Arhip – responsible for the deployment plans of the Romanian troops on the national territory and the man who gave the Soviets crucial information about the Romanian armed forces, Nicolae Militaru etc. (Neagu, Stănescu, 1999, p. 30). The Security Troops also entered an accelerated preparation for the war.

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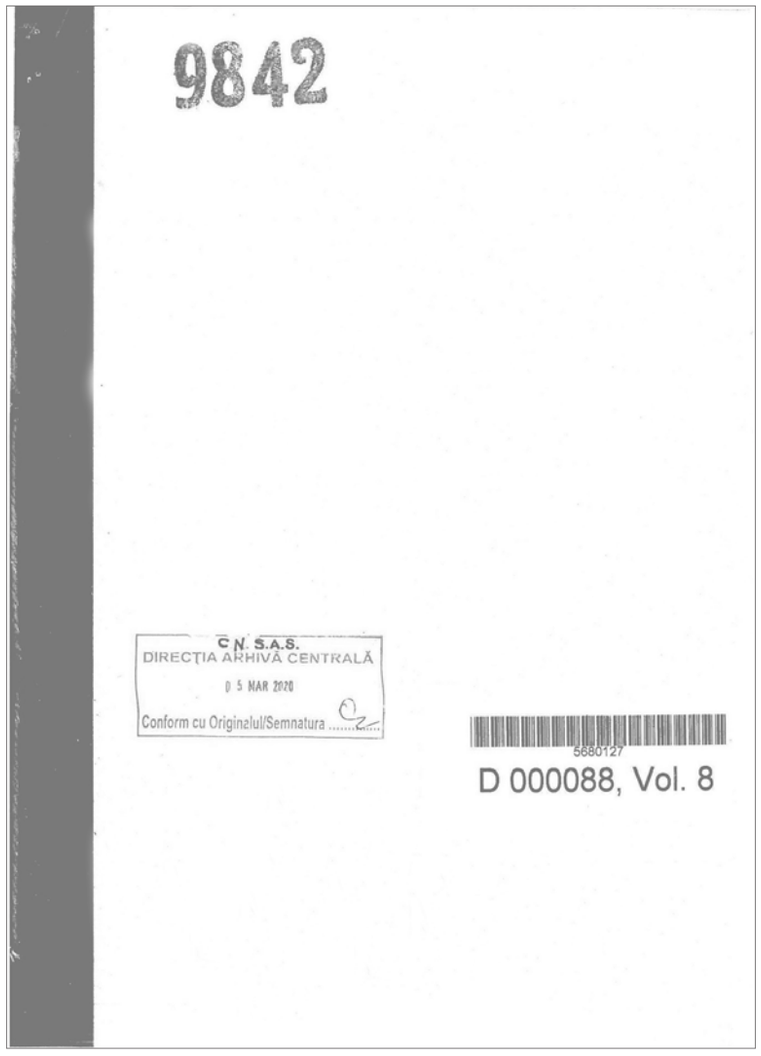
Those were the political and military thinking decisions in Bucharest meant to immediately defend Romania. Moreover, medium and long-term decisions were made to prepare the Romanian Armed Forces for a possible defence war. As it was clear that at any moment it could be attacked by the USSR and its allies, Romania initiated a comprehensive programme for the development of the military industry.

Yet, after the Second World War, the Romanian military industry was decimated. Romania, as a defeated state, was forced to dismantle most of its munitions and weapons factories. Only two factories remained functional, the ones in Sadu and 30 Decembrie, meant

[2] More details about the Romanian military doctrine in Pascaru (2023), pp. 191-204.
[3] Glavnoye Razvedyvatelnoye Upravlenie – Organization of the USSR Main Intelligence Administration.

to build ammunition for the domestic peacekeeping forces (Opriș, 2007, p. 8). In the post-war years, Romania was obliged to respect the Paris Peace Treaty and pay war compensation to the USSR, and the development of the Romanian military industry was conditioned by the clauses of those treaties.



CONSILIUL SECURITATII STATULUI
- Direcţia III-a -

STRICT SECRET
2 decembrie 1968
Ex.nr.1

C.N. S.A.S.
DIRECȚIA ARHIVĂ CENTRALĂ
05 MAR 2020
Conform cu Originalul/Semnatura

N O T Ă

cu problemele ce trebuie avute în vedere cu ocazia îndrumării şi sprijinului ce se va acorda Inspectoratelor judeţene pe linie "B A D E A".

- De problemele "BADEA" se ocupă şi răspunde nemijlocit inspectorul şef, care să antreneze posibilităţile întregului aparat;

- în funcţie de volumul de muncă, să fie repartizat un număr corespunzător de ofiţeri;

- asigurarea deplină a conspirativităţii în jurul acestei probleme.

1./ Cu privire la baza de lucru:

Vor fi incluse în baza de lucru următoarele categorii de persoane:

a.- Fosta şi actuala agentură a organelor de informaţii "BADEA";

b.- reprezentanţii oficiali care lucrează temporar în ţara noastră;

c.- cetăţenii (rezidenţi) ţărilor "Badea" domiciliaţi în R.S.România;

d.- cetăţenii români care întreţin legături suspecte cu persoane din ţările "BADEA":

- legături diplomaţi, tehnicieni, ziarişti, comerciaţi, turişti etc.;

- vizitatori ai ambasadelor şi consulatelor "Badea";

- persoane care poartă corespondenţă suspectă cu cetăţeni din ţările "Badea";

- persoane care vizitează frecvent ţările "Badea", în scop oficial sau particular şi au comportare suspectă;

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e.- cetăţeni români care au studiat în ţările "Badea" şi continuă să întreţină legături neoficiale cu instituţii sau persoane din aceste state;

f.- cetăţeni români repatriaţi din ţările "Badea";

g.- suspecţii din rîndul turiştilor şi vizitatorilor la rude veniţi din ţările "Badea".

- Cazurile mai deosebite din baza de lucru să fie analizate periodic de către inspectorul şef, stabilindu-se măsurile corespunzătoare;

- asigurarea supravegherii informative a bazei de lucru, în care să se ţină seama de:

- prevenirea oricăror acţiuni de amestec în treburile noastre interne;

- imprimarea unui caracter ofensiv activităţii de contracarare a acţiunilor ostile ţării noastre;

- verificarea multilaterală şi temeinică a informaţiilor obţinute, indiferent de sursă, pentru a preveni eventualele provocări sau acţiuni de dezinformare a noastră;

- documentarea multilaterală a activităţii celor urmăriţi pentru a putea proba sau demasca oricînd acţiunile lor potrivnice ţării noastre;

- crearea de condiţii pentru realizarea unor contacte operative între ofiţerii cu posibilităţi în acest sens şi reprezentanţii, tehnicienii, delegaţii sau alţi cetăţeni ai ţărilor "Badea" care se află temporar în teritoriu.

2./ <u>Cu privire la crearea reţelei informative</u>:

In scopul depistării persoanelor care desfăşoară activitate potrivnică ţării noastre şi contracarării oricăror acţiuni ostile, este necesară formarea unei reţele de informatori capabili prin care să asigurăm supravegherea întregii baze de lucru.

a.- <u>In recrutarea de noi informatori să avem în vedere, în primul rînd, următoarele categorii de persoane</u>:

- intelectuali şi specialişti, cunoscători de limbi străine (profesori, medici, ingineri, cercetători, ziarişti, oameni de cultură şi artă etc.);

- persoane cu rude sau prieteni în ţările "Badea";

- cetăţeni români din rîndul minorităţilor naţionale pe linia problemei "Badea";

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- cetăţeni români căsătoriţi cu persoane din ţările "Badea";

- unii rezidenţi ai ţărilor "Badea", însă numai după o verificare minuţioasă şi cu aprobarea conducerii Consiliului Securităţii Statului;

- legăturile salariaţilor reprezentanţelor diplomatice şi economice ale ţărilor "Badea", inclusiv vizitatorii acestor obiective;

- salariaţii instituţiilor frecventate de către diplomaţii şi cetăţenii statelor "Badea";

- cetăţeni români care au urmat studii în ţările "Badea" sau au lucrat un timp în aceste state şi au legături ori pot cultiva relaţii cu persoanele aflate în atenţia noastră;

- persoane care au colaborat cu serviciile de informaţii "Badea".

b.- <u>In instruirea şi dirijarea reţelei informative să avem în permanenţă în vedere</u>:

- cunoaşterea temeinică a principiilor politicii P.C.R. în relaţiile cu statele "Badea" şi orientarea reţelei informative în lumina acestor principii.

N o t ă: <u>De precizat caracterul contrainformativ al activităţii noastre, fapt de care trebuie să se ţină seama în instruirea informatorilor ce fac deplasări în exterior</u>.

- Educarea fiecărui informator pentru a înţelege just activitatea ce o desfăşurăm pe această linie şi a învinge teama unora de a ne sprijini cu toată convingerea;

- grija pentru ca informatorii noştri să nu comită provocări sau să fie atraşi în asemenea acţiuni;

- verificarea continuă a reţelei informative şi controlarea activităţii acesteia folosind toate mijloacele muncii de securitate.

- <u>In instruirea informatorilor să fie fixate sarcini care să ducă la obţinerea de date cu privire la</u>:

- problemele pentru care reprezentanţii şi tehnicienii ţărilor "Badea" manifestă interes, metodele şi mijloacele prin care încearcă să le obţină, cetăţenii români pe care se sprijină în activitatea lor ostilă R.S.România;

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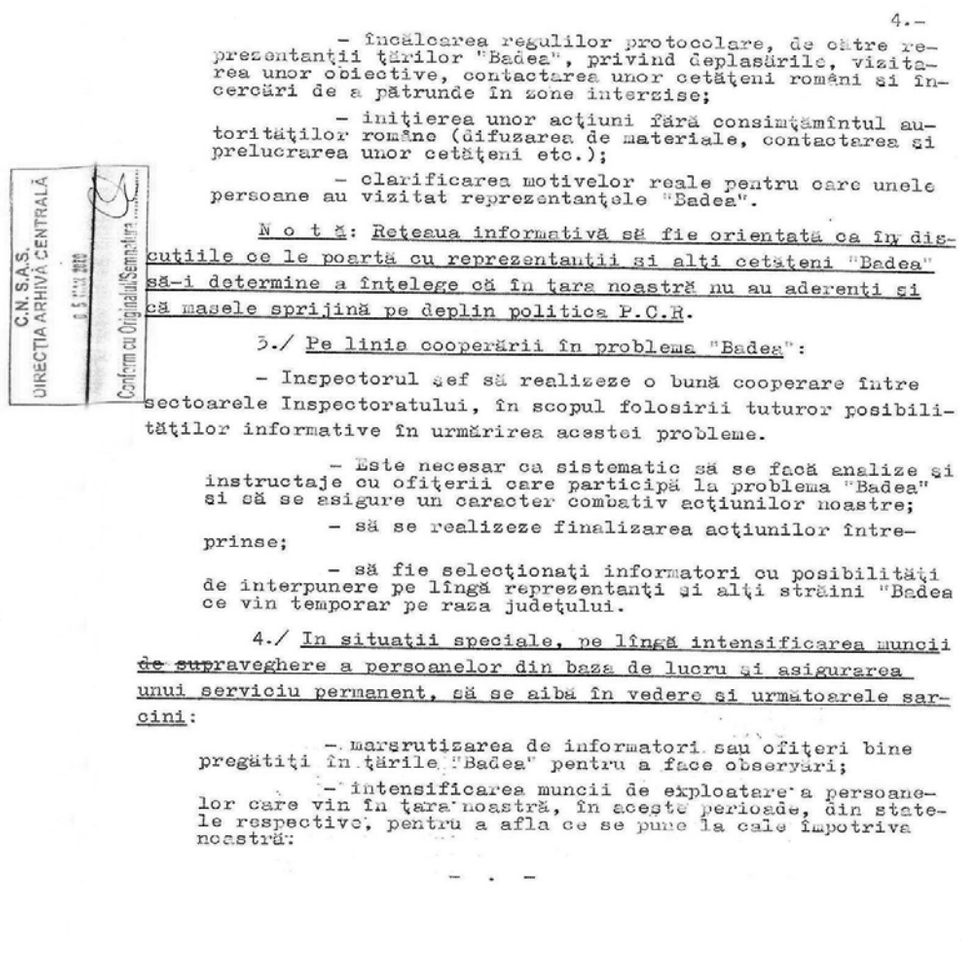

4.-

- încălcarea regulilor protocolare, de către reprezentanţii ţărilor "Badea", privind deplasările, vizitarea unor obiective, contactarea unor cetăţeni români şi încercări de a pătrunde în zone interzise;

- iniţierea unor acţiuni fără consimţământul autorităţilor române (difuzarea de materiale, contactarea şi prelucrarea unor cetăţeni etc.);

- clarificarea motivelor reale pentru care unele persoane au vizitat reprezentanţele "Badea".

N o t ă: Reţeaua informativă să fie orientată ca în discuţiile ce le poartă cu reprezentanţii şi alţi cetăţeni "Badea" să-i determine a înţelege că în ţara noastră nu au aderenţi şi că masele sprijină pe deplin politica P.C.R.

5./ Pe linia cooperării în problema "Badea":

- Inspectorul şef să realizeze o bună cooperare între sectoarele Inspectoratului, în scopul folosirii tuturor posibilităţilor informative în urmărirea acestei probleme.

- Este necesar ca sistematic să se facă analize şi instructaje cu ofiţerii care participă la problema "Badea" şi să se asigure un caracter combativ acţiunilor noastre;

- să se realizeze finalizarea acţiunilor întreprinse;

- să fie selecţionaţi informatori cu posibilităţi de interpunere pe lîngă reprezentanţi şi alţi străini "Badea ce vin temporar pe raza judeţului.

4./ In situaţii speciale, pe lîngă intensificarea muncii de supraveghere a persoanelor din baza de lucru şi asigurarea unui serviciu permanent, să se aibă în vedere şi următoarele sarcini:

- marşrutizarea de informatori sau ofiţeri bine pregătiţi în ţările "Badea" pentru a face observări;

- intensificarea muncii de exploatare a persoanelor care vin în ţara noastră, în aceste perioade, din statele respective, pentru a afla ce se pune la cale împotriva noastră:

- . -

C.N.S.A.S. DIRECŢIA ARHIVĂ CENTRALĂ Conform cu Originalul/Semnătura

Photo 1-5: Measures taken by the State Security Council in relation to "Badea"
(ACNSAS, Documentary Collection, File no. 88, vol. 8, pp. 50-53).

Nevertheless, the reality of 1968 was quite different from that of the years '45-'50. The Paris Peace Treaties *"expired"*, and Romania could achieve, as far as the economy and Moscow allowed it, a military industry. A number of munitions and weapons, as well as combat machines factories were developed. Among the most notable Romanian achievements, we list the upgraded AK-47, the TABs,

the TR-77 tank and the IAR 93 plane (made in collaboration with Yugoslavia) etc.[4].

So far, we have presented *"own forces"* with which Romania could defend itself in the event of a Soviet invasion. Could it receive help from outside? Was there any hope? The USA, China, France and Yugoslavia were the main hopes for the political leadership in Bucharest. It was clear that there could be no military aid, not even with weapons, this hypothesis being excluded from the beginning. However, a statement would have been moral support. One of the statements came from President Lyndon Johnson himself, who referred, in San Antonio, on 28 August 1968, that *"should not untie the dogs of war"* and that a Soviet attack on Romania would have unforeseen consequences (Public Papers, 1970, p. 946). Moreover, the American secretary Dean Rusk sent a letter to the Soviet prime minister Andrei Kosygin, saying, among other things: *"Twice in my life and yours the world wars have started in Eastern Europe. I would like your government to abstain if a military action is planned against Romania or any other country in Eastern Europe."* (Ghiurco&TVR). Dean Rusk also called on the Soviet ambassador to Washington, Anatoli Dobrnin, to report, asking what the Soviets intended by bringing troops to the borders of Romania (Dobrinin, 2016, p. 237). Therefore, we can conclude that the Americans put all kinds of declarative pressure on the Soviets not to attack Romania.

China was the second country in which Romania set its hopes. China was in an ideological war with the USSR, fighting for the status of first power in the socialist camp. China was not afraid of the Soviet Union, with Chinese communist leaders criticizing Moscow on every occasion. However, although China and Romania had very good relations, military aid was excluded. Indeed, Chinese Prime Minister Ciu En Lai had announced that he would publicly criticise Soviet actions against Romania and that he could help Romania even with cannons, however, warning: *"attention, that the near fire does not go out*

ROMANIAN MILITARY THINKING

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[4] All the achievements of the Romanian military industry in the period 1968-1975 can be found in Pascaru, *op. cit.*, pp. 255-275.

with the far water", thus urging Romania to be cautious in relations with Moscow (Cătănuș, 2005, p. 43).

As regards France, although President Charles de Gaulle visited Romania in May, apart from a few warnings to Moscow, no other measures were expressed. The last hope was Yugoslavia. On 24 August 1968, Nicolae Ceaușescu, hoping for an alliance with Josip Broz Tito against the Soviet Union, secretly paid a visit to the neighbouring country. The meeting with Tito took place in the town of Vârșeț. Josip Tito did not want to expose himself to a Soviet attack, knowing very well how the Soviets acted in relations with the other socialist states, as he himself found in Ceaușescu's situation in the '50s, when only Stalin's death escaped Yugoslavia from invasion. Returning to the meeting in Vârșeț, Tito exposed to Ceaușescu the situation in which his country was, having problems with Italians at the northern borders, adding that he did not want a conflict with the Soviets, especially since the Bulgarians had expansionist tendencies, targeting parts of Yugoslavia (Scurtu, 2002, pp. 94-114). All that Ceaușescu obtained from Tito was the possibility that the Romanian armed forces, disarmed, could enter the Yugoslav territory to reorganize, and political leadership could take shelter in the territory of his country (Ib.). Like the leaders in Pekin, Tito asked Ceaușescu to be more moderated in relations with the USSR. Tito disagreed with the supply of the Romanian armed forces from Yugoslavia.

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Seeing himself overcome by the situation, with the country surrounded by Warsaw Pact troops, in real danger of being invaded, probably also for fear of having the fate of the Hungarian prime minister Imre Nagy in 1956, on 25 August 1968, Nicolae Ceaușescu had a discussion with the Soviet ambassador in Bucharest, A.V. Basov. At the end of the meeting, Basov transmitted to Moscow the following: *"I spoke to the commander. He will not bark!"*, words intercepted by the Security (Betea, pp. 229-233).

We do not know why Brezhnev gave up the invasion or whether he just wanted to scare the leadership in Bucharest. What we do know is that although the Romanian communist leader behaved like a rebel inside the socialist camp, often violating Moscow's directives,

the existence of the socialist system, social, political and economic, in Romania was not in danger. Nicolae Ceaușescu ruled Romania with an iron hand and there was no danger that it would abandon socialist ideology.

What happened after the hot moments of August 1968? Internally, the cult of the leader was born, a cult that, at some point, would overwhelm Nicolae Ceaușescu. In August 1968, Ceaușescu lived his moment of glory and many dissidents, such as Paul Goma or Adrian Păunescu, voluntarily entered the party. People would have willingly defended Romania. In my appreciation, it was the first and last time in the history of communism in Romania when the people sincerely supported Nicolae Ceaușescu.

In foreign policy, Romania started a positive period, marked by its accession to the World Bank and the International Monetary Fund. Romania established diplomatic relations with most states, and the dream of obtaining the most favoured nation clause from the USA began to take shape. Nicolae Ceaușescu, however, detached himself, in the '80s, from the realities that encompassed the whole world. He would end up as the last Stalinist in Europe, in a reality he no longer understood (Fălcan).

Romanian-Soviet political relations had been strained since the first years of the seventh decade of the last century, first Gheorghe Gheorghiu-Dej and then Nicolae Ceaușescu adopting an increasingly autonomous attitude in bilateral relations and in the socialist bloc.

CONCLUSIONS

The speech by Nicolae Ceaușescu criticized the invasion of the Warsaw Treaty Organization troops in Czechoslovakia to end the liberal reform program, adopted by the Czechoslovak Communist Party in the summer of 1968, leading to the maximum strain of the Romanian-Soviet relations. Romanian-Soviet political relations had been strained since the first years of the seventh decade of the last century, first Gheorghe Gheorghiu-Dej and then Nicolae Ceaușescu adopting an increasingly autonomous attitude in bilateral relations and in the socialist bloc.

Romanian and foreign archive documents have shown over time that only once the USSR would have pursued an invasion in Romania, to finish with the independent *"circus"* of Bucharest, but in August 1968, Romania was in the most dangerous moment in the history of relations with the Soviets. They deployed numerous troops along the border

with Romania, helped by both Hungarian and Bulgarian neighbours, who did the same. Hungary wanted, as a reward for the zeal shown to Moscow, at least part of Transylvania, if not the entire intra-Carpathian space. Bulgaria longed for possessions from Yugoslavia, which was also shown by Tito in his discussion with Ceausescu, from Vârșeț.

In order to face an invasion, all the structures of the Romanian Armed Forces entered the mobilization, the espionage and counter-espionage services intensified their specific activity, the people joined in turn the mobilization, by voluntarily joining the Patriotic Guards, re-established on 21 August 1968. New military large units and units were established, while others were deployed throughout the national territory. Regarding the national territory, on 21 August 1968, it began its preparation for a war of defence, by making maps with all sorts of aspects and features that could be used.

21 august 1968 represented the moment of glory of the Romanian leader, an apotheosis, *"his finest hour"*, as academician Florin Constantiniu (2011, p. 500) pointed out, and it opened many doors for Nicolae Ceaușescu and for the subsequent Romanian foreign policy.

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BIBLIOGRAPHY:

1. Apostol, Gh. (2022). *Eu și Gheorghiu-Dej. Memorii.* București: Editura Paul Editions.
2. ACNSAS/Archive of the National Committee for the Study of the Securitate Archives, Documentary Collection, Files no.: 86, vol. 5, p. II; vol. 9; no. 88, vol. 3, vol. 6, vol. 8, p. 50-53; no. 11711; no. 11718; no. 11760; no. 11761; no. 12555, vol. 4, 5; no. 13132, vol. 13, 14; no. 13206.
3. AMNR/Romanian National Military Archives, Collection Direcţia Operaţii/Operations Directorate (Microfilm). Reel no. 1738: File no. 2690/1968, File no. 2691/1968; Reel no. 1739: File no. 2692/1968, vol. I, p. 80; File no. 2696/1968, vol. I, p. 91; Reel no. 1752: File no. 2760/1969; Reel no. 1757: File no. 2783/1969, vol. I, *Monografii și planuri de pregătire operativă a teritoriului*, p. 3.
4. AMAE/Archive of the Ministry of Foreign Affairs, Collection Czechoslovakia, File no. 1238/1968, p. 56.
5. ANIC/National Central Historical Archives, Collection C.C. al P.C.R., secția Cancelarie, File no. 129/1968, pp. 155-161, apud Betea, L. (2018). *21 august 1968. Apoteoza lui Ceaușescu*. Editura Corint.
6. Betea, L. (2018). *21 august 1968. Apoteoza lui Ceaușescu*. Editura Corint.
7. Buga, V. (2015). *Sub lupa Moscovei*. *Politica externă a României. 1965-1989*. București: Institutul Național pentru Sudiul Totalitarismului.
8. Cașu, I. *Primăvara de la Praga. Percepții sovieto-române*, in https://historia.ro/sectiune/general/primavara-de-la-praga-perceptii-sovieto-romane-579704.html, retrieved on 6 December 2024.
9. Cătănuș, D. (2005). *România și Primăvara de la Praga*. București: Institutul Național pentru Sudiul Totalitarismului.
10. Cătănuș, D. (2011). *Tot mai departe de Moscova. Politica externă a României. 1956-1965*. București: Institutul Național pentru Sudiul Totalitarismului.
11. Constantiniu, F. (2011). *O istorie sinceră a poporului român*. București: Editura Univers Enciclopedic.
12. Cosma, N., Stănescu, I. (1999). *În anul 1968 a fost programată și invadarea României.* București: Editura Paco.
13. Diplomaţia: Primăvara de la Praga, https://www.youtube.com/watch?v=dNtKVT4MA4o, retrieved on 6 December 2024.
14. Dobrînin, A. (2016). *Confidenţele unui ambasador sovietic la Washington*. *Memorii*. București: Editura Meteor Press.
15. Fălcan, D. *Ultimul stalinist. Ascensiunea și decăderea lui Ceaușescu*, https://historia.ro/sectiune/general/ultimul-stalinist-ascensiunea-si-decaderea-lui-577008.html., retrieved on 21 November 2024.
16. Gheorghe, I., Soare, C. (1999). *Doctrina militară românească*. București: Editura Militară.
17. Ghiurco, M., TVR, *Moștenirea clandestină. Episode 2*, https://www.youtube.com/watch?v=TSoamwmYENI, retrieved on 8 December 2024.
18. Johnson, L.B. (1970). *Containing the public messages*, *speeches and statements of the president*, *1968-1969*. Washington: United States Government Printing Office.
19. Mitrokhin, V., Andrew, C. (2003). *Arhiva Mitrokhin. KGB în Europa și în Vest. Documente*. București: Editura Orizonturi.
20. Opriș, P. (2007). *Industria românească de apărare. Documente*. Ploiești: Editura Petrol-Gaze.
21. Oșca, Al. et al. (coord.) (1999). *Tentația libertății. Operațiunea Sumava*. București: Editura Militară.
22. Pacepa, I.M. (2014). *Moștenirea Kremlinului. Rolul spionajului în sistemul comunist de guvernare*. București: Editura Humanitas.
23. Pascaru, F. (2023). *În fața invaziei. Măsuri militare inițiate de România în contextul crizei cehoslovace*. București: Editura Militară.

24. Pascaru, F. (2018). *Spionajul românesc în timpul regimului Gheorghe Gheorghiu-Dej – Direcția Informații Externe (1951-1963)*. In *Document. Buletinul Arhivelor Militare Române*, no. 2 (80).
25. Preda, D. (2009). *1968. România și Primăvara de la Praga*, *Documente diplomatice*. București: Editura Mondomedia.
26. Public Papers of the Presidents of the United States (1970). *Lyndon B. Johnson. Containing the public messages*, *speeches and statements of the president. 1968-1969*. Washington: United States Government Printing Office.
27. Retegan, M. (2004). *1968. Din primăvară până în toamnă. Schiţă de politică externă și politică militară românească*, 2nd ed. București: Editura RAO.
28. Retegan, M. (2004). *Război politic în blocul comunist. Relaţii româno-sovietice*, vol. II. București: Editura Tritonic.
29. Sandachi, P. (2001). *Forţele aeriene române și criza cehoslovacă*, in *"Dosarele Istoriei"*, no. 9.
30. Scurtu, I. (2002). In *Studii de istorie*. București: Editura Ars Docendi, Universitatea din București.
31. Scurtu, I. (1998). *La București, înainte de Praga 1968. Încercări de reformare a regimului socialist totalitar și de ieșire de sub dominaţia sovietică*. In *"Dosarele istoriei"*, no. 5.
32. Scurtu, I. *1962 – Vizita lui N.S. Hrușciov în România*. In *Art-Emis*, https://www.art-emis.ro/istorie/1962-vizita-lui-ns-hrusciov-in-romania, retrieved on 7 December 2024.
33. Soare, C. (1989). *Studii despre doctrina militară românească*. București: Editura Militară.
34. Stanciu, C. (2011). *Războiul nervilor. Dispute Ceaușescu – Brejnev*, *1965-1971*. Târgoviște: Editura Cetatea de Scaun.
35. Stanciu, C. (2015). *România și problema cooperării balcanice. 1969-1975*. In *"Arhivele Totalitarismului"*, no. 3-4.
36. Stanciu, C. (2018). *Ceaușescu și Tito. Singuri împotriva tuturor*. In *"Historia"*, no. 199, August.
37. Stănescu, M. (2009). *Statul Major General.* In *Enciclopedia Armatei României*. București: Editura Centrului Tehnic-Editorial al Armatei.
38. Stănescu, M. (2018). *Criza cehoslovacă în dinamica războiului rece*. In *"Historia"*, no. 199, August.
39. Stîkalin, A. (20050. *Primăvara de la Praga în viziunea generalului A.M. Maiorov*. In *Document*, no. 1 (27).
40. Troncotă, C., in *Moștenirea clandestină*, ep. 2, https://www.youtube.com/watch?v=TSoamwmYENI, documentary series related to Romania and the Cold War, retrieved on 7 December 2024.

41. Uszkai, N., *Vânătorii de Munte din Armata României – repere istorice și valenţe ale prezentului la 102 de ani de existenţă*, Romania Military site, https://www.rumaniamilitary.ro/vanatorii-de-munte-din-armata-romaniei-repere-istorice-si-valente-ale-prezentului-la-101-de-ani-de-existenta, retrieved on 8 December 2024.
42. Watts, L. (2011). *Ferește-mă, Doamne, de prieteni! Războiul clandestin al blocului sovietic cu România*. București: Editura Rao.

ROMANIAN MILITARY THINKING

THE IMPACT OF THE ROMANIAN ARMED FORCES ON DAILY LIFE IN BESSARABIA (1930S)

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The article presents the impact of the Romanian Armed Forces, as a state institution, not only on the daily life in Bessarabia during the 1930s, but also on Romanian society as a whole. Thus, the factors and means by which the military institution contributed, to a certain extent, to the change in the way of life in both rural and urban environments are discussed. In approaching the topic, certain elements have been taken into account as follows: the interwar national construction programme; the multi-ethnic identity configuration; the management and interaction in the cultural, economic, educational fields; the recruitment and the military service; the hygiene and health care. Interpreted unitarily, the mentioned elements had the role of modernizing the daily life of the province. The research objective is to provide an overview of the way the Armed Forces managed to meet the challenges specific to the region.

Keywords: Bessarabia; Romanian Armed Forces; national construction; modernization; interwar period;

PRELIMINARIES

The presentation of the military institution influence on each of the basic fields of daily life in Romania, as well as the interaction between the Romanian Armed Forces and the population of Bessarabia is aimed at highlighting how the Armed Forces, as a state institution, positioned and reacted to various challenges specific to each region. Although the subject is approached briefly and unevenly in specialized literature, without distinguishing between the reference period and the subject matter, the research task has been made possible based on the works of renowned researchers in the field, such as Dimitrie Gusti, Gheorghe Palade, Ion Valer Xenofontov, Oana-Maria Mitu, Octavian Țicu, and others. Additionally, the original sources identified by the author in the National Archives Agency in Chișinău, as well as the period press, are useful and relevant as factual material.

The study of the impact of the military institution on daily life as well as of its contribution to the construction of identity in the communities of the Romanian province deserves special attention, as it fits into the strategies and tools used by the Romanian state to build the Romanian nation during the 22 years it governed Bessarabia.

Due to its complex characteristics, the study of the impact of the military institution on daily life as well as of its contribution to the construction of identity in the communities of the Romanian province deserves special attention, as it fits into the strategies and tools used by the Romanian state to build the Romanian nation during the 22 years it governed Bessarabia.

Between 1920 and 1940, as part of the interwar national (re)construction programme, the primary roles were assigned to the security structures, whose purpose was to monitor the process of cohesion and consolidation of the state by ensuring the protection of the Romanian ethnic majority, in relation to those who did not accept the form of government of the unified state and did not comply with the directives of the government. That programme became applicable to Bessarabia once the Romanian armed forces entered it, on 12 January 1918. For these reasons, the everyday relevance of the Romanian Armed Forces provided authorities and communities with public presence and an additional advantage in interacting with society in both urban and rural areas.

At the same time, the Armed Forces held the highest position in the symbolism of state institutions, being placed alongside the School and the Romanian Orthodox Church (a fact included in the Romanian Constitution of 1923), in shaping civic and moral attitudes that fostered national spirit. The role of the Armed Forces was to take over, continue, or complete segments of the process of unifying the mental, attitudinal and behavioural differences of national minorities, and to provide a common basis for interaction with those they directly addressed. Through that and the community extensions it sought to practice, the military institution aimed to relax communication barriers and soften the identity contours that existed before the war (Mitu, 2021, p. 244).

The role of the Armed Forces was to take over, continue, or complete segments of the process of unifying the mental, attitudinal and behavioural differences of national minorities, and to provide a common basis for interaction with those they directly addressed.

In that approach, the priority for the Romanian population of Bessarabia was to condition the fixed role of the Armed Forces activities into two main directions: *"socializing and cultivating the spirit of equality and fraternity, creating spiritual bonds at the individual level, and fostering a sense of belonging to a single community, as well as forming loyalty to the central public institutions in relation to the principles and interests of the Romanian national state."* (Ib., p. 247).

MILITARY INSTITUTION: A REFERENCE FOR PATRIOTIC AND CULTURAL EDUCATION

Determined by the level of underdevelopment of the rural communities in Bessarabia, the areas of focus of the Romanization programme, as well as its operational needs, were aimed at normalizing the situation at the societal level. On the practical level of the role they were tasked to fulfil, taking care of young people who were illiterate and not socialized in any other official formative environment, the officers found their educational mission difficult. One of the most visible problems raised by the illiteracy of the troops was the military system's inability to supplement the communication that occurred between officers and soldiers. The process of shaping national consciousness, within the military institution, consisted in strengthening the interethnic relations and the national construction of the Romanian state.

Among the three social, cultural, and educational entities mentioned, the School and the Church ensured the initiation and continuity of the formation and practice of national sentiment,

while the Armed Forces provided a school-like supplement, ensuring the fundamental fluidity of cult practices, and paving the way for cultural activities (Gusti, 1946, p. 212). The interaction between the Armed Forces and other components of the institutionalized cultural sphere demonstrated the contribution made to solidifying the connection between military authority and the population, which was largely determined through cultural, musical, and sports associations.

In a Bessarabia with an underdeveloped Romanian consciousness, characterized by the absence of a Romanian ethnic pressure, the rehabilitation of traditional identity elements, as well as the gradual development of the State's moral authority, was to be undertaken through the filter of young people who had fulfilled the military service.

This reality was outlined in 1918, when the entry of Romanian troops into Bessarabia required explanatory support to legitimize their presence in the eyes of the population and thus ensure acceptable limits to a social order already destabilized by war and Bolshevik interference. Therefore, not only troops were sent to the province, but also priests and military teachers to explain to the population the role of the Romanian military action (Palade, 2010, p. 39). For those reasons, the necessity of organizing an integrated training process for the related structures and components was outlined by the General Staff of the Romanian Armed Forces. For example, in the *Order of the General Staff, Section 5, No. 2635 of 8 December 1938*, it is indicated that all active officers fulfilling the function of county prefect were required to participate in officer training at the garrison (ANA, F. P-339, inv. 1, f. 3468, p. 4).

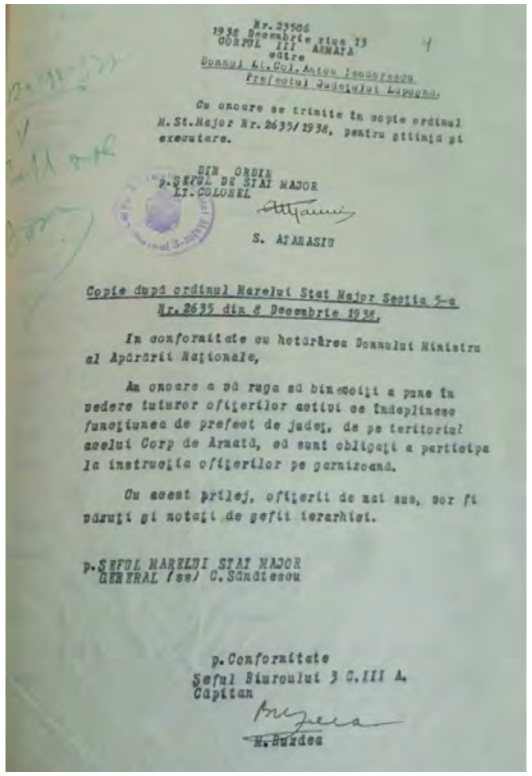
The necessity of organizing an integrated training process for the related structures and components was outlined by the General Staff of the Romanian Armed Forces. For example, in the Order of the General Staff, Section 5, No. 2635 of 8 December 1938, it is indicated that all active officers fulfilling the function of county prefect were required to participate in officer training at the garrison.

At the same time, in the 1930s, various aspects of daily life became concerns for the authorities in the implementation of the programme to integrate Bessarabia's minority population into the Romanian state system. The complexity of the integration programme interacted effectively with certain capabilities of the Armed Forces, such as vigilance, reconnaissance and information collection, control and reaction actions, as well as communication with locals while carrying out community-interest work, all of which being considered productive for the process of regional identity reconstruction.

Thus, the Armed Forces, along with other force structures, closely examined how mandatory linguistic, educational, and religious

integration requirements were being implemented among the Orthodox minorities (Russians, Ukrainians, Bulgarians, and Gagauz) in Bessarabia, seeking to align them with the new national principles (Mitu, p. 289). Referring to other community entities that did not fit the Orthodox majority profile, the Germans and Jews from central and southern Bessarabia were particularly highlighted.

Regarding the ethnic relations and configuration in Bessarabia, it was observed that the deployment of the Romanian Armed Forces in Bessarabia stimulated provincial communities to make increasingly intense efforts to improve their living conditions.



Nr. 23506
1938 Decembrie ziua 13
CORPUL III ARMATĂ
către
Domnul Lt. Col. Anton Teodorescu
Prefectul Judeţului Lăpuşna.

Cu onoare se trimite în copie ordinul M. St. Major Nr. 2635/1938, pentru ştiinţă şi executare.

DIN ORDIN
p. ŞEFUL DE STAT MAJOR
LT. COLONEL
S. ATANASIU

Copie după ordinul Marelui Stat Major Secţia 5-a Nr. 2635 din 8 Decembrie 1938.

In conformitate cu hotărârea Domnului Ministru al Apărării Naţionale,

Am onoare a vă ruga să binevoiţi a pune în vedere tuturor ofiţerilor activi ce îndeplinesc funcţiunea de prefect de judeţ, de pe teritoriul acelui Corp de Armată, să sunt obligaţi a participa la instrucţia ofiţerilor pe garnizoană.

Cu acest prilej, ofiţerii de mai sus, vor fi văzuţi şi notaţi de şefii ierarhici.

p. ŞEFUL MARELUI STAT MAJOR
GENERAL (ss) C. Sănătescu

p. Conformitate
Şeful Biuroului 3 C. III A.
Căpitan
M. Buzdea

Photo 1: Copy of the Order of the General Staff, Section 5, No. 2635, dated 8 December 1938 (Ib.)

Regarding the ethnic relations and configuration in Bessarabia, it was observed that the deployment of the Romanian Armed Forces in Bessarabia stimulated provincial communities to make increasingly intense efforts to improve their living conditions (Țicu, 2018).

THE ARMED FORCES INVOLVEMENT IN THE INTERACTION PROCESS IN THE CULTURAL, EDUCATIONAL, AND ECONOMIC FIELDS

The complexity of the functional capacities of the Romanian Armed Forces fully facilitated the achievement of objectives outlined in the National Construction Plan during the reference period. Therefore, a significant aspect was the Armed Forces responsiveness in various emergency situations, the timely organization of a socio-cultural action plan regarding military support for national construction in Bessarabia, and the establishment of good working relationships to support the Romanian administration in the territory.

At the same time, with other regulatory duties and responsibilities concerning the execution of the National Construction Plan in Bessarabia counties, it was noted that some actions undertaken in an organized manner by the Armed Forces since the early interwar period involved the deployment of specialized personnel (officers, teachers, and regimental priests), who contributed directly to Romanian literacy activities. Those efforts were particularly aimed at the youngsters of enlistment age, but in the absence of a state apparatus to address the urgent needs of immediate Romanization interventions for the regional population, military personnel were also used for the training of civilians (Mitu, p. 316).

Some actions undertaken in an organized manner by the Armed Forces since the early interwar period involved the deployment of specialized personnel (officers, teachers, and regimental priests), who contributed directly to Romanian literacy activities.

Armed Forces representatives carried out a number of well-structured and effective cultural activities. The contribution and dedication of the Romanian military personnel were well managed by the authorities through the creation of the first cultural centres. One of the first Romanian cultural centres in southern Bessarabia was established on 28 April 1920, in the village of Selemet in the Tighina County, under the direct encouragement of Second Lieutenant Marin Georgescu, adjutant of the 15th Howitzer Regiment (Ib.). The officer took the initiative to bring together the local authorities, teachers, and priests of the village hosting the Regiment, launching a call to all prominent people in the community to explain the importance of the national goal, the need to rediscover the identity of *"pure Romanian"*, and the contribution of the organized cultural activities quality (Ib.). In this context, it was noted that Second Lieutenant Georgescu chose to supplement the purely administrative details in the founding

documents of the cultural centre with somewhat contrasting statements, which, for example, emphasized that the institution would specifically aim at the *"revival of the hora dance because in it lives the language, humour, poetry, and our soul".* It illustrated the models of identity attachment that were created/amplified by national rhetoric in the military personalities acting as active agents of the collective consciousness reconstruction programme (Palade, 2010, pp. 58-59).

With such perseverance, the establishment of cultural centres continued in Bessarabia. In this regard, the moral and material contributions of the Armed Forces proved to be effective and were foundational in the establishment of one of the first cultural-spiritual divisions in the entire province. That initiative emerged in Cetatea Albă, where the first Cultural Circle in Bessarabia was established (Iliescu, 1928, pp. 44-45), which would later become the first Bessarabian branch of *"Astra".* Subsequently, this spiritual source operated with numerous cultural initiatives organized in the province during the mid-1920s. With dedication and initiative, military elite representatives continuously led those actions.

In the second-largest city of Greater Romania by population, Chișinău, "King Ferdinand I" Military High School was established, which represented "an educational institution with a military profile, having a strong ideological, national, and security-focused mission to ensure the safety of the unified Romanian state".

During this process of promoting Romanian cultural and spiritual values, Captain Mihail Dumitrașcu, from the 30th Infantry Regiment *"Matei Basarab"* stationed in Cetatea Albă, became publicly recognized as a promoter of other emerging forms of Romanian culturalization in the province (Petrescu, 2008, p. 20). Specialized historiography links the founding contribution of this officer to the opening, in 1925, of four other cultural institutions: *"Regimentul 28 Infanterie Ismail", "Batalion Vânători Tighina", "ASTRA Tighina" ("Tighina County"),* and *"Tighina City"* (Iliev, 2013, p. 91). Motivated by Captain Dumitrașcu, the officers of the 28th Infantry Regiment in the city of Ismail established their Astrist organization on 1 January 1925, opening a cultural circle and a library for each of the 14 companies. With the support of the Central Committee from Sibiu, each of those libraries was frequented by about 100-150 soldiers (Petrescu, 2008, p. 21). Also, in Lăpușna County, the cultural centres were involved in assisting with military concentrations and equipping (Xenofontov, 2023-b, p. 30).

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having a strong ideological, national, and security-focused mission to ensure the safety of the unified Romanian state" (Xenofontov, 2023-a, p. 590).

Throughout the 1930s, the authority and specific capabilities of the Armed Forces in this domain continued the national construction effort, focusing on becoming a foundation for connecting the Armed Forces with the population in Bessarabia, as well as on fostering collaboration between military structures and other cultural-spiritual institutions of the State. The goal was to form in the popular consciousness reflexive mental associations between the Army, School, Church, and State, between the principles and teachings specific to each, and the universal canons of the national Romanian identity consciousness (Gusti, p. 212).

SOCIAL UTILITY ACTIVITIES CARRIED OUT WITH THE PARTICIPATION OF THE ARMED FORCES

In the early 1930s, the unified State radically increased actions to streamline the operation of the mentioned strategic programme by involving the armed forces in social activities of both spiritual and material nature (Mitu, p. 311). In this regard, the reality was confirmed by some staff officers, who even argued that the concrete help provided by the Romanian military to the rural population, for example, with labour forces and agricultural inventory to restore field production after the destruction caused by the world conflagration, had won them the *"love and admiration of the population who at first, (viewed them) with distrust"* (Ib.).

In this context, the military authorities in the province were also well aware of the strategic need for radical changes in infrastructure, road construction, and modernization to alter the existing situation. Their achievement was expected to contribute to increasing the economic potential and, implicitly, to improving the situation of the large social categories of the population in Bessarabia (Agrigoroaiei, 1993, p. 90).

In addition to the relationship with the local population, there was also direct involvement of the military institution in activities with social and utility purposes. For example, in 1919-1920, only one road was built connecting the city of Hâncești with the Prut localities, while

The military authorities in the province were also well aware of the strategic need for radical changes in infrastructure, road construction, and modernization to alter the existing situation. Their achievement was expected to contribute to increasing the economic potential and, implicitly, to improving the situation of the large social categories of the population in Bessarabia.

the construction of others was constantly delayed. In 1920, at the insistence of the Military Command of Bessarabia, the construction of the Chișinău – Băcioi – Gara Zloți road began (Ib., p. 90). As a result, 150 km of road embankments were executed by the military and the local population (Ib.).

A large volume of work was launched in the '30s, when the Romanian authorities in Bessarabia identified the strategic development of road networks and infrastructure as critical elements in modernizing the lives and well-being of the local population. The development of infrastructure, as part of a network, alongside railways and navigable routes, to support military operations, was for the first time addressed by the High Council of National Defence (Giurgiu, 2012, p. 91), in a meeting on 22 February 1932, held at the Royal Palace, under the presidency of King Carol II. General Constantin Ștefănescu-Amza, Minister of National Defence, requested approval for the construction of roads in Bessarabia, as *"these represented both strategic and economic interests"* (Ib.). After the meeting, on 13 December, the topic was revisited in a new session of the High Council of National Defence at the Royal Palace. General Constantin Lăzărescu, Chief of the General Staff, emphasized the need to begin the construction of approximately 900 km of roads in Bessarabia in 1933, with an estimated cost of 952 million lei (Ib.). Ultimately, the decision was made by Prime Minister Iuliu Maniu, who stated: *"It would be good to begin the construction of roads in Bessarabia"* (Ib.), and allocated the necessary funds for the planned works in the first priority stage of the Road Network Development Plan (Ib.).

General Constantin Lăzărescu, Chief of the General Staff, emphasized the need to begin the construction of approximately 900 km of roads in Bessarabia in 1933, with an estimated cost of 952 million lei. Ultimately, the decision was made by Prime Minister Iuliu Maniu, who stated: "It would be good to begin the construction of roads in Bessarabia", and allocated the necessary funds for the planned works in the first priority stage of the Road Network Development Plan.

In this regard, the Romanian military authorities in Bessarabia were simultaneously making continuous efforts to improve and build roads of various categories. As a result, in the work plan of Minister General Răşcanu, published in *Cuvânt Moldovenesc* on 26 July 1931, a chapter titled *Refacerea şoselelor cu sprijinul oştirii/Restoring Roads with the Support of the Armed Forces* announced that *"given the nearly non-existent resources (...) I will immediately appeal to the military workforce, with whose help I hope and can start even in August the restoration of these roads, which are so necessary for the economic life across the river Prut"* (Planul, 1931). With the active involvement of the Armed Forces, roads were constructed linking the cities of Hotin and Cernăuți through the Otaci – Grozinți – Colincăuți road, Soroca

with Florești, Cahul with Traian Val station. The road network, or rather stretches of road and paved roads, connected the ports of Reni, Chilia, with surrounding localities (Giurgiu, ib., p. 90).

Concurrently, in the article *D-l ministru general Răşcanu în nordul Basarabiei/General Minister Răşcanu in Northern Bessarabia*, published in *Cuvânt Moldovenesc* on 25 September 1931, it was mentioned that he inspected the northern part of Bessarabia, spoke to the population, and inspected the authorities. In Soroca, *"he stated that, as a Minister, he would focus solely on administration and would be uncompromising with those who failed to do their duty or who engaged in politics".* The publication of the time noted that 12,000 troops were working on the roads. The government allocated 40 million lei for that purpose (D-l ministru/HE Minister, 1931).

The process of road network development for the needs of the population was constant throughout the era. Compared to the old Kingdom and especially Transylvania, the infrastructure in Bessarabia was in worse condition. In 1920, at the request of the Military Command of Bessarabia, the construction of the Chișinău – Băcioi – Rezeni – Gara Zloți road began, which was interrupted in some years (Xenofontov, 2024, pp. 114-115). By 1938, the modernization of 1,200 km of roads was planned, including the routes Focșani – Bacău – Roman, Botoșani – Dorohoi – Cernăuți – border; Sușița – Tecuci – Bârlad – Crasna –Huși – Chișinău; Fundata – Pitești – Râmnicu Vâlcea – Govora; Pitești – Curtea de Argeș; Sebeș – Deva – Arad – Timișoara; Cluj – Dej – Hamleu; and Bazargic – Balcic, with a budget of 800 million lei (Giurgiu, ib.).

Compared to the old Kingdom and especially Transylvania, the infrastructure in Bessarabia was in worse condition. In 1920, at the request of the Military Command of Bessarabia, the construction of the Chișinău – Băcioi – Rezeni – Gara Zloți road began, which was interrupted in some years.

At the same time, it is important to note that the economic development of the unified Romania was in a deep crisis, affected by the great economic crisis of 1929-1933, which was in turn triggered by the banking collapse in New York. As a result, poverty was widespread throughout the province, both in urban and rural areas. Despite the socio-economic difficulties faced by the Romanian authorities in the province, the social phenomenon was a priority in their activities. The military was also involved in combating poverty.

In another article titled *Starea lucrurilor din Basarabia/The State of Affairs in Bessarabia*, published in *Cuvânt Moldovenesc* on 28 August 1931, Minister Ioan Răşcanu emphasized that one of the military's tasks was combating poverty: *"In the cities where poverty has spread*

its wings more widely, I will set up canteens with field kitchens, so that 50–60 poor people can be fed daily" (*Starea lucrurilor*, 1931). Thus, it is worth noting that, in addition to the military's constitutional missions, the Romanian Armed Forces command took on another important social task. The results of the military's involvement in supporting the population were reflected in the press of the time. Moreover, the Romanian troops efforts sparked a patriotic feeling of belonging and national pride. For example, in the *Cuvânt Moldovenesc* newspaper on 19 March 1933, in the article *Armata* în *ajutorul săracilor/The Armed Forces Help the Poor*, it was mentioned: *"Our image speaks volumes and dispels all the slanders brought against us by the enemies of our country and nation, from within and outside the borders. Just as in wartime the armed forces defend our country, our property, and our lives, in peacetime, the armed forces always come to the aid of the needy. We see them here, distributing hot meals this winter to the poor of Chișinău."* (*"Armata",* 1933).

The involvement of troops during their mandatory military service in carrying out public interest work was not their primary duty, as it was that of defending the State. However, it was the disciplined, well-organized, and operationally prepared military contingent that could provide the response and support for a need that the authorities had no other way of addressing.

Photo 2: The Armed Forces Helping the Poor (Ib.).

Nevertheless, it should be noted that the involvement of troops during their mandatory military service in carrying out public interest work was not their primary duty, as it was that of defending the State. However, it was the disciplined, well-organized, and operationally prepared military contingent that could provide the response and support for a need that the authorities had no other way of addressing.

Given the severe circumstances of socio-economic reconstruction in light of the unsatisfactory reality of public services provided by the authorities to taxpaying citizens, the role and visibility of the Armed Forces in the National Construction Programme became obvious in the improvement of the living conditions of the population in Bessarabia.

In this context, the Armed Forces represented a compelling potential in the process of strengthening efforts to enhance the interwar national construction process. The consistent and successful engagement of the Romanian Armed Forces in overcoming the obstacles to the smooth development of everyday life had the capacity to demonstrate to both rural and urban populations that the State was consciously concerned and made considerable efforts to modernize and consolidate the socio-economic situation of Bessarabia.

THE ROLE OF THE ARMED FORCES IN HEALTHCARE ASSISTANCE IN THE PROVINCE

Another direct involvement of the military institution in socially beneficial activities was in the field of healthcare. At the end of the First World War Bessarabia faced significant challenges regarding the state of medical and sanitary assistance. The Armed Forces were tasked with addressing epidemiological issues, combating various infections being among the main problems. Thus, both civil and military authorities established a Civil-Military Inspectorate for Bessarabia, which was responsible for combating epidemics. The military structures were organized according to emerging needs, specifically to combat epidemic diseases (Dumitraș, 2009, p. 11).

Considering the created situation, the existing possibilities, and the obligations assumed by the Romanian Armed Forces in Bessarabia, General Doctor Nicolae Vicol, the chief sanitary inspector for Bessarabia, proposed a series of measures to rectify the situation. Among them were: adapting sanitary organization to the administrative framework, ensuring that operations were properly coordinated; continuing the activity of civilian hospitals under the supervision of local authorities, in coordination with the General Directorate of the Civil Sanitary Service (Dumitraș, 2018, p. 82).

In support of those sanitary security efforts, under the instructions of the superior military authorities of the Romanian Ministry of War, six military pharmacies were established in the cities of Bolgrad, Cetatea

General Doctor Nicolae Vicol, the chief sanitary inspector for Bessarabia, proposed a series of measures to rectify the situation. Among them were: adapting sanitary organization to the administrative framework, ensuring that operations were properly coordinated; continuing the activity of civilian hospitals under the supervision of local authorities, in coordination with the General Directorate of the Civil Sanitary Service.

Albă, Tighina, Chișinău, Bălți, and Hotin. Their mission was to collect all sanitary materials within their geographical area and provide medical supplies to Romanian troops, local Bessarabian militias, and hospitals and pharmacies organized in the province (Ib.). During that period, for more efficient cooperation with civil authorities and to aid the local population, a central sanitary depot was established in the village of Călărași, near Chișinău. Furthermore, to provide medical support to the troops stationed in Bessarabia and to eliminate epidemics of contagious diseases, several military hospitals were set up (Ib.).

To provide medical support to the troops stationed in Bessarabia and to eliminate epidemics of contagious diseases, several military hospitals were set up.

As part of the Romanian military's sanitary services, another form of healthcare assistance was developed by the Armed Forces through the construction and operation of soldier baths. Evidence in this regard can be found in an interwar Bessarabian media source, the newspaper *Cuvânt Moldovenesc*, in an article titled *Baia Corpului 3 Armată/The Bath of the 3rd Army Corps.* The article highlights the attention the 3rd Army Corps Command gave to both its troops and the civilian population. It mentions that *"After the Armed Forces worked planting tens of thousands of trees, after the barracks were built, after the construction of the Public Bath and the Cultural Centre in Nisporenii Lăpușnei – just to name a few – came the fulfilment of a great need, the construction of the Chișinău garrison bath."* (Baia, 1931). This bath was completed on 10 January 1931, and was consecrated in the presence of officers, enlisted men, and civil authority representatives. The bath was located at the 3rd Army Corps Military Hospital. At the same time, according to the publication of the time, General Dragu was quoted as saying that the bath was just the beginning of a programme of works he intended to carry out for both the military and the civilian population (Ib.).

The Programme and Operation of the 3rd Army Corps Bath (Ib.)

The bath operates the following schedule, from 08:00 to 13:00 and 15:00 to 19:00:

Mondays, Wednesdays, Fridays, and Saturdays – it will be available for officers, their wives, and soldiers.

Tuesdays, both morning and afternoon – the wives of civil servants may use the bath.

Thursdays – for civil servants.

Sundays – it is a day of Christian rest, so the bath will not operate.


D-l general C. Dragu, comandantul Corpului III Armată.

Noi, din partea gazetei, aducem d-lui general Dragu și ofițerimei din garnizoană, pe această cale mulțumirile și sentimentele de recunoștință ale populației civile funcționărești, cari de acum înainte va avea putința—eftin de tot—să practice regulele higienice.

Să trăești d-le general!

(P.)

Photo 3: General C. Dragu, Commander of the 3rd Army Corps, and debts of gratitude for the organization of the bath[1] (Ib.)

Public health issues became a priority for the Kingdom of Romania, which, by engaging both civil authorities and the military, organized and increased the number of medical institutions. It was manifested through the creation of a system of dispensaries, small maternity units, child care centres, deworming stations, and public baths (Opopol, 2019, pp. 203-208). Overall, the activity of the Romanian Military Sanitary Service in Bessarabia after the Great Unification, under the leadership of the general medical inspector for Bessarabia, Nicolae Vicol, in collaboration with local authorities, improved the unsatisfactory pre-existing sanitary and epidemiological situation. It also established a system of civil and military health protection that successfully operated during the interwar period.

The activity of the Romanian Military Sanitary Service in Bessarabia after the Great Unification, under the leadership of the general medical inspector for Bessarabia, Nicolae Vicol, in collaboration with local authorities, improved the unsatisfactory pre-existing sanitary and epidemiological situation. It also established a system of civil and military health protection.

FINAL CONSIDERATIONS

In the context of addressing the daily life and living conditions of the population of Bessarabia in the 1930s, the beneficial impact of the military authority was highlighted through the reconstruction

[1] We, on behalf of the newspaper, bring to General Dragu and the officers of the garrison, through this means, the thanks and feelings of gratitude from the civilian administrative population, who, from now on, will have the opportunity – at very little cost – to practice hygienic rules. Long live, General! (P.)

of the consciousness of the Bessarabian elite and population. Despite insufficient material support from the state authorities, the importance of the national construction programme encouraged the independent initiatives of officers and non-commissioned officers, in collaboration with those in the province, to promote the representation of Romanian culture in Bessarabia's social environment.

In those socio-historical conditions, the Army, together with the Church and the School, successfully contributed to the most important projects aimed at connecting Bessarabia with the rest of the Romanian social and cultural space, through the direct involvement of military personnel in the community. We must also mention the military's contribution to the modernization of the national cultural system and the execution of material and construction actions, such as regional infrastructure projects, construction of local roads, and the building and reconstruction of social interest structures like schools, churches, cultural centres, baths, and others. However, the achievements and influence of the Armed Forces on the entire modernization process of living standards and daily life in the region during the reference period were not sufficient to maintain a sustainable development trajectory. Unfortunately, the events of June 1940, with the beginning of the Soviet occupation, shattered the results and efforts made by the Romanian Armed Forces, along with other Romanian authorities, in carrying out the national construction process and the integration of the Romanian people.

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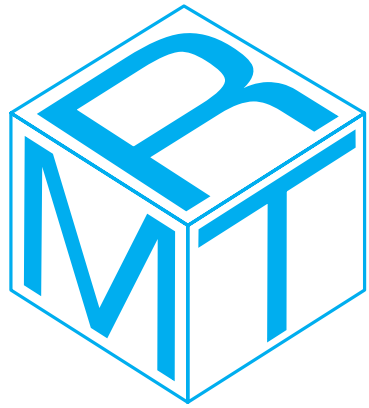
BIBLIOGRAPHY:

1. Agenția Națională a Arhivelor/Archives National Agency/ANA (Chișinău). F. P-339, inv.1, f. 3468, p. 4.
2. Agrigoroaiei, I., Palade, Gh. (1993). *Basarabia în cadrul României întregite, 1918-1940*, Chișinău: Universitas.
3. *Armata în ajutorul săracilor* (1933). In *Cuvânt Moldovenesc*, Chișinău, year VII, no. 12.
4. *Baia Corpului 3 Armată*. In *Cuvânt Moldovenesc*, year VI, no. 4, 18 January 1931.
5. *D-l ministru general Răşcanu în nordul Basarabiei* (1931). In *Cuvânt Moldovenesc*, year VI, no. 49, 25 September.
6. Dumitraș, V. (2018). *Secvenţe istorice vizând activitatea serviciului sanitar militar român în Moldova în timpul Primului Război Mondial și în Basarabia după Marea Unire din 1918 (dedicat Centenarului de la Marea Unire)*. In *Revista de Ştiinţe ale Sănătăţii din Moldova*, vol. 15(1), pp. 75-86.
7. Dumitraș, V., Dediu, I., Cârstea, N. (2009). *Managementul sanitar în campanie*. Chișinău: Centrul Editorial-Poligrafic Medicina.
8. Giurgiu, L. (28 July 2012). *Concepţia Consiliului Superior al Apărării Ţării privind dezvoltarea drumurilor în perioada interbelică. Sesiunea ştiinţifică "Ziua Arhivelor Militare": Armata Română şi societatea civilă – studii şi comunicări*. Piteşti: Col. Dr. Marian Moşneagu, Col. Dr. Petrişor Florea, Dr. Cornel Ţucă (eds.). Brăila: Editura Istros a Muzeului Brăilei.
9. Gusti, D. (1946). *Sociologia militans. Cunoaştere şi acţiune în serviciul naţiunii*, vol. II. Bucureşti: Fundaţia *"Regele Mihai I"*.
10. Iliescu, R. (1928). *Cum s-a întemeiat Cercul Cultural "Cetatea Albă" în Cetatea Albă. Zece ani de la realipire (9 aprilie 1918 – 9 aprilie 1928)*. București: Tipografia Fundației Culturale *"Principele Carol"*.
11. Iliev, M. (2013). *"ASTRA". Regionala Basarabiei (1924-1935) (I)"*. In *Transilvania*, no. 9, p. 91.
12. Mitu, O.-M. (2021). *Construcția națiunii și problema identitară în România Mare. Cazul sudului Basarabiei*. Galați: Universitatea *"Dunărea de Jos"*, Socio-humanities Doctoral School. Doctoral Thesis.
13. Opopol, N., Pantea, V., Bahnarel, I., Friptuleac, G., Volneanschi, A. (2019). *Secvențe ale etapelor de dezvoltare a științei igienice în Republica Moldova*. În *Sănătate Publică, Economie şi Management în Medicină*, no. 4(82).
14. Palade, Gh. (2010). *Integrarea Basarabiei în viaţa spirituală românească (1918-1940)*. Studii. Chișinău: Cartdidact.
15. Petrescu, D. (2008). *Onisifor Ghibu, misionar cultural în Basarabia*. In *Revista Română*, year XIV, no. 4 (54), December.
16. Petrescu, D.-Şt. (2012). *Astra, stindard al culturii române în Basarabia (I)*. In *Revista română*. Iaşi, no. 4.
17. *Planul de lucru al d-lui ministru general Răşcanu* (1931). In *Cuvânt Moldovenesc*, year VI, no. 31, 26 July.
18. *Starea lucrurilor din Basarabia (1931)*. In *Cuvânt Moldovenesc*, year VI, no. 36, 28 August.
19. Țicu, O. (2018). *Dilemele Independenței (I): Rolul armatei române în transformarea Basarabiei*, https://moldova.europalibera.org/a/blog-centenarul-unirii-octavia-ticu/28988217.html, retrieved on 25 March 2024.
20. Xenofontov, I.V. (2023-a). *Liceul Militar "Regele Ferdinand I" din Chișinău – "uzină de energie națională"*. In *Gândirea militară românească*. Proceedings of the international scientific conference *"Resilience, military capabilities development and NATO-EU cooperation for the development of a Black Sea security strategy"*. București: Defence Staff, 5th ed., 14-16 November 2023.
21. Xenofontov, I.V. (2023-b). *Structuri militare în Chișinăul interbelic*. In *Studia Universitatis Moldaviae. Seria "Științe umanistice"*, no. 10 (180).
22. Xenofontov, I.V. (2024). *Automobile în Chișinăul interbelic*. In *Dialogica*. Cultural and Literary Studies Journal, no. 2.



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