

ROMANIAN MILITARY THINKING



ROMANIAN MILITARY THINKING
INTERNATIONAL SCIENTIFIC CONFERENCE
PROCEEDINGS



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ORGANISED BY THE DEFENCE STAFF**

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***DYNAMICS OF SECURITY ARCHITECTURE
IN THE WIDER BLACK SEA AREA,
IN THE CONTEXT OF THE CONFLICT IN UKRAINE
AND THE NEW NATO STRATEGIC CONCEPT***

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ROMANIAN MILITARY THINKING
CONFERENCE

**DYNAMICS OF SECURITY ARCHITECTURE
IN THE WIDER BLACK SEA AREA,
IN THE CONTEXT OF THE CONFLICT IN UKRAINE
AND THE NEW NATO STRATEGIC CONCEPT**

FOREWORD

Lieutenant General Gheorghiu VLAD

Deputy Chief of Defence Staff



The fourth edition of the Romanian Military Thinking International Conference was as valuable as it was useful. Valuable due to the quality of the debates promoted in such an institutional framework, but especially useful, due to the obvious contribution to the formation and promotion of a security culture necessary not only at the level of the Romanian Armed Forces but also at the level of the entire society.

The theme of the conference – Dynamics of security architecture in the wider Black Sea area in the context of the conflict in Ukraine and the new NATO Strategic Concept – and the contribution of the institutional partners who supported the organization of the event – New Strategy Center, Conflict Prevention and Early Warning Center, and the Association “Integrated Security, Defense and Intelligence Services” – have defined the main objective of the activity: ensuring a closer collaboration between the institutions with responsibilities in the field of defense and national security, as well as between them and international organizations, non-governmental organizations, the academic area, experts in various fields, considering the current extremely volatile security environment in the Black Sea Region.

As we all know, the global and especially regional security paradigm has dramatically changed following 24 February 2022, the day when the Russian Federation invaded Ukraine. The event has shattered peace and severely altered the security environment, generating pervasive instability and rising strategic as well as systemic competition, entailing operational aspects of defence and deterrence, capability building, technology and industry analysis, rules-based international order, and redefinition of multilateral strategy.

In this context, the NATO 2022 Strategic Concept, adopted on 29 June, at the NATO Summit in Madrid, identifies the Russian Federation as the most significant and direct threat to Allies’ security and to peace and stability in the Euro-Atlantic area, as it uses conventional, cyber and hybrid means to undermine the rules-based international order. That is why NATO will continue to respond to Russian threats and hostile actions in a united and responsible way,

adopting a 360-degree approach to deterrence and defence, entailing not only a mix of capabilities, the space and cyber ones included, but also multi-region and multi-domain approaches. Under these circumstances, the People's Republic of China is considered a systemic competitor. Therefore, as the challenges are more global, NATO must adapt to be capable of meeting them.

The Strategic Concept mentions maritime security as key to peace and prosperity, the Allies expressing their determination to strengthen the posture and situational awareness to deter and defend against all threats in the maritime domain, uphold freedom of navigation, secure maritime trade routes and protect main lines of communications. Considering the above-mentioned aspects, the Black Sea region, together with the Baltic and Mediterranean Sea ones, are areas of strategic interest to NATO. That is why, the Alliance is determined to ensure that deterrence and defence posture remains credible, flexible, tailored and sustainable, which entails robust in-place, multi-domain, combat-ready forces, enhanced command and control arrangements, prepositioned equipment.

Romania, as a country in the Black Sea region, as well as a NATO and EU member state in the eastern flank, must remain a pillar of stability and a security provider in the region. The new Strategic Concept reaffirms that NATO's key purpose is to ensure the collective defence of its members, based on the 360-degree approach and in line with the three essential core tasks. Moreover, the EU Strategic Compass's objective is to make the EU a stronger and more capable security provider, able to protect its citizens and to contribute to international peace and security. In this context, the Strategic Concept and the Strategic Compass should be coordinated to be able to guarantee the Euro-Atlantic security, including by capability development initiatives. Concrete steps have been taken with regard to strengthening deterrence and defence posture in the eastern flank, especially following Russia's invasion of Ukraine.

Thus, Allies have reinforced the existing battlegroups and agreed to establish four more multinational battlegroups in Bulgaria, Hungary, Romania and Slovakia, to ensure the extended NATO's forward presence along the Alliance's eastern flank. Moreover, at the 2022 NATO Summit in Madrid, Allies agreed to enhance the multinational battlegroups from battalions up to brigade size, where and when required. In addition, many activities undertaken by Allies nationally have contributed to increased activity in the eastern flank. Allies have

sent additional ships, planes and troops to NATO territory in Eastern Europe, further reinforcing the Alliance deterrence and defence posture. The USA has strengthened its military presence in Poland, Romania and other Eastern allied countries. Other Allies, including the UK, the Netherlands, Spain and France have also announced additional military deployments in Romania, Bulgaria and the Black Sea. The Royal Netherlands Air Force deployed F-35 fighter aircraft in support of NATO's enhanced Air Policing in Bulgaria.

As far as Romania is concerned, the French Armed Forces have reinforced NATO's multinational Battle Group Forward Presence with the SAMP/T surface-to-air missile defence system – MAMBA in support of the Alliance's initiative to deter and defend the eastern flank of Europe. Since May 2022, the French Air Force have deployed the MAMBA last generation medium-range surface-to-air system as well as a centre of defence management in Romania. In order to enhance the system's efficiency and to meet the needs of the NATO Integrated Air and Missile Defence, it is connected and integrated to the Romanian and NATO defence systems through a tactical data liaison. France is the framework nation supported by an alternative company of either Belgian or Dutch troops.

As for the national effort, the Headquarters Multinational Corps South-East (Sibiu), the Multinational Brigade South-East (Craiova) and the Multinational Division South-East (Bucharest), providing command and control of NATO corps-level land operations in peacetime, crisis and conflict, represent Romania's contribution to strengthening the allied presence of forces on the eastern flank of NATO. In the same vein and taking into consideration the Defence Investment Pledge, Romania's defence budget was established to increase from 2% to 2.5% of GDP. The forecast suggests investment would account for 40% of the total defence budget by 2025, which places the focus on the national defence capability development too, including in the field of logistics and cutting-edge technology.

All the above-mentioned aspects were developed within the panels of the conference, both at the level of debates and from an academic perspective, in this way contributing to a better understanding of the current security environment. The participation of some international experts in security domain made the ideas and messages transmitted to be all the more valuable as they came from different backgrounds and cultures.

PRESENTATION OF THE CONFERENCE



GEN Daniel PETRESCU
Chief of Defence Staff

The Romanian Military Thinking International Doctrinal Conference was organised by the Defence Staff, on the occasion of the 163rd anniversary of the Defence Staff and the 24th edition of the Romanian Military Thinking Journal Awards.

Keynote speakers:

- **GEN Daniel PETRESCU** – Chief of Defence Staff
- **H.E. Mircea GEOANĂ** – NATO Deputy Secretary General
- **Iulian CHIFU** – State Advisor to the Romanian Prime Minister for Foreign Relations, Security & Strategic Affairs
- **H.E. Bogdan Lucian AURESCU** – Minister of Foreign Affairs
- **David MUNIZ** – Chargé d’Affaires, US Embassy in Romania

“War is back in Europe. This is the most severe security crisis in Europe after the Second World War. War has its own philosophy: things could go one way or another very quickly. It is a clash of will, a clash of armies, a clash of leaderships, a clash of economies, the support of the population and so on. There are a lot of imponderables, things we do not know, and it is probably what we cannot think about that would influence the outcome”.

“As we speak, we need to be conscious about the fact that the war is happening close to our borders, that people are dying as we speak. I need to start by strongly condemning this attack, which was unprovoked and which is illegal, the attack of Russia against Ukraine. (...) This is a war for national survival for Ukraine. This is a war of choice for Russia, but this is also a battle where our values, the values of the West, are tested. It has political, military, economic and all types of implications. At the political level, I would say that we deal with a new political and military framework. It is characterized by more uncertainties and constraints compared to the period before this war. Probably a regress in integration and international cooperation might follow as a result of this war, but, probably, the globalization process would not be stopped”.

The Chief of Defence also noted that: *“The war in Ukraine has already triggered some changes in the hierarchization of the European countries priorities. We see the European countries cooperating more and we see the willingness to invest in defence. I think that everybody has realized the importance of creating your own capabilities, capabilities you can rely on in case of a crisis, especially if it is a military crisis”.*

As for the Western sanctions on Moscow, he emphasized that: *“The Russian Federation is under sanctions from the West. At the same time, there are countries outside Europe that are still cooperating, politically and economically with Russia. Therefore, Russia is not totally isolated at the global level”.*



H.E. Mircea GEOANĂ
NATO Deputy Secretary General

“Romania is a highly-valued NATO ally. Romania makes an important contribution to our shared security, including at this pivotal time”.

The NATO official drew attention to the fact that the Black Sea region has been the point of interest and the launching pad for Russian aggression build-ups for more than two decades now. *“Russia’s irresponsible and hostile behaviour in the Wider Black Sea Region has deeply affected the security of the North Atlantic Alliance and has also hampered economic development and exacerbated instability in the region. (...) What happens in the Black Sea does not stay in the Black Sea. It has global repercussions”.* That is why the importance of the Black Sea in the new Strategic Concept.

“Russia’s partial withdrawal from Kherson demonstrates the incredible courage of the Ukrainian armed forces and it shows us how vital it is to continue our support for Ukraine. President Putin is responding to his failures on the battlefield with more indiscriminate attacks on the Ukrainian cities, the civilians, the civilian infrastructure, and with a dangerous nuclear rhetoric. So, we must stay the course. The North Atlantic Alliance will not be intimidated or deterred. We will support Ukraine’s right to self-defence for as long as necessary. At the same time, we continue to strengthen our own defences to keep allied territory and our citizens safe”.



Iulian CHIFU
State Advisor to the Romanian Prime Minister
for Foreign Relations, Security & Strategic Affairs

Iulian Chifu highlighted the solidarity of NATO and EU countries for supporting Ukraine.

“We are all expecting and we need that Ukraine wins the war. It is a fact that is assumed at the NATO Secretary General level, at the EU level. Like-minded countries, we are supporting Ukraine, and there should be no step back, as it would mean compromising our principles and values, and actually undermining the rules-based order”.

Iulian Chifu mentioned that the UN General Assembly adopted, on 14 November 2022, a resolution regarding the costs of the war and sanctioning Russia *“for war crimes, for destruction, for all the behaviour unsuitable for the international law”* in Ukraine.

At the same time, he showed that the population supported the assistance given to Ukraine and bore the costs generated by the increase in energy prices and inflation. *“Citizens assume the fact that we need to pay. To pay directly for assistance in Ukraine, for refugees, for the developments in Ukraine, for each and every issue (...) and the costs that are coming from the rising cost of the energy, the inflation in our countries. And we have done it, we succeeded in having the support of our people to do that, in order for our children and grandchildren to have the same life, with liberty, with democracy, with human rights observed, with their free choices, and not under the type of autocracy that Putin is imposing on these people”.*

Another highlighted aspect was that of the secondary sanctions: *“We cannot accept that somebody takes profit of the costs, the grievances and the support of our people for the war in Ukraine, and makes money or supports Russia to avoid the sanctions. This is another very important point and I am quite sure that in the foreseeable future we will see the developments in that area. It is a matter of justice, for each and every one of us, including at the international level, that anyone who introduces the war in Europe, as this is the case, is paying for the costs it has caused to our citizens and our countries”.*

He also stated that there is a war in Europe that *“no one thought possible”*, but that the factors that led to its emergence must be understood. Iulian Chifu added that the war, beyond the conventional component, has also an important hybrid component, along with the threats related to the use of nuclear capabilities. Following this war, as the adviser to the Prime Minister of Romania indicated, the states can evaluate the investments they have made in recent years in military capabilities as well as the national economies reaction to a situation in which a greater production of armaments and ammunition is necessary.



H.E. Bogdan Lucian AURESCU
Minister of Foreign Affairs, Romania

In his speech, the Minister of Foreign Affairs, Bogdan Aurescu, emphasized the need to strengthen the Defence and Deterrence Posture on the Eastern Flank, including in the Black Sea region, stressing the importance of fully implementing the historic decisions adopted at the NATO summits in 2022, in Brussels and Madrid, as well as those included in the Alliance New Strategic Concept. He mentioned that, in late November, he would host, “on behalf of Romania, for the first time, the NATO Foreign Ministers meeting in Bucharest. (...) The Foreign Ministers meeting in Bucharest will also offer an opportunity to reflect on our future approach towards Russia, including on the long term”.

The Romanian official emphasized the importance of continuing support for partner states, especially those most affected by the effects of Russia’s aggressive pursuit of interests. In this context, he showed that “Our support for these countries should include at least three key areas: defence, resilience and economy, with the aim to ensure that these countries become self-sustainable, resistant to hybrid challenges and able to protect their sovereignty and territorial integrity”. Moreover, he highlighted that “the United States is also working on a national strategy focused on the Black Sea region. There is also a draft under discussion within the US Congress. This is an approach encouraged by Romania and firmly embedded in our bilateral agenda”.



David MUNIZ
Chargé d’Affaires,
US Embassy in Romania

The US Chargé d’Affaires in Bucharest, David Muniz, stated that the current situation: “is a constant reminder that this region is no longer in peace, and a constant reminder of the need for NATO in the first place”. (...)

Moreover, the US official emphasized that NATO allies have never been stronger, and the Alliance is so strong because of its members, Romania included, support. Romania was appreciated to be “in a critical place, a critical location, and giving critical help. You should be very proud of what you have achieved on behalf of the Alliance, on behalf of the Western world. (...) Romania and the Black Sea region are now, more than ever, integral to Europe’s defence and to its economy. Thanks to you, NATO remains strong and able to guarantee its Article 5 commitments”.

Regarding Russia’s actions in Ukraine, David Muniz showed that the horrors produced by this war, similar to those of the Second World War, will remain in the collective memory.

PANEL 1
THE CONSEQUENCES OF RUSSIA’S INVASION OF UKRAINE
FOR THE WIDER BLACK SEA AREA
– PLENARY SESSION
(COORDINATED BY THE NEW STRATEGY CENTER)

Moderator:

- **MG (r.) Leonardo DINU** – New Strategy Center

Speakers:

- **GEN Daniel PETRESCU** – Chief of Defence Staff
- **MG Konstantinos KOLOKOTRONIS** – Director, Military Intelligence & Security Branch, Hellenic National Defence General Staff
- **LTG (ret.) Ben HODGES** – Senior Advisor, Human Rights First
- **H.E. Cristian DIACONESCU** – New Strategy Center
- **Silviu NATE** – Director, Global Studies Center, “Lucian Blaga” University of Sibiu

The global and especially the regional security environment has dramatically changed following 24 February 2022, the day of Russia’s invasion of Ukraine, affecting the rules-based international order.

The invasion has mobilised international efforts in coordinating support to Ukraine, both on national basis and as NATO member states. The support has got materialised in humanitarian, economic and military aid.

In this context, NATO has moved from reassurance to deterrence and defence measures, by deploying response forces included, to strengthen the posture and presence on the eastern flank. Considering the geographical location of Ukraine, the Wider Black Sea Area has gained even much more importance than it used to have prior to the invasion, maritime security being also mentioned as key to peace and prosperity in the new NATO Strategic Concept adopted in Madrid, in June 2022.

Being a complex problem, mainly because of the dual nature of challenges – external and internal – and the profound connection between the region experiencing direct conflict and other regions in Europe, the Middle East and Asia, the Wider Black Sea Area security requires a holistic approach.

The mentioned holistic approach should take into account various aspects in order to prevent the Wider Black Sea Area from becoming a strategic environment defined by chaos and the consequences of war from being globalised. Among those aspects, the following, which will represent the focus of the panel, can be mentioned: future emergent and disruptive technologies, unmanned systems, interagency communication, energy security, exploitation of resources and new sources of energy, supply security, food security, navigation safety, national and regional transport infrastructure, humanitarian crisis.

PANEL 2
THE FUTURE OF NATO: DETERRENCE AND DEFENCE
IN THE NEW STRATEGIC ENVIRONMENT
 – PLENARY SESSION
 (COORDINATED BY THE CENTRE
 FOR DEFENCE AND SECURITY STRATEGIC STUDIES)

Moderators:

- **COL Florian CÎRCIUMARU** – Director, Centre for Defence & Security Strategic Studies, “Carol I” National Defence University
- **COL Dan-Lucian PETRESCU** – Centre for Defence & Security Strategic Studies, “Carol I” National Defence University

Speakers:

- **Antonia COLIBĂȘANU** – Senior Geopolitical Analyst & COO, Geopolitical Futures; Lecturer, SNSPA; Senior Associate Expert, New Strategy Center
- **MG Karol DYMANOWSKI** – Deputy Chief of the General Staff of the Polish Armed Forces
- **Cynthia SALLOUM** – Faculty Advisor & Senior Researcher, NATO Defense College
- **Phillip PETERSEN** – President, New Generation Warfare Center
- **MG Iulian BERDILĂ** – Chief, Land Forces Staff

NATO has proved to be the world’s largest, enduring and most powerful military alliance. Considering the new strategic environment, even prior to Russia’s invasion of Ukraine, the Alliance launched the “NATO 2030” initiative, formulating the new strategic outlook, based on the identification of the main challenges and opportunities in the next ten years and beyond, as well as the concrete proposals to make NATO stronger and ready for the future.

As far as the challenges are concerned, they can be subsumed under three categories, namely a changing threat landscape, with a return of geopolitical strategic and systemic competition, shifting internal dynamics, with marked illiberalism, and continued evolution of warfare, with the emergence of new technologies, operational domains, military doctrines.

With regard to the proposals for NATO to adapt to growing global competition and more unpredictable threats, including terrorism, cyber-attacks, disruptive

technologies, climate change, and Russia and China’s challenges to the rules-based international order, they are related to deepening political consultation and coordination, strengthening deterrence and defence, improving resilience, preserving a technological edge, upholding the rules-based international order, boosting training and capability building, combating and adapting to climate change, investing in NATO.

Deterrence and defence represent the focus of the panel, especially in the context of Russia’s invasion of Ukraine, the strategic environment in the Wider Black Sea Area, and the adoption of the new NATO Strategic Concept in June 2022, in Madrid. At the Summit in Madrid, the Heads of State and Government agreed to bolster Allied deterrence and defence, reaffirming their commitment to maintaining an appropriate mix of nuclear, conventional and missile defence capabilities. Moreover, it was reiterated the importance of the Defence Investment Pledge to meet the NATO-agreed guideline of allocating 20% of annual defence spending on major new equipment by 2024 as well as the commitment to the full and speedy implementation of military plans to strengthen the Alliance’s deterrence and defence posture and to improve the readiness of forces to meet current and future defence needs. The deterrence and defence concept is complemented by the NATO Warfighting Capstone Concept, which provides a vision to guide the Alliance’s long-term warfare development to remain militarily strong now and in the future.

PANEL 3**ARMED CONFLICT NEAR NATO'S EASTERN FLANK:
LESSONS IDENTIFIED**

– PLENARY SESSION

(COORDINATED BY ROMANIAN MILITARY THINKING JOURNAL)

Moderator:

- **NAVY CAPT (ret.) Cristian BOGDAN** – Scientific Advisor, *Romanian Military Thinking Journal*

Keynote speaker:

- **H.E. Sorin DUCARU** – Director, European Union Satellite Centre

Speakers:

- **LTG Viorel PANĂ** – Chief, Air Force Staff
- **MG Corneliu POSTU** – Director, ROU Defence Staff
- **COL Marjan MILENKOVSKI** – J-1 Department, General Staff Army of the Republic of North Macedonia
- **Greg MELCHER** – Chief Operations Officer, New Generation Warfare Center
- **RADM (LH) Auras-Liviu COMAN** – Deputy Chief for Operations & Training, Naval Forces Staff

24 February 2022 will remain a watershed date in European history; that day, the Russian regime led by President Vladimir Putin launched a military invasion of Ukraine, marking the return of war in Europe for the first time in decades.

Much of what has transpired since the war's onset has come as a surprise, whether in its political and strategic dimensions or in operational and tactical terms. The war was not an impossibility prior to 24 February, but it was certainly viewed in the West as improbable from the perspective of a rational cost-benefit analysis. This is especially so when one considers Putin's attempt to swallow the entirety of Ukrainian territory. The means with which Russia attempted its conquest also raise a number of questions as to its armed forces' level of preparedness, organisation and operational ability. Today, it is clear that Russia's military capacity was overestimated while Ukraine's capacity to resist was underestimated.

For its part, the Atlantic Alliance has displayed a political unity that was admittedly lacking in recent years prior. The United States has demonstrated

unequivocal commitment to the defence of Europe, while European allies have shown both political resolve and a will to take defence spending seriously. Very little dissent or free riding has occurred in the West. Solidarity with Ukraine has been optimal, both politically and through the delivery of weapons.

The European Union (EU) too has acted swiftly, most notably through the imposition of sanctions on Russia in lockstep with US and UK sanctions. The EU has also decided to finance the delivery of weapons to Ukraine.

This debate will examine some identified lessons that NATO, its allies and partners can draw from the war in Ukraine while the Alliance released its new Strategic Concept and, once again, has demonstrated its ability to adapt to a new environment.

Topics:

- (Policy/Diplomacy) NATO's response to Russia's aggression and implications for both the EU and for NATO's new Strategic Concept;
- (Policy/Diplomacy) Diplomacy in conflict;
- (Military) Ukraine's military performance on the battlefield;
- (Military) Russia's military performance on the battlefield:
 - Attacks on Kyiv;
 - Air Operations;
 - Land Operations;
 - The War at Sea: Naval Blockade in the Sea of Azov and in the Black Sea;
 - The role of Nuclear Threats;
 - The new technology on the battlefield.
- (Economy) Economy supporting the participants in conflict;
- (Social) The human factor in the Russian-Ukrainian conflict;
- (Info) the role of STRATCOM before and during military operation in Ukraine;
- (Infrastructure) the role of infrastructure in military operations.

ROUND TABLE
GLOBAL COMPETITION AND THE IMPLICATIONS
FOR SECURITY AFFAIRS
 (COORDINATED BY “GENERAL NICOLAE CONDEESCU”
 ROMANIAN DEFENCE INTELLIGENCE TRAINING CENTRE)

Moderator:

- **Dan COLESNIUC** – National Defence and Security Expert, Ministry of National Defence

Speakers:

- **GEN (r.) Ștefan DĂNILĂ** – Former Chief of General Staff
- **MG Gabriel-Nicușor ANGHEL** – Chief, Military Intelligence Directorate
- **BG Laura JURCUȚ** – Chief, Directorate of Quality & Relations with Beneficiaries, Special Telecommunications Service
- **Adrian Victor VEVERA** – General Director, National Institute for Research & Development in Informatics
- **MG (r.) Cristian EREMIA** – Program Coordinator, Integrated Intelligence, Defence and Security Solutions
- **Iulia ANGHEL** – Lecturer, Faculty of Communication Sciences, Ecological University of Bucharest
- **LTC Alina BAȘCA** – Romanian Intelligence Service
- **Mirela ATANASIU** – Scientific Researcher, Centre for Defence and Security Strategic Studies, “Carol I” National Defence University
- **Cristian BARNA** – Training Manager, Intelligence4ALL

Global competition aligns across economic, military and political vectors, having at the core the competition of ideals, values and governance. That is why, the new NATO Strategic Concept emphasises the idea of rules-based international order, alongside one of multilateral norms and institutions.

The intrinsic challenges of the global competition require the review and revision of security affairs in line with the developments in the strategic environment. Global markets, complex global supply chains, encapsulating technological progress and strategic industry, define the competition.

Military strength and resiliency, including military-civil fusion, pose significant challenges for competitors. To achieve long-term strategic objectives without

crossing the threshold of military confrontation entails actions in all operational domains – cyber, space and hybrid ones included, as well as a wide range of soft power elements.

Global competition is also related to the political domain, as a whole-of-government approach should be developed and implemented not only to integrate all the indicators provided by intelligence, advanced forecasting and decision support capabilities but also to tailor the most appropriate responses, which get materialised in the economic and military fields, including strategic communication. In the long-term global competition for building capabilities, their interdependency and interoperability should be also taken into account.

Considering the redefinition of security by extending the concept to include the currently perceived threats as well as the normative aspects in the field, security affairs are intended to protect the state and its citizens by using diplomacy, maintaining effective armed forces, implementing civil defence and emergency preparedness measures, ensuring the resilience of critical infrastructure and using intelligence services to detect, avoid or counter threats. In this regard, security affairs unquestionably require multidisciplinary analyses to broaden the perspective and people educated and trained to perform such tasks.

The mentioned aspects will be enlarged upon within the panel that is organised as a roundtable discussion.

PANEL 4**INVESTMENTS IN SECURITY AND DEFENCE AT THE CONFLUENCE OF THE EU STRATEGIC COMPASS AND THE NATO STRATEGIC CONCEPT**

– PLENARY SESSION

(COORDINATED BY INTEGRATED INTELLIGENCE, DEFENCE AND SECURITY SOLUTIONS/I2DS2)

Moderator:

- **Niculae IANCU** – President I2DS2, Integrated Intelligence, Defence and Security Solutions

Keynote speaker:

- **Florin Marian SPĂTARU** – Minister of Economy

Speakers:

- **RADM (LH) Ion-Cristian LIȘMAN** – Deputy Chief of Defence Staff for Resources
- **Thomas-Durell YOUNG** – Program Manager, Europe Center for Civil-Military Relations, Naval Postgraduate School
- **Emanuel CERNAT** – Managing Partner, Corporate Affairs Strategies
- **BG (r.) Plamen BOGDANOV** – Associate Professor, University of Library Studies and Information Technologies, Sofia
- **Adrian DUȚĂ** – Director, Euro-Atlantic Centre for Resilience

Romania has assumed a substantial increase in the defence budget, including investments in defence capabilities. Romania's level of ambition is aimed at a solid defence posture, in the national and allied context, in the Black Sea region, on NATO's eastern flank, and on the EU's eastern border.

National efforts should be correlated with the EU (EDF and PESCO) as well as NATO (DIANA included) defence capability development initiatives. Intelligent investments in the development of new capabilities entail the integration of our country into the European projects that are relevant to the objectives derived from the *2040 Defence Strategic Analysis* as well as a coherent contribution to the new Allied security and defence policies.

Topics:

- Impact of the EU Strategic Compass “investment” dimension on the Romanian defence capability development;
- NATO new Strategic Concept and Romania's level of ambition in the Allied context;
- European defence capability development through EDF and PESCO;
- Research and technological development in NATO. The DIANA Initiative implications for Romania's future defence technologies;
- Military mobility at the confluence of European and Transatlantic defence and security.

PANEL 5**MARCHING TO A NEW WORLD CHARACTERISED BY RIVALRY. NATO'S EASTERN FLANK AND ITS FUTURE RELATIONSHIP WITH RUSSIA**

– PLENARY SESSION

(COORDINATED BY THE CENTER FOR CONFLICT PREVENTION AND EARLY WARNING)

Moderator:

- **Narciz BĂLĂȘOIU** – Director, Center for Conflict Prevention & Early Warning

Keynote speaker:

- **H.E. Bogdan Lucian AURESCU** – Minister of Foreign Affairs

Speakers:

- **RADM (UH) Mihai PANAIT** – Chief, Naval Forces Staff
- **Iulian CHIFU** – State Advisor to the Romanian Prime Minister for Foreign Relations, Security & Strategic Affairs
- **Sergei KONOPLYOV** – Kennedy School of Government, Harvard
- **Mustafa AYDIN** – Professor, Kadir Has University, Istanbul
- **Orysia LUTSEVICH** – Managing Director, Ukraine Forum, Chatham House
- **Oazu NANTOI** – Member of the Parliament of Moldova, Intelligence Oversight Committee
- **Greg SIMONS** – Researcher, Institute for Russian and Eurasian Studies, Uppsala University

The commonly accepted definition of great power takes into account population, territory, resources, economic capability, military strength, political stability and competence that can assure the ability to exert influence on a global scale. From this perspective, the world may be viewed as undergoing a new phase of competition, entailing mainly economic elements, or even rivalry, as well as political, military and geostrategic aspects, which can lead to a multipolar international system. The great power rivalry could represent a source of instability for a future multipolar world. Moreover, the current distribution of power allows not only great but also middle and small powers as well as non-state actors to have military capabilities that threaten global security, which further complicates the picture.

In this context, to which the conflict between Russia and Ukraine is added, NATO's eastern flank and its future relationship with Russia is complex. The topic is addressed in the new NATO Strategic Concept adopted in July this year. At the NATO

Summit in Madrid, Allies agreed that Russia is the most significant and direct threat to their security and to peace and stability in the Euro-Atlantic area. Consequently, they also agreed to further strengthen NATO's posture. However, the allies remain willing to keep open channels of communication with Moscow to manage and mitigate risks, prevent escalation and increase transparency as NATO seeks stability and predictability in the Euro-Atlantic area and between NATO and Russia.

Therefore, after NATO's practical civilian and military cooperation with Russia was suspended in April 2014, in response to Russia's military intervention and aggressive actions in Ukraine, and its illegal and illegitimate annexation of Crimea, and Russia suspended, in October 2021, the work of its diplomatic mission to NATO, and required NATO to close down the NATO Information Office in Moscow and suspend the work of the NATO Military Liaison Mission in Moscow, in grand strategic terms, the relations between NATO and Russia will remain highly consequential. The war in Ukraine has changed NATO's understanding of Russia's priorities, risk tolerance, and ultimate foreign policy aims. On the one hand, it compels NATO to return to its core mission, namely the defence of Europe, and to adapt its posture accordingly as quickly and sustainably as possible. On the other hand, considering the mentioned aspects of competition and rivalry, the challenges in Asia and the Middle East included, it can lead to reconceptualising alternative frameworks in international relations.

These are some of the topics that will be discussed within the panel.

HISTORY SECTION

THE WAY TO COLD WAR. POLITICAL MILITARY DEVELOPMENTS AND SECURITY DYNAMICS IN THE WIDER BLACK SEA AREA, 1942-1955 (COORDINATED BY THE INSTITUTE FOR POLITICAL STUDIES OF DEFENCE AND MILITARY HISTORY)

During the Second World War, 1941-1944, the Black Sea Campaigns involved the Axis forces, namely the Romanian and Bulgarian navies as well as German and Italian units, and the Soviet naval forces. The German air superiority contested the Soviet superiority in surface ships. All of the major Soviet shipyards were located in Ukraine – Nikolayev and Sevastopol, in the Crimean Peninsula. They were occupied in 1941 and the ships were evacuated to harbours in Georgia, which became the main bases for surviving fleet. As the Montreux Convention allowed Turkey to close straits to all military traffic, some ships were obtained in Romania, Bulgaria or Hungary and then converted to serve the German cause.

In 1942, operations were dominated by the Siege of Sevastopol. In 1943, the Kerch-Eltingen Operation had the object of defeating and forcing the withdrawal of the German forces from the Crimean Peninsula. In 1944, a series of offensives by the Red Army were directed at the German-occupied Crimea, being known as the Battle of Crimea.

Between 1945 and 1946, there were three major crises considered to be the triggers of the Cold War, namely in Iran, Turkey and Greece. They intersected with great power rivalries to increase tensions between the Soviet Union and the Anglo-American allies. The crises were part of a general restructuring of power relationships in the region, many historians considering the Iranian crisis as a pivotal event in the Cold War, which shaped the foreign and domestic policies of most nations around the globe, in the context of what was known as the bipolar international order.

The mentioned crises were iconic for the intersection of local interests, local power struggles and great power politics.

However, the causes of the Cold War were not represented by geopolitics and strategy alone.

To them, there were added changes in the balance of political forces, which further complicated international relations. The post-war transnational ideological conflict between the USA and the USSR was part of the ongoing European restructuring, in political, economic and military terms, and internal power relationships.

In this context and following the logic of bipolar international order, the two political-military alliances that dominated the international stage for about 50 years were established, namely the North Atlantic Treaty Organisation, in 1949, and the Warsaw Treaty Organisation, in 1955, having the USA and the USSR respectively as informal leaders.

The round-table discussion will enlarge upon the mentioned aspects.

PANEL 1
FROM THE BATTLE OF STALINGRAD
TO THE PEACE SETTLEMENTS, 1943-1945

Moderator:

- **Manuel STĂNESCU** – Deputy Director, Institute for Political Studies of Defence & Military History

Speakers:

- **Petre OTU** – Professor, Chairperson, Romanian Military History Committee
- **Dan-Dragoș SICHIGEA** – Chief, Mangalia Museum Section, National Museum of the Romanian Navy
- **George UNGUREANU** – Curator, National Military Archives of Romania, Central Archive Repository
- **Alin SPĂNU** – Adjunct Professor, University of Bucharest

PANEL 2
GEOSTRATEGIC BALANCE AT THE BLACK SEA
DURING EARLY COLD WAR, 1946-1955

Moderator:

- **Carmen-Sorina RÎJNOVEANU** – Director, Institute for Political Studies of Defence & Military History

Speakers:

- **Constantin HLIHOR** – Professor, University of Bucharest
- **Liviu ȚÎRĂU** – Associate Professor, Faculty of European Studies, Babeș-Bolyai University
- **Liliana BOCȘAN** – Associate Professor, University of Bucharest
- **Lucian DRĂGHICI** – Researcher, Romanian National Military Archives

ROUND TABLE
ROMANIA AND THE EARLY COLD WAR

Moderator:

- **Petre OTU** – Professor, Chairperson, Romanian Military History Committee

Speakers:

- **Bogdan SCHIPOR** – Senior Researcher, “A.D.Xenopol” History Institute the Romanian Academy
- **Gheorghe ONIȘORU** – Professor, “Ștefan cel Mare” University, Suceava
- **Ion RÎȘNOVEANU** – Scientific Researcher, “Ferdinand I” National Military Museum
- **Alexandru OȘCA** – Deputy Chairperson, Romanian Military History Committee
- **Cristina BRĂGEA** – Scientific Researcher, Institute for Political Studies of Defence & Military History
- **Ion GIURCĂ** – Professor, “Hyperion” University

PERCEPTION, COGNITIVE DISSONANCE AND NUCLEAR DETERRENCE IN THE INFORMATION AGE, POSSIBLE IMPLICATIONS FOR THE EURO-ATLANTIC SECURITY ARCHITECTURE IN THE CONTEXT OF A NEW NATO STRATEGIC CONCEPT

Olga R. CHIRIAC

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The February 2022 military aggression on Ukraine has sent shockwaves across European capitals as well as across the Atlantic. This “new normal”, namely a conventional war in twenty-first century Europe, is both hard to process and inherently ominous as to the future of the European security architecture and strategic stability on the continent. The aim of the article is to analyse the combined effects of technological advances in information/computing technologies and human cognition on strategic choices such as nuclear deterrence strategies. The paper is looking to address the proposed research questions through a cognitive psychology lens, with a particular focus on perception and cognitive dissonance. The plasticity of both the geopolitical environment and the information space present the optimal conditions for propagation of cognitive errors in human decision-making. The article is taking a closer look at what said vulnerability means for the Euro-Atlantic security architecture, most specifically for the North Atlantic Treaty Organization.

Keywords: cognitive dissonance; deterrence; European defence; perception; NATO; strategic stability;

INTRODUCTION

February 2022 officially ended the unipolar moment of the United States and the unipolar world order emerged after the dissolution of the Soviet Union. Undoubtedly, the attack on Ukraine took a vast majority of observers by surprise, it still seems unconceivable that contemporary Europe is hosting a conventional war. It raises the question: what went wrong? After the dissolution of the Soviet Union, the United States and its allies were in a much better position than the Russian Federation. In fact, in the 1990s, Russia experienced de facto economic collapse and numerous civil unrests, some of which culminated with attempted coups. How is it possible that the progressive and advanced West, including its institutions such as the North Atlantic Treaty Organization (NATO) and the European Union (EU), was not capable to foresee the terrible events and developments in Ukraine.

The present article is setting out to initiate a discussion around these questions and is doing so by adopting a cognitive psychology framework applied to the theory of deterrence. First, the paper establishes the theoretical foundation: what is deterrence, what are the elements of deterrence and what brought about the birth of such a theory. Also in the theoretical fragment of the article, there is a brief explanation of the cognitive frame in general and cognitive dissonance in particular. The second portion of the paper illustrates the difference between the Nuclear Age and the Information Age. The reason why these two periods in human history are singled out is because the position of the article is that the rampant advances in technologies, especially the emergence of the internet and social media at a globalised, mass scale, have changed the discussion around deterrence, but not the principles or the central aims of the theory. Human cognition as a process has not changed, it is the environment in which it functions that was altered. The last position of the paper discusses perception and deterrence in the post 2022 NATO Strategic Concept timeframe. The attention falls on the relationship between the perceptions of NATO and the Russian Federation of each other. The reason behind zooming into this relationship is because NATO remains the only credible line of defence for Europe at the moment. In spite of being home to an economic powerhouse like the EU and several technologically very advanced countries such as France or Germany, the European continent is still struggling with the inability to be autonomous, credible and/or capable in matters of security and defence. The article does not spend too much time on the “why” behind this inability

to defend due to the limited scope of the paper. The conclusions bring together the elements of the discussion put forth and close out by tying everything back to Thomas Schelling's theory of deterrence.

THE "DIPLOMACY OF VIOLENCE" – DETERRENCE, COERCION AND DECISION-MAKING

Thomas Schelling is widely regarded as the intellectual founder of US nuclear deterrence thinking. In his 1960 book, *"The Strategy of Conflict"*, Dr. Schelling defined deterrence as a form of cooperation between belligerents/competitors. So, notably, in deterrence theory logic, deterring an enemy to act a certain way is in fact a form of successful bargaining. This will represent the central theoretical pillar of the present article. The concept of deterrence encompasses numerous psychological and cognitive nuances which have been sometimes overlooked in strategic planning. These human elements are embedded in the concept because deterrence is by excellence a theory of influencing an adversary or an ally to do or not to do something. Deterrence existed in military and strategic art for centuries, nevertheless, the nuclear age changed the rules of the game, the potential to influence, became overnight a matter in large part limited to those states who possess nuclear capabilities. The major game changer in international relations was marked by the advent of nuclear weapons. Their impact on both diplomacy and international relations in general was foundational because nuclear powers automatically started and engaged in bargaining from a position of dominance as compared to non-nuclear states. Cold War foreign affairs and strategic planning have been pivoted to nuclear deterrence thinking, and eventually arms control regimes and non-proliferation efforts.

In *"Deterrence"*, by Lawrence Freedman, the author charts the evolution of the contemporary concept of deterrence, and discusses whether and if so how it still is relevant in today's world (Freedman, 2004). Freedman's major contribution to deterrence theory was to develop *"a distinctive approach to the evaluation of deterrence as both a state of mind and a strategic option"* (Freedman, 2004, foreword). Another very poignant way of conceptualizing deterrence was put forth by Thomas Schelling as avoidance of *"mutual damage"* as *"common interest"* (Schelling, 2008, p. 1). Further relevant ideas, meant to reinforce the propositions of the present article were put forth in *"The Spread of Nuclear Weapons: An Enduring Debate"* by Scott Sagan and Kenneth Waltz. Sagan and Waltz conclude in their 2013 book that in order to better develop military capabilities for deterrence, it is vital to understand all sides of the problem on global nuclear proliferation (Sagan, Waltz, 2013).

Robert Jervis reduced deterrence to an excellent explanation when he asserted that deterring means one actor deters another *"convincing him that the expected value of a certain action is outweighed by the expected punishment"* (Jervis, 1982, p. 4). He continued explaining how punishment *"is composed of two elements: the perceived cost of the punishments that the actor can inflict and the perceived probabilities that he will inflict them. Deterrence can misfire if the two sides have different beliefs about either factor"* (Jervis, 1982, p. 4). A working definition for the concept of deterrence was put forth by Rand Corporation's Michael J. Mazarr when in *"Understanding Deterrence"* he wrote: *"Deterrence is the practice of discouraging or restraining someone – in world politics, usually a nation-state – from taking unwanted actions, such as an armed attack. It involves an effort to stop or prevent an action, as opposed to the closely related but distinct concept of "compellence," which is an effort to force an actor to do something"* (Mazarr, 2013, p. 2). By synthesising these different definitions of deterrence, we can say that, in international security and policy building, a policy of deterrence generally refers to employing threats of military force directed by the leaders of one state towards the leaders of another in an attempt to prevent the other state from resorting to the use of military force in pursuit of its political goals.

Deterrence has three main components: capabilities, communication, namely how states communicate to adversaries about said capabilities and credibility. It is in the latter two the challenges of effective deterrence lie because neither is self-explanatory. Communication is a deeply socio-cultural cognitive process, therefore each state will understand to communicate differently and to a different predetermined audience making credibility difficult to gain or maintain. A good example is the United States, a mighty conventional and nuclear superpower who was not able to unequivocally defeat North Vietnam or who abruptly retracted from Afghanistan after twenty years of fighting. The present article focuses on cognitive processes and cognitive dissonance effects, therefore, the discussion will be centred in communication in all its aspects and vehicles as well as credibility shaped by perception.

Deterrence can be attempted in several ways. For the Euro Atlantic security community where the Russian Federation is a decisive player, coercion plays a very significant role. *"Coercion"*, writes Thomas Schelling, *"depends more on the threat of what is yet to come than on damage already done"* (Schelling, 1966, p. 172). Decisions, including political ones, are reached by people and in the human mind, coercing can be done without the use of force, but with the idea that said force could be exercised. To this point, Schelling underscores *"the usual distinction between diplomacy and force is not merely in the instruments, words or bullets, but in the relation between adversaries-in the interplay of motives and the role of communication, understandings, compromise, and restraint"* (Ibid., p. 1).

Finally, to complete the theoretical framework of the article, we will clarify the concept of cognitive dissonance. The concept first appeared in academic literature in 1957 when American psychologist Leon Festinger published *“A Theory of Cognitive Dissonance”*. Festinger’s theory of cognitive dissonance is regarded as one of the most influential theories in social psychology (Harmon-Jones, Mills, 1999, p. 1). The article employs the concept as it was conceptualised by Festinger, namely *“pairs of cognitions (elements of knowledge) can be relevant or irrelevant to one another”* (Ibid., 1999, p. 3). If two cognition processes, or cognitions, are relevant to one another, they are either consonant or dissonant. Cognitive consonance reflects a state of mind in which a person’s *“conscious knowledge, attitudes, and awareness are congruent and in harmony with their unconscious, emotional, or innate beliefs”* (Festinger, 1957). APA defines cognitive consonance as *“a situation in which two cognitive elements are consistent with one another, that is, one cognitive element follows from or is implied by the other”* (APA, 2022). Conversely, a cognition is dissonant if *“the obverse (opposite) of one cognition follows from the other”* (Festinger, 1957). The existence of dissonance, or *“being psychologically uncomfortable”* acts as a motivator for a person to reduce the dissonance and herein leads too *“avoidance of information likely to increase the dissonance”*. The power/intensity of dissonance is directly proportional to the pressure to reduce it. In the wider context of the article, I argue that the perceptions of our adversaries can potentially act as saboteurs to strategic stability negotiations and nuclear deterrence design. Because deterrence is so heavily interlinked with human perception, which in turn is received, processed and interpreted through a socio-cultural rather than rational lens, the strategy under analysis runs the risk of producing at best irrelevant at worst negative outputs in strategic stability negotiations.

NUCLEAR AGE VS INFORMATION AGE

“With enough military force, a country may not need to bargain” (Schelling, 1966, p. 1) no longer holds true in the information age. Every single piece of information we receive we can run due diligence on thanks to the internet. At least we think so. The information age altered the strategic environment the same way the industrial revolution did in the previous century. In the context of the article, the information age represents the historical/temporal period of the twentieth century which can be characterised by a fundamental shift from *“traditional industry”* established by the Industrial Revolution to *“an economy primarily based upon information technology”*. In the information age, information itself has essentially become a prized commodity and the ways in which it is distributed and disseminated have been exponentially increased by massive leaps in the use of computer technology.

Just like the detonation of the first atomic bomb by the US announced the ominous birth of the Nuclear Age, the Information Age was precipitously brought upon the international system by the advent of the internet. Information propagation by multiple sources with their own agendas and more often than none no accredited training or credentials, can have a damaging impact on human cognition, especially if applied consistently over a medium to long period of time. The Russian Federation has been very successful in systematically distributing disturbing information in order to instil fear and propagate insecurity. Under this pressure, man’s cognition can elect to distance itself from the dissonant element, in doing so, sometimes achieving the opposite result.

A major complication in the information age is the fact that the nuclear threat did by no means disappear or diminish, but the stimuli for potential conflict, like information about the assumed intentions of the adversary, or our perception of him/her, is readily available and compounds by the minute by means of social media and the internet. The ephemeral balance of power is heavily dependent on *“information advantage”* and this in turn can easily be swayed by leveraging human cognition, which tends to not be rational. Other disruptors are artificial intelligence, cloud computing, data analytics, and cyber operations, including cyber warfare (Microsoft, Applications for Artificial Intelligence in Department of Defense Cyber Missions 2022). Information is collected in unprecedented volumes and at an unprecedented pace and this is done by all great powers not only the *“usual suspects”*: USA, China or Russia. This overstimulation of the human mind can easily lead to cognitive dissonance and people may easily start to *“operate”* in a white noise vacuum. If in the pre-internet era of the Cold War, information distribution was easily controllable, at present this no longer is the case. During the Cold War, controlling information flows was easy compared to today due to several factors. On the other hand, intelligence collection (information collection) was not the easiest task. Strategic decisions were heavily dependent on Hum Int in addition to Sig Int. The Cuban Missile Crisis is a good example of how the two contributed to political decision making. While the intelligence collected via signal/satellites presented unequivocal proof of missiles on the US border with Cuba, the perception the leaders had off each other and of each other’s strategic culture played a decisive role in the outcome. While Nikita Khrushchev perceived the much younger American resident as inexperienced and gullible, John F. Kennedy demonstrated to be anything but such things.

Information is the catalyst of communication in deterrence: *“If he cannot hear you, or cannot understand you, or cannot control himself, the threat cannot work”* (Schelling, 2008, p. 38). For example, early 2022, when Russian troops were

building up on the borders of Ukraine, NATO Secretary-General Jens Stoltenberg was “reassuring” everyone “NATO has no plans to deploy combat troops to non-NATO member Ukraine in the event of a Russian invasion” (Reuters, 2022). Furthermore, it was indeed difficult to fathom that in twenty-first century Europe one sovereign nation state will violate the territorial integrity and sovereignty of another European sovereign state. Many analysts, as well as specialists in the media or academia, have jumped to call this a miscalculation by the Russian government, but not many have tried to decipher why many people, including in the Russian Federation and Ukraine, did not believe an invasion is possible. The article postulates it is because of cognitive processes. After all, in cognitive psychology, we have identified how “Whatever we know about reality has been mediated, not only by the organs of sense but by complex systems which interpret and reinterpret sensory information” (Neisser, 2014, p. 24).

An interesting aspect of nuclear deterrence in the information age is the emergence of artificial intelligence (AI). The implications of AI applications at the strategic level are not in discussion, at least for now. Nevertheless, at the operational and tactical levels, AI has been applied in order to maximize effectiveness. Nuclear deterrence and nuclear strategy remain a human domain decision process. This in itself should once again underscore the importance of nuclear deterrence and should assure a special place for diligent research and planning for the field. The decision to push the nuclear button so to speak is still in the hands and minds of leaders and a very select few.

PERCEPTION AND DETERRENCE POST 2022 NATO STRATEGIC CONCEPT

A multipolar world, with multiple decision-making centres, is undoubtedly complex. Naturally, the more decision makers, the more potential for risk, the more opportunities for misinterpretation. After February 2022, it has become very clear that the European security architecture is fully dependent on the United States. On its own, neither the EU as a whole nor individual European powers have the credibility (in a deterrence sense) or capabilities to withstand an attack from nuclear power Russia. The US nuclear umbrella shields the European continent from a conventional or nuclear attack and US basing enforces the guarantee. NATO nuclear posture after the 2022 Strategic Concept is clear: nuclear weapons are a core component of the Alliance’s capabilities for both collective defence and deterrence. NATO remains firmly “committed to arms control, disarmament and non-proliferation, but as long as nuclear weapons exist, it will remain a nuclear

alliance” (NATO, 2022). The Alliance’s strategic outlook presented in its documents is also clear: “The fundamental purpose of NATO’s nuclear capability is to preserve peace, prevent coercion and deter aggression. As long as nuclear weapons exist, NATO will remain a nuclear alliance” (Ibid.). Nuclear weapons are a core component of “NATO’s overall capabilities for deterrence and defense, alongside conventional and missile defense forces” (Ibid.). Concretely, NATO’s current nuclear policy is based on two public documents agreed by all Allies: the 2022 *Strategic Concept* and the 2012 *Deterrence and Defense Posture Review*.

To the Russian Federation, de facto heir to the Soviet Union, nuclear deterrence, deterrence logic and signalling are important tools in designing strategy as well as communicating to foes or competitors. The core official document, the Fundamentals of the State Policy of the Russian Federation in the Field of Nuclear Deterrence, was designated by Russian political leadership as the “strategic defense planning document that reflects official views on the essence of nuclear deterrence, defines the military dangers and threats that nuclear deterrence is intended to neutralize, the principles of nuclear deterrence, and the conditions for the transition of the Russian Federation to the use of nuclear weapons” (Fundamentals of the State Policy of the Russian Federation in the Field of Nuclear Deterrence, 2020). Nuclear posturing and nuclear arsenals have remained a foundational instrument of exerting power for Moscow. According to the same 2020 document, nuclear is not a standalone element but a segment of “a set of coordinated, united by a common plan, political, military, military-technical, diplomatic, economic, informational and other measures implemented based on the forces and means of nuclear deterrence, to prevent aggression against the Russian Federation and (or) its allies”. (Ibid.). As with any Russian strategic document, it is imperative for it to be properly framed, in concert with Russian history, a thorough understanding of Russian socio-cultural customs, Russian grand strategy, including military and economic strategies. The Doctrine underscores “preventing the escalation of hostilities and their termination on terms acceptable to the Russian Federation and/or its allies”. Similarly to other documents denoting Russian strategy building, nuclear deterrence “is carried out continuously in peacetime, during the immediate threat of aggression and in wartime, up to the beginning of the use of nuclear weapons”. Probably the most important assertion of the Doctrine is that Russia reserves the right to use nuclear weapons “in response to the use of nuclear weapons and other types of weapons of mass destruction against it and/or its allies, as well as in the event of aggression against the Russian Federation using conventional weapons, when the very existence of the State is threatened” (Ibid.). The nuclear first strike capability works as a very strong deterrent.

NATO also acknowledges deterrence is essentially a *“political function”*. As with any deterrence discussion, the credibility and resolve of the alliance, in addition to capabilities, are the factors which decide whether said deterrence is indeed capable to achieve set aims. NATO declares that in the event the *“fundamental security of any NATO Ally”* will be threatened, the Alliance *“has the capabilities and the resolve to impose costs on the adversary that would be unacceptable and far outweigh the benefits that any adversary could hope to achieve”* (NATO, 2022). In the European security architecture, this is mainly targeted towards the Russian Federation. The conflict in Ukraine is a very good example of the fragility of deterrence in Europe, not because of capabilities, but because of the ever present risk of misperception or *“misreading”* the other side. In addition to this potential vulnerability, there is the internal makeup of the Alliance, where each country, hence its political decision makers prioritise a domestic political agenda for reelection and have different degrees of perception or misperception of Russian intentions. As professor Jervis indicated: *“Unless statesmen understand the ways in which their opposite numbers see the world, their deterrence policies are likely to misfire unless scholars understand the patterns of perceptions involved, they will misinterpret the behavior”* (Jervis, 1982, p. 1). In the cognitive frame, professor Jervis referred *“that actors’ perceptions often diverge both from ‘objective reality’ (or later scholars’ perceptions of it, which is as good a measure as we can have) and from the perceptions of other actors. These differences, furthermore, both randomly and systematically influence deterrence”* (Ibid.). Furthermore complicating the discussion is the perception of the *“other”*. Russia presents a markedly dissonant conception of the situation in Ukraine, it has been presenting a contradictory discourse on its intentions in Ukraine. In 2014, Foreign Minister Sergey Lavrov penned an article in Russian newspaper Kommersant in which he, on the one hand, underscored the importance of Ukrainians’ free will to choose which alliance it will belong too and simultaneously wrote: Russia *“explained to our Ukrainian friends that a change in the economic rules of the game on their part would cause a strictly adequate reaction from Russia in full compliance with international standards, including WTO norms”* (Lavrov, 2014). This divergent discourse is consistently present in Russia. It remained constant since the illegal annexation of the Crimean peninsula at the very least. As recently as 2022, at a press conference following his speech at the UN, Russian Foreign Minister Sergei Lavrov talked about how *“all Russian laws and doctrines, including the nuclear doctrine, will apply to the territories of Ukraine that are to join Russia through sham referendums”* (Ukrainska Pravda, Russia’s Nuclear Doctrine Will Apply to *“New”* Territories – Lavrov 2022). The Russian nuclear

doctrine was updated and according to experts, it changed the focus from Western to non-Western threats. Paradoxically one might say. Here is where the dissonant cognition might explain said perception. In Western view, Russia remains behind its occidental counterparts due to economic and technological shortcomings. This is not of importance when building nuclear doctrine because the nuclear doctrine needs to factor in not Western perception but Russian conceptualization of the world. It goes back to debates about strategy and implicitly deterrence during the Cold War when in 1981 it was also argued how *“our strategy has to be aimed at what the Soviets think is important to them, not just what we might think would be important to them”* (Jervis, p. 6).

The situation in Ukraine is complicated from a nuclear deterrence perspective because the Russian Federation perceives US and European support for Ukraine as a declaration of war. In the same UN press conference cited earlier, the Russian Foreign Minister explained how *“by providing Kyiv with weapons, the USA, the European Union and NATO cannot claim to have a neutral status, that is, they cannot claim that they are not taking part in the conflict”*. At present, United States’ nuclear weapons are *“forward-deployed in Europe”* (NATO, NATO’s Nuclear Deterrence Policy and Forces, 2021) but the same Russian elites do not value much Western credibility or resolve in the face of a nuclear or conventional threat on NATO territory. Russian foreign policy expert Aleksey Arbatov synthesised this domineering perception about the West in Russian security and defence circles: *“Russian political and expert circles as well as the Russian public share a latent conviction that the West is more afraid of nuclear war than Russia – sometimes, this conviction manifests on the official level”* (Arbatov, 2022). This further demonstrates how a dissonant view of the opposing side can undermine the deterrence posture of a state, especially if the revisionist/aggressor state does not understand how far the status quo alliance is willing to go. Steven E. Miller wrote about this when he analysed deterrence during the Cold War: *“Deterrence can also be undercut if the aggressor does not understand the kind of war which the status quo state is threatening to wage”* (Miller, 1985, p. 60). Miller illustrated his assertion with the Pearl Harbor example when Imperial Japan assumed the US will respond, but it did not gauge the strength and scale of the response. *“The magnitude of dissonance between one cognitive element and the remainder of the person’s cognitions depends on the number and importance of cognitions that are consonant and dissonant with the one in question”* (Harmon-Jones, Mills, 1985, p. 4). One inconsistency feeds off the other and can, and most likely will, perpetuate misinterpretation. The same can be said about the *“opposite side”* – NATO. If NATO planners and US strategists in

particular do not return to understand Russia and using signalling in bargaining for a positive outcome, humanity runs the risk of further, unimaginable consequences. Again, in deterrence theory logic, because of the potential devastation brought upon by nuclear war, bargaining does not mean giving into the revisionist aggressors' demands, but in preventing nuclear armageddon and saving lives as well as the environment. Conventional defence remains the foundation of a sound security and defence architecture in Europe, but in a multipolar world in technological and economic flux, it is a matter of survival to influence a malign power to stop the destruction. Skilful diplomacy needs to replace the Russian diplomacy of violence and coercion in order to protect the rules based order where norms, laws, human rights and positive values matter and thrive.

To sum up as pragmatically as possible, this inner turmoil embodied by cognitive dissonance affects all strategic decision making, including nuclear. Paradoxically, it is in the nuclear realm where this sense of cognitive unrest should not matter because in objective reality, a nuclear power has the capability to inflict incommensurable pain and destruction on its enemies. A nuclear war or escalating a war with a nuclear super power is automatically a lost battle, a failed negotiation, or as Thomas Schelling would call it: failed bargaining.

CONCLUSIONS

The nuclear threat is real, complex and very serious. In addition to the matter itself being existential in nature, the information age has exacerbated the dangers of propagating agents of disinformation or misinformation, elements which only add to the sense of dissonance in relation to any subject. The key element of any debate related to European security architecture, simply must be approached from an acceptance that the Russian Federation, to this day, remains the only state on par with the US in the nuclear realm. For Moscow strategic planning, the nuclear element is foundational, in contrast, the Americans tend to consider nuclear weapons a sort of last resort option. These are obvious conclusions, yet, the diplomatic evolutions in the post Cold War strategic environment tend to contradict deterrence logic. Capabilities are important, but communication and credibility can transform a nuclear adversary with lesser nuclear potential into a super foe simply by means of perceptions or misperceptions. As mentioned in the article, Russian elites tend to perceive the US and its allies as risk avoidant. In the zero sum game of nuclear deterrence, perceptions matter far more than actual potential. We simply do not know if the Russian president will decide to use tactical weapons in Ukraine for example. We know he has the capabilities, but we have no way of anticipating his thoughts. This matters a lot in deterrence. The use of nuclear weapons or their proliferation simply cannot amount to anything positive. Instead of wasting precious

time on trying to guess what Russian leaders think, the West, to mean the US and its allies and partners, including NATO, would be better served by trying to understand Russian mindset and engage in the bargaining Thomas Schelling spoke off at the advent of deterrence theory.

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THE ROLE OF THE NATIONAL SECURITY STRATEGY IN THE NATIONAL SECURITY OF THE UNITED STATES OF AMERICA

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The paper analyses the nature and role of the National Security Strategy within the national security of the United States of America in different historical periods of the country's development and international relations. The US national security strategies since the end of the Second World War up to the present day have been studied and, on this basis, it is concluded that today the scope of the strategy's purposes have been expanded, which further increases the importance and role of this fundamental document for the national security of the country.

Keywords: strategy; national security; USA; security environment; nuclear weapons;

INTRODUCTION

The national security of the United States of America is defined as a collective term encompassing both the national defence and foreign relations of the United States of America with the purposes of gaining: *“a military or defense advantage over any foreign nation or group of nations; a favorable foreign relations position; or a defense posture capable of successfully resisting hostile or destructive action from within or without, overt or covert”* (Doctrines for the Armed Forces of the United States, 2017, pp. GL-9 – GL-10, DOD, Dictionary of Military and Associated Terms, 2019, p. 150).

The country's national security system was designed after the Second World War to meet the global security challenges at the time. Today we can summarise that this system includes the organisations, structures, and processes that govern decision-making, budgeting, planning and execution, and congressional oversight of national security activities (Dale, 2008, p. 1). A key element of that system is represented by national security strategic guidance documents. A fundamental document in the hierarchy of these documents is the National Security Strategy of the United States of America.

It is important to trace the role of the US National Security Strategy in different historical periods and especially today in the light of modern changes in the security environment.

US NATIONAL SECURITY STRATEGIES FROM THE EARLY 1950s TO THE MID-1980s

The foundations of US national security were laid by the National Security Act of 1947. The Act reorganised the US government's military and intelligence agencies after the Second World War.

In 1947, the National Security Act passed by Congress mandated that the President deliver a comprehensive annual *“National Security Strategy Report”*. The goal was for the administration to inform the American people of the four elements of its foreign policy and national security thinking: the foreign policy, worldwide commitments, and national defence capabilities of the United States of America

necessary to deter aggression and to implement the US national security strategy; the proposed short-term and long-term uses of the political, economic, military, and other elements of the national power of the United States of America to protect or promote the interests and achieve the set goals and objectives; the adequacy of the capabilities of the United States of America to carry out the US national security strategy, including an evaluation of the balance among the capabilities of all elements of the US national power to support the implementation of the national security strategy; such other information as may be necessary to help inform Congress on matters relating to the US national security strategy (Pavel & Ward, 2019).

In fact, in the United States of America, from the early 1950s to the mid-1980s, strategic documents related to national security were issued periodically, usually at the beginning of the new president's term.

Presidential Directive NSC-68 "United States Objectives and Programs for National Security" (1950)

Based on the ideas and views of the American diplomat and historian George Kennan, on 14 April 1950, President Truman's National Security Council produced the first notable top-secret document – Directive NSC-68 "United States Objectives and Programs for National Security". It described in detail the Cold War strategic context, noted the intentions and capabilities of both the United States and the Soviet Union, and presented possible courses of action together with assessments (Dale, 2008, p. 2). The directive included not only military aspects but also political and ideological elements, with a focus on hard power, and in particular on the military forces perceived as necessary to deter the Soviet Union.

The document states that *"the military advantages of striking first require us to be constantly on the alert so that we can drop all our might on the enemy... In the initial phase of a nuclear war, the advantage of initiative and suddenness will be enormous"* (Perov, 1989).

Strategy of Massive Retaliation (1953)

After the inauguration of President Eisenhower in 1953 and a month-long review of national security policy, on 30 October of that year, the President approved the top-secret Directive NSC 162/2 "A Report to the National Security Council by the Executive Secretary on Basic National Security Policy". The document presented a new strategy known as Eisenhower's "New Look" strategy.

The new strategy was announced on 12 January 1954 by Secretary of State John Foster Dulles to the Council on Foreign Relations, where he stated: *"The main decision must be based first of all on our great ability to strike back immediately at places and with means of our own choosing"* (Sokolovski, 1971, p. 78). He added that the USA will defend its allies by applying *"deterrence through the power of massive retaliation"* (Office of the Secretary of Defense, 2012, pp. 5-6). Thus, the new strategy became better known as *"Massive Retaliation"* as well as strategy of *"massive response strikes"*.

The new strategy (document NSC 162/2) emphasised both geopolitics and hard power as foundations for maintaining US values, America's way of life and for nurturing freedom abroad (Lettow, 2021).

According to the strategy, the USA will carry out Massive Retaliation and Instant Retaliation, and there being no forbidden (protected) areas where the enemy forces could hide from a nuclear attack.

The adopted strategy envisaged the preparation and conduct of a general nuclear war only against the Soviet Union and other socialist countries.

Thus, the Eisenhower government adopted the first US nuclear strategy. The main idea of the strategy is the threat of use of nuclear weapons to be a strong deterrent factor.

Strategy of Flexible Response (1961)

In January 1961, President Kennedy came to power in the United States. As a result of the growing nuclear capabilities of the Soviet Union and the strengthening of the role of the *"vulnerability"* factor, a more realistic Strategy of Flexible Response was adopted the same year.

According to one of the creators of the strategy, General Maxwell Taylor (Chief of Staff of the Land Forces, Chairman of the Joint Chiefs of Staff since 1962), it implies a proportional use of military force commensurate with the scale of the danger (Taylor, 1961, p. 38). The new strategy provided the opportunity, if necessary, to wage a general and limited nuclear war with and without the use of tactical nuclear weapons.

In accordance with the strategy, the USA must maintain the combat capability of its forces at a level at which the enemy forces are likely to be. The priority targets of nuclear strikes will no longer be cities, but military sites. In addition, the strategy aims to force the Soviets to stop their aggression in the face of the threat of attacking their cities.

With the new strategy, President Kennedy's administration, and in particular one of its prominent representatives, Secretary of Defence McNamara, abandoned the idea of a *"massive retaliatory strike"* and adopted the idea of *"flexible and graduated response"*.

National Security Strategy of Realistic Deterrence (1971)

On 20 January 1969, Richard Nixon took office as President of the United States of America. At that time, the Soviet Union was able to achieve approximate strategic parity with the United States. This forced the Nixon administration to make serious efforts to overcome the new strategic situation, to review US nuclear and conventional forces and strategic doctrine, to review its strategic priorities, such as defence plans, in response to the realities of the deteriorating US economy and the tightening of the federal budget.

Nixon adapted the country's foreign and defence policy to the new situation. He proclaims his so-called Nixon Doctrine, based on his strategy for peace, and its main elements or pillars – *"strength"*, *"partnership"* and *"willingness to negotiate"*.

Based on the Nixon Doctrine and the President's Strategy for Peace, the United States of America adopted the *National Security Strategy of Realistic Deterrence* in 1971.

The basic purpose of the new strategy was *"to provide, through strength and partnership, the security of the United States and its Free World allies and friends. Its aim is to discourage – and eventually to eliminate – the use of military force as a means by which one nation seeks to impose its will on another. It seeks to deter war, but ensures adequate capabilities to protect the [American] nation and its interests should deterrence fail"* (*National Security Strategy of Realistic Deterrence*, 1972, p. 2).

Strategy of Limited Nuclear Options (1974)

The United States had been closely monitoring the development of the Soviet missile program. The first test in the Soviet Union in August 1973 of multiple independently targetable re-entry vehicle (MIRV) on an intercontinental ballistic missile (ICBM) – 5 years after a similar test in the USA, caused concern at the Pentagon.

At a press conference on 10 January 1974, Secretary of Defense James Schlesinger described to journalists the threat looming over the US Minuteman ICBMs. According to him, the United States of America needed weapons of counteraction to allow reliable strikes on Soviet ICBMs. Schlesinger referred

to providing US Strategic Missile Forces with *"selective first nuclear strike"* capabilities based on a new type of war – the so-called *"Limited Nuclear War"*.

The changes to the US strategy were adopted by Nixon in a top-secret Memorandum NSDM-242 on policy for planning the employment of nuclear weapons, signed on 17 January 1974. It was hoped that the new strategy would be the basis for stopping the arms race and negotiations. In practice, as stated in the memorandum, this was not a major new change in the US nuclear strategy, rather an elaboration of existing policy.

The document included planning for *two types of nuclear weapons employment*: planning for *Limited Nuclear Employment Options* and planning for *General War*.

In relation to the novelty in the strategy – the planning of *options for limited nuclear employment*, the memorandum states that *"should conflict occur, the most critical employment objective is to seek early war termination, on terms acceptable to the United States and its allies, at the lowest level of conflict feasible. This objective requires planning a wide range of limited nuclear employment options, which could be used in conjunction with supporting political and military measures (including conventional forces) to control escalation"* (*National Security Decision Memorandum 242*, 1974, p. 2). These options would enable the USA to conduct selected nuclear operations and to communicate to the enemy a determination to resist aggression.

In addition, according to the memorandum, the options for limited nuclear employment should hold some vital enemy targets hostage to subsequent destruction by survivable nuclear forces, and permit control over the timing and pace of attack execution, in order to provide the enemy opportunities to reconsider his actions.

Countervailing Strategy (1980)

In January 1977, President Carter's administration came to power in the United States of America. During his tenure, Carter issued a series of directives to prepare the USA for nuclear war.

The last of these directives, Presidential Directive 59 (PD/NSC-59) on Nuclear Weapons Employment Policy, signed on 25 July 1980, announced the new US Countervailing Strategy, which also set out a new policy (manner) of employment of the nuclear forces.

The directive was an important step in the evolution of US targeting policy for nuclear forces in a nuclear war and its impact on maintaining deterrence in the 1980s, especially in light of the growing Soviet arsenal of strategic weapons and their capabilities. It was stated that the most fundamental objective of US strategic policy remained nuclear deterrence. The directive included requirements, actions, principles and goals for the implementation of the new strategy.

The new directive stated that overall targeting planning appropriate to implement a Countervailing Strategy would result in a capability to choose to put the *major weight of the initial response on military and control targets*.

The following *categories of military targets*, with appropriate sub-options for different theatres, should be covered in planning for nuclear weapons employment: strategic and theatre nuclear forces, including nuclear weapons storage; military command, control, communications, and intelligence capabilities; all other military forces, stationary and mobile; industrial facilities which provide immediate support to military operations during wartime. In addition, pre-planned options, capable of relatively prolonged withhold or of prompt execution, should be provided for attacks on the political control system and on general industrial capacity (*Presidential Directive/NSC-59*, 1980, p. 3).

Thus, from the early 1950s to the mid-1980s, American presidents issued six strategic documents related to national security, bearing different names (1950, 1953, 1961, 1971, 1974 and 1980). To a large extent, their unclassified versions satisfy the idea of the National Security Act of 1947 to inform the American people about the basic elements of the country's foreign policy and national security.

THE ROLE OF NATIONAL SECURITY STRATEGIES IN US NATIONAL SECURITY FROM THE MID-1980s TO THE EARLY 2020s

US National Security Strategies from the Mid-1980s until the End of the Century

The Goldwater-Nichols Department of Defense Reorganization Act was passed in the United States of America in 1986. It gave a significant impetus to the development of the armed forces – increasing integration and changing organisation, training, staffing, command and control.

In accordance with the Goldwater-Nichols Act, the US National Security Strategy was to be presented to the US Congress and published annually. The strategy

was intended to be a report on the work done by the administration and to declare plans in this area. The document was to be produced by the National Security Council with the direct participation of the President (Belova, 2007, p. 67).

With the Goldwater-Nichols Act, the purpose of the National Security Strategy was changed to better reflect the changing global security environment.

Since the passage of the law to by the end of the 20th century new US national security strategies were developed annually (except in 1989 and 1992). The evolution of US strategies for the employment of nuclear forces continued through the 1980s, along with the development of the capabilities and precision of nuclear weapons in both the United States and the Soviet Union. The first US strategies during this period reflected both the ideological and military confrontation between the two countries as well as the ongoing process of reduction of the medium-range nuclear missiles and the economic stagnation of the Soviet Union at the end of the Cold War.

Since 1990, US national security strategies have taken into account the changes and uncertainties in the international security environment and the crises in the former communist countries. The new strategies adapted the military component of the US *“Big Strategy”* to changing threats and new military technologies. Moreover, they have provided continuity in areas such as deterrence, strong alliances, forward defence and force projection. They reflected the signs of *“political detente”* between East and West in the early 1990s, but the then existing uncertainty in the security environment was expressed in a series of questions posed in the strategies at the time that needed to be answered in the following years, in order to shape America's long-term security strategy for the last decade of the 20th century.

National security strategies since 1993 have recognised the existence of a *“unipolar world”* dominated by the USA and shifted their focus from a global threat to regional challenges and opportunities as regional instability increasingly threatened US interests and security. The proliferation of weapons of mass destruction was also seen as a major threat to US security. To cope with threats, it was envisioned to maintain a robust overseas presence of US forces, no longer only as permanently stationed forces, but also as temporary deployments, multinational exercises, site visits and other activities based on bilateral agreements (*National Security Strategy of Engagement and Enlargement*, 1994). As a result, the build-up of a qualitatively new type of force began – the so-called Response (Deployment) Force, which, if necessary, could deploy in a timely manner near a critical area.

US National Security Strategies since the Beginning of the 21st Century until the End of the Second Decade of the Century

In the first two decades of the 21st century, US presidents did not often issue national security strategies.

The 2002 strategy took into account the domestic and international situation, and American views and intentions following the terrorist attacks on 11 September 2001, as well as the ongoing multinational operation in Afghanistan and the war on global terror in general. Due to the complex nature of non-traditional threats, which makes them particularly dangerous, and in search of new approaches to countering them, the strategy emphasised the concept of “*pre-emptive war*” (preventive actions).

In 2006, President George W. Bush issued his second (and last for his two terms) National Security Strategy of the USA. Dictatorial regimes, which provided an environment for the spread of terrorism, were identified as a major threat. The biggest threat was considered Iran and required its nuclear program to be stopped. The armed forces were given great importance as a means of maintaining US hegemony, and the right to take pre-emptive military action, if required, against old or new threats, was reaffirmed. However, in the new strategy it was declared that the United States of America would not resort to force in all cases to pre-empt emerging threats. Its preference was that nonmilitary actions succeed.

The 2006 strategy for addressing regional conflicts included three levels of US engagement: conflict prevention and resolution; conflict intervention; and post-conflict stabilization and reconstruction (*The National Security Strategy of the United States of America*, 2006, p. 15).

The Obama administration also developed only two national security strategies (in 2010 and 2015) during its two terms. It is important to note that with his entry into the White House in 2009, Obama shifted the focus of foreign policy to increasing the role of international decisions, thus limiting the role of the United States of America in the world, which is visible in the 2010 strategy. It placed international terrorism as a major threat to the country and the disruption, dismantlement, and defeating al-Qa’ida and its violent extremist affiliates in Afghanistan, Pakistan, and around the globe, as priorities. Russia, China and India were seen as major international partners, but the requirement to maintain US military superiority over actual and potential adversaries was reaffirmed.

The beginning of the second decade of the 21st century saw changes in international security relations, with renewed competition between the United States, on the one hand, and Russia and China, on the other. These changes are linked to Chinese activity in the East and South China Seas, as well as Russian actions in the Ukraine, including the annexation of Crimea in March 2014 (Kamenarov, 2018). The mentioned events have strongly influenced the formation of official US policy.

In this regard, the 2015 strategy focused on America’s decision to rely on “*leadership achieved by setting a good example for others*” (in imposing core values at home and abroad), with “*appropriate partners*” (increasing at the same time their numbers and potential) and using “*all the tools of US power*”. The US military must remain dominant in every domain, but the strategy made it clear that “*the use of force should not be America’s first choice, but it will sometimes be the necessary choice*”. It was to be “*principled and selective*” and to have been seen as an element of a much broader toolkit (*National Security Strategy*, 2015, p. 8). The new strategy outlined the US approach to Washington’s key relations with Russia and China. The clash with Russia in the context of the Ukrainian crisis has led to a significant change – from the desire to build stable ties with Moscow contained in the 2010 strategy, to the need to “*deter*” Russia in the 2015 strategy, including through “*raising the price that Russians will have to pay for their behaviour*” and supporting the sovereignty of Russia’s neighbours. With regard to China, it is clearly stated that the USA is and will remain a “*Pacific power*”, emphasising the fact that tensions and risks in the Asia-Pacific region are growing (Grevi, 2015). Generally, the 2015 strategy set out ideas for a firm and comprehensive approach to tackle with crises in key regions of the world.

President Trump issued only one US National Security Strategy at the end of the first year of his term from 2017 to 2021. The strategy took into account the growing political, economic, and military competitions that the USA faces around the world. And also, that “*China and Russia challenge American power, influence, and interests, attempting to erode American security and prosperity*” (*National Security Strategy of the United States of America*, 2017, p. 2).

Among the key challenges and trends affecting the US position in the world, the new strategy identified: revisionist powers, such as China and Russia, that use technology, propaganda, and violence to oppose the world against American interests and values; regional dictators who spread terror, threaten their neighbours and seek to acquire weapons of mass destruction; jihadist terrorists who stir

up hatred to incite violence against innocents in the name of wicked ideology and transnational criminal organisations that disseminate drugs and violence in our societies.

The strategy identified four vital national interests that the USA must protect in the competitive world: protect the American people, the homeland, and the American way of life; promote American prosperity; preserve peace through strength; advance American influence (*National Security Strategy of the United States of America*, 2017, pp. 3-4).

These four vital interests in the strategy are also called “pillars”. These are the main principal sections of the document. Overall, the 2017 US National Security Strategy, enshrined in Trump’s “America First” doctrine, reflects changes in the international situation and security policy in the post-Cold War era.

Part of the criticism of the strategy is its definition of “*more competition than cooperation*”. According to analysts, the strategy reflects the fact that most of the resources needed by the USA, as well as its own economic activity, are not related to the Western, but to the Eastern Hemisphere and, in particular, to the Eurasian supercontinent. This important feature of the geography of American hegemony over the past few decades has determined the prevention of appearance of regional hegemonic power in one or another part of Eurasia as a key element of US national strategy (Kamenarov, 2018).

The American National Security Strategy in the Early 2020s

The new US President Biden took office in January 2021. Just two months later, in the midst of the COVID-19 pandemic, he issued the *Interim National Security Strategic Guidance*, entitled *Renewing America’s Advantages*. With it, the president conveys his vision for how America will engage with the world, because, as it is written, it cannot afford to be absent any longer on the world stage. The document was published even as work on a National Security Strategy had begun, which supposes that many of the ideas included in the Guidance will form the basis of future strategy.

The Guidance recognises that many of the biggest threats America faces respect no borders or walls, and must be met with collective action. It is defined that pandemics and other biological risks, the escalating climate crisis, cyber and digital threats, international economic disruptions, protracted humanitarian crises, violent extremism and terrorism, and the proliferation of nuclear weapons

and other weapons of mass destruction all pose profound and, in some cases, existential dangers (*Interim National Security Strategic Guidance*, 2021, p. 7).

In addition, it is strongly stated that the distribution of power across the world is changing, creating new threats. China is defined as rapidly becoming more assertive and as the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system. It is considered that Russia remains determined to enhance its global influence and play a disruptive role on the world stage.

The Interim National Security Strategic Guidance states that ensuring US national security requires to: defend and nurture the underlying sources of American strength, including our people, our economy, our national defence, and our democracy at home; promote a favorable distribution of power to deter and prevent adversaries from directly threatening the United States and our allies, inhibiting access to the global commons, or dominating key regions; and lead and sustain a stable and open international system, underwritten by strong democratic alliances, partnerships, multilateral institutions, and rules (*Interim National Security Strategic Guidance*, 2021, p. 9).

It is stated that the United States of America can do none of this work alone and will reinvigorate and modernize its alliances and partnerships around the world. The USA is envisaged to reaffirm, invest in, and modernize the NATO Alliance and its alliances with Australia, Japan, and the Republic of Korea – which, along with its other global alliances and partnerships, are America’s greatest strategic asset.

Moreover, it is stated that the United States will recognize that its vital national interests compel the deepest connection to the Indo-Pacific region, Europe, and the Western Hemisphere, and will recommit itself to its transatlantic partnerships, forging a strong common agenda with the European Union and the United Kingdom on defining the issues of the present day. Development of partnerships is envisaged in the Middle East with Israel, regional ones to deter Iranian aggression and threats, disrupt al-Qaeda and related terrorist networks and prevent an ISIS resurgence, as well as continuing to build partnerships in Africa.

In addition to recommitting to US alliances and partnerships, the USA, as stated, will move swiftly to earn back its position of leadership in international institutions, joining with the international community to tackle the climate crisis, COVID-19 and other shared challenges.

As the USA re-engages the international system, President Biden's Interim National Security Strategic Guidance defines that the USA will address the existential threat posed by nuclear weapons, will head off costly arms races and re-establish its credibility as a leader in arms control, which is the reason why the USA moved quickly to extend the New START Treaty with Russia. It is also planned to take steps to reduce the role of nuclear weapons in US national security strategy, while ensuring its strategic deterrent remains safe, secure, and effective. In addition, readiness for a meaningful dialogue with Russia and China is stated on a range of emerging military technological developments that implicate strategic stability.

In advancing America's interests globally, smart and disciplined choices are envisaged regarding US national defence and the responsible use of the military, while elevating diplomacy as a US tool of first resort.

These are the main ideas in the Interim National Security Strategic Guidance of the new American president, issued, as stated in the document itself, at a turning point when the United States of America is in the midst of a fundamental debate about the future direction of world development. It is also concluded that no nation is better positioned to navigate this future than the USA.

The ambitious commitments made by US President Biden suggested that the new strategy would be presented by the end of the first year of his term. That has not happened by the autumn of 2022. The reasons are probably rooted in the great dynamics in international relations and the security environment over the past few years and the military aggression of Russia against Ukraine commencing in the spring of 2022, which do not allow the finalisation of the debate on global development and the formulation of precise texts, that would constitute the new US National Security Strategy.

In any case, in the last decade in the USA, the *National Security Strategy* has been defined as a "document approved by the President of the United States for developing, applying, and coordinating the instruments of national power to achieve objectives that contribute to national security" (*DOD Dictionary of Military and Associated Terms*, 2019, p. 150).

Experts believe that since the end of the second decade of the 21st century, there are already six broad purposes for the US National Security Strategy: to outline the president's vision for America's role in the world; to highlight the President's top national security priorities; to broadly guide the resource allocation for the national security related departments and agencies; to articulate to friend and foe alike

the strategy and subsidiary national security policies of the United States; to justify the national security departments' and agencies' budgets with the Congress; and to inform the public debate and garner public support for US national security efforts (Pavel & Ward, 2019). Thus, today, as the scope of the purposes of the US National Security Strategy expands, its role in the country's national security is growing even more.

CONCLUSIONS

The US National Security Strategy is a fundamental document of the country's national security. Based on it, a series of subsequent strategic documents are being developed, such as the National Defense Strategy, the National Military Strategy, the Nuclear Posture Review (the US Nuclear Doctrine), the National Homeland Security Strategy, the National Intelligence Strategy and many others.

A review of the various US national security strategies over the years shows that they have some common core elements, such as: endorsement by the head of government; accurate reflection of national values; clear articulation of national interests; declaration of strategic vision; and identification and assessment of future challenges (Du Mont, 2019). These are elements of most similar strategies around the world.

Since the passage of the mentioned Goldwater-Nichols Act in 1986, American presidents have issued and presented to the Congress national security strategies virtually annually. After the end of the Cold War, the strategies were prepared as an unclassified document, which was made available to the public and provided an opportunity for public debate on all issues related to the national security of the country.

Thus, following the evolution of national security strategies and analysing their role in US national security, we can conclude that their formulation and proclamation seeks to achieve ever broader purposes – from analysing the security environment and the threats to the country to presenting the president's vision of the US role in the world and gaining public support for the declared priorities of the national security of the state.

At the beginning of the third decade of the 21st century, the world is once again at a pivotal moment in the strategic competition between existing and resurgent Great Powers. In these circumstances, the new US National Security Strategy is expected with reasonable interest.

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THE DIGITAL CENTURY AND ITS IMPLICATIONS ON THE INTERNATIONAL SECURITY ENVIRONMENT. DIGITAL CONFRONTATIONS IN CYBER SPACE AND REAL SPACE

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Starting with the end of the 20th century and the beginning of the 21st century, humanity is experiencing a new societal type, the information society. The emergence of computers, the Internet, digital information, artificial intelligence and digital devices with the ability to automatically process information, work autonomously, or even form networks with other devices, cyber and virtual space and so on have led to a technological explosion and the digitalization of societies.

Under these circumstances, the digitalization and virtualization of many human activities and relationships in all societal domains constitutes a postmodern “game changer” of societies. Consequently, digitalization has major repercussions at the level of security and the international security environment. We are witnessing a transition from the nuclear century to the digital century, through the emergence of a new type of human confrontation, the digital confrontation. This new type of confrontation manifests itself both in virtual space, through what we so often hear as cyber war, and in real space, through digitalization of defence and the battlefield. Thus, if the security environment of the 20th century was characterized by globalization under the auspices of the nuclear threat, is it appropriate to consider that the 21st century will be characterized by de-globalization under the auspices of the digital threat?

Keywords: security; digitalization; digital society; cyber attacks; digital threats;

SOCIETAL EVOLUTION AT THE BEGINNING OF THE 21ST CENTURY. THE LEAP FROM THE INDUSTRIAL SOCIETY TO THE INFORMATION SOCIETY

Considering the development of information technology, humanity is at a crossroads of societal evolution, the type of human society being in a process of qualitative transformation, from the industrial society specific to the 18th - 20th centuries to the informational and digital society specific to this new beginning of century and millennium.

Specifically, the industrial economy, based on the production of goods by people, is losing capacity, being gradually replaced by a *knowledge-based economy*, where the production of goods and services becomes primarily based on digital information and devices with capabilities to collect, process, storage, analysis and distribution of products to the consumer market.

In a special and avant-garde vision of the information society, the Government of Japan launched in 2016 a new societal concept, “Society 5.0” (Deguchi, Hirai, Matsuoka, Nakano, Oshima, Tai and Tani, 2020, pp. 1-23) , defined as a *super intelligent society in which the technologies that can achieve physical-cybernetic fusion are developed at a scientific level for the benefit of humanity, especially from the perspective of developing the wealth of the population (figure no. 1).*

Thus, with reference to the *information society*, we allow ourselves to define this latest form of societal evolution as *a social, physical, biological and digital process through which large volumes of data are collected, analysed and processed by means of digital technologies in information with applicability in the physical world, which acts simultaneously at all levels of societies, while modifying individual and collective actions and behaviours to identify the best solutions to increase efficiency and effectiveness in all societal fields – military, political, economic, social, environmental and digital.*

Given these conditions, are there repercussions of the evolution of informational society on security and, implicitly, on the international security environment? If so, which are they?

	Society 1.0	Society 2.0	Society 3.0	Society 4.0	Society 5.0
Society	Hunter-gatherer	Agrarian	Industrial	Information	Super smart
Productive approach	Capture/Gather	Manufacture	Mechanization	ICT	Merging of cyberspace and physical space
Material	Stone • Soil	Metal	Plastic	Semiconductor	Material 5.0*
Transport	Foot	Ox, horse	Motor car, boat, plane	Multimobility	Autonomous driving
Form of settlement	Nomadic, small settlement 	Fortified city 	Linear (industrial) city 	Network city 	Autonomous decentralized city 
City ideals	Viability	Defensiveness	Functionality	Profitability	Humanity

Figure no. 1: Conceptualization of Society 5.0 (Hitachi-UTokyo Laboratory, 2020, p. xii)

DIGITAL CONFRONTATION IN CYBERSPACE. CYBER ATTACKS AND DIGITAL DANGERS

Information societies entail inter-relationships in cyberspace and an ever-increasing interconnectivity of physical and cyber environments that produce physical, informational and bio-psycho-social effects. From a societal perspective, digital relationships between physical entities are identical with the relationships formed in the physical space and are of three major types, namely cooperation, neutral or confrontational.

In the case of the latter type, digital confrontations, the functioning of devices and digital networks or the flow of data between devices in the network or behavioural influencing thus becomes critical at the level of societies – regardless of whether we are referring to the individual, societal or state level.

Thus, digital confrontations take place in conditions where state and non-state actors intentionally or unintentionally exploit the vulnerabilities of military and/or non-military digital systems to extract, corrupt or destroy cyber and/or physical space or to obtain prestige, military or political advantages or profit (NATO Standardization Office, 2009, p. 1).

Correlated with digital confrontations, there arises the need to discuss the offensive and defensive power of security actors in cyberspace. From this point of view, the specialists are debating a new notion, namely the digital or cyber power of these security actors, regardless of their type.

Therefore, we agree to those specialists who refer to this new type of power in state terms, placing it alongside military, economic, diplomatic and informational power, considering that digital power or cybernetic power represents the ability to use cyberspace to create advantages and influence events in other operational environments and at the level of other instruments of power [Kuehl in Kramer, Starr & Wentz, (eds.), 2009 apud. Schreier, 2015, p. 11].

However, although we do not dispute such a definition, we believe that it is limiting, and from our perspective, digital/cyber power must also be defined in societal terms, not only in state terms, with reference to the ability and power of other non-state security actors to use cyberspace, arguing that informational digital influence is not carried out by states only and affects the whole of society – the individuals, societal and state levels (figure no. 2).

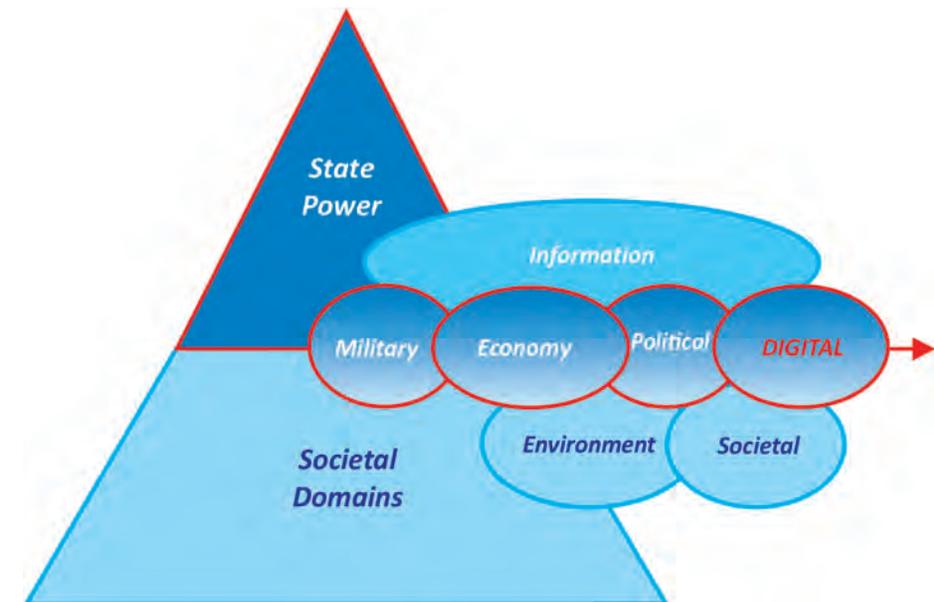


Figure no. 2: Digital power as state power and societal domain of threat

As a consequence, we argue that the digital power or cyber power of informational societies represents both the ability to use cyberspace to create advantages and influence events in all societal fields – military, political, economic, social, digital and environmental as well as the ability to defend against hostile digital actions that produce negative effects at a physical, informational and bio-psycho-social level, regardless of their type.

This new type of power is directly correlated with the *digital index* of societies (figure no. 3).

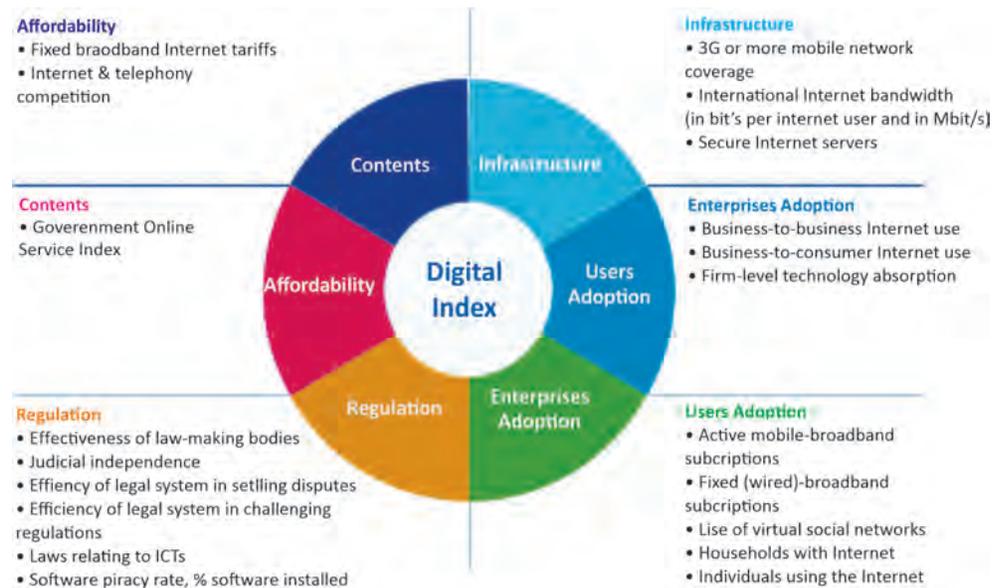


Figure no. 3: Digital Index (DiGiX: The Digitization Index)

Considering these aspects, from our point of view, the *confrontation in the digital space* (figure no. 4) acquires at least two dimensions, often synergistic and overlapping, namely:

- ❖ *At the state-societal level: cyber-attacks*, which take place in two forms:
 - *cyber war*, and
 - *digital information influence or digital influence*, respectively *war or cyber information operations*, “*information warfare*”/“*information operations*”/“*influence operations*”;
- ❖ *At the societal-individual level: digital threats*, which occur in two other forms:
 - *cybercrime* and
 - *digital danger*.

Included by some authors in the category of “*non-classic*” (Hlihor, Băncilă, 2020, p. 229) or “*hybrid*” (Chifu, 2020, pp. 12-13) conflicts, the *cyber attack is carried out by a state actor directly or indirectly, through a non-state actor, singular or correlated with other means of power, mainly for the purpose of fulfilling some economic and financial, but also military and political interests.*

It takes place either by *attacking cyber devices and networks*, in the case of *cyber warfare*, or by *digitally influencing political-military decision-makers*

and the public opinion of the adversary, especially by changing political ideologies, in the case of *digital informational influencing*.

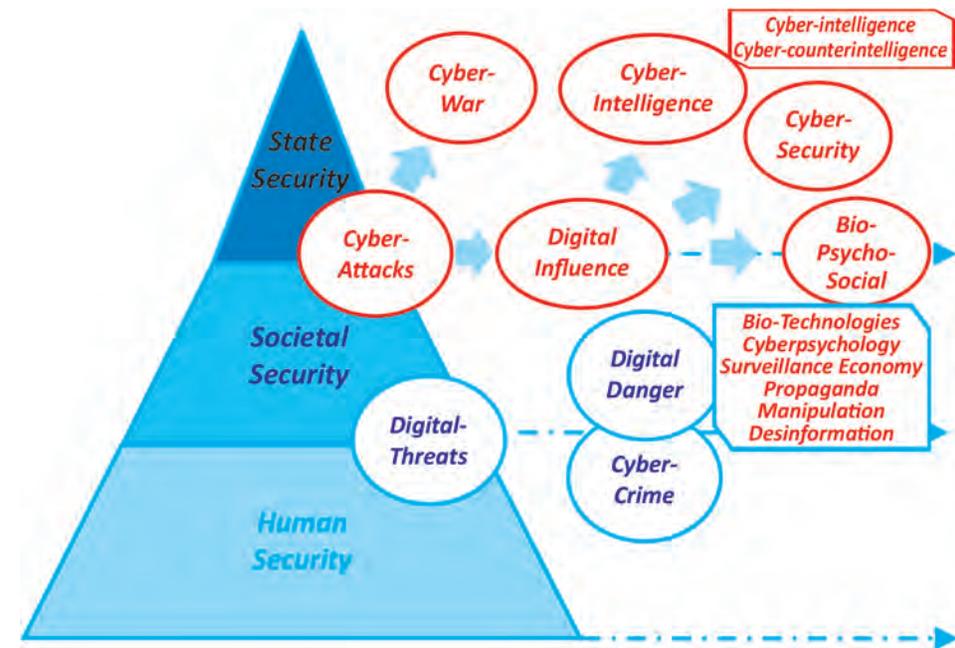


Figure no. 4: Types of digital conflicts

Regarding the notion of *cyber war*, we agree that it represents *any action of penetrating computers and digital networks carried out by a state actor against an adversary, with the aim of causing damage and destruction* (Clarke and Knake, 2010, p. 14).

In addition, we allow ourselves to supplement this definition with the fact that *the adversary can be another state actor or a non-state actor of strategic importance to the attacked state actor, and the damage and destruction can be of any kind, by affecting the physical or cyber integrity, both to IT&C and physical entities – citizens or institutions.*

Another component of the *digital conflict* is represented by *digital information influencing*, which in our understanding represents *any activity or attempt by a state or non-state actor to influence the cyber information environment for its own benefit, at the national level, at the level of the adversary or at the global level, both offensively and defensively.*

From the perspective of the goals pursued and the effects provoked by the digital information, we consider that there are *several types of digital informational*

influences, as follows: *digital bio-psycho-social influences* – that include the actions of propaganda, manipulation and disinformation, individualized or mass spread, which seek to change behaviours at the level of the opponent; *cyber-intelligence* – that include actions specific to the information activity carried out in the digital environment (Intelligence and National Security Alliance, 2015), of an offensive type – *cyber-espionage*; and defensive type – *cyber-counterintelligence* – include the activities of penetrating cyber systems and networks to identify and assess the capabilities, intentions and digital activities carried out by the adversary; and *cyber-security* defensive activities – that include the activities of securing systems and networks and digital information.

The second category of *digital conflicts* is represented by those who mainly affect society and its individual members and which we name as *digital threats*, which take place in two other forms: *cybercrime* and *digital danger*. Regarding *cyber crime* [Klimburg (ed.), 2012, pp. 13-15], we refer to *those types of legal or illegal activities carried out by non-state actors that constitute social dangers, have mainly an economic purpose and are penalized by states and/or at the level of regional and international organizations*.

Regarding the *digital danger*, we consider that it consists of the *activities carried out through digitalization in the political* (Farrow, 2022), *economic, social* (Milanovic, Schmitt, 2020, pp. 261-269) *and environmental domains by state or non-state actors. Such dangers can be carried out by states against their own citizens or by non-state actors against the societies where they operate and they affect societal identity and human rights*.

DIGITAL CONFRONTATION IN REAL SPACE. DEFENCE DIGITALIZATION AND BATTLEFIELD AUTOMATION

Considered to be part of the third wave of military technology development, following the invention of firearms and nuclear weapons, *autonomous lethal weapons with artificial intelligence* are already a reality of humanity (Lee, Qiufan, 2021, pp. 337 et seq.). Furthermore, they were already used on the battlefield. Essentially, such autonomous weapons have the ability to search for a target, make the decision to fire on the target, and ultimately kill the target, *all without human involvement in the process*.

Also called “*slaughterbots*” or “*killer robots*”, autonomous lethal weapons with artificial intelligence are pre-programmed to kill a certain profile of a human target, and in the process use a wide range of digital data collected from different sensors and have facial recognition capabilities.

Already in the possession of the Turkish Armed Forces, which used them in Syria in 2021 (United Nations, 2021, p. 148), or the Israeli Armed Forces, which used them in the separatist regions of Gaza (Gross, 2021), *lethal autonomous weapons exist, have been used and are currently allowed at the international level*, even if the UN had initiated expert-level discussions for their international regulation starting 2013 (United Nations, 2022).

The only notable success of the international community took place in 2019, when the signatory countries of the *Convention on the prohibition or limitation of the use of certain categories of classic weapons that could be considered as producing excessive traumatic effects or that would strike indiscriminately* (The Convention on Certain Conventional Weapons – CCW A.N.) have adopted a number of *11 guiding principles regarding the use of lethal autonomous weapons* (CCW, 2019, p. 10), which, however, are not binding for the CCW signatory states, but only have the status of *recommendations*.

Unfortunately, despite calls for a total ban on *slaughterbots* not only from several CCW member states, such as Austria or New Zealand, but also from several non-governmental organizations, such as the International Committee of the Red Cross (ICRC), the regulation of lethal autonomous weapons failed at the Sixth CCW Review Conference held on 17 December 2021 in Geneva (Klare, 2022), following the blocking of consensus by the USA and the Russian Federation, both states having ambitions to integrate *slaughterbots* into their own military arsenals.

In this context, we consider it important to mention that the *International Committee of the Red Cross has issued recommendations* (ICRC, 2021) *for the regulation of lethal autonomous weapons*, through the adoption by states of some legally binding rules, which ensure the fulfilment of the following three primary requirements:

- a. *Unpredictable autonomous weapon systems should be expressly excluded, particularly because of their indiscriminate effects*. This would be best achieved by banning autonomous weapons systems that are designed or used in such a way that their effects cannot be sufficiently understood, predicted and explained;
- b. *The use of autonomous weapons systems to target human beings should be precluded*, in light of ethical considerations to protect humanity and uphold the norms of international humanitarian law for the protection of civilians and non-combatants. This would be best achieved through a ban

on autonomous weapon systems that are designed or used to apply force against individuals;

- c. *The design and use of autonomous weapons systems that would not be prohibited should be regulated* in order to protect civilians and civilian property, to comply with the rules of international humanitarian law and to protect humanity; through a combination of:
- a) Limits on the types of targets, such as restricting them to objects that are military objectives by nature;
 - b) Limits on the duration, geographic scope and scale of use, including to allow for human judgment and control in relation to a particular attack;
 - c) Limits of the situations of use, such as their constraint to situations where civilians or civilian goods are not present;
 - d) Requirements for human-machine interaction, in particular to ensure effective human supervision and timely intervention and deactivation.

Precisely in order to further highlight the need for the international adoption of the above-mentioned recommendations, we also propose a brief analysis of the *risks generated by autonomous lethal weapons*, before and during a military conflict.

In this regard, we agree with certain non-governmental specialists who have identified a number of seven (LethalAWS) as follows:

- *Actionable unpredictability* – such weapons are unpredictable by the very way they were built, with behaviour to annihilate the adversary while being difficult to detect and destroy. Such unpredictability is all the easier to achieve not only in a real complex operational environment, but also in the operational conditions of human-machine interactions; as well as car – car (Ekelhof, Paoli, 2020, p. 1);
- *Non-state proliferation* – slaughterbots are cheap and easy to mass-produce weapons, quick to transport and difficult to detect and destroy, which makes them accessible to non-conventional groups;
- *Degeneration of interstate disputes into military conflicts* – the low cost of construction and operation, both in financial and human terms, intensifies the risks of escalation of interstate conflicts into military conflicts, to the detriment of diplomatic, economic or informational de-escalation measures;
- *Escalation of military conflicts* – under the conditions of an increased speed and area of operation, autonomous systems induce risks of accidental and rapid escalation of conflicts, perpetuation of instability and military crisis,

simultaneously reducing the period of time and space necessary for taking measures to de-escalation by belligerents;

- *Ease of transformation into weapons of mass destruction* – in general, software is characterized by “scalability”, i.e. the ability to be modified, both quantitatively and qualitatively, and digital devices inherently include this capacity, including in terms of networks of devices they form swarms to which they attach. Slaughterbots, in their “quality” as digital devices, are no exception to this “scalability” capability and, although they act autonomously, they can also act in a network, thus forming groups of autonomous lethal weapons that act in unison and coordinated to fulfil the assigned mission. Such groups of slaughterbots, also called swarms of robotic systems (lb.), or armed fully autonomous drone swarm – AFADS (Kallenborn, 2020), can generate victims in large numbers and we agree that they must be included in the category of weapons of mass destruction;
- *Selectivity in choosing targets* – with the ability to select targets based on biometric data and facial recognition software, slaughterbots can be used to commit crimes against groups of people based on age, gender, race, ethnicity, or religious dress;
- *Promoting the arms race* – in the absence of regulation or a total international ban on slaughterbots, states are practically encouraged to invest in the research and development of these types of weapons, thus generating a new arms race, this time with autonomous weapons.

However, we consider that the risks presented above represent *military risks to state-societal security generated by lethal autonomous weapons* and we allow ourselves to complete this list with two more risks (*figure no. 5*), namely:

- *Crime escalation* – at an estimated unit cost of less than \$1000 (Lee, Qiufan, 2021, pp. 337 and f.), all component parts can be purchased online, and operationalization can be achieved through downloadable open-source technologies from the Internet for free, thus being easy to procure, assemble and use, both by individuals acting independently and by organized crime groups;
- *Traceability difficulties* – given the ease of procurement and assembly, traceability (United Nations) is almost impossible, especially in conditions of illicit use, but also in conditions of use by state actors who do not want to take responsibility in production or application in different situations of disputes or military conflicts.

In this context, we also draw attention to the fact that the use of artificial intelligence in the field of weapons and military technologies is not limited only to slaughterbots. The applicability of AI is currently being studied at the level of other types of classic weapons, in order to assign them the ability to act autonomously without the presence of a human operator, individually or in a network. Such weapons being developed include firearms, missiles, military ships, military vehicles, fighter planes, or drone ships, as well as military robots to replace human soldiers (Özdemir, 2019, pp. 16-22).

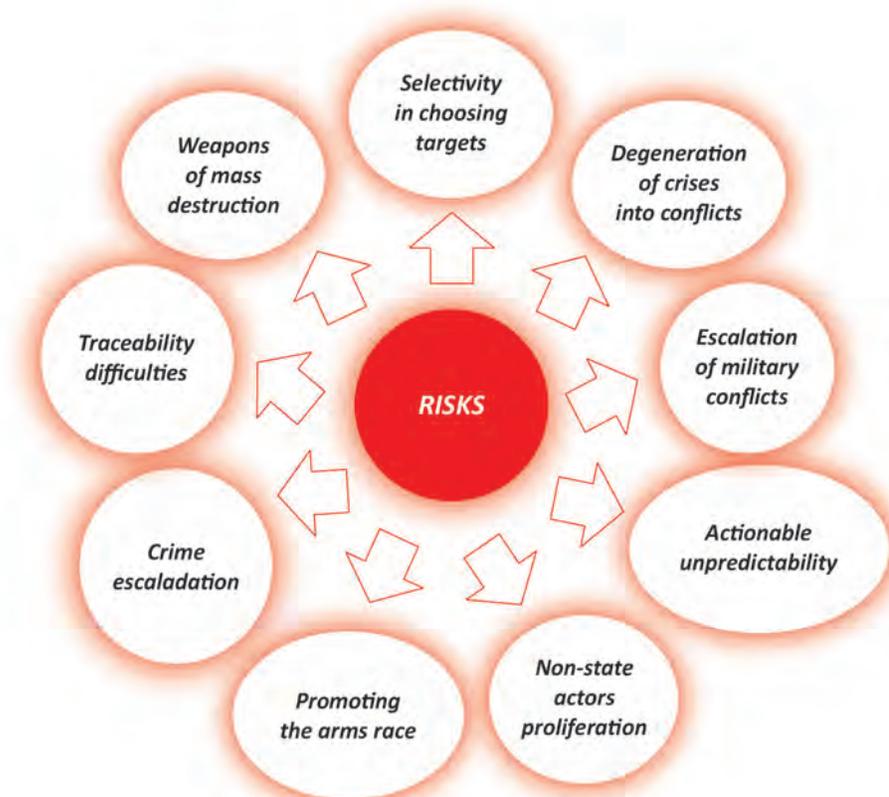


Figure no. 5: Security risks generated by lethal autonomous weapons

Considering the new informational-digital military technologies, the popular television series Star Trek has a good chance of becoming a reality. Though, the specificity of these new technologies is that they are neutral by themselves, and their effect, positive or negative, depends to the greatest extent on people, the societies and states that build and use them.

SECURITY AND SECURITY ENVIRONMENT AT THE BEGINNING OF THE DIGITAL AGE. DIGITALIZATION, GLOBALIZATION, DE-GLOBALIZATION AND THE MULTIPLICATION OF SECURITY CRISES

Security is a complex psycho-social phenomenon, almost impossible to define in a unitary and universally accepted way, precisely because of its multidimensionality (Mândraș, 2020, pp. 78-95).

However, before highlighting the main aspects of security and the current security environment, we consider it useful to further clarify the theoretical notions.

Therefore, we reiterate the fact that security includes at least 4 main dimensions (Mândraș, 2021, pp. 27-39), grouped by types of security and specific domains (figure no. 6), as follows:

- ❖ The dimension of *security subjects*, classified according to the historical evolution of the concept of security and the main security subjects: the state, society and the individual;
 - ❖ The dimension of the *domains/sources of insecurity*, classified according to the main sources, risks, threats and dangers of insecurity, grouped by the main societal domains;
 - ❖ The dimension of the *sources of security*, classified according to the state's behaviour and degree of introversion or extroversion in achieving its own security within international relations;
 - ❖ The dimension of the *security environment*, classified according to the geopolitical depth of the security environment and the relationships established by the security actors and their involvement in combating the sources of insecurity, at national, regional or international level.
- ❖ Thus, with regard to the *security environment*, we can consider that it has a multivalent character, in the sense that it represents an essential dimension of state security, which manifests itself at the national, regional or international level, but is also correlated with the other subjects of security – individuals and the societies they form.

Composing the *three essential components of the security concept*, alongside the *reality constructed through discourse* and *security policies and strategies* (Hlihor, 2008, p. 13. *apud* Mândraș, 2021, pp. 28-29), the security environment is represented by the objective reality in which security relations take place, at the societal or state level.



Figure no. 6: Dimensions of security

At the same time, the *security environment* is defined both by the specific threats and dangers that exist in the national, regional or international social reality, and by the preventive or defensive behaviours adopted by security actors to counter these threats and dangers, whether they are state or non-state actors.

Under these conditions, which are the main general characteristics of the current security environment and what is the impact of the digitalization of societies on the social reality?

First of all, starting with the period of the 90s, characterized by the end of the Cold War, it was manifested an “*openness*” to studying other types of security rather than the national-state one, as well as to other types of sources of insecurity and non-state security actors. Therefore, it was agreed that there exists a new reality of international relations resulting from the dissolution of the Soviet Union and the promotion of human freedom and the free market.

Obviously, we are referring to this new reality as *globalization*, which along with the “*dynamism, flexibility (...) the emergence, complexity, radicalism and perpetual crisis that take place in the international security environment and that influence all areas of social life*” (Mocanu, 2013, p. 11) leads us to anticipate and conclude

that *change is the constant nature of postmodernism – the current stage of development of international society in the 21st century.*

In a holistic perspective, *globalization resides in the generalized global interconnectedness that exists within and between individuals, social groups, societies, nation-states, organizations, and regions, achieved through the international expansion of trade and access to markets for the production and distribution of goods and economic-financial services, but also the transport and freedom of movement of people, goods and financial or non-financial capital, on the background of the development of digitalization, which has amplified global interconnectivity (figure no. 4).*

In practical terms, this expansion has eliminated or diminished geographic and geopolitical barriers and profoundly transformed global politics and its study [Little, Smith (ed.), 2005, p. 135], a field that is increasingly concerned with the negative impact of these transnational and international transformational processes on individuals, societies, nation states, or even the Earth.

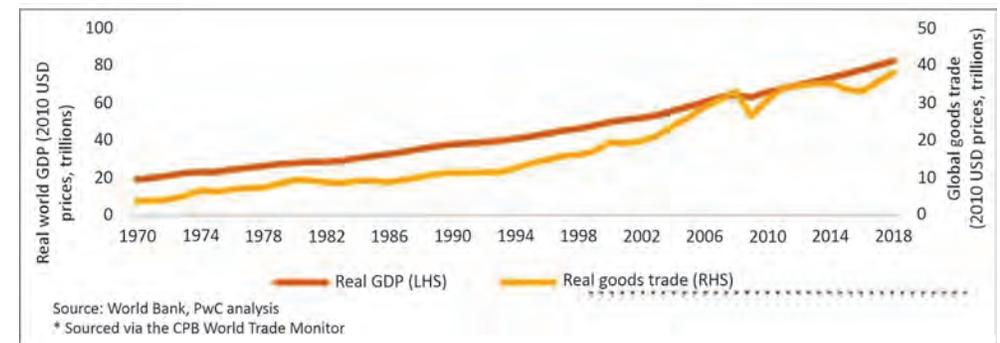


Figure no. 7: The tandem between the growth of world Gross Domestic Product (GDP) and the growth of trade in goods (RHS) (Kupelian, 2020)

Regarding the impact of globalization on the current political system still dominated by nation states, some authors (Drezner, 2008; Dreher, Gaston, Martens, 2008) debate the *risk of dissolution*, especially of small states. Arguments include the burden of social and economic transformations, cultural and political aspects of the global system. The issues regarding the autonomy and sovereignty of these nation states are being debated within the contemporary international system (Najam, Runnalls, Halle, 2007), under the effect of the interdependencies generated by the global economy and financial system, technological and communications developments, consumerism, the permeability of national borders and cross-border threats, such as international terrorism, illegal migration or ecological disasters.

As for the concept of the sovereignty of the states, traditionally, it was defined by the absolute political authority of the states exercised within the framework of international relations (Hinsley, 1986, pp. 1-27). However, considering the modern evolutions, the concept of sovereignty has suffered modifications, which resides in its expression as an absolute authority of states to exercise their exclusive right to apply special measures to protect the rights of their own citizens, as well as their own security (Edkins, Shapiro, Pin-Fat, 2004, p. 79).

Moreover, given the dynamics of the international environment in the context of cross-border risks that threaten the states themselves and, implicitly, their sovereignty, security specialists have focused on this issue, trying to identify whether the risk of dissolution mentioned above is real or not and whether the states are willing to give up their own sovereignty in favour of a supranational, even global body [Waltz, 1979; Hobbes, Shapiro (ed.), 2009].

This risk almost certainly exists, but our response to these dilemmas must be differentiated, depending on the types of power that the states in question have at their disposal to counter the threats and dangers to which they are subject, including the new type of digital power to which we have previously referred.

At least in terms of relinquishing one's own sovereignty and the risk of dissolution, an eloquent example is Great Britain itself, faced in the last decade with two referendums – one regarding the acquisition of independence by Scotland, and the other regarding separation from the EU, which is a reality of the present.

Theoretically, we agree that the dissolution of states into a supra-state organization with collective sovereignty and capitulation of national sovereignty would fail. At least at the present time, such a supra-state organization would not be able to offer viable security solutions in the face of global threats to human security, justice, or environmental changes (Tännsjö, 2008, pp. 122-125), especially in the absence of a monopoly on decision-making authority, the imposition of law and the use of force to ensure the security of societies, recognized, accepted and implemented at the regional or global level, with the support of the population.

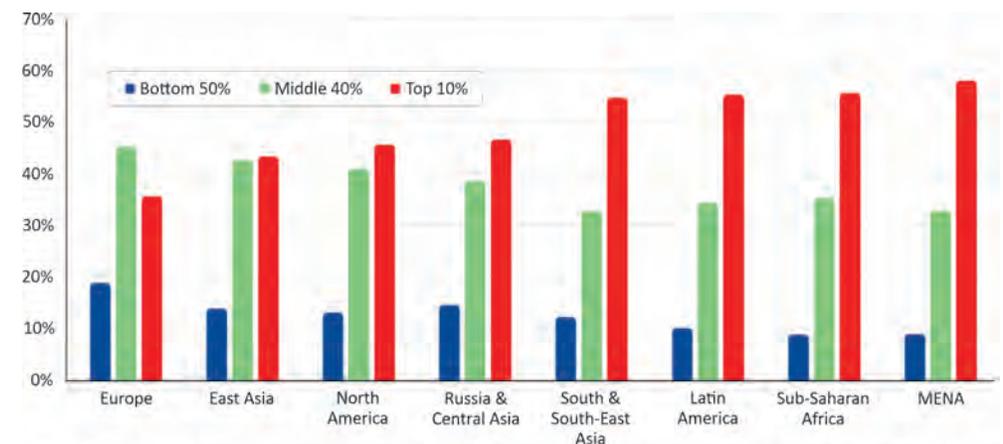
At the same time, in the last two decades, the global system has been subjected almost simultaneously to several serious crises, such as: the financial crisis of 2008; the migration crisis that marked Europe and the USA in 2016; BREXIT; the public health crisis generated by the SARS COV virus 2 initiated in China at the end of 2019 and spread across the globe in 2020; the crisis of the political rise of extremist and populist parties; and, last but not least, the current crisis generated by the illegal military invasion of Ukraine by the Russian Federation, which in turn generates

more social crises, crises in the global food supply chains, as well as a major energy crisis in the EU.

All these multi-crises entailed and still entail enormous costs for states, societies and individuals alike, which consist not only in financial sums of money but also in economic regressions, social, economic, political, environmental costs and, last but not least, loss of human life and human rights and freedoms.

In addition, these multi-crises also accentuate the change in the global order specific to the end of the 20th century, and American unipolarism is already a matter of the past, being gradually replaced by a USA-China bipolar global competition that captures more and more states.

Additionally, we believe that the basis of these multiple crises is not only the competition between state actors, larger or smaller, but also another characteristic of the current security environment manifested at the individual and societal level, namely the global economic inequalities (*figure no. 8*), which manifest at the level of states, regions, but also of individuals, who are increasingly influenced by digitalization.



Interpretation: In Latin America, the top 10% captures 55% of national income, compared with 36% in Europe. Income is measured after pension and unemployment benefits are received by individuals, but before income taxes and other transfers.

Sources and series: wir2022.wid.world/methodology

Figure no. 8: Income inequality differentiated by region (WIR, 2022)

These inequalities not only affect the security of states, but also erode the global social foundation, being assumed that these differences in economic well-being have amplified the increasingly violent and daily social movements in Western states and beyond. We briefly recall the movements of the “yellow vests” in France, the anti-immigration protests in Germany, the “Black Lives Matter” protests

in the USA and the invasion of the Capitol by American Protestants in January 2021, or even the current protests in the Russian Federation against the background of the illegal invasion of Ukraine. They all affect all areas of security.

Under these conditions, what stands at the basis of these movements and social crises? The economic poverty and the supposed crisis of societal identity generated by the cultural interference of immigrants in the American and European majority culture (Xinchun, 2020, p. 39)?

We believe that an affirmative answer to such a question would be too simplistic, as it is quite far removed from reality, and would obviously be almost exclusively in accord with the Chinese Communist Party's foreign policy doctrine.

However, this does not mean that identifying the genesis factors of the current global crises should be ignored, especially by the states that define themselves as democratic-liberal. Moreover, at least in the case of crises in the Euro-Atlantic space there are accusations and evidence regarding the involvement of the Russian Federation (Cunningham, 2020) and the People's Republic of China (Solon, Dilanian, 2020) in informational manipulation and fake news campaigns through social networks. Consequently, we can investigate the premise of digital social media platforms being employed as new means of digital power utilized by some states against others as part of a more comprehensive information operations campaigns.

However, we agree that currently the world scene is being affected by *uncertainty due to globalization and digitalization* and we are witnessing a process of de-globalization in the sense of slowing down and reconfiguring global economic exchanges and resizing regional and global security, generated especially by initiating a new global strategic confrontation.

However, if the global competition specific to the second half of the 20th century was based predominantly on the confrontation of two economic models – capitalism versus communism, the current global competition has a higher level of importance, being based on the confrontation between two diametrically opposed ideological systems, democratic-liberal and authoritarian-illiberal, obviously represented by the two big current global state actors, the USA and China.

Like a centrifugal effect, this new geopolitical confrontation and mutation of the international security environment has already contaminated and will inevitably keep on globally contaminating more and more state and non-state actors of varying sizes and importance.

Even though some Asian authors are already preaching the globally decline and failure of Western politics and are clamouring for China's centralized leadership

and its policy of *"putting the people first"* (Peng, 2020, p. 11), we believe it is far too early to reach such conclusions. At least for citizens of the former communist states of Eastern Europe who were born after 1991, such a claim could be viewed with great scepticism.

For how can you put people first and what kind of global leader can you be considering the accusations of using digitalization to increase authoritarian social control over your own population through a social credit system (Canales, 2021), or affecting the human rights of a *"vociferous"* minority, such as the one of the Muslim Uyghur minority in China's Xinjiang region (Minority Rights Group International, 2007)?

QUO VADIS?

At the beginning of the digital century, humanity is witnessing a confrontational diversification with repercussions at both state and non-state levels, manifested both in the physical-real space and in the digital/cybernetic-virtual space.

The current background consists of the worldwide amplification of digitalization and the development of multiple security crises manifested almost simultaneously at the regional or global level. De-globalization through the slowdown of international trade; SARSCOV-2 medical crisis; the financial and economic crisis; the food and energy crisis; social protests generated by financial inequality; the political rise of the populist and extremist movement; increasing global economic inequality; and, last but not least, the illegal military invasion of Ukraine by the Russian Federation are just some examples.

Therefore, *the international security environment at the beginning of the 21st century is in the process of rearranging the world order, which promises to be unpredictable and fluctuating, full of dangers and threats to the security of all security subjects – individuals, communities, states.*

Among these dangers and threats, the competition between the US and China for world supremacy, especially in the field of digitalization and control of the cyber and digital space, particularly draws our attention.

Thus, *digital confrontations take on new historical dimensions and show a global increase in scale, especially through new types of digital conflicts – cyber attacks and threats; and, last but not least, the global risks posed by the digitalization of the field of defence and automation of combat weapons.*

We agree that the security environment of the present century will be characterized by at least three essential features, such as *opacity in government*

transparency, confused and competitive global interventionism, and inadequate responses to security crises (Gowan, 2018). However, we believe that these features must be supplemented by the fourth, namely the *digital bipolarism and competition*, manifested by the *exponential development of digitalization and its expected disruptive impact on all types of security subjects – state, societal and individual*.

Despite the complexity and diversification of regional and international security structures that have developed since 1950 to the present days, it is becoming increasingly clear that they have not been prepared to diminish and neutralize current dangers.

Therefore, humanity and international security is currently evolving from a global “cold war” specific to the 20th century, which consolidated peace in Europe, to a “hot peace” that includes a war at the eastern end of Europe and reshapes the world order.

In conclusion, given the experience of the 20th century, we are confident that a major nuclear conflict will be avoided in the 21st century, but the nuclear threat is joined by a new type of *digital threat* that must be diminished.

Are societies and the current national, regional and international security structures capable of countering this new type of threat, or is it time to reconfigure the security systems?

We take this opportunity to invite specialists and the general public to answer such a question, and within this context, we note the establishment in Bucharest of the Euro-Atlantic Centre for Resilience, which aims to promote and pursue resilience objectives within seven communities of interests, including societal resilience, emerging and disruptive technologies, or the resilience of communication systems and new technological ecosystems (Euro-Atlantic Resilience Centre, 2022).

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BLACK SEA'S STRATEGIC IMPORTANCE AND NATO'S ROLE IN COUNTERING THE KREMLIN'S MILITARY DOMINATION

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The Black Sea region has become one of the key geopolitical spaces for the competition between Russia and the West on which the very future of Europe ultimately depends. The Kremlin wants to keep the Black Sea in its sphere of influence through a strategy of regional destabilisation based on a special military operation against Ukraine, the illegal annexation of new territories, historically considered to belong to Russia, and the strengthening of the military presence in these territories or the direct military threat to the states in the region in order to limit as much as possible the possibilities of their accession to the Euro-Atlantic structures. On the other hand, the West is trying to respond to Russia's expansion with an advanced defence strategy in which the Black Sea occupies a central place. Thus, the Black Sea region, which has traditionally been treated as a less important area, acquires new strategic features becoming a much more militarised, unstable and contested region, a region that is in dire need of a new regional status-quo in order to stabilise. Considering this state of facts, this article has as its main objective the geopolitical analysis of the Black Sea region, given that Russia has become the main destabilising factor in the region, as well as the identification of solutions to achieve regional stability based on the increasingly consistent involvement of the North Atlantic Alliance.

Keywords: geopolitical space; independent states; Ukraine; the Black Sea; NATO New Strategic Concept;

INTRODUCTION

In the years since the end of the Cold War, the global distribution of power has been in a permanent reset. The position of the US, as the most influential power in the international system, has been increasingly challenged, and the recent rise of regional powers has led to the creation of real conditions for the change of this world order. In this context, the Russian Federation, through its retaliatory attempts to strengthen its regional and global role and thereby restore its status as a major player in the international system, is at the forefront of these developments. Russians believe that they rightfully belong among the world's Great Powers, and that is why Vladimir Putin is doing everything to counter perceived threats to that goal. The strategy adopted in this regard is based, first of all, on dominating the regional subsystem and establishing it as a zone of direct/indirect control around Russia's borders followed by the expansion of influence in more distant regions. This strategy is more than evident today when, without any hesitation, Russia illegally invaded Ukraine trying by force of arms to block the Euro-Atlantic integration of this country, keeping it in its zone of influence as a buffer zone between it and a West which became more and more challenging for its own security. Moreover, by threatening the use of nuclear weapons, Russia's war against Ukraine has gone beyond the stage of a simple threat to this state's sovereignty and integrity, becoming a threat to European and global peace and security.

At the same time, the war in Ukraine takes the Black Sea region out of the shadow cone it was in, placing it in a geostrategic context of utmost importance for the security of the contemporary world. Although the anti access/area denial (A2/AD) and hybrid warfare strategy were practiced by Russia in this region long before the invasion of Ukraine, even before the annexation of the Crimean peninsula in 2014, as clear signs of the fact that the Black is becoming one of the geopolitical spaces of great interest for the Kremlin, the West largely ignored these signs, not giving them their due importance. Under these conditions, the Russian Federation did everything in its power to keep the Black Sea within its sphere of influence and to control the regions of immediate interest. Russia's reaction to Georgia's and, more recently, Ukraine's attempts to integrate into NATO and the EU are instructive examples of this strategy. On the other hand, the desire for Euro-

Atlantic integration of the states that were once part of the communist bloc either as independent states or as republics of the former USSR corroborated with NATO and the EU expansion near the borders of the former superpower were perceived as threats towards Russia and used as motivation for its illegal military response first in Georgia in 2008 and then in Ukraine in 2014 and 2022 respectively. On the other hand, the West is trying to respond to Russia's expansion with an advanced defence strategy in which the Black Sea occupies a central place.

Thus, the Black Sea region, which has traditionally been treated as a less important area, acquires new strategic features becoming a much more militarised, unstable and contested region, a region that is in dire need of a new regional status-quo in order to stabilize. Considering this state of facts, this article has as its main objective the geopolitical analysis of the Black Sea region, given that Russia has become the main destabilising factor in the region, as well as the identification of solutions to achieve regional stability based on the increasingly consistent involvement of North Atlantic Alliance.

WHY IS THE BLACK SEA SUCH AN IMPORTANT REGION FOR RUSSIA?

Geographically, the Russian Federation is the largest country in the world, covering more than 1/8 of the Earth's land surface. However, relative to this huge area, Russia's population is only about 142 million, which is strongly concentrated in the western part, the rest of the territory being sparsely populated (CIA, 2016). From a military point of view, the defence of this extensive territory, which borders 14 different countries, along a border of more than 22,500 km, in the vast majority of which is not marked by any significant geographical barrier, has always represented a difficult task (STRATFOR).

Therefore, throughout history the defence of its borders against potential enemies has been an essential problem for which Russian leaders have decided that the only option is to *expand the borders*, in order to create a buffer zone that acts as a defensible barrier against its rivals. *"I can only defend my borders in one way, to expand them"* (Talbot, 2009, p. 133), said Empress Catherine the Great, and this option of ensuring security through expansion of borders would lead to the creation of the Russian Empire. Thus, after the creation of the Grand Duchy of Moscow from the 14th century followed centuries of expansion until the Soviet era when the Russian Empire reached its greatest extent (Friedman, 2012, p. 9).

During the period of Peter the Great, Russia began its expansion to the West and South, managing to complete the conquest of Crimea, the Caucasus region and Central Asia by the end of the 19th century, after having previously annexed the Baltic region, territories from Poland and Ukraine, reaching the Baltic Sea and the Carpathian Mountains to the West (Ib., p. 4). Russia's direct access to the Black Sea region (through the ports of Kerch and Azov) is confirmed by the signing of the Treaty of Küçük Kaynarca in 1774. Therefore, the end of the 19th century is the historical moment when the Russian Empire conquers the territories adjacent to the Black Sea and turns them into a buffer zone for the defence of its Southern border and obtains direct access to this sea.

Later, Catherine the Great made it possible to establish the first ports on the Black Sea, usable throughout the year, thus contributing to the consolidation of efforts to transform Russia into a naval power. Since 1783, the year in which the foundation stone of the city of Sevastopol was laid, the Black Sea has become a disputed space between the Tsarist and Ottoman Empires, later the USSR and Turkey (after the breakup of the two empires at the end of the First World War). The Black Sea region proved to be extremely important for the two empires and this fact is demonstrated by the events that marked the history of this region. First there was the Crimean War (1853-1856), then the treaties that attempted to redefine the region's geopolitics (Treaty of Sèvres – 1920, Treaty of Lausanne – 1923) followed by the signing of the Montreux Convention – 1936. Despite a so-called Straits Crisis in 1946, in the period after the Second World War the Black Sea region was characterised by a geopolitical balance determined by Turkey, NATO, the United States and the USSR. But this geopolitical balance was to be shattered by the collapse of the Soviet Union in 1991. This event caused Russia to lose important territories in the West and South, most of them constituted in valuable buffer zones, and brought insecurity to the new Russian borders (Kuchins, 2000). So, the loss of control over important territories, as is the case of the Black Sea region, has caused great concern for Kremlin, and the situation has increased in complexity when the Central and Eastern European states, whether former Soviet republics or former satellites of the USSR asked one by one to join NATO and the European Union, and the expansion of the two Western organisations brought them closer to Russia's borders.

In this context, Russia was forced to do everything in its power to keep the Black Sea region in its sphere of influence and stop the growth of Western influence in the region, as well as the Euro-Atlantic integration of states that, traditionally,

constituted its strategic buffer zone. Thus, Russia first used the tactics of frozen conflicts, which it later combined with a whole arsenal of hybrid/unconventional tactics, with the construction of an Anti Access/Area Denial type zone, followed by the *green men* type of aggression, forcing the limits of international law, to end up triggering a real conventional war against a sovereign state, precisely because it refused to continue playing the role of a buffer zone. But for Russia, the Black Sea region is also important for the fact that it represents the only exit to the *warm seas* where it can make its military presence felt. So, for Russia, the geostrategic factors of the Black Sea region remain unchanged since 1853, only the main geopolitical competitors of Russia of those times have been replaced by NATO, the EU and the USA, otherwise Crimea has remained the source of military conflict, Turkey represents the same strategic pivot, and the control of the straits still represents the same strategic objective that leads to Russia's access and military presence in the eastern Mediterranean as a counterbalance to the US and NATO expansion towards the Middle East.

As things currently stand, the Black Sea will continue to witness aggressive Russian military actions and threats to use tactical nuclear weapons. On the other hand, Russia will continue to put the Black Sea under the hybrid pressures, including economic pressures, disinformation, cyber attacks or information campaigns with the aim of eroding the confidence of the riparian NATO member states in the Alliance's ability to defend them and deter non-NATO members to request integration into the Euro-Atlantic organisational structures. One way or another, through actions of the type listed above, Russia will continue to put pressure on all states in the Black Sea region. With no prospect of an end of the Russia's illegal war of aggression against it, Ukraine will be the hardest hit. With some of its most important territories lost, critical infrastructure destroyed and its economy severely damaged, Ukraine has no prospect of improving its relationship with Russia, even if it enjoys massive support from the West. The Republic of Moldova and Georgia are two other states in the Black Sea region, former Soviet republics, therefore located in the area considered a strategic buffer zone for Russia, which will continue to be under pressure from Moscow. The frozen conflicts on their territory, initiated and maintained by Russia, represent constant Kremlin's obstacles against these two countries institutional strengthening and Euro-Atlantic integration. Romania is also a Kremlin's target which, through a hybrid strategy that currently emphasizes bellicose rhetoric, is trying to call into question the benefits of our country resulting from Euro-Atlantic integration. It is expected that this rhetoric will intensify,

and it is not excluded that in addition Russia will use other nationalist tactics with the help of which to induce doubts about the national unity of Romania and the importance of Western values. Despite the strategic rapprochement with Russia, Turkey will never let go of its suspicions regarding Moscow's age-old dream of taking control of the Bosphorus and Dardanelles straits. Moreover, we are currently witnessing an increasingly consistent encirclement of Turkey by Russian contingents deployed in the Black Sea area, in the Caucasus and Syria. Even Bulgaria, a country of slavic origin and traditionally in a relaxed relationship with Kremlin, ended up being spied on by Russia by using high-ranking officials from the Ministry of Defence in Sofia.

Therefore, the Black Sea region is extremely important for Russia, which will not stop using complex tactics, either hybrid or conventional, including the threat of using tactical nuclear weapons, to achieve its strategic goals of maintaining this area far from Western influences.

WHY IS THE BLACK SEA AN IMPORTANT REGION FOR THE WEST?

Despite the fact that in current language we use the concept of the Black Sea region, in reality, the Black Sea represents a region only from a geographical point of view. The states in the region do not have a common history, they do not have common identity and culture roots, they have put on hold all forms of common economic, political and military cooperation, summing up only to forms of bilateral cooperation. The only thing that creates a unique perception is the hatred towards the common enemy, Russia. Therefore, the regionalisation of the Black Sea must be looked at very carefully, especially in the states located in this area. The more they support the idea of regionalisation, the harder it will be for them to understand the lack of a Western strategy regarding this region.

However, the Black Sea area is of crucial importance to Europe and the US, being a major geopolitical crossroads determined by the critical intersection of the East-West and North-South corridors. Many experts believe that whoever controls or dominates the Black Sea can easily project power on the European continent, mainly in the Balkans and Central Europe, but also in the Eastern Mediterranean, as well as in the South Caucasus and the northern Middle East (Anastasov, 2018).

Russia's war of invasion of Ukraine has turned the Black Sea region into the provider of the most serious threats to the European security architecture since World War II. The West saw itself in the face of a *fait accompli*, Russia invaded

a sovereign country which it stripped of its important territories, and through this gesture showed that it is not only challenging the regional order in the Black Sea area, but is openly challenging the post Cold War world order itself. And for this, Russia uses conventional military force, applies asymmetric means of warfare and threatens to use tactical nuclear weapons to oppose the sovereign decisions of the former Soviet republics in the so-called *near abroad*, and to stop both their internal democratization processes, as well as their Euro-Atlantic integration. But above all, Russia wants to stop Western influences in these states and keep NATO and the EU as far as possible from its borders and out of its strategic buffer zone.

Under these circumstances, for the West, the Black Sea region acquires new strategic values, this area becoming one of the key geopolitical spaces for the competition with Russia, a competition on which, ultimately, the very future of Europe depends. The Kremlin wants to keep the Black Sea in its sphere of influence through a strategy of regional destabilisation based on a special military operation against Ukraine, the illegal annexation of new territories, historically considered to belong to Russia, and strengthening of the military presence in these territories or the direct military threat to the states in the region in order to limit as much as possible their Euro-Atlantic accession. On the other hand, the West is trying to respond to Russia's expansion with an advanced defence strategy in which the Black Sea occupies a central place. That is why the Black Sea region, which has traditionally been treated by the West as a less important area, acquires new strategic valences becoming a much more militarised, more unstable and contested region, a region that in order to stabilize is in urgent need of a new regional status-quo.

NATO'S ROLE IN STABILISING THE BLACK SEA REGION

In the current strategic context, NATO seems to be the most appropriate vehicle for the articulation of a unifying strategic vision that leads to the consolidation of regional security and to stopping Russia's ambitions, put into practice through military force. The North Atlantic Alliance can take a series of steps to secure the region and support both member and non-member states in promoting their own interests, respectively aspirations for Euro-Atlantic integration. First, the Alliance should start a process of creating a NATO strategy for the Black Sea. The Alliance must take into account the diversity of interests of the states in the region and develop meaningful ways of collaborating with each one. Many of NATO's recent initiatives have not taken these aspects into account and have failed to meet expectations. In addition, as part of this strategy NATO should encourage

the establishment of a permanent naval group in the Black Sea, whose primary mission would be maritime patrol (modelled on the successful air policing mission in the Baltic area) to maintain a robust NATO presence in this area, in accordance with the 1936 Montreux Convention.

Through these measures, the allies could demonstrate that the Black Sea is a very important region for NATO and therefore must receive the attention it deserves. A separate NATO strategy and support for the Black Sea countries would send a message that the Alliance takes the region seriously. Maybe NATO should have done this years ago, and then we would not have been in a situation of almost direct confrontation with Russia, but maybe it's not too late either. And this also considering the fact that the Black Sea is so interdependent with the Mediterranean and the Middle East region that what happens in the Black Sea is unlikely to stay only in the Black Sea. The geopolitical implications are multiple and that is why they must be analysed and followed by practical actions.

At the Madrid summit in June 2022, NATO adopted a *new strategic concept*, on which occasion it announced its strategy for the next decade. Although, regarding the Black Sea region, the most important programmatic document of the North Atlantic Alliance only includes the option of increasing the presence of NATO forces on the eastern border of the alliance, it paves the way for the development of a strategy dedicated to this region. The presence of NATO forces on the eastern border is a key issue in the context of Russia's ongoing war in Ukraine, but equally important is the creation of a strategy for the Black Sea region.

For the countries in the region, this aspect is encouraging. Before Russia's first aggression against Ukraine in 2014, NATO's strategic vision of the Black Sea region was almost non-existent, limited to brief mentions of the region in official statements and communiqués. Even after the annexation of Crimea, at the 2014 NATO Summit in Wales, the allies did not consider it useful to adopt a clear vision of the Black Sea region. It was only considered that Russia's actions were contrary to the international principles that were the basis for the adoption of the Trust-Building Measures in the Black Sea (Document on Trust-Building Measures in the Black Sea) adopted in 2002 (Ibid.). However, NATO's response after 2014 to the threat posed by Russia to the members in the Black Sea region was to establish an advanced presence – Forward Presence (FP) and an enhanced presence – enhanced Forward Presence (eFP) in the Baltic Sea region. So the Alliance treated the two regions differently even though the threat was the same, Russia.

Subsequently, NATO began to pay more attention to the Black Sea region in order to emphasize more clearly Russia's aggressive actions in this area at the Warsaw summit in 2016. The allies realised that, through military activities in the Black Sea, Russia was strengthening its position in Crimea and deploying new capabilities that would allow it to project its power in the Mediterranean. Therefore, the decisions adopted at this summit also referred to the support that must be given to Romania to establish a multinational brigade in order to facilitate the integrated training of allied units affiliated to the South-East Multinational Division and to develop the surveillance and air defence of Georgia.

NATO's attention on the Black Sea region continued to grow so that at the Brussels Summit in 2018, the Alliance adopted new measures to strengthen security in this area. From a military point of view, the decisions aimed at strengthening the maritime presence, in the context of establishing an appropriate forward military presence – Tailored Forward Presence in the Black Sea region and developing cooperation with its partners Georgia, respectively Ukraine. Later, at the Brussels summit in 2021, the allies condemned Russia for its military build-up in the Black Sea, demanding an immediate end to the blockade measures of Ukrainian ports and the Sea of Azov.

Two years later, at the 2021 Brussels Summit, NATO's communiqué began to outline other areas of commitment in strengthening the security of the Black Sea: strengthening the allied maritime posture, increasing NATO's presence and activity, and developing cooperation between the alliance and its partners: Georgia and Ukraine. Tailored Forward Presence (TFP) was established in the Black Sea region, still maintaining differences between eFP and TFP.

Given the situation in the Black Sea region after Russia's invasion of Ukraine, it was expected that the *new strategic concept* adopted by NATO at the Madrid summit in June 2022 would pave the way for the adoption of a long-awaited strategy for the Black Sea region. Indeed the NATO Strategic Concept adopted in Madrid identified revisionist Russia as an adversary of the Alliance and showed the need for a strengthened NATO force position in the east. Even if they do not mention it directly, these outlines pave the way for starting a process of creating a real strategy for the Black Sea region.

However, for the development of such a strategy, NATO states in the region, Turkey, Bulgaria and Romania, should, for the most part, speak with one voice. For now, the three NATO countries bordering the Black Sea lack a common perspective on the regional threat and the best ways forward to combat it, and that is essential

for a NATO strategy. On the other hand, the increased military presence in the Black Sea is more than necessary, but the necessary force structure must be analysed very carefully. The multiplier factor of surveillance and reconnaissance (ISR) capabilities, unmanned systems or those that ensure increased mobility must be taken into account for the success of a credible deterrence promoted by NATO in the Black Sea. The response to hybrid threats must also be taken into account, and with regard to economic security measures, especially in the energy and food fields, coordination with the European Union, but also with other international entities, will be essential. Last but not least, a NATO strategy for the Black Sea will also have to meet the expectations of the non-NATO partners in this area, Ukraine, Moldova and Georgia. Undoubtedly, Ukraine is the most seriously affected country by the war it is forced to wage with Russia, and no one can say at this time when and how this war will end. However, Ukraine must already be given a chance from the allies to at least support post-war reconstruction, economic recovery and destroyed critical infrastructure, military capabilities and democratic consolidation. As for the Republic of Moldova and Georgia, it seems that they will continue to be the target of Russian pressure and, in the hope that they will not be the target of any special Russian military operation, they will need to be supported primarily to successfully deal with external hybrid actions and strengthen themselves as independent states and democracies. Regarding the three countries Euro-Atlantic integration, it is probably difficult to identify a path in the short term, but in the medium and long term, nothing is excluded.

So, in order not to allow Russia to strengthen its position in the Black Sea region, which would enable it to strategically control this area and ensure its base of action in the Eastern Mediterranean, becoming a potential threat to the key interests of NATO allies, the Alliance will have to adopt a clear strategy in this area. It is more than obvious that the NATO allies have a clear interest in preventing the Black Sea from becoming a Russian lake, and for that, a new geopolitical vision of this region is needed. Developments in the Black Sea region are connected to developments in other areas adjacent to it, especially the Mediterranean Sea and the Baltic Sea.

THE GEOSTRATEGIC RESETTLEMENT OF THE BLACK SEA REGION

At the moment, the situation in the Black Sea region is extremely difficult, which is why it requires an immediate solution to end the violence and the war in Ukraine, and in the medium and long term, a new geostrategic approach to the region is needed. Instead of a large-scale regional project based on the accession of all states

to NATO and the EU, a project based on smaller initiatives that are new or based on other existing strategic cooperation formats should be considered. It is possible that some of these initiatives have their success rate while others fail, but that cannot be known until they are tried. This does not mean that countries like Ukraine or Georgia should stop thinking to NATO and the EU accession. On the contrary, they must dose their accession effort by means of initiatives based on the cultivation of bilateral and plurilateral relations, initiatives that may even lead to a regional recalibration.

After the end of the Cold War, the states bordering the Black Sea tried several regional cooperation initiatives, more or less successful. However, when Russia invaded Ukraine, all these initiatives reduced their activity to the maximum that it can be said that they almost do not exist anymore. The reason is easy to explain since all cooperation initiatives have taken into account the fact that Russia not only should not be excluded, but it is absolutely necessary for Russia to be part of these initiatives. But even if Russia has excluded itself through its actions, these regional cooperation initiatives must continue. The states of the Black Sea region can and should continue themselves their efforts to build regional cooperation, even if there is no actor among them that can sufficiently stimulate cooperation in the region. Apart from Russia, the regional actor that could play this role would be Turkey, but given its limited military presence in the Black Sea and its external orientation towards the Middle East and the Caucasus, at least in the short term Turkey cannot fulfil this role.

In these conditions, one should look with more confidence towards other regional initiatives such as the Three Seas Initiative or Bucharest 9 which can create the effect of deterring the adversary, making the transition from a type of defence through sanctions (deterrence by punishment) to one much more efficient and adapted to local/regional capacities, such as defence by denial of anticipated gains (deterrence by denial) (Zamfir, 2021). In this sense, the tactics employed by the Baltic states are worth following, the lessons learned by them can be extremely useful for the states in the Black Sea region as well.

As I have already mentioned, over time the countries of the Black Sea region have tried several plurilateral initiatives, not all of them successful. The steps taken within these initiatives highlighted the considerable disagreements between NATO's Black Sea allies and partners. That is why, in order to strengthen the dialogue leading to the mitigation of these disagreements, it would be necessary to create a *Black Sea Forum*, following the model of the *Northern Future Forum* as a regional

dialogue platform within which the states in this area can harmonize opinions and alleviates tensions that may arise between them. It is obvious that in the current situation Russia could not be a member of this forum, but such initiatives can also work without Russia.

To the extent that attention will be focused on initiatives such as the Three Seas Initiative or Bucharest 9, the Baltic and Black Sea regions will be increasingly connected, and the integrated space of the two regions should be simultaneously reformed and redefined not as the eastern flank of Europe, but as the gateway to the continent, not only for Russia, but also for other actors such as China and its Belt and Road Initiative (Galeotti, Lanoszka, Rogers, 2021, p. 26). On the other hand, Turkey's regional policy shows that the Black Sea should be seen as a Euro-Atlantic gateway to the Middle East. Moreover, if Moscow succeeds in dominating the region, it would almost certainly strengthen its position in the eastern Mediterranean, jeopardizing the main sea gateway between Europe and the Indo-Pacific region (via the Suez Canal) (Ibid., p. 27). Therefore, the Black Sea region could be connected not only to the Baltic region to the north but also to the eastern Mediterranean so that what happens in one of these regions has an impact on the other two. In this way, a new vision on the regionalisation of the Black Sea would lead to its geostrategic redefinition taking into account a regional modelling along the north-south geopolitical axis and a regional opening along the east-west geopolitical axis.

CONCLUSIONS

The West is facing unprecedented political-military developments in the Black Sea region, which has made it one of the most vulnerable geographical areas in modern Eurasian geopolitics (Avdaliani, 2022). The Black Sea is not only the space where the Russian-Ukrainian military conflict is taking place, but also the intersection of two geopolitical axes that determine the geostrategic reshaping of this region. Russia sees the region as a buffer zone for the defence of its traditional borders, as well as a launching pad for its geopolitical goals in the eastern Mediterranean. Moscow has adopted a regional strategy based on a hierarchical regionalism in which Russia controls this area and in which the West has limited access. Russia's pressures on states in the region, and especially the war against Ukraine, represent not only Moscow's response to Western interference in its near abroad, but also Russia's desire **to return to the world elite with the intention of getting involved in the reshaping of the world order.**

In this context, in the absence of a long-term Western strategic thinking regarding the Black Sea region, NATO and the EU are struggling to find an adequate response to the change in the military balance of power in the Black Sea and to Russia's retaliatory actions. The problem is that the West still does not really know how to approach Moscow. Russia has certainly become stronger than it was in the 1990s, but it has yet to prove how strong it really is, and that is why the West is still hesitating. But, based on the new Strategic Concept adopted in Madrid in the summer of 2022, NATO could build a strong strategy to counter Russia in the Black Sea with effects in other related regions as well.

The process will not be easy at all because in the Black Sea NATO still does not have a strong ally or even a reliable partner to build a strategic approach. Ukraine is destroyed by war with Russia, and Georgia is smaller and weaker, while Romania and Bulgaria are not seen as actors willing to take on this role. Turkey would be the only state that could serve this purpose. For the moment, however, Turkey not only has a reduced presence in the Black Sea, but the unresolved differences between Ankara and the West represent the most important obstacle.

However, a NATO strategy for the Black Sea region is more than necessary and it must also lead to the geostrategic reshaping of the area. For this purpose, existing regional initiatives must be used, especially those that address regionalisation along the north-south geopolitical axis and open the region along the east-west geopolitical axis.

Regardless of what the future developments will be, the North Atlantic Alliance must assume an increased role in the Black Sea region with the aim of, in the short term, stopping Russia's violent actions in the war in Ukraine and countering its bellicose rhetoric against the states in the area, and in the long term, to adopt an integrated strategy to maintain peace and security in this area.

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THE STRATEGIC NUCLEAR TREATY REGIME AT A CROSSROADS. THE (IM)POSSIBLE SEARCH FOR A NEW POINT OF BALANCE?

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The qualitative and quantitative balance in strategic nuclear capabilities between major global nuclear-armed states had been the subject of a longstanding international bilateral and multilateral treaty regime, which since the onset of the 21st century has undergone a process of continual degradation. With the gradual establishment of a more confrontational multipolar world order, the treaty regime as well as the guarantees it provided for international security have come into further peril. The present paper will examine the defining characteristics of the nuclear treaty regime, the factors leading to a point of balance in preceding decades between the nuclear superpowers of the United States of America and the Russian Federation, and the transformational factors, which have destabilised the balance in contemporary times. Furthermore, the paper will extend the discussion on the future of nuclear arms control to the changing geopolitical landscape and the rise of new major global powers such as the People's Republic of China. Ultimately the paper, attempts to establish the framework of the future evolution of the nuclear arms debate and the possibilities of reaching a new point of stability and deterrence between the mentioned state actors.

Keywords: USA; Russia; China; New START; nuclear weapons; nuclear proliferation;

INTRODUCTION

At the onset of the third decade of the 21st century the continued stability of the international system appears ever more precarious with the developing fault lines between major regional and global powers. As the interests of major political actors shift towards a more confrontational stance, a return to the division and uncertainties reminiscent of previous eras has transitioned from possibly into reality. In the shaping new global environment, past notions and established principles are becoming quickly irrelevant and castoff, especially when pertaining to the issues of nuclear security and the strategic nuclear balance between major global powers.

With the degradation in relations between the two historical nuclear “superpowers” of the United States of America (USA) and the Russian Federation (Russia), which now again find themselves on the opposing sides of a proverbial global division, the final surviving elements of the diverse decades old treaty framework governing the subject of nuclear security have been progressively discarded, placing the international system in a state of heightened uncertainty and instability, reminiscent of the darkest days of the Cold War-era nuclear arms race. On the backdrop of the rising tensions between the USA and Russia, the People's Republic of China (China) has transformed its meteoric economic rise into a military one, becoming the third largest nuclear state, and developing capabilities that would put it on par with both the USA and Russia.

In this new reality, the previously established balance becomes questionable, many of its elements being already part of the past. With new nuclear arms race already gaining pace between the three powers, the question as to whether a new point of balance can be reached, and whether the former systems of stability and security can be reconfigured or reconstructed to suit modern realities becomes an existential enquiry on the future of human civilisation.

Within the present paper, the essence of what is termed the historical “nuclear treaty regime” is examined, its rise and fall as a structure of the international system, as well as the specific factors manifesting over the preceding decades, which have placed the major nuclear powers of the contemporary era ever further from the point of balance, which had been established. The ultimate objective being to establish whether the currently unfolding processes of nuclear competition can be

contained into a new framework, the factors acting both in its favour and against its materialisation and the possibility for such a proverbial regulatory regime to exist within the confines of a multipolar world made up of powers with radically different approaches, capabilities and postures are considered.

THE POINT OF BALANCE AND THE NUCLEAR TREATY REGIME. A BRIEF SUMMARISATION

In order to understand the contemporary and future potential state of affairs surrounding the “*nuclear treaty regime*”, and how major nuclear powers have moved away from a previous “*point of balance*” within it, it is first necessary to understand what is meant by these terms both in general scientific discussions and within the confines of the specific paper.

A “*regime*”, by definition, is a “*particular way of operating or organising a system*”. The system in question pertains to the wide system of international treaties, which has come to materialise in the past seven decades towards ascribing certain limitations to the existence, proliferation, qualitative and quantitative characteristics of fission and fusion weapons and their deployment across nation-states, and to regulate their impact across the wider security spectrum in intranational affairs and the international system, with the principal goal of maintaining deterrence through nuclear means. The specific interactions and objectives of the interrelationships between such treaties are defined together, in a system of overall relations and outcomes, as the “*nuclear treaty regime*”. The overall state of this system, when in consideration of the major nuclear powers and their respective security perceptions, had reached a point of parity in capabilities and thus a stable condition, is defined as the “*point of balance*”, which under duress and according to changes in one or more elements of the larger system can correspondingly shift.

The nuclear treaty regime and its corresponding elements and characteristics necessitate further clarification and explanation in projecting its evolution and impact across time, leading up to the present moment. As previously stated, the regime is centred on the existence of an array of treaties, which in their individual conceptions bear the hallmarks of the post-Second World War international system, namely the realisation of the power of the atom as a weapons system of new unparalleled authority in the arsenal of the nation-state, and the evolution of the international system around a “*rules-based*” world order in its search for peace, balance and stability, working international mechanisms of agreement, regulation, enforcement and verification, in particular between the powers of the bipolar Cold War world order.

The nuclear treaty regime can be subdivided into two aspects of its existence. There are the international treaties, which encompass the larger international system, which primarily focused on preventing the proliferation of nuclear weapons technology beyond the already existing “*recognised*” “*club of nuclear weapons states*”, limiting the usage of atomic power to peaceful purposes, and providing for instruments of verification and enforcement of the agreed upon international rules. The principal treaty in this regard is the Nuclear Non-Proliferation Treaty (NPT) of 1968. An assortment of other treaties was established to also prohibit the placement of nuclear weapons in specific environs, understood to be unclaimable by any specific nation state, such as outer space, Antarctica and the ocean floor, with the Outer Space Treaty of 1967, prohibiting the placement of nuclear weapons in outer space; the Antarctic Treaty of 1959, stipulating the same for the frozen continent; and the Seabed Arms Control Treaty of 1971, preventing placement of nuclear weapons on the seafloor. Progressively, regional treaties have also been established to prohibit the placement of nuclear weapons by outside powers in specific regions of the globe, thus establishing so-called “*nuclear-free zones*”, with some examples being the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean of 1968; the South Pacific Nuclear Free Zone Treaty of 1985; the Southeast Asian Nuclear-Weapon-Free Zone Treaty of 1995; and the African Nuclear-Weapon-Free Zone Treaty of 1996. A further regulative framework was continuously established to reduce and ultimately prohibit the active nuclear testing by nuclear-armed states, and thus limit environmental consequences and the ability of non-nuclear states to proceed with active programs, these treaties sequentially being the Partial Nuclear Test Ban Treaty of 1967; the Threshold Test Ban Treaty of 1974; and the Comprehensive Nuclear-Test-Ban Treaty of 1996 (which unfortunately has not come into force due to the lack of ratification by some major powers, but whose valid signatories have retained from undermining its stipulations). On the other side of the spectrum exist the bilateral treaties between the two historical nuclear super-powers of the United States of America and the Soviet Union/Russian Federation, which have evolved into their own sub-framework of treaties as part of the broader system of the nuclear treaty regime, striving towards quantitative reductions, but also a diverse array of qualitative limitations in offensive and defensive capabilities of both states in specific categories of nuclear and nuclear-related armaments. These treaties in turn formed the centrepiece of the search for a point of balance in the construction of the nuclear treaty regime,

and include: the Anti-Ballistic Missile Treaty or ABM Treaty of 1972 (Bureau of Arms Control, Verification and Compliance, 1972), which recognised an arms race in ABM systems as being potentially catastrophic to “conventional” nuclear deterrence, and thus limited the number of sites and of protected objects of the larger nuclear infrastructure to only two; the Strategic Arms Limitation Talks or SALT I (1972) and SALT II (1979), which sought to begin a facilitated process of bilateral talks on reduction of intercontinental ballistic missiles (ICBMs), general reduction of the number of warheads, and to overall construct a platform for facilitating further contact negotiations, and despite not achieving specific treaty results, fulfilled their penultimate role as a facilitator of an expanded treaty framework; the Intermediate-Range Nuclear Forces Treaty or INF Treaty of 1987, which effectively eliminated the entire class of ground-launched intermediate-range ballistic (IRBM) and cruise (GLCM) missiles from the inventories of both states; and finally the sequential series of Strategic Arms Reduction treaties or START (1991) (US Department of State, 1991), which began the deconstruction of the Cold War-era nuclear arsenals towards more economical and manageable levels, whilst ensuring a stable parity in strategic offensive capabilities, aimed at achieving a minimum level of deterrence.

Altogether the nuclear treaty regime, in both aspects of its existence, defines heavy nuances and disproportionalities, which exist to this day and age. The set of treaties in the first category prevented the proliferation of nuclear technology beyond the major victorious powers of the Second World War. The set of treaties in the second category ensured that nuclear deterrence and parity can be achieved and maintained, but also excluded other nuclear powers, or for that matter even non-nuclear powers, from the discussion table on key topics.

THE POST-COLD WAR ERA AND THE DOWNFALL OF THE NUCLEAR TREATY REGIME

The nuclear treaty regime was in its essence a construct of the Cold War world order. Its elements, regulations, nuances and subjective fairness were built upon and centred around the bipolar international system and the principal objective of ensuring peace through nuclear deterrence between the two nuclear superpowers of the USA and USSR and their respective smaller nuclear capable allies, whilst also ensuring that nuclear proliferation did not occur in an uncontrolled and mutually disagreeable fashion.

Thus, when the accepted order of the day, which to a large degree had brought about concrete measures of stability in the qualitative aspects of nuclear arms, and was actively engaged in bringing about significant quantitative reductions, collapsed in 1991 with the fall of the Soviet Union, seismic changes were an expected outcome for the future of the established nuclear treaty regime, as well as the overall state of nuclear stability across the globe. On the one hand, the future state of affairs between the United States of America and the Russian Federation, which was internationally recognised as the inheriting international entity of the Soviet nuclear arsenal, was preserved and evolved further towards maintaining a point of strategic balance in capabilities with the lineage of treaties descending from the SALT negotiations, namely the Strategic Arms Reduction Treaty I (START I) in 1991, START II in 1993 (never came into force, due to reasons elaborated upon in the following paragraphs), Strategic Offensive Reductions Treaty in 2002 (SORT) and NEW START in 2010 (known as START III or SNV III in Russia). Collectively these treaties formed the cornerstone in the efforts of reducing the Cold War-era arsenals towards points of near parity, and would form the last tangible surviving element of the nuclear treaty regime and the nexus of discussion between the USA and Russia into the 2020s. On the other hand, the novel international scene of the post-Cold War era presented new challenges in the control of nuclear proliferation, with Pakistan acquiring nuclear weapons in the late 1990s, the People’s Republic of China continuing its nuclear weapons and delivery mechanism programs, and the Democratic People’s Republic of Korea and the Islamic Republic of Iran striving towards acquiring such weapons, with the former achieving practical results by 2006. These developments were in stark opposition to the controlled order of the bipolar system of the Cold War, and presented a radically new aspect in security considerations internationally, and specifically for the dominant global power in this era, the United States of America.

As these developments coalesce into positions of stark contrast with each other, between past ambitions of nuclear parity and new policy choices towards maintaining strategic superiority in a more complex and precarious international system, the general nuclear treaty regime between the USA and Russia falters, and the system of treaties begins to unwind.

CHANGES IN POLICY. FACTORS OF DISPARITY BETWEEN THE USA AND RUSSIA

Any system, in the examined case that of the nuclear treaty regime, is, in its essence, as strong as its constituent elements, which through their interaction and dependencies ensure its effective operation. When certain elements of the system are put under duress and the overall system loses its ability to afford reconstitution in order to ensure its continued operation, such a system begins the process of degradation, which unless stopped, would inevitably lead to its collapse (Marinov, 2021, pp. 301-311).

As mentioned beforehand, the nuclear treaty regime, as systemised during the Cold War, had the peculiarities and limitations in scope related to the interactions, chiefly between the USA and the USSR, as well as the specific set of threats, in terms of nuclear capabilities, which each posed to one another. In the post-Cold War era, the materialisation of new threats expressed in a growing potential number of nuclear states as well as the proliferation of ballistic missile technology led to a reconstitution in priorities for US offensive and defensive nuclear capabilities, going beyond simple deterrence with its chief nuclear rival.

With the START I Treaty of 1991 setting the path for a general reduction of nuclear arsenals between the USA and Russia, as well as the inability of Russia in both economic potential and political willingness in the 1990s to pursue a renewed stage of nuclear armaments modernisation and competition, the USA reconfigured its nuclear policy. The focus was, thus, shifted away from continuing cost-prohibitive investments in offensive strategic nuclear arms, a policy course, which has remained, in large part, true even today, with the mainstay of US offensive capabilities in 2022 remaining with the legacy Minuteman III (LGM-30G) land-based ICBM and the Trident II (UGM-133A) sea-based SLBM (The International Institute for Strategic Studies, 2022, pp. 48-58). Whilst both missile systems have undergone successive periods of modernisation, no new strategic offensive system has been introduced, with potential replacements not apparent for the near future. The policy choice was made in consideration of the parity established with Russia at the time, as well as the lack of any potential new opponent capable of fielding a nuclear arsenal of sufficient qualitative and quantitative capacity to compete with US capabilities. Instead, the focus of US policy was, by the early 2000s, placed with the consideration in mind of smaller nuclear powers, rogue state actors, or otherwise states with a profusely anti-US position in global affairs threatening US

interests even on the regional level. Thus, by 2002, the USA moved to abandon the ABM Treaty with Russia, and to develop its defensive capabilities, with the stated goal of deterring aggression from rogue state actors. Since then, the USA has developed an array of both land-based (Ground-Based Midcourse Defense and later land-based AEGIS) and sea-based (AEGIS) ABM capabilities, which have consistently evolved over the subsequent two decades to produce a potent missile defence umbrella, especially against states with limited and technologically underdeveloped arsenals. The Russian side responded to the withdrawal of the USA from the BMD Treaty with its own withdrawal from the START II Treaty, immediately following. Russia's own considerations and interests can be interpreted with the specifics of the START II Treaty banning multiple independently targetable re-entry vehicles (MIRVs), and the desire of Russia to maintain its potent arsenal of the UR-100N and the super-heavy R-36M ICBMs, which in turn posed a potent danger even to a well-developed BMD network.

Nevertheless, based upon these developments of the early 2000s, the partially fallacious assumption can be extrapolated that the point of balance had been overall maintained. Strategic priorities had shifted between the two major nuclear superpowers, with one focusing on its defensive capabilities, whilst the other maintaining potent offensive capabilities, cancelling out each other and ensuring a continued state of stable nuclear deterrence. In turn, both sides continued talks on further disarmament, culminating in the SORT Treaty in 2002 and the New START Treaty in 2010, reducing nuclear arsenals and strategic delivery systems to an all-time low by 2022, and the de jure expiration of the latter. However, such initial perceptions depart from the basic structure of the nuclear treaty regime of the Cold War, and the point of stability and balance that it established, recognising that any significant quantitative or qualitative deviation of both sides would be tantamount to undermining the entire system of stability in the longer period of time of a given system's evolution and severity of deployment. The systemic choice had previously been to either limit specific weapons systems for both sides in equal measure, as it had been the case of the ABM Treaty, or outright outlaw weapons categories altogether, such being the cases of land-based intermediate-range missiles (IRBMs) with the INF Treaty or the fractional orbital bombardment system (FOBS) with the Outer-Space Treaty and SALT II. In the two decades since the United States has vastly expanded its ABM capabilities to include an increasing number of launch platforms and increasingly more capable missile interceptors with the SM-2, SM-3 Block IIA

and perspective SM-3 Block IIB, in a missile defence array, which has become responsive and adaptable, owing to the combination of extensive land and space-based early warning and tracking infrastructure, and an expansive and versatile defensive umbrella placed on the large fleet of Ticonderoga-class cruisers and Arleigh Burke-class destroyer, as well set land-based sites (The International Institute for Strategic Studies, 2022, p. 110). In turn, Russia has aggressively pursued the modernisation of its nuclear triad, whilst also investing heavily in novel perspective offensive nuclear weapons systems, the stated goal being a clear opposition and a perceived danger from US ABM capabilities towards the state of deterrence between the two nuclear superpowers. Russia has since introduced the RT-2PM2 Topol-M, RS-24 Yars and RS-26 Rubezh road-mobile ICBMs, the RS-28 Sarmat silo-based ICBM, and the R-29RMU Sineva, R-29RMU2 Layner and RSM-56 Bulava SLBMs (The International Institute for Strategic Studies, 2022, p. 194). In addition, Russia has developed the new carrier platforms with the Borei-class SSBN and a modernised version of the Tu-160 supersonic strategic bomber. A further focus has been placed on developing technological solutions, specifically aimed at overcoming BMD umbrellas with the Avangard hypersonic glide vehicle (HGV), mounted on the UR-100, RS-26, and RS-28 missiles, the Kh-47M2 Kinzhal aero-ballistic missile, the supposed capability of the RS-28 to produce act in a FOBS capacity, the development of the Poseidon strategic nuclear underwater nuclear-powered system and the 9M730 Burevestnik intercontinental nuclear-armed nuclear-powered cruise missile (ICCM) (Marinov, *Redefining the Strategic Nuclear Balance. Novel Strategic Offensive Weapons Systems*, 2022). Thus, by the late 2010s a clear arms race had developed, which whilst still in the confines of the treaty stipulations of New Start in terms of pure quantitative arsenals and limited launch platforms, was rapidly accelerating in scope and pace with the introduction of new and novel weapons systems with the objective of gaining a strategic edge on opposing side.

The further degradation of established treaty principles came with reported further expansion of Russia's offensive arsenal with the development of intermediate-range missile systems, in violation of the INF Treaty. In the war of mutual accusations that followed (TACC, 2019), the USA ultimately withdrew from the Treaty in 2019 (Lopez, 2019), with both sides stating their intention to return to the development of such missile systems, with the Russian 9M729 and 3M-54 (Kalibr) based on the Iskander complex, and with a US ground-launched cruise

missile also in development. In the context of the rapidly deteriorating relations, and the downward spiral of the international environment since, where trust was quickly evaporating, the USA withdrew from the Treaty on Open Skies in 2020, followed by Russia in 2021 (МИД России, 2021), thus removing a key element in the framework for established mechanisms of verification, treaty compliance, and confidence and trust building (RUSI, 2020). Finally, the last significant element in the nuclear treaty regime by 2021 remained the New START Treaty. Both sides showed interest to renew commitments in the nuclear security talks, and had agreed by early 2021 to trigger the extension clause of the treaty for an additional five-year period, thus making the treaty extend to 2026 (US Department of State, 2022), with expected negotiations on a subsequent treaty to further reduce and define nuclear inventories having continued, despite the collapse of overall diplomatic relations (Reuters, 2022; Interfax, 2022). On the one hand, the USA expressed its desire for the treaty to include China (Dubois, 2021). A prospect that China itself viewed unfavourably, arguing that the treaty is unequal in respect to its own capabilities and would place discriminatory limits compared to US and Russian arsenals (Quinn, 2019). On the other hand, both the USA and Russia expressed interest and commitments in further security talks, even despite the grave situation surrounding the conflict in Ukraine and the unprecedented rift in overall relations between the two states.

The dissonance between the United States of America and Russia should, however, not be viewed in a proverbial vacuum and in the context of the relations only between these two states within the larger international system. The imbalances and nuances of the Cold War-era mindset greatly contributed to the outcome of the treaty regime being not only beneficial in terms of its allowance towards nuclear capabilities for the two major global nuclear powers but also discriminative in not gravitating other states towards the same regulations and limitations, which had been recognised as risking deterrence and nuclear stability. As it was mentioned previously, the changing nature of the international environment in the post-Cold War era, the active threats and aggressive competitors contributed a significant transformational factor in the precipitated changes leading up to the general collapse of the treaty regime. The existence of such national actors underwrites a decisive role in the discussions leading up to a potential reformation of the treaty system, with the chief ones among them. Perhaps the actor of highest gravity in precipitating change currently and in the future is the People's Republic of China and its rise to not only economic but also to military power.

THE ROLE OF THE PEOPLE'S REPUBLIC OF CHINA

The power potential of the People's Republic of China has gradually transitioned from a purely economic and financial power house to an ever more affluent political actor with global standing and interests and an expanding array of military capabilities. The rise of China has placed it in direct opposition with both other regional powers of Eastern and Southern Asia, as well as the superpower of the United States of America, which has come to increasingly view China in its policy documents as its preeminent adversary in the decades to come. China has increasingly grown closer to Russia and has been one of its most active supporters in the international system of relations. Thus, by 2022, and in an increasingly multipolar world marked by increasing tension and open conflict, China stands as a crucial new player in the potential reformation of the structures of balance and stability in the world of tomorrow, including those pertaining to nuclear security.

The expansion of China's conventional military has been, more recently, coupled with the expansion of its nuclear forces. Since 2013, China has embarked on a path to greatly increase the role and potential of its developed nuclear triad, reforming its armed force's structure, better defining its nuclear posture and deterrence policy, and placing an ever-expanding accent on the introduction of new and more capable elements to its nuclear strike power potential (Bogdanov & Marinov, 2022, pp. 50-55). In policy terms, China has presented several key cornerstones, those being namely: that the Chinese nuclear posture only envisions the employment of nuclear weapons in a second-strike capability and only against an adversary who has utilised nuclear weapons against China; China does not seek to compete with the arsenals of the USA and Russia, but also recognises that treaties between the two states and any potential treaties with China would place the Chinese state in an unfair position; the principal rival and risk for Chinese interests and security remains the United States of America; and finally, that whilst not competing with the US arsenal in quantitative terms, China retains the right and ambition to pursue a nuclear second-strike capability in qualitative terms, capable of fulfilling the stated strategy of conducting effective "*counter-value*" or in Chinese terms "*counter-cities*" strikes in a second-strike capacity (The State Council Information Office of the People's Republic of China, 2019; Cordesman, 2019).

As of 2022, the PRC has risen to be the third largest global nuclear power, with an estimated arsenal of up to 350 warheads, spread across a working and technologically sophisticated nuclear triad, thus being the only such state other than the United States of America and Russia. China has strived to actively modernise

its delivery mechanisms and increase them to a number sufficient to encompass the available arsenals of warheads (which in reported Chinese doctrine are traditionally kept separate from most of the launch platforms). In 2022, according to Western estimates, China possesses 116 ICBMs, the most numerous being the DF-31 and DF-41 classes; 110 IRBMs of the DF-26 class; 80 nuclear-capable MRBMs of the DF-21 classes; and up to 72 SLBMs spread across 6 Type-094 SSBNs; in addition to a strategic air arm of H-6 bombers of both legacy and modernised designs (The International Institute for Strategic Studies, 2022, pp. 255-260). In qualitative terms, the Chinese arsenal, not being bound by the INF Treaty, has exponentially developed in the direction of intermediate-range and medium-range missiles. The principal objectives of these classes of weapons in Chinese inventory have been projected to encompass the role of providing the PRC with a tool for regional dominance, and specifically against US interests and capabilities spread across the Western Pacific. Apart from the already stated Russian Avangard HGV, China has been the other principal state actor to develop a working HGV delivery mechanism with the DF-ZF, mounted on a DF-17 MRBM, with a supposed conventional warhead, geared towards the same role of projecting regional power against US land-based and naval assets and their BMD umbrella.

Regardless of the expansion of its nuclear arsenal and its capabilities, China continues to claim that it is a secondary nuclear power compared with the United States of America and Russia, and has no aspirations to expand its nuclear arsenal to the levels of the aforementioned and thus does not seek direct competition. Furthermore, China has also claimed its own radically different approach towards its nuclear posture compared to the USA and Russia, promoting the existence of nuclear weapons-free zones, a posture geared towards a second-strike capability only, and direct assurances not to ever utilise nuclear weapons against a non-nuclear state. Chinese attitudes towards any potential treaty negotiations place the above points as key, and so far, incompatible with the policies and doctrines of the USA and Russia. Moreover, it is the lack of any specific treaty obligations, which have allowed China to develop its capabilities, especially in its medium and intermediate-range missile systems, independently of the US-Russia strategic nuclear relationship and its limitations. The unanswered, and perhaps unanswerable question currently remaining is whether China would pursue nuclear capabilities within the limits of its own stated strategy or it would go beyond to actively compete with the USA and Russia as a true nuclear superpower.

THE (IM)POSSIBILITY OF A NEW TREATY REGIME?

With major elements of the nuclear treaty framework between the United States of America and Russia having already collapsed, ushering an era of renewed nuclear rearmament, as well as the rise of China as a major nuclear power of significance in the calculations of both the USA and Russia, the question as to the possibility of finding a renewed point of balance arises. The potential answer lies in several factors of the contemporary world order and would be dependent on their coalescence and successful management into a new nuclear treaty regime.

The first factor of consideration is that of the remaining New START Treaty and the need for its preservation and eventual replacement as a facilitator of further dialogue between the United States of America and Russia. The corresponding effects of its discontinuation would be a further step towards a new and uncontrolled nuclear arms race, which unlike the rearmament processes at present would also allow for the gradual increase in both nuclear carrier platforms and even of the general increase in the number of nuclear warheads (Countryman, 2019, pp. 1-5). For the United States of America, a future nuclear treaty framework is desirable in a format that includes China, as it would potentially regulate the uncontrolled expansion of both conventional and nuclear Chinese strike capabilities, whilst also potentially reducing Russia's nuclear potential as an ally of China. For the Russian Federation, there is dissimilar desire to extend the START format, considering the profound lack of regulations for the new systems Russia has begun to develop and field as well as the need to keep restriction on the potential enlargement of the US offensive strategic nuclear arsenal. Additionally, and in the interests of Russia, the inclusion of China in any trilateral treaty format is currently unfavourable, as it alleviates major potential restrictions or regulations on China in its own increasingly more open and aggressive competition with the United States of America.

The second factor is that of the disparity in strategic arms inventories currently accelerating with the rearmament process. Unlike with the Cold War-era nuclear arms race, where the USA and the USSR raced each other in similar categories of weapons systems, and afterwards allowed for a mutually beneficial agreement on their limitation, the current arms race is in categories of dissimilar properties, enshrined in different approaches towards nuclear security. Ergo, the ease of transition towards disarmament witnessed with the SOLT, START, INF and ABM Treaties of the past is greatly aggravated in the contemporary and future periods, when sides have to agree upon the limiting or outright disposal of weapons

systems, which the other side does not possess, thus foregoing a potential strategic edge. The disparity in the nuclear arsenals is further defined as gravitating strictly towards the development of *"first-strike"* systems, with both the United States of America viewing Russian and Chinese HGV development and the future Poseidon underwater system as such weapons, and correspondingly, Russia and China accusing ABM developments in the USA as a nullifier of their own *"second-strike"* capacity and thus a facilitator for a US *"first-strike"*.

The third factor is expressed in the role of China and its own capabilities and ambitions as both a pre-eminent nuclear power and major international actor on the world stage. With both China and the United States of America, recognising each other as competitors and potential threats to their respective national security objectives, the forthcoming strategic nuclear security environment would place China and its evolving nuclear arsenal as an adversary of the United States of America, alongside Russia. Such a scenario would bear certain similarity to the status of the US nuclear allies in Europe when relating to the Soviet Union during the Cold War, but with the additional and incomparable strategic weight of China possessing a technologically competitive nuclear arsenal to that of the USA. Thus, the inclusion of China and its own aspirations as a factor in shaping global security would be vital in potential treaty negotiations, as it has so far been the intention of the USA. However, China has repeatedly shown unwillingness to participate in such a format, viewing it as unfair in respect to Chinese capabilities and stated policy, demanding reductions in the arsenals of both Russia and the USA before any meaningful negotiations, as well as condemning the specific role of the ABM systems in the US arsenal (Quinn, 2019; Reuters, 2020). Nonetheless, a new nuclear treaty framework, which includes China, along with the United States of America and Russia, would be the highest form of recognition internationally for the new role of China in the global order of the future, as well as a tool to assert influence in the shaping of its chief adversary's nuclear capabilities.

Based on the above, the prospects for a new treaty regime seemingly rely on mutually exclusive factors, which would require the respective states of the USA, Russia and China to produce decisions counterproductive towards their own power potential. The history of the nuclear treaty regime has demonstrated that such abnormal occurrences are possible within the international system, when the instability and risks included in a nuclear arms race become uncontrollable factors for the security perceptions of all states involved.

For the purposes of this paper, and the question posed, several key components can be ascertained in respect to the previously listed factors, which would make up a potential future nuclear treaty regime possible. These components can be described as regulatory and restricting measures in quantitative terms, when discussing the specific numerical values of both individual available warheads and individual offensive or defensive systems, and qualitative terms, when discussing their specific capabilities and general disparities in such systems being developed on the opposing sides vis-à-vis one another. The quantitative element will in large part be dependent on the qualitative one, and the formulation of a new point of balance between the systems possessed by each side. Nevertheless, the specific numerical values of these components are impossible to achieve in the confines of a system ordered in a similar fashion to the one of the Cold War-era, the main contributory factor being that the nuclear treaty framework of the Cold War was the product of the bipolar international system of the period. In the multipolar order of the contemporary era, the construction of a new treaty framework, in order to be effective and truly directed towards balance, would have to, by necessity of the actors involved and their ambitions, contain a drastic alteration to the mindset and general assumptions of nuclear security and stability beyond the confines of the two-superpower model. A supplementary factor, as previously described, would be the significant qualitative disparity in the armaments and strategies currently being pursued by the respective nuclear powers of the USA, Russia and China.

With these elements and factors taken into account on the possibility or impossibility to forge ahead a new systemic solution to the problem of achieving a viable point of balance between the nuclear powers, the ultimate solution may lie in the historical precedence and the general working order of the international system. In hindsight, the Cold War-era solutions, the construction and adoption of the nuclear treaty regime itself were the product of a preceding decade old process, which placed all sides in an uncertain and procedurally escalating security environment around the capabilities and potential employment of nuclear weapons by the adversary. The only solution to the uncertainties of the Cold War era, facilitated by great strides in technology and strike potential in manner not too dissimilar to the current era, was the acceptance of a regulated framework with mutual obligations and regulatory measures. What remains to be seen is whether such historical lessons have been forgotten, and whether the current and future points of discontent between the major powers will prove to be insurmountable obstacles towards peace and stability.

CONCLUSIONS

The nuclear treaty framework established since the late-Cold War period can be stated to have been thoroughly dismantled by 2022, the only surviving element being the New START Treaty, a vital one, as the potential for an uncontrolled increase in the nuclear arsenals of the United States of America and Russia has so far been contained. Nonetheless, the downfall of the ABM and INF treaties, amongst others, has ushered in a noticeable increase in the nuclear capabilities of both nuclear superpowers, with both pursuing independent paths towards maintaining their respective perceptions for nuclear security. Against the backdrop of the relationship between the USA and Russia, China has risen to the forefront of the debate, not only by being the third largest nuclear power, but also by developing a technologically advanced and competitive nuclear arsenal. With the deteriorating international environment, facing even bleaker prospects for cooperation in the future, a return to normalcy can be prided by the reconstruction or reinvention of the nuclear treaty regime. Significant hurdles are faced in such a grandiose task, those namely being the qualitative differences in the currently developing arsenals of the USA and Russia, and the quantitative differences in respect to China and the stated ambition to engage it in the future rebalancing act of power distribution in the nuclear security sphere. With the volatility that a compromised state of nuclear security can bring to the international system, still present in recent memory, prospects remain for finding a solution, which would require major concessions and higher degrees of understanding and acceptance than ever before.

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GENERAL CHARACTERISTICS OF THE KALININGRAD REGION

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This article presents a brief but informative examination of the Kaliningrad region in order to find out the mysteries of a geographical territory that belongs to Northern Europe, but currently represents Russia’s only European trophy after winning the Second World War. The paper contains general elements, as well as data that may seem new, through which the geography and history of the region are analysed in the first part. After understanding the natural state and the secular heritage of this territory, we will portray the policies of the Russian Federation imposed on its exclave, determine whether Kaliningrad is an important commercial actor on the international stage and investigate the evolution of the population from an ethnic, cultural and religious point of view. All these elements described previously represent an essential body of knowledge in our attempt to ultimately determine the importance of the Kaliningrad Oblast as a first-line geopolitical bastion in the eternal East-West confrontation in Europe.

Keywords: exclave; Königsberg; Baltic Rim; NATO; Russian Federation; Intermarium;

INTRODUCTION

From the very beginning, it is necessary to make a clear distinction between the city of Kaliningrad and the Kaliningrad region. The city has a purely historical value, being known by the scholars especially under the name Königsberg, the place where Prussian kings and then German emperors were crowned. Currently, instead of the Prussian city, we have Kaliningrad. It is a city rebuilt after World War II by the Soviets on the ruins of the king’s mountain¹, it is the administrative centre and the largest city of the region (bearing the same name). It is also the second largest city in the North-Western Federal District of Russia (after St. Petersburg), the third largest city in the Baltic region and the seventh largest city on the Baltic Sea.



Picture no. 1: Königsberg then and Kaliningrad now

(http://www.castlesofpoland.com/prusy/krol_po131_en.htm, <https://ro.depositphotos.com/300702724/stock-photo-kaliningrad-russia-august-24-2019.html>, retrieved on 15 September 2022).

The history and geography of the city will be debated in the first chapter of this article. It is very important to discover “*What was Königsberg?*” in order to understand what Kaliningrad will become, and it is also essential to understand the ambiguous geography of the Russian oblast in order to foreshadow the geopolitical problems that may soon arise in the 21st century. Kaliningrad Oblast is the westernmost oblast of Russia and represents an exclave, that means that between Kaliningrad territory and the territory of the country it belongs to there are other countries that separate them. This gives a special importance to this region and makes any analysis much more interesting. In the second chapter, we will expose

¹ In German language, Königsberg translates as King’s Mountain.

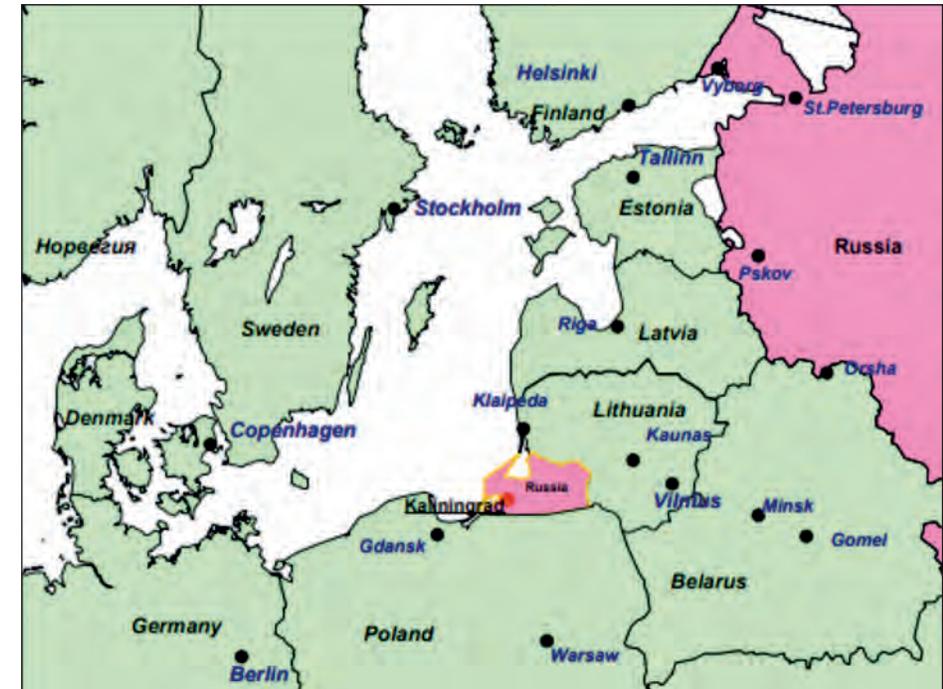
some generalities regarding the society that lives within the borders of this oblast. We will approach the analysis of the population from a demographic, cultural and anthropological point of view in order to give us a brief idea of the customs of the inhabitants, their lifestyle and even their belonging to the *ruskiy mir* or the European community. Later, we will find out how rich the Kaliningrad region is, what it sells and buys. We will try to detect the main aspects of economic and commercial nature in order to understand why the existence of this exclave depends to a large extent on the European neighbours or on the subsidies received from the Kremlin. Kaliningrad Oblast is one of the smallest subjects of the Russian Federation, but it is far from insignificant. For the Russians, this region can have both a strategic-military importance through which they can launch their armed forces towards central and northern Europe, but it is also the most injurious Russian territory in the event of an all-in Russia-European Union/NATO war.

HISTORICAL-GEOGRAPHICAL LANDMARKS

Kaliningrad is located at a straight distance of about 277 km from Warsaw, 527 km from Berlin, 525 km from Copenhagen, 535 km from Stockholm, 659 km from Prague, 1,000 km from Baia Mare and 1,100 km from Moscow. Although, politically, Kaliningrad is an exclave of the Russian Federation, geographically the region seems more like an enclave of the European Union. This characteristic makes this oblast one of the most important and priceless Russian federal topics on the chessboard of European geopolitics.

The Kaliningrad region stretches over 15,100 km², comparable to half of Belgium's territory. From the westernmost point of the oblast to the most Eastern one there are 205 km, and from North to South there are only 108 km. The landscape of the territory is similar to that of the Baltic states, except for the multitude of lakes. The only remarkable lake in the Kaliningrad region is Vistytis, at the crossroads with the borders of Poland and Lithuania. The Mazurian Lakes District stretches on 290 km in the Northeastern part of Poland and includes over 2,000 lakes, including Lake Vistytis. The most common landforms are low hills, plains and marshy areas, and 20% of the oblast's surface is covered by oak, pine, spruce and beech forests. An interesting aspect from a geopolitical point of view is the Suwalki Corridor. It measures 90 km long (between Belarus and Kaliningrad), 60 km wide and is the main route between the exclave and the mainland. Professor J.R. Deni highlights his own memory of the area in his last visit near the Suwalki corridor: *"Driving through*

the area last October while on a research trip to NATO units, I found it a wide-open rural region, predominantly characterised by rolling farmland interspersed with forests and small villages. Much of it is ideal terrain for tracked vehicles like tanks, given the very limited roadways and the gentle hills" (Deni, 2022).



Picture no. 2: Kaliningrad in Europe (Vinokurov, 2007, p. 1)

Infrastructure is modest throughout the region. The only infrastructure links between Central Europe and the Baltic States are two motorways (one with two lanes in one direction, the other with one lane in one direction) and one railway. Poles can take the train to Lithuania only once at the end of the week. The lack of adequate infrastructure makes it impossible for NATO to respond quickly in the event of a Russian incursion to *"liberate"* and *"protect"* Russian minorities in the Baltic countries. From the desire to reduce the gaps with the Western part of the continent and to increase the interconnectivity of the East with Western Europe, the *The 3 Seas Initiative* was born. This political platform brings under the same umbrella 12 E.U. states from Central and Southeastern Europe, countries that had a similar historic destiny (except Austria) being at the crossroads of empires and thus incapable of sustainable development. The main objectives of this regional

sub-union are: economic growth, infrastructure development, increased level of digitisation, joint energy projects. Development of the *Intermarium* region and the increase in European and regional initiatives led to the exclusion of Kaliningrad and the transformation of the oblast into a grey area. *“Media analysts and scholars alike tend to view the Kaliningrad region as “double periphery”, since it is excluded from a major modernisation processes both in the European integration zone and in the Russian Federation”* (Sebentsov, Zotova, 2013, p. 81). The Suwalki Corridor and the Kaliningrad exclave remain the *“Achilles tendon”* of the North Atlantic Alliance. In the future, this area can become hotter than the Wider Black Sea Region today, where there are a multiple frozen conflicts. *“The Suwalki corridor (also known as the Suwalki Gap) separates the Russian exclave of Kaliningrad on the Baltic Sea from Belarus, now host to thousands of Russian troops and soon home to permanently stationed Russian forces, including advanced fighter jets and nuclear weapons. It is also the only way to get by road or rail from Poland and Central Europe to the Baltic states — arguably NATO’s most exposed members”* (Deni, 2022). However, we can look at the problem from both directions. It is as complicated for Russia to safely evacuate its civilians from Kaliningrad, as it would be for NATO to protect the Baltic states in the event of a Russian *Blitzkrieg*.

From a historical point of view, it is interesting to follow the sinuous and unpredictable transition from Königsberg to Kaliningrad. The city of Königsberg was founded around 1255 by the religious order of the Teutonic Knights who had begun their *“crusade”* to Christianise the natives of the Baltic area. In 1525, the duchy of Prussia was formed in the Western part of the former monastic state of the Teutonic Knights. Many consider this a consequence of the Reformation and the publication of Martin Luther’s 95 Theses. The Duchy of Prussia is considered the first Lutheran Protestant state with the majority of population speaking a Germanic dialect. The beginning of the 17th century comes with events that will radically change the course of European history. First, in 1618 the Prussian-Brandenburg Union was established because John Sigismund of Hohenzollern, Prince-Elector of Brandenburg, was also elected Duke of Prussia. After the Peace of Westphalia (1648), the new world order found the Holy Roman Empire weakened and France guided by Richelieu became the new hegemon of Europe. The French foreign policies and those of the Protestant countries understood the importance of diminishing the influence of Catholicism and the Habsburgs in European affairs, so the new European order wanted to give more importance to the Hohenzollerns

and Prussia. At the beginning of the 18th century, more precisely in 1709, the Duchy of Prussia-Brandenburg becomes a kingdom, and King Friedrich I moves the capital from Königsberg to Berlin. After the Napoleonic Wars, at the beginning of the 19th century, the German Confederation was created, believing that a union of German states could stop France from a new incursion to the eastern parts of the continent. In this confederation of German states, the main actors were the Austrian Empire and Prussia. Due to the strategies of Chancellor Bismarck and the technical and military superiority of the Prussian army, the German Empire was created in 1871, following two wars won by Prussia against Austria (1866) and France (1870).

The German Empire dissolved after losing World War I, and the new Weimer Republic was separated from the territory of East Prussia, which became an exclave, when the Free City of Danzig was established under the administration of the League of Nations. After losing World War II, Germany is permanently stripped of the geographical region of East Prussia. This territory was divided between Poland (the puppet state of the Soviet Union), Lithuania (a socialist republic integrated into the Soviet Union) and the Kaliningrad oblast (the region around the historic city of Königsberg) newly joined the Soviet Union. Since the end of World War II, attempts have been made to completely erase the history and identity of the Prussian city of Königsberg. The use of the German language and German names was banned and brutally punished by the Soviets. All streets and buildings have been renamed, and the city archives of Königsberg were either destroyed or moved to Moscow. The history of the city was rewritten and the Soviet monuments had a great relevance in this purpose. Most of the monuments erected in the Kaliningrad region outline the victorious image of the *“liberating”* Red Army. The end of World War II constitutes the beginning of the existence of the city of Kaliningrad. The name of the city, where Prussian kings and German emperors were previously crowned, is now given by a reliable comrade of Stalin, Mikhail Kalinin². German civilians were regarded by the Soviets as contaminated with the germs of fascism and, by 1948, they were all expelled from Kaliningrad to the German Democratic Republic. In 1945, there were about 5,000 ethnic Russians and members of the Red Army in Königsberg, but in 1948 almost half a million Russian speakers were already in Kaliningrad. Colonisation was carried out with people from the USSR, especially with Russians, Ukrainians, Belarusians, Tatars, Georgians and Uzbeks.

² In old Slavonic language *“grad”* means *“city”*, so *“Kaliningrad”* means *“The city of Kalinin”*.

HUMANIST ANALYSIS OF THE EXCLAVE

Sociological Generalities

Currently, the population of Kaliningrad is up to half a million inhabitants and the population of the entire oblast is almost one million inhabitants (78% settled in urban areas). According to the 2010 Russian census, the composition of the Kaliningrad region is as follows: 86.4% Russians, 3.7% Ukrainians, 3.6% Belarusians, 1.1% Lithuanians, 1% Armenians, 0.8% Germans, 0.5% Tatars, 0.4% Azerbaijanis, 0.3% Poles, 0.3% Uzbeks, 1.9% unspecified. We can notice the ethnic mixture bequeathed by the Soviet Union in the Baltic region, similar with the high percentage of ethnic Russians in each Baltic state or in each former Soviet Republic. The predominant religion in the oblast is Orthodox Christianity, but the percentage is quite small, about 31% of the population. *“Once a highly inter-mixed area with a population of Germans, Poles, Lithuanians and Jews, it was ethnically cleansed of most of its German population by Stalin. This was followed by a systematic campaign of russification which sought to erase all traces of German heritage”* (Wolff, 2022).

The *Intermarium* region is like a triangle-shaped territory that has its peaks in the Black, Baltic and Adriatic Seas. This region represents the boundary between the culture and civilisation of Western Europe and that of diversified and spicy Asia. This territory has been invaded from East to West and vice versa far too many times in history and the native peoples of this territory have not enjoyed a stable political situation or sustainable economic development because they were placed on the battlefield of the great empires. Wars and their consequences have consistently altered the ethnic and political structure of this territory. In 1867, at the beginning of the period of German supremacy over Europe, the city of Königsberg had just over 106,000 inhabitants of which about 98,000 were Protestants, and Catholics and Jews around 3,000 each. Before World War II (1939) in Königsberg there were almost 320,000 Protestants, 22,000 Catholics and only 2,000 Jews (most of them had already emigrated to the USA). The transformation of the Prussian city of Königsberg into the Soviet city of Kaliningrad represented one of the largest exoduses of civilian population in modern history and also meant one of the most violent campaigns of occupation. The denouement of the Second World War was catastrophic, 80% of the city of Königsberg was destroyed. East Prussia along with its capital was literally erased from the map. During the Potsdam Conference (17 July 1945), it was settled that Königsberg and East Prussia will be annexed to the Soviet Union. In October 1945, there were only 4,836 Soviet civilians in the Königsberg, then in February 1946 the number became 7,843. At the first

transport of people, on 23 August 1946, 11,000 families from the Soviet Union were brought in the region. On 1 February 1947, another 278,000 Soviet civilians came to Königsberg and the Germans began to be the minority. At the beginning of 1946, there were about 70,000 Germans in the former Prussian capital. In April 1946, the actual political incorporation of the Königsberg into the Soviet Union happened and its name was changed. The Germans were kept until 1948 mainly to help rebuild the region and to perform forced labour, especially in agriculture. On 11 October 1947, the displacement order of the Germans was signed. By the end of 1947, 30,000 Germans had been moved, and by the middle of 1948, about 102,000 Germans had been moved from the Eastern Prussia region. Only German specialists remained in the newly formed Russian oblast. In 1950, the population of Kaliningrad was about 300,000 people, of whom 77% were Russians, 9.4% Belarusians, 5.8% Ukrainians, 3.7% Lithuanians and 4% from other parts of the Soviet Union.

An interesting detail about the population of the Kaliningrad oblast is that the demographic balance is positive compared to the situation of neighbouring countries. The population of Poland in 2020 had the same value as in 1990, and the population of Lithuania in 2020 is only 2.7 million residents, compared to 3.7 million in 1990. Kaliningrad is the only territory in the area where the percentage of population has steadily increased, this being also due to the accession of the Baltic States and Poland to the European Union. *“As a result of positive net migration, since the 1990s, the population has been stable. However, life expectancy in the region is lower; there are no obvious shifts in the morality rate, which is indicative of a still high level of social pathology (alcoholism, drug abuse, spread of HIV, etc.)”* (Sebentsov, Zotova, 2013, p. 86). A case study³ was carried out on 675 students from three top universities located in cities bordering the Baltic Sea. The respondents – from Immanuel Kant Federal Baltic University, the University of Gdansk and the University of Klaipeda – concluded that the reason for the weak cross-border cooperation is caused by: the geopolitical orientations, the policies of the authorities and the stereotypes that have shaped public opinion throughout the decades. *“Kaliningrad students, as well as Russian population in general, are prone to pessimistic views on the prospects of the region: 55.6 % of IKBFU students believe that, in the near future, the situation in the region will remain the same or get worse. Only 34.6% of students share this viewpoint in Gdansk and 18% in Klaipeda.*

³ The survey was conducted by the research team of the Immanuel Kant Baltic Federal University (under the supervision of G.M. Fedorov and E.S. Fidrya), Klaipeda University (Eduardas Spiriajevas), and the University of Gdansk (J. Wendt) with the help of a questionnaire drawn up by V.A. Kolosov and O.I. Vendina in the framework of a project of the Russian Foundation for Basic Research (No 12-06-91052).

At the same time, Kaliningraders are more optimistic about their future than the regional prospects: 57.9 % are sure that they will be able to attain a better standard of living in a short-term perspective” (Sebentsov, Zotova, 2013, p. 87).

Political Generalities

According to the updated constitution, after the annexation of the Crimean Peninsula in 2014, the Russian Federation consists of 85 federal subjects: 22 republics, 3 cities of federal importance, 9 krajs, 46 oblasts, 4 autonomous okrugs and an autonomous oblast of the Jews. The separation of powers in the state is carried out as follows: President – the head of state and armed forces; Government – executive role, headed by the Prime Minister (the deputy head of state); *Parliament/Federal Assembly* – divided into *State Duma* (lower chamber) and *Federal Council* (upper chamber); Supreme Court – the supreme body that subordinates all the courts within the borders of the Russian Federation. In the last two decades, Russian politics has been totally subjugated by Vladimir Putin’s party *United Russia*. Currently, out of the 616 seats in Parliament, 466 seats are occupied by party members of *United Russia* – 324/450 seats in the State Duma and 142/166 seats in the Federal Council.

The Kaliningrad region has two deputies in the State Duma and two representatives in the Federal Council, all of whom are affiliated with the party *United Russia*. The political authority in the Kaliningrad belongs to the Legislative Assembly and the Governor – the head of the regional government. They are in charge of managing the budget and enforcing regional laws specific to the well-being of the indigenous people. Out of the 40 seats of the Legislative Assembly in the Kaliningrad region, party members of *United Russia* occupy 29 seats and members of the Communist Party occupy six seats.

The Kremlin’s main political objectives vis-à-vis the Kaliningrad region are: to reduce the region’s exclave towards Russia in conjunction with the postponement of the oblast’s cooperation with the European Union, to weaken the distinctive feeling of the citizens in the exclave towards those in the motherland and to maintain its social stability and predictability. Any phenomena that can cause the oblast to break from Russia are cut off from the root. *“Kremlin will be making efforts to maintain social stability, for example, through economic development, maintaining the residents’ ability to travel outside the oblast and continuing subsidizing the region”* (Wisniewska, Domanska, Strzelecki, Zochowski, 2016, p. 20). Russian propaganda is at a higher level in Kaliningrad than in other regions of the federation because the oblast is surrounded by NATO/EU states. Manipulation of elections and electoral fraud are active phenomena practices in Russia, and Kaliningrad is continuously subjected to such activities

in order not to come to power a nationalist party that wants independence and to transform the oblast into the 4th Baltic state, or the accession to power of a pro-European party. *“The election campaign in the oblast was almost unnoticeable, which was proof of the attempt to discourage citizens from political activity. In effect of this, voter turnout was low – officially 44% (compared to 47.9% on the nationwide scale)”* (Ibid., p. 17). We can assume that Russian propaganda has achieved its goal. The annexation of the Crimean Peninsula was approved by about 88% of the residents of the oblast. However, the unfavourable economic situation of the citizens of Kaliningrad, compared to that of Poland or Lithuania, may create social unrest and political destabilisation. The largest uprising in Russia since the breakup of the Soviet Union was captured in Kaliningrad in early 2010, where it is estimated that about 12,000 people participated in peaceful demonstrations against Putin’s party. The Kremlin knows that the tranquillity in the oblast depends on the general well-being of the inhabitants and their habituation to the continuous state of militarisation. Currently, it is estimated that about 30% of the population of the Kaliningrad oblast is composed by members of the Russian army, representatives of the institutions of force and public officials together with their families. As you can see, the indigenous population is witnessing a strong influence from the military personnel.

Economic and Commercial Situation

The economy of the Kaliningrad region is characterised by a relatively small domestic market (about 1 million residents), insufficient investment (either from Russia or from European regional development initiatives) and a trade balance with an astounding deficit. In 2021, the Kaliningrad region made exports of \$ 2.4 billion and imported almost three times more. Compared to other regions of the Russian Federation, in 2021, Kaliningrad was ranked 4th out of 85 federal subjects in the absorption of imports and 35th out of 85th in the top exporting regions of Russia. An interesting thing if we consider that 4% of the total imports of the Russian Federation go to the Kaliningrad region, which has only 0.65% of the population of the entire federation. The main countries who are exporting to the Kaliningrad region are: South Korea (27.6%), China (9.7%), Slovakia (6.3%), Belarus (5.4%), Germany (5.5%), Poland (3.7%), the U.S. (5.6%), Paraguay (6.7%), Brazil (8.2%). The main imported products are: parts used in the transport industry (32%), vegetables (19%), machinery (10%), products of animal origin (6%) (OEC, 2022).

From the last decade of the 20th century to the end of the first decade of the third millennium, Kaliningrad went through an economic revival, thanks to:

2. The establishment of the Yantar Special Economic Zone in 1996; 3. The enlargement of the European Union around the oblast and the agreeable economic agreements between the E.U. and Russia; 4. Russia's entry into the World Trade Organization in 2012. *"The existing SEZ regime has played a crucial role in determining patterns of production and trade specialization. With 40% of total trade carried out with Russian mainland, 20-25% with the EU-15 states and about 20% with the new members of the Union (mostly with neighbouring, Poland and Lithuania), Kaliningrad specializes in trade with Russia's regions and with the European Union"* (Vinokurov, p. 22). With the coming to power of President Putin, the Yantar Special Economic Zone turned into an instrument that increased Kaliningrad's dependence on Moscow. Soon corruption grew and the oligarchs began to assimilate resources from the small domestic industry. Access to international companies was gradually restricted and the focus was on prioritising large enterprises rather than supporting small and medium-sized enterprises. *"On 1 April 2016, Kaliningrad's special economic zone (SEZ) privileges expire, meaning that it will lose its right to duty-free trade and will have to stand on its own two feet"* (Sukhankin, 2016). Foreign corporations started relocating in 2012 and turned to Belarus, Poland or Lithuania. The economic disaster for Kaliningrad had only just begun in 2012, then foreign investment withdrawn from the country and caused a serious deficit. The shortage of foreign capital was felt harshly in the pockets of the citizens of the oblast. *"Investments in the region have decreased for the fourth year in a row (by 10% annually on average), and the residents' real incomes have been falling since 2015 as well (by around 6%)"* (Wisniewska, Domanska, Strzelecki, Zochowski, 2016, p. 10). In addition to these aspects, there is also the fact that foreign investors are discouraged from investing in the Kaliningrad region because only a third of the small territory is accessible to civilians, for the obvious reasons of national security. Speaking about corruption, this is a perfect reflection of Russia's policy during the Putin period. The Russian economy is subordinated to the oligarchs. Key business people are obedient to the country's supreme leader and, in return, receive preferential contracts that turn them into billionaires at the expense of ordinary citizens. It is assumed that more than 80% of the Earth's amber⁴ resources are in the mines of the exclave. *"In 2015, the Kaliningrad Amber Factory (a mine) located in Yantarny extracted 313 tons of amber, and its income from sale reached 1.3 billion roubles (around US\$21 million). The estimated level of illegal production in Kaliningrad is currently around 150 tons annually"* (Ibid., p. 12). The whole amber sector is controlled by the home company of the Russian Presidential Administration – Rostec.

⁴ In Russian language, 'Amber' translates as 'Yantar'.

Kaliningrad also possesses several gratifying factors that increase its importance at the geopolitical and commercial level. Kaliningrad is a very important region for China and the New Silk Road. At the end of 2020, the first train was launched on the route Xi'an-Kaliningrad and the trip lasted about 11 days (almost 7,000 km). The port of Kaliningrad paves the way for China to trade with Scandinavia. The port of Kaliningrad is the only port of the Russian Federation that remains thawed throughout the year. However, the port is a modest one, with a manual operating capacity of only 12.7 million tons annually. The Polish ports of Gdynia and Gdansk have a capacity of 15 and 25 million tonnes respectively and the Lithuanian port of Klaipeda has a capacity of 40 million tonnes annually, all of them are in the Baltic Sea. In this case, the interest of the Kaliningrad region's developmental inhabitants does not coincide with Kremlin's policies. The increasing exclavization felt by Kaliningrad, practically swallowed up by EU and NATO countries (especially after the accession of Sweden and Finland) is even more burdensome due to its dependence on volatile West-Russia relations. The relationship between Moscow and Kaliningrad is simple, money in exchange for loyalty. Compared to other regions of the Russian Federation, Kaliningrad strategic position on the Baltic Sea and belonging to European territory gives it some self-support and wellbeing. The disadvantage is that because of the status of an exclave, with the territory surrounded by countries of the European Union and far from the mother territory, European sanctions against the Russian Federation feel the worst by Kaliningrad. In addition, the provocative attitude of the Kremlin towards the sovereignty of the Baltic states (Latvia, Lithuania and Estonia) or regarding Poland may attract negative attitudes of the neighbours of Kaliningrad on the exclave. According to *Core and Periphery theory*⁵, sketched out by the economist John Friedmann who shows why certain regions are impacted economically, politically and culturally differently and why certain geographical areas are prosperous while others are struggling in subsistence, the Kaliningrad region is seen as an international development corridor. Friedman demonstrates how marginal (or peripheral) regions are forced to cooperate with neighbours in order to develop harmoniously.

⁵ This theory, patented by economist John Friedmann in 1963, explains how economic, military, political and cultural authority is imposed by the regional hegemon to the periphery of its "sphere of influence".

THE WAR OF ARMS AND THE DIPLOMACY OF PEACE

Balance of Power in the Baltic Region

From a geopolitical point of view, for the Russian Federation each Baltic state has certain significant geostrategic characteristics, which history has demonstrated on numerous occasions. For example, Estonia was endowed with its geographical position at the entrance to the Gulf of Finland and in the proximity of St. Petersburg. Russia's control of this area reassures the Kremlin of a possible attack on the Northwest Federal District and protects the city of federal importance of St. Petersburg. During World War II, the Nazis carried out perhaps the bloodiest blockade in the history of the world. The Nazis decoupled the population of Leningrad from aid (military, medical, food, water etc.) for almost two and a half years, which caused the deaths of over a million residents of the city. The southern part of the Baltic Sea is intertwined with the Great European Plain, an area with a relief that has always facilitated military invasions. History has shown us on at least two previous occasions that the invasions of the West to the East are easily made by crossing the German-Polish Plain. When the Russians projected their military strategy for the Northwestern area and the Baltic Sea, the genocide produced by the Nazis of 1941-1944 and the Napoleon's conquest are imprinted in their minds and did not shy away from using all their force to achieve their geostrategic objectives. We are seeing that even today.

After the breakup of the Soviet Union, Kaliningrad had all premises on becoming a success story compared to other regions of Russia. It was intended to be a binder of cooperation between Russia and Europe, and in some scenarios, it was regarded as a Russian Hong Kong on the Baltic Sea. *"In the 1990s and early 2000s, the units deployed there were neglected – as were the Armed Forces in general. The Baltic Sea had become something of a security policy backwater, leaving the Baltic Sea Fleet adrift searching for a raison d'être"* (Westerlund, 2017). At the end of the last decade of the 20th century, Russia was busy building the Nord Stream pipeline and with separatist movements in Chechnya. *"In 1997, Russia unilaterally reduced its land and naval units by 40 percent in its north-western region, contributing significantly to a more benign security environment among Baltic littoral states"* (Forsström, 2019, p. 732). In the first decade after the dissolution of the Soviet Union, NATO was just a simple warning, nothing concrete. The North Atlantic Alliance was seen as a direct threat to Russian security around 2010. Since then, in every updated military doctrine of the president, Vladimir Putin has seen NATO as the greatest threat to Russia's existence. The Kaliningrad region is rightly considered one of the three pillars of the security on the western flank of the Russian Federation.

Crimea-Armavir-Kaliningrad creates a large radar through which the Russian Federation is notified in a timely manner of any possible attack coming from Europe. *"In peace-time and crisis, Kaliningrad provides a forward position for intelligence collection and surveillance as well as a platform for strategic deterrence by military means"* (Westerlund, 2017).

The Russian Federation is divided into eight federal districts (not counting Crimea), and the Central Federal District, with its administrative seat in Moscow, and the north-western federal district (with its administrative seat in St. Petersburg) are under the protection of the Western Military District. The Western Military District, where Kaliningrad is located, is Russia's second smallest military district, geographically, but the first in importance because the main enemy of the Russians remained NATO. In the time of the Soviet Union, in place of the Western Military District was the Military District of Moscow, the Military District of Leningrad and that of Kaliningrad. *"Moscow (...) considers threats emanating from the west to be the most severe threats that can ultimately endanger the military security and thus the existence of the Russian state"* (Muzyka, 2021, p. 4). Russia's army is the 5th largest army in terms of active soldiers, about 1 million soldiers (after China, India, USA and North Korea; Romania is the 54th place in this top), but it is also the army with the most soldiers in reserve, about 2 million. In terms of budget, the Russian Army ranked in 2021 on the 5th place in the top of the countries that made expenditures in the military field. According to estimates (Russian Forces, p. 3), the Russian Federation has two armies of combined weapons in the Western Military District, the 20th in Voronezh (300 km from Kharkov) and the 6th in St. Petersburg and around 200 military units in this Military District. However, the combined 6th army of weapons is the weakest because any attempt to develop it could seem like a threat to the Baltic states and implicitly to NATO. Whether we are talking about NATO or national armies, the military presence in the Baltic countries is rather neutral than in balance. Estonia has allocated about \$770 million on defence in 2021 and has nearly 34,000 troops (active plus in reserve). Similar figures have Latvia, and Lithuania has as many as the two gathered. Interestingly, the sum of the population of Estonia (approx. 770,000) and Latvia (about 1.8 mil.) is almost equal to the population of Lithuania, approx. 2.7 million people. NATO personnel in the 3 Baltic states are around 4,500 troops. In the event of an all-out war, it seems that Russia has hegemony in the region. Or at least had it until the time of the invasion of Ukraine in 2022. Since then, Sweden and Finland — two key players in Northern Europe and the Baltic Sea — have decided to integrate them under the umbrella of NATO's collective defence. The balance of power also seems to change

on the southern shore of the Baltic, right next to the Kaliningrad exclave. Poland, worried about Russia's constant violations of international law, will become the most powerful ground force in Europe. It is clear that we will see great changes in Southern and Eastern Europe, possibly regional initiatives will develop the area and hijack Western Europe economically and militarily. In this regard, it is also interesting to find out the denouement of the War in Ukraine, which currently lasts for just over 200 days. The Kaliningrad region is practically swallowed up by EU and NATO member states, and this is a good reason why Russia should not attack any Baltic state. The citizens of the exclave consider themselves Russians and were overwhelmingly sympathisers of the annexation of Crimea or the war in Ukraine.

“For Russia, however, Kaliningrad's main significance is military as an unsinkable aircraft carrier. As a military base, the region adds significantly to Russia's strategic depth and is a critical asset for Moscow in its anti-access area denial (A2AD) capabilities in the Baltic Sea, potentially undermining NATO's freedom of maneuver across the Baltic States and parts of Poland” (Wolff, 2022). Currently, the role of Kaliningrad is an instrument of coercion on regional actors who are within the range of nuclear weapons installed in the oblast or in the Western Military District. *“The Iskander missile system was first introduced to the region in 2016 and then upgraded in 2018, as part of a Russian strategy to counter NATO's deployment of an anti-ballistic missile defense shield in Europe”* (Ibid.). The Kaliningrad region is defended by the 11th Army Corps of the Coastal Fleet Defence Troops, air and anti-aircraft Defence Forces plus the Russian Fleet in the Baltic Sea. The most feared Russian capabilities in the 11th Army Corps are the BM-27 Hurricane and BM-30 Smerch self-propelled missile launchers that can fire 12 missiles in 38 seconds and cause destruction over an area of 67 hectares. In the 152nd Brigade located in Chenryakovsk (east of the oblast) there are Iskander missiles. Iskander short-range ballistic missiles are a versatile weapon that can carry nuclear warheads as its cargo. They are at the limit of the INF Treaty (Intermediate-Range Nuclear Forces Treaty) and they are very tricky to intercept. Iskander missiles can attack a point at a maximum of 500 km and can be launched from both a terrestrial and a naval platform. The westernmost point they could attack in a dramatic escalation would be Berlin. Of all Russia's air and anti-air defence divisions, the best performing are in the Western Military District. *“One intrinsic feature of the Baltic States battlespace is the heavy presence of Russian army aviation assets, which include one regiment and one brigade. The reason behind such force prepositioning is the ground terrain around the Baltic States, which, because of its large number of lakes, rivers, and generally boggy terrain, does not favor maneuver warfare”* (Muzyka, 2021, p. 37).

The Russian Fleet from the Baltic Sea has two bases: in Kronstadt (it belongs to the port of St. Petersburg) and in Baltysk (Kaliningrad). The most feared weapons are the vertical launch systems of the Kalibr and Osnik anti-ship cruise missiles, both with a nuclear arsenal, both of them can reach targets at a distance of 1,000-2,000 km. Along with these, we also have the Iskander missiles, but also the Zircon hypersonic ones. Zircon missiles can reach a target at 1,000 km and have a speed of Mach 9 (11,000 km/hour), very difficult to intercept.

Military Diplomacy

In the Russian Military Doctrine of 2014, a new possible threat to their national security is specified – *“global strike against Russia”* (Forsström, 2019, p. 740). Russia is the largest country on the surface of the Earth, it shares land borders with 16 sovereign states and 2 maritime borders with the U.S.A. and Japan. Even though Russia has been a great power since the 18th century and now has the largest nuclear arsenal in the world, it still has to tie up certain military alliances in order to be able to defend its vast territory. The security environment of the beginning of the 21st century tends towards multipolarity and a state of militarization of the countries of the world is easily noted. Russia is trying to weave ties with its favorite regional states through joint military exercises and the export of raw materials and weapons at a great price. Some of the most important military exercises that Russia manages together with friendly states are: *Shchit Soyuz*a (with Belarus), *Slavic Brotherhood* (Serbia+Belarus), *Vostok* (China+Mongolia), *Defenders of Friendship* (with Egypt), *Kavkaz* (Armenia, Belarus, China, Iran, Pakistan, Myanmar), *Jenter* (China, Pakistan, Kyrgyzstan, India, Kazakhstan, Tajikistan, Uzbekistan). But since the war in Ukraine began in 2022, a colder attitude of Russia's Asian and Caucasian allies was noted and these states are closing ties more and more with China. We already note that two sovereign states that Russia considers in *russskiy mir* have been attacked since the beginning of the 21st century (Ukraine and Georgia). It will not be long before tensions arise on all the borders of the Russian world, such as those between Armenia-Azerbaijan and Tajikistan-Kyrgyzstan or like the pro-democracy demonstrations in Iran and Kazakhstan, and soon the multi-ethnic federation will succumb after 300 years characterised by the eternal desire for expansion.

Since the biggest threat to Russia is NATO, and the most likely theater of war will again be the old European continent, then I set out to analyze the evolution of the Zapad military exercise (*“West”* in Russian) in order to be able to make some assumed predictions on the hypothetical scenario that could occur in the hypostasis of invading NATO territory through the Baltic countries or Poland. *“Out of all the military districts, Russia's Western Military District (MD) fields the most robust,*

most numerous, and most capable fighting forces. Strengthening the western operational direction remains the priority for Moscow” (Muzyka & Consuling, 2021, p. 4). The militarization of the oblast has been on an upward slope for the past 20 years. This state is justified by the reforms of the Russian army in the region, by the newly transported military equipment in the oblast, by the increased availability characterised by the stationing of a large number of soldiers, the constancy of military exercises carried out in the oblast, the improvement of combat support and logistics.

Zapad 2021 was the largest military exercise executed in the western region of the country from where, the Russians believe, the greatest threat is coming: the West. This exercise was attended by soldiers from countries such as Russia, Belarus, India, Kazakhstan, Armenia, Mongolia, Kyrgyzstan and observers from China, Vietnam, Sri Lanka, Pakistan, Myanmar, Uzbekistan. The Kremlin has been trying for many years to increase the interoperability of the Belarusian army with the Russian one, and also to accustom the Belarusians to the active presence of the Russian military on their territory. “*The Zapad 2021 exercises will likely support Putin’s efforts to establish a continuous Russian military presence in Belarus. Zapad 2021 will emphasize the logistical activities necessary to establish supply lines that could support a sustained Russian presence in Belarus*” (Barros, 2021, p. 3). According to analysts, Russia and Belorussia have had joint military exercises almost monthly since August 2020. “*During last year’s Zapad military exercise, Russian and Belarusian troops reportedly practiced closing the Suwalki corridor by attacking from Belarus in the direction of Kaliningrad*” (Deni, 2022).

CONCLUSIONS

Even though Kaliningrad is Russia’s smallest federal subject, it can be compared to a very important chess piece when it comes to the match the Russians are waging against the West. The region has both military importance, but it can also represent a very great weakness of Russia because in an all-out war the residents of Kaliningrad would have no escape. For Russia’s foreign policy, an armed Kaliningrad means dominating the Baltic states and perhaps even the entire sea, and internally the Kremlin wants to demonstrate its capacity, as a world power, to protect even this little exclave which is situated at more than a thousand km from Moscow and which is encircled by hostile powers.

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THE BATTLE OF KYIV – ASPECTS REGARDING THE CONDUCT OF MILITARY OPERATIONS AT TACTICAL LEVEL –

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The military operations conducted on the territory of Ukraine during the conflict started by the Russian Federation on 24 February 2022 show that the chances for large-scale combat operations in Europe have significantly increased. Consequently, the way those operations are carried out must be carefully reconsidered. Adapting to the requirements of the modern battlefield requires a rapid multi-domain integration of new technologies and modern weapon systems. Therefore, doctrinal changes are required. There is no doubt that the Battle of Kiev is a valuable source of information for military leaders, regarding the conduct of military operations at each level. Therefore, a pertinent analysis in relation to the factors that have contributed to the battle's outcome could be very helpful.

The main objective of the analysis is to highlight lessons on the topic of planning and carrying out military operations at tactical level. It emphasises both the determining factors for the failure of the Russian offensive and the features that gave the Ukrainian forces the upper hand, ensuring the successful defence operation. The research methodology is based on the qualitative evaluation of the available information, to enable an assessment of the battle from the combat functions perspective with the aim to identify possible gaps in Western armies' way to carry out combat operations.

Keywords: combat operations; urban environment; new weapon systems; tactical implications; battlefield;

INTRODUCTION

In the morning of 24 February 2022, the whole world found out that the Russian Federation's launched a ground invasion of Ukraine. Despite the inherent risks and costs of a large-scale combat operation and in a context marked by a detailed exposure of the Russians' likely plans and courses of action, the Russian Federation decided to achieve its political goals through the so-called *special military operation* (Kagan, Bugayova, Barros, Stepanenko, Clark, 2021, p. 8). Consequently, for the first time after the Second World War, conventional combat operations were conducted on Europe's soil. The conflict put up into scene two conventional military forces, extremely lethal, apparently sufficiently determined and capable of multi-domain operations.

Taking in consideration the significant quantitative differences between Russian and Ukrainian forces, as well as the qualitative and technological gap regarding weapons systems, and military equipment, the Western's experts estimated a rapid defeat of the Ukrainians. The assumption that the overwhelming combat power of the approximately 105 Battalion Tactical Group/BTG deployed to Ukraine's borders would generate the decisive conditions for an easy defeat of the Ukrainian forces proved to be false. Achieving air supremacy in the early days of the conflict, an essential requirement for the success of ground operations, has also failed (Rice, Dan, 2022).

Several Western analyses regarding Russians' military options in Ukraine have identified the capital and other major urban centres as important military objectives. Therefore, seizing those objectives was essential to generate Ukraine's political collapse, affecting the armed forces' will to fight and also demoralising local population. Another assessment of the Institute for the Study of War/ISW, released just before the start of the conflict, indicated Kyiv as the main objective on the North Axis of advance from Belarus (Kagan, Bugayova, Barros, Stepanenko, Clark, 2021, p. 11). The same publication evaluated the importance of this objective, both for the Russian's operations and for the Ukrainians' necessity to preserve their main source of physical and moral power.

In the initial phase of the conflict, the Russian offensive indeed confirmed the estimates regarding their advance towards Kyiv. Western intelligence, as well as several military research institutes, has estimated that the Ukrainian capital will most likely capitulate within 72 hours (Watling, Reynolds, 2022, p. 1). President Zelensky was given the opportunity to leave the country, but his decision to stay transformed the city into one of Ukraine's centres of gravity. On 2 March 2022, the Royal United Service Institute for Defence and Security Studies/RUSI emphasised that *"It is only a matter of time before Russian forces reach and complete the encirclement of Kyiv"* (Davies, 2022). However, on 22 March, in the daily update regarding the conduct of military operations, ISW was assessing that Russian forces from Kyiv's area of operations most likely lost initiative and adopted defensive positions. That was the culmination point of the Russian forces' offensive operation (Kagan, 2022).

The battle for Kyiv, no matter how long the war will last, will most likely remain an symbolic episode of this armed conflict. It could be considered the *"turning point"* that transformed the Russian *blitzkrieg* into a war of attrition. Therefore, this battle will remain one of the benchmarks for the planning and execution of large-scale combat operations in the future, especially in severely restricted environments such as the urban one.

Thus, the study's main objective is to identify valuable lessons for future military leaders about this tactical confrontation between two near-peer adversaries. The manner in which tactics, techniques and procedures must be adapted to the battlefield's new requirements, as well as the implications generated by the new weapon systems constitute the subsequent objectives of this analysis. The research methodology is based on the qualitative analysis of several documents and studies considered to be relevant in the field of military art. The information regarding the conduct of operations comes from the periodic evaluations of international research institutions, experts' opinions, intelligence estimates and analyses managed by the North Atlantic Alliance and its members. The weapon systems' characteristics and equipment data come from the information provided by the developing companies. We need to emphasise that in spite of the available information, this approach analyses the military operations in the Kyiv area from a tactical perspective. The identification of the aspects and factors that influenced the operations' planning and execution of the combat forces also aims to find some lessons and consequently improve the operation process.

It should be noted that there still is the possibility that some information is distorted, biased or incomplete. And this is valid taking in consideration the need to preserve the operational security. The tendency of the belligerents to exaggerate and/or diminishing the effects or impact of some actions for propaganda purposes could be a reason for the inaccuracy of some data, as well as the aim to preserve the combatants' morale. Therefore, we point out once again the need to exclusively consider authentic and credible bibliographic sources.

THE BATTLE SCENE AND THE MILESTONES REGARDING THE PLANNING AND EXECUTION OF COMBAT OPERATIONS IN THE KYIV AREA OF OPERATIONS

Kyiv is an approximately 840 square kilometres size city and a population of nearly 3 million people. Its size is twice the one of Bucharest. It is located on the east and west banks of the Dnieper River. This natural obstacle is crossing the city from north to south and basically divides it into two large cities, with the ability to support each other in military operations. Most of the cities have a layout on the banks of a major river and this becomes a characteristic of large urban agglomerations. Therefore, there are major implications in terms of planning and conducting combat operations, both offensive and defensive ones. A hilly and wooded terrain is surrounding the city. The watercourses that converge to the Dnieper River in the northern area and the artificial lakes make offensive operations more difficult and provide the defending forces with an advantage.

The moment of the attack was carefully chosen. The Russian military planners relied on a rapid and forceful advance along the main lines of communication, with the possibility of manoeuvring outside them, exploiting the frozen ground conditions. The perspective of extending operations until the arrival of the spring was certainly out of the question, due to the swampy terrain north of Kyiv. Obviously, the Russian tried to avoid the *rasputița* that trapped the Guderian's tanks in the fall of 1941.

Ground attack on Russia's Northern axis of advance toward Kyiv was foreseeable. As a consequence, the forces were deployed as follows:

- on the Belarus-Kyiv Axis, 15 to 20,000 soldiers on the Western bank of the Dnieper River, in four armoured regiments;
- on the North-East Kyiv Axis, an approximately two-division sized force with the purpose to seize the capital by travelling through the Chernihiv and Sumy's districts (Vershinin, 2022).

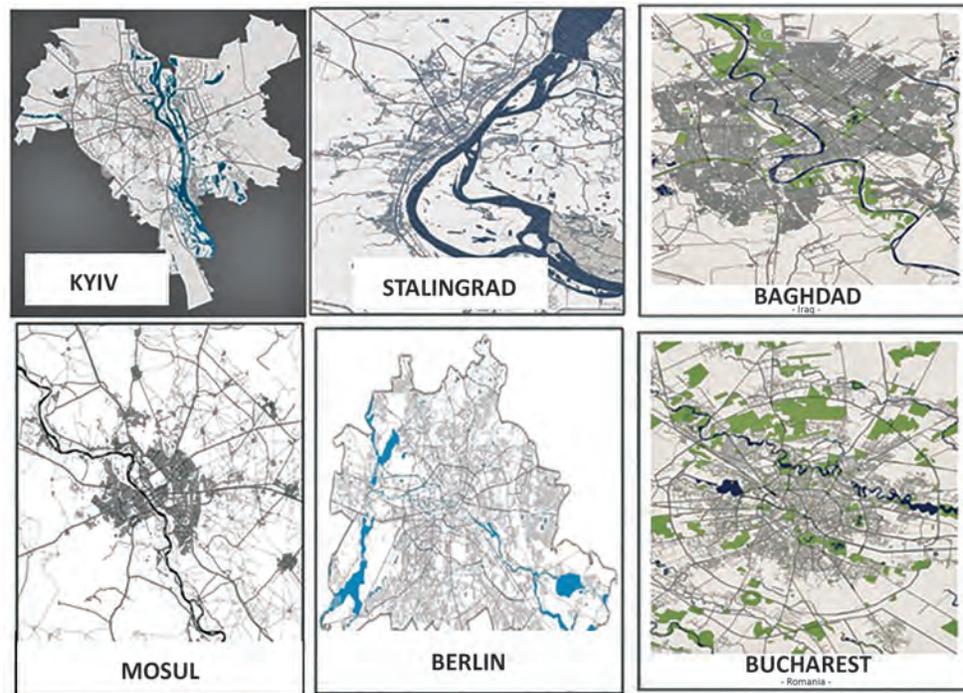


Figure no. 1: Cities on riverbanks
(<https://freevectormaps.com/>, retrieved on 21 August 2022).

The coordination and synchronisation of those forces was a major challenge for the Russians commanders, given the hardship of the terrain, the line of communication's insufficiency and the Ukrainian army's resistance in depth. The failure to meet those manoeuvring warfare's requirements would have led to the exposure of the Russian formations' flanks on the riverbanks. Therefore, the Russian forces paid special attention to those aspects, at least in the initial phase of the operation. It is very likely that the planners of the so-called *special military operation* took in consideration several erroneous assumptions regarding the Ukrainians' fighting power, their determination and will to fight, as well as the local population's disposition to support Russian forces. However, certainly the planning of the operations at the operational level took in consideration the achievement of several objectives in order to ensure the premise for success. Assessing the modus operandi of the forces assigned to conquer the capital city, from the operational art perspective, it is obvious that the Russian military planners set certain main decisive

prerequisites to be met in order for their goals to be accomplished. In my opinion, those decisive conditions include:

- obtaining air dominance in the Kyiv area of operations, in particular by neutralising Ukrainian air defences;
- occupying and controlling the Antonov airport located in the city of Hostomel, west of Kyiv, in order to create an air bridgehead to sustain further operations;
- seizing the localities around Kiev and maintaining control over them as an essential condition for securing the lines of communication and ensure an efficient logistics' flow;
- capturing and controlling Chernihiv and Nizhyn, two large railway nodes, in order to facilitate the flow of resources from the east to Kyiv.

Undoubtedly, seizing a large city like Kyiv is not easy due to the hardship of offensive operations in urban terrain. Urban operations impose many challenges to ground forces that conduct offensive activities. Large cities make these operations difficult, due to the complexity of the terrain, the ability to absorb the shock of offensive actions and by inflicting attrition on the attacker. The urban terrain gives a tactical advantage to the defender, allowing those forces to build an in-depth, cohesive defence. Usually, the terrain's fragmentation generates the conditions for several simultaneous tactical clashes. Thus, relative combat power superiority is difficult to achieve. The three-dimensional character of the urban terrain requires a methodical approach to the operations and consequently they are time and resource consuming. The urban environment amplifies soldiers' physiological pressure and the rate of casualties is also exacerbated in this type of environment, both for the armed forces and the local population. An analysis of the Battle for Mosul (16 October 2016 – 17 February 2017) highlights several aspects that underline the difficulty of urban combat operations. These observations could be considered lessons learned and refer to: the impossibility of complete isolation of the city, the increasing pressure in time on the attacker and during their advance into the depth of the defence, the loss of initiative by the offensive forces once they entered town. The assessment also emphasises that the dense urban environment facilitates the support of operations and the achievement of objectives directly depends on the support of the population (Arnold, Fiore, 2022).

It is difficult to determine whether the Russian forces engaged in the operations to capture Kiev considered these aspects in their planning and preparing activities. Most likely, based on the information they had, they did not assume the possibility of extending the battle in time. The failure to achieve those decisive conditions to complete their objectives generated many other frustrations at the tactical level. And those frustrations severely diminished the combat power of the Russian forces.

The Battle for Kyiv expanded in time and space, and after a few weeks from the beginning of the operation, the Russian forces deployed in the Kiev area had to hold the offensive and consolidate their positions. By reaching the culminating moment, Russian forces needed to shift from an offensive to a defensive posture. In the offensive operations, a force reaches the culminating point in three distinct situations:

1. when the force no longer has fresh forces to go into battle in order to continue the offensive operation;
2. the logistic system is ineffective, and the forces' supply activities are no longer possible;
3. when the combat power of the attacker is exceeded by the defending forces' combat power.

Despite the fact that the force's ratio was a real advantage for the Russian forces, reaching up to 10:1 in some critical situations, the Ukrainian forces' combat power was most likely superior. It could be estimated that the failure of the offensive was largely a direct consequence of the insufficiency of fresh forces necessary to develop the offensive, as well as a deficient logistical system.

Regardless of the errors made by the Russian commanders when planning and carrying out the operation, one of the main causes of their defeat were the effectiveness of the Ukrainian forces' resolute defence. On the night of 22-23 February, based on valuable information about the Russia's imminent attack, the Ukrainians redeployed forces from their initial positions, along the Belarus-Kyiv Axis, thereby misleading the Russians about the future combat disposal (Rice, 2022). By organising a defence in-depth concentrated on the key terrain, Ukrainian forces drew the enemy's forces into several killing areas. Over there, they were blocked, pinned-down and subsequently destroyed by ground mobile detachments, massed artillery fire and strikes of the Bayraktar TB 2 systems. The decisive moments, such as preventing the Russians to create an air bridgehead at Hostomel, the Brovary's ambush, the battles of Moschun Forest or the clashes in the Ivankyiv, Bucha and Irpin areas created the premises for successful defensive operations. Also, the

ingenious use of terrain and infrastructure allowed the Ukrainian forces to gain a position of advantage in space and time. Finally, there were able to repel the attacker and recapture the occupied territory. A relevant example is the controlled flooding and the temporary rising of the rivers in the Northeast of the city causing drastically effects for the Russian forces' mobility and their logistic capabilities.

IDENTIFIED LESSONS REGARDING THE PLANNING AND EXECUTION OF COMBAT OPERATIONS AT THE TACTICAL LEVEL

It should be mentioned that there is not a strictly time and space framing for the Battle for Kyiv. Many analyses identify 24 February as the moment of its start. And most likely the battle ended in early April with the regaining of the lost territories by Ukrainian forces. From a spatial perspective, the decisive moments of this confrontation are located inside the city's adjacent areas. Although, the attacking forces reached positions about 10 km from the city centre, they failed to penetrate the defence systems and were stopped in the outskirts of Kyiv.

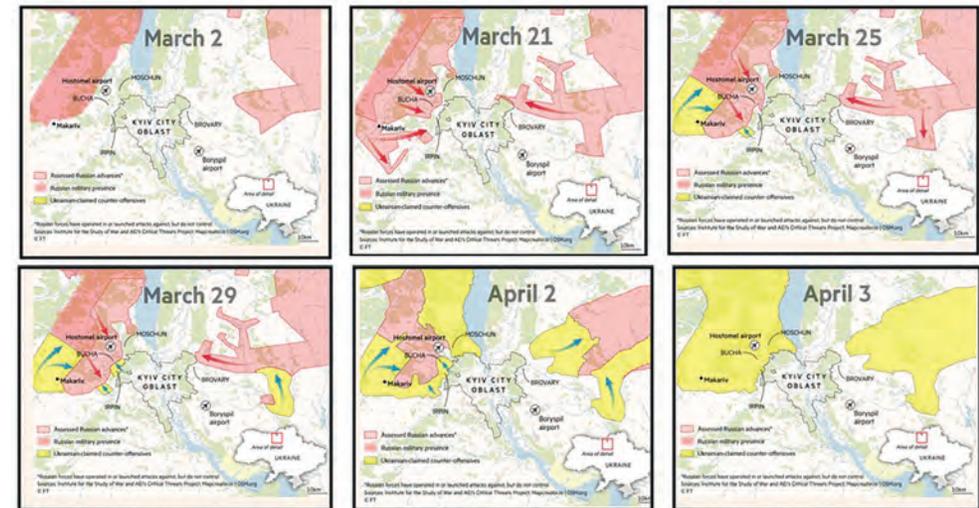


Figure no. 2: Conduct of operations on the Kyiv Axis of effort
(<https://www.understandingwar.org> retrieved on 21 September 2022)

It should be emphasised, once again, that the study is mainly focused on the relevant aspects regarding tactical activities conducted in the Kyiv area of operations. The analysis of several critical situations that generated the outcome of the battle enabled the identifying of interesting information. The identified

lessons are grouped in relation to the combat functions. We have also identified some relevant aspects related to the force structure and composition, new weapon systems' exploitation, soldiers' morale and will to fight.

Force Structure and Composition

The backbone of the Russian ground forces in the Kyiv area of operation has been a structure based on the Battalion Tactical Group/BTG format. This kind of tactical unit is one of the solutions identified by the Russians after the Russo-Chechen wars. It was developed after the conflict in Georgia in 2008 and its main purpose is obtaining a flexible unit with sufficient combat power to conduct manoeuvre operations. This transformation proved to be effective in Eastern Ukraine conflicts during the 2014 conflict in Donbas. The operational framework and operations' requirements specific to low-scale and low-intensity conflicts facilitated successful operations in case of BTGs employment. Therefore, their development was continuous and official data shows that the Russian Federation had 66 BTGs in 2016 (Grau, Bartles, 2022), 136 in 2019 (Ramm, 2019, p. 25) and about 168 in 2021 (Ibid.).

The BTG's structure and composition is usually based on the organic mechanised or motorised infantry battalion. The unit is reinforced with both manoeuvre and combat support elements and logistical support as follows: 1-2 tank companies, 1 self-propelled artillery battery and/or 1 multiple rocket launcher system/MLRS battery, 1 anti-tank battery, 1 air defence company, 1 combat engineer company, 1 armoured reconnaissance company, electronic warfare/EW capabilities, unmanned aerial systems/UAS capabilities, and additional logistics support elements (Keith, Olikier, Nichiporuk, 2019, p. 32). Even if this kind of unit seems to be a robust and lethal structure, it proved to be difficult to integrate it into major ground operations. Consequently, Russian BTGs proved to be ineffective in the initial phase of the Russian-Ukrainian conflict. By extensively using this type of units, the fighting power of their higher echelon units was consequently diminished, as well as their ability to integrate and coordinate the actions of those BTGs.

For several reasons, some political and others tactical ones, the Ukrainian forces were not into battle position during the night of 23 to 24 February. The city, apparently, was not prepared for defence. However, the capital's defence plan ensured the capacity to swiftly build a versatile force able to successfully repeal the attack. The regular formations having an adequate level of training received the rapid augmentation of the territorial defence units formed during the mobilisation process. Those units deployed into combat positions around the city and blocked

the keys of the terrain. The need for rapidly increasing fighting power through mobilising the local population in order to create territorial defence units forced the Ukrainian commanders to deploy professional personnel to ensure an appropriate level of training for the recruits. These initiatives create adequate conditions for recruits to effectively handle their basic weapon systems as assault rifles, mortars, anti-tank guided missile systems or MANPAD air defence systems (Reynolds, Watling, 2022, p. 17). Moreover, the Ukrainian defence system in the Kyiv area was consolidated by the use of mobile and small-sized tactical structures that operated mainly in sensitive points in order to conduct attacks on Russian armoured formations and logistical units or to coordinate the fires of own forces.

Command and Control

The inefficiency of the Russian command and control/C2 system during their attempt to seize Kyiv is well-known. This fact has significantly contributed to their overall failure. Having in mind the aim to realise an adequate analysis about how C2 was integrated to operations, I have tried to answer the following research question: *“Which were the main factors that contribute to an ineffective C2 for the Russian ground forces?”*

Undoubtedly, there are many reasons for the Russian C2 failure and it is obvious that an exhaustive answer is not possible. However, several relevant aspects were identified. First of all, it should be highlighted the existence of a diminished capability to plan and conduct large-scale combat operations at the brigade and division level. The existing dysfunctions in the Russian operational planning process come from their philosophy of command. A detailed command philosophy does not give the subordinate commanders the chance to be creative in pursuing of their objectives. Usually, *“the solution”* for a specific problem is provided by the higher echelon and therefore the answer to the question *“What is the purpose of the operation?”* becomes irrelevant. Many times, the Russians field commanders were facing situations where they strictly received directives about the way that a mission must be accomplished.

In a comprehensive study about the Russian way to fight, Lester W. Grau and Charles K. Bartles identified another factor that justifies the Russian's approach regarding the planning of operations at the tactical level. By evaluating personnel categories, the authors conclude that the ground forces of the Russian Army do not have enough staff officers, especially at the tactical level of the operations and the available non-commissioned officers are not adequately integrated

in the units' chain of command. As a consequence, this reality creates the conditions for an overuse phenomenon of the disposable officers (Grau, Bartles, 2016, p. 9).

The problem was partially solved by dispatching staff officers in support of BTGs from the higher echelons. Even this solution was functional during the small-scale operations from Eastern Ukraine, it has accentuated the problems related with the ability to plan and coordinate large-scale operations.

The Battle for Kyiv validates the existing deficiencies regarding divisions and brigades' capabilities to conduct offensive operations. The battalion tactical groups were independently engaged into the battle without an adequate and coherent support. The successive engagement of Russian BTGs in combat, especially in urban clashes, generates the gradual decrease in their combat power (ISW, 2022).

Those problems related with the coordination and synchronisation of the operations at the divisional level caused a direct involvement of the high-ranking officers, including army and army corps commanders. As a consequence, they moved very close to the frontline and gave Ukrainians the chance to eliminate them through precise artillery fires targeting command posts or snipers actions.

The communication system planned and executed by the Russian forces was also poor on the Belarus-Kyiv Axis. Intelligence indicates that they extensively used high-frequency radio stations, easy to intercept and cellular phones as an alternative to their military equipments. Moreover, the Russian forces did not have GPS type navigation systems and they relied on classical outdated maps. The Russian electronic warfare/EW was successful in the very beginning of the confrontation, but the effectiveness of those operations significantly decreased after the first week of combat. The failure to properly securing the lines of communications hampered the dislocations of EW systems to the frontline due to the risk of capturing them. Therefore, Ukrainians gained the chance for a better coordination of their own actions and the opportunity to foresee the Russian plans using interceptions. (Cranny-Evans, Withington, 2022).

On the other hand, the Ukraine Army's C2 system proved to be more flexible and efficient than the Russian one. Ukrainian's concept of operations tried to avoid patterns in the C2 projection. Therefore, they chose where the tactical command post should be deployed. In order to confirm this supposition, I will mention the media information that announced the Russian strikes on schools and local institutions around Kyiv, in the very beginning of the conflict. Those strikes most likely targeted Ukraine's C2 system, especially the CPs, but also logistics facilities

and ammo warehouses. Taking in consideration that both armies' doctrines include the same principles regarding combat disposal layout, those targets were predictable and therefore Ukraine's commanders took in consideration a second best option regarding the location of sensitive combat disposal elements. A Western-based mission command philosophy allowed Ukrainians to preserve the C2 system despite the Russians multiple attempts to disrupt it through EW operations and precision munitions strikes. As a consequence, it could be concluded that freedom of movement and disciplined initiative at the tactical level ensured Ukraine's chances for survival in the first days of the war.

Intelligence

Despite the constant effort of the covert Russian intelligence officers to provide reasonable information regarding the determining factor for the military operations, the ground forces on the Belarus-Kyiv Axis did not have them. Thus, the intelligence preparation of the battlefield was complete without knowing the essential elements necessary for determining the enemy's probable course of actions. There was also not enough time to make a viable assessment about the enemy's capabilities, terrain and weather implications and local population ability to influence the operation. The available 72 hours to plan the air assault operation to seize the Hostomel Airport as well as the approximately 24 hours ensured for the BTGs planning process did not cover the necessary time requirements (Watling, Reynolds, 2022, p. 3).

Ukrainian's forces managed to obtain a relative informational superiority taking advantage of a terrain's attentive analysis in order to foresee the enemy's options. A thorough reconnaissance allowed them to identify the key terrain like avenues of approaches, ambushes favourable areas, easy to flood terrain. These aspects facilitated a cohesive in-depth defence with successive positions that absorbed the shock and the energy of the Russian offensive actions. By covering key terrain with ISR sensors, Ukraine's forces obtained essential information about the enemy's courses of actions and consequently an accurate localisation of enemy forces was possible. The local population constantly reported about the enemy's activities in the occupied territories. Ukrainian intelligence verified the information and passed it to the conventional forces in order to take further actions. The communication's interception has also allowed Ukrainians to take advantage and to outrun their enemy regarding informational and decision-making cycles.

Fires and Manoeuvre

Taking in consideration the doctrine's stipulations, it should be highlighted that fires and manoeuvre are separately described but they are also strongly related. The *joint action* in land environment is the result of the fires and manoeuvre's combination with the contribution of information activities and CIMIC. This kind of action is designed to strike both the enemy's combat capabilities, their will to fight and the understanding of the situation. It is directed through the intelligence and command and control and supported by the protection and sustainment functions (AJP 3-2, 2022, p. 44). Bearing in mind these theoretical aspects, I chose to address in an integrated manner the way fires and manoeuvre were used in the Battle of Kyiv.

The Russian forces ability to conduct manoeuvre operations was severely affected by the lack of time for planning and appropriate preparations. The plan for the seizure of Hostomel Airport was made in less than 72 hours and the ground forces had even less of this amount of time. The lack of information about the Ukrainian resistance hampered both the Russian's ability to manoeuvre and fires capabilities and the way in which they were allocated. This caused the failure of the air assault detachment tasked by VDV¹.

A reinforced company-level unit was tasked to seize the Antonov Airport in the morning of 24 February in an attempt to exploit the shock and surprise of this kind of action. However, the forces of the 4th Rapid Reaction Brigade had swiftly counterattacked and liberated the airport until the last hours of the day, forcing the Russian forces to withdraw in the surrounding forests. Even if the Russian forces managed to recapture the airport with the support of the ground units, it was impossible to build an air bridgehead in order to develop further operations. Consequently, the attacker, by losing the effects of surprise and the initiative, reduced his chances to seize the city (Kofsky, 2022).

The assessment of this part of the battle emphasises the fact that the Russian lack of heavy weapons and inadequate air defence protection generated the failure in keeping the airport under their occupation. Also, it is true that the late junction with manoeuvre ground forces amplified the chances for failure of the air assault element. In conclusion, mention should be made that the airborne and air assault operation must be carefully planned and synchronised with the actions conducted by other forces tasked to contribute to the overall objective of a major operation.

¹ Vozdushno-desantnye voyska Rossii/Russian Airborne Forces.

The ground units' operations were also far from the plan's directives. Despite a rapid advance along the Belarus-Kyiv Axis facilitated by the Ukrainian's poor defence in the border area, the Russian BTGs gradually diminished their combat power. Their forces were permanently exposed to the enemy's raids and ambushes conducted along the lines of communications. The frequent exposure to artillery and UAS fires contributed to the degradation of BTGs combat power, too. The lack of combat support units, especially long range artillery and medium range air defence systems, did not allow the Russian BTGs to effectively counter these threats. Moreover, the existence of serious logistic dysfunctions regarding resupplying with ammo, daily rations and carburant put a significant pressure on the forces engaged in operation. Several battalions managed to breach the Ukrainian defence and reached the outskirts of Kyiv, but the difficulty to reinforce them made their gains irrelevant on the battlefield (Jones, 2022).

The Ukrainian layered and in-depth defence system dramatically reduced the Russian ground forces ability to manoeuvre. The defence of the key terrain along the main roads toward Kyiv enabled the Ukrainian forces to hamper the BTGs movement. The ambushes conducted along communication lines created opportunities to block and fix the Russian armoured formations. The FGM-148 Javelin anti-tank guided missiles system allowed Ukrainian forces to strike and stop Russian armoured columns, targeting their security elements. The Next Generation Light Antitank Weapon/NLAW was successfully employed in urban terrain where the capability to hit targets from a short distance proved to be decisively. As a conclusion, the necessary conditions to destroy the Russian forces with the concentrated fire of artillery and UAS were met by their opponent.

The failure to capture the capital within days by the unified action of airborne and BTGs' forces generated an orientation to a methodical approach with the purpose to seize the city. Thus, the Russian forces tried to isolate it and block the main lines of communication. Taking in consideration the huge size of the city and the great number of adjacent roads existing nearby, sealing the city was impossible due to the lack of sufficient forces.

Moreover, in their attempt to obtain a large number of armoured units, the Russian commanders did not ensure sufficient infantry elements within the BTGs formation (Spencer, 2022). Considering this aspect, I appreciate that the insufficiency of medium and light infantry proved to be fatal in urban battles. Thus, the lack of security elements to ensure an appropriate *screening* task of the armoured columns created the opportunity to ambush them in choke points.

A good example is the destruction of a Russian armoured column in vicinity of the Brovary village, on the East side of the capital. The *hit and run* tactics conducted by small and mobile Ukrainian units facilitated the permanent harassment of the attacker. The insufficient quantity of infantry inside the BTGs formation generated several problems, such as the impossibility to secure the lines of communication, to control the key terrain, the inadequate protection of tanks and heavy infantry formation in restricted areas. Moreover, the unified action of the infantry and tanks units, which is essential in urban terrain, did not work properly during the offensive operation to capture the city.

The destruction of bridges situate on the Dnieper's tributary rivers was another tactical action that restricted Russians' ability to manoeuvre and gave Ukrainians the chance to target their forces with artillery and UAS capabilities. The controlled destruction of the infrastructure was synchronised with the controlled flooding of the terrain and raising the rivers' debit in order to impede the obstacle's crossing. That generated traffic jams and huge agglomeration of forces, creating the opportunity for the Ukrainian forces to mass the artillery fires that produced heavy losses. The crossing operation was impacted by the lack of crossing means. The initial plan of the operation did not anticipate the need to conduct river crossing operations. To make things worse, the controlled flooding transformed the terrain in a huge marsh, where the armours transit was severely restricted. Consequently, the advantage of the frozen soil was practically cancelled by Ukrainian forces (Spencer, Collins, 2022). Several points of crossing were intentionally left open and they were used by the Russian forces that were then ambushed. The destruction of a column of one hundred armoured vehicles in the vicinity of Bucha and Irpin towns became a well-know example of this kind of tactical operation (Bowen, 2022).

By analysing the factors that influenced the fires and manoeuvre in the Battle for Kyiv, it could be emphasised that the cooperation between state institutions is fundamental from the national defence perspective. The wisely manipulation of the infrastructures is not possible without civilian expertise and the integration of fires and manoeuvre in an urban environment requires a solid knowledge about critical urban objectives.

Force Protection

One of the Ukrainians' biggest challenges during the Battle for Kyiv was to ensure their ability to operate in the electromagnetic spectrum. Knowing the Russians' EW capabilities, Ukrainian military planners anticipated the enemy's superiority in this

operating environment. An EW specialist of the Ukrainians stated: *"We thought we were going to be denied the entire electromagnetic spectrum around Kyiv"* (Watling, Reynolds, 2022, p. 2). Indeed, in the first days of the conflict, the effects of the EW operations significantly reduced the defence capacity of the Ukrainians, creating the conditions for airborne infiltration and the rapid advance of ground units. However, as Russian forces advanced into Ukrainian territory, the EW effects were no longer so effective. The unsecured lines of communication frustrated the deployment of these capabilities to the contact zone due to real risk of being destroyed or captured.

Despite the initial annihilation of a large number of radars and air defence means, the Ukrainian air defences system could not be completely neutralised. Ukrainian soldiers successfully used MANPAD systems to target Russian attack helicopters tasked for Close Air Support/CAS and Close Combat Attack/CCA missions. The protection of air capabilities designated for airborne or resupply operations was not properly carried out, causing the Russian forces to abandon them due to very high losses, in particular because of the portable anti-aircraft missile systems. On the other hand, the Russian BTGs did not have adequate air defence capabilities and therefore the armoured units were frequently exposed to UAS attacks.

Another aspect that should be brought to attention concerns ballistic protection requirements. The effectiveness of the 30 mm cannons and heavy machine guns mounted on the Russian armoured vehicles was reported in many situations by the Ukrainian personnel. Their reports showed that these weapon systems were extremely lethal in close combat. In conclusion, their use in combat could bring the next advantages: the need to use of a smaller number of dismounted personnel and higher power of penetration of light armour, buildings and shelters. As a conclusion, we believe the following aspects are essential: blocking and engaging these capabilities before they can reach their weapons' effective range and building (especially in the urban environment) adequate shelters using materials that neutralise the penetrating projectiles' effect.

The effects of artillery strikes could be amplified in the urban environment, due to a congested electromagnetic environment that affects the accuracy of precision guided munitions. Taking into consideration that the complete evacuation of the civilian population in a large urban area like Kiev is unlikely, military commanders and local authorities must consider providing shelters and bunkers for them. When the population must use their own homes as a shelter, barricading the windows with sandbags could be useful because the glass from broken windows

could cause serious injuries to both civilians and military personnel during shelling. The large number of civilian casualties could overwhelm the medical system and obstruct military operations.

The manner in which the tactical movement of the Russian BTGs' manoeuvring elements was conducted did not integrate the requirements of force protection. The lack of forces deployed to secure the terrain and the main routes of advance created opportunities for the Ukrainians to strike the armoured formations without any warning. The security of stationary forces, including the ground manoeuvre units and logistical support elements, was inadequate due to the insufficiency of guard detachments. The unsecured signal communications further deepened this problem and a lot of information about the location, composition and intentions of the Russian forces was compromised. Therefore, from this perspective, the need to ensure a proper mix of forces to perform security operations both to contact and rear areas of operations should be once again emphasised.

Sustainment

The logistic system of the Russian ground forces is significantly based on the railway system due to the need to transport heavy equipments that belongs to them. Recent western studies and analysis reveal that manoeuvre ground units rely on an insufficient number of wheeled trucks and special purpose trucks for transportation of food, fuel and equipments. Moreover, the poor technical conditions and the lack of spare parts deepen the existing problems in resupplying process and maintenance activities. These are the main factors that explained the failures of the Russian logistical system in support of the offensive in the Kyiv area of operation.

The railway network East and West of the Dnieper is deficient, limiting the possibilities to supply the manoeuvre units. Obtaining a viable chain of supply from the East depended on the timely take over and control of two main railway junctions in the cities of Chernihiv and Nizhyn. But those objectives were not achieved by the Russian forces. All these aspects were carefully analysed by the Ukrainians and therefore action was taken to obstruct the railway links with Russia and Belarus, from the very first days of the conflict. These objectives were completed by destroying several railway junctions or bridges along the main routes of supply (Gibson, 2022).

By managing to create a bridgehead at Hostomel Airport, the Russian forces would have achieved the capability to reinforce the battlefield with both manoeuvre forces and logistical elements needed to sustain their operations. The existing road

network North of Kyiv is precarious and did not allow the projection of parallel supply axes, with bypasses to avoid choke points if necessary. The Western Dnieper's tributaries narrowed the movement of forces, forcing them to use bridges over the watercourses. The destruction of these key points by the defending forces blocked and slowed down not only the manoeuvre forces, but also the Russian logistical support units. The logistical convoys were not adequately defended, especially against aerial threats. Thus, they were attacked by Ukrainian mobile units that managed to block them and causing heavy losses. As a consequence, those targeted logistical elements created havoc in their attempts to leave the battlefield and blocked the inflow of the reserves, being impossible to use them in battle (SCM Globe, *Russian Logistics for the Invasion of Ukraine*, 2022). Moreover, the forces engaged in battle, especially the artillery structures, were deprived of the necessary ammunition and therefore their fighting power was considerably reduced. The images of tanks abandoned on the battlefield due to lack of fuel or self-propelled artillery systems being pulled back to resupply with ammunition reveals the inefficiency of the Russian supply system (Alexander Stott, *The Weakening Logistics Chain of the Russo-Ukrainian War: An Unfolding Case Study*, 2022).

The last aspect I wish to highlight is the inability of Russian forces to neutralise and destroy the Ukrainian logistics system. Although far from being perfect, Ukrainian logistics properly support the defence operations, ensuring the forces' survival in the critical moments of the battle. The invader did not have the capabilities to identify the depots, nor could they block the ground lines of communication to interrupt the flow of supplies. Most likely, the Ukrainians prepared in advance several warehouses and caches, ensuring a swift resupply in the main areas of operations. The urban environment as well as the terrain configuration in the areas adjacent to the city allowed the Ukrainians to project a decentralised and flexible logistics system.

The New Weapon Systems Integration and Exploitation in the Battle for Kyiv

The Battle for Kyiv could be considered the stage for testing and confirming the utility of new weapon systems. The effects of Western man-portable Anti-Tank Guided Missile systems (Javelin and NLAW) have become notorious. The versatility of these weapons is given both by the ingenious capabilities to hit the targets and by their facile deployment and utilisation. The *top-attack* or *flying-top-attack*

options allowed hitting the Russian armoured vehicles on the top area where their vulnerability is increased. The *fire-and-forget* function of these modern weapon systems creates the possibility to avoid countermeasures taken by the enemy, while the *mid-flight-abort-mission* function makes it easy to correct the missile's flight or abort the mission and choose another target (<https://www.lockheedmartin.com/en-us/products/javelin.html>). The British NLAW system's capability to activate the missile at less than 20 meters allowed it to be successfully used in the congested urban environment (<https://www.saab.com/products/nlaw>).

The Russian military's response came quickly in order to counter these real threats to their own armoured capabilities. With the purpose of diminishing the destructive effects of anti-tank missiles, they improvised and mounted the so-called "*iron cages*" on top of their armoured vehicles. This innovation has proven to be ineffective against missiles equipped with *dual tandem warheads* that are able to penetrate additional protection systems, including the respective improvisations (Parker, Horton, Neff, 2022).

Another capability that is worth mentioning is the Turkish Bayraktar TB2 UAS. This system won its reputation related to its effectiveness in combat operations in the Nagorno-Karabakh conflict in 2020. The Azerbaijani Army used these capabilities and managed to destroy the Armenian air defence system, subsequently annihilating their armoured capabilities (Hecht, 2022). In the initial phase of the conflict in Ukraine, its armed forces ingeniously exploit these systems to target sensitive objectives: command posts, artillery capabilities and air defence systems, armoured formations or logistical support elements. In the area around Kyiv, these modern capabilities proved to be extremely lethal due to their infiltration's abilities, especially when the lines of communication were not secured properly. Also, the use of precision guided munitions as a striking vector increased the lethality and effectiveness of these systems.

Loitering munitions, also known as *kamikaze drones*, is another new weapon system used in Ukraine. These striking vectors are part from a separate, unique category of weapons that combines the characteristics of both drones and conventional munitions. According to their capabilities in terms of range and the type of projectile, loitering munitions could produce effects at tactical, operative or strategic level. Their ability "*to loiter*" above the battlefield for a period of time searching their target gives them their unique characteristic (Deveraux Brennan; 2022). Especially Ukrainian special operations forces have used these capabilities in

order to engage vulnerable combat disposal elements: command posts and isolated communications facilities/systems, observation and guard posts, stationary isolated vehicles, disembarked personnel, patrolling elements.

There is no doubt that these innovative systems already have an impact on military operations. They will have in the future too, and this impact depends on the current situation and the system's quantity available to accomplish a specific task. My opinion is that this type of ammunition can become an extremely useful capability in the future, especially in restricted environments such as urban or mountainous terrain. Therefore, the manner in which these capabilities were used during the Russian-Ukrainian conflict must be carefully studied, and the Western armies must take into account both the opportunity to be equipped with such systems and finding ways to counter them.

The utility of these weapon systems on the modern battlefield is highlighted by the fact that both combatants have sought to ingeniously use them, in order to gain advantage. The forces engaged in the offensive used the Russian versions with almost the same technology. The frequency of their use increased as the conflict extended over time, demonstrating both the need for their integration into operations and the Russian forces' ability to adapt.

Soldiers' Morale and Their Will to Fight

Many times, military scientists and experts try to make predictions about the outcome of a specific battle. They usually consider aspects involving the quantity and quality of the military capabilities, the implications of the existent technologies, the capacity to sustain a military effort in time and the quality of the army's doctrine. The physical and conceptual components of the combat power are relatively easy to assess and definitely have a significant contribution to obtaining success on the battlefield. Nevertheless, the combat power's morale component has the same importance. The soldiers' motivation and determination as well as the high quality of the leadership could be decisive factors, regardless of the existing differences at the physical and conceptual components.

In an attempt to keep the secrecy, during the operation planning process, the Russian commanders did not disseminate sufficient information regarding their objectives, concept of operation and the possibility that it might take more time and take place on a bigger area. They failed to understand that mission command is really a force multiplier on the modern battlefield and facing an adaptable and highly motivated enemy requires initiative and freedom of action.

Taking in consideration the facts, I consider that a framework based only on *line of departure-attack direction-final objective* is no longer adequate.

Moreover, the dysfunctional communications system, the lack of high-performance radio stations and GPS systems generated confusion among the Russian units and soldiers. This reality contributed to a gradual degradation of the morale. At the same time, an inefficient chain of supply put pressure on ground operations, and the evident shortages had a negative impact on the motivation and confidence of Russian soldiers. The Russian planners did not take into account the possibility that the battle would last longer and therefore the Russian BTGs had minimal resources at the start of the operation. By replacing the casualties with poorly motivated conscripts (this fact is not admitted by the Russian Federation), the Russian commanders further deepened the existing morale problems.

The situation of the Ukrainian forces was quite different from that of the Russians. A study by the RAND Corporation emphasises that the soldiers' will to fight is the most important factor on the battlefield (RAND Co., 2018, p. 1). This is highlighted once again by the battle's analysis. The Ukrainian military forces, both the regular and the territorial defence troops formed by mobilised civilians, showed courage and spirit of sacrifice on the battlefield. They successfully resisted the offensive operations of one of the largest military powers in the world (Jenkins, 2022). As a conclusion, the role of the soldiers' morale in prevailing on the battlefield should be outlined once again. The higher morale of the soldiers is, the bigger the chances to obtain the needed will to fight are.

CONCLUSIONS

In conclusion, the idea that the initial failure of the Russian forces is not an accidental event looks to be a pertinent one. There is no doubt that the foreign aids given to the Ukrainians in terms of intelligence support and modern weapon systems had a significant impact on the course of the war. The transformation of Ukrainian Armed Forces started in 2014, the high training standard as well as determination and motivation of the soldiers made the difference between opponents.

Another essential aspect that becomes a determining factor of the Russian military failure seizing Kyiv is represented by its *how to fight* philosophy. The Russian military doctrine, otherwise built on the same foundations as most doctrines of modern armies including Western ones, has not proven its effectiveness in the Battle for Kyiv. And this is not the first time. The Great Red Army failed lamentably in a confrontation with the smaller but more determined Finnish Army. That conflict

remains known throughout history as the Winter War (30 November 1939 – 13 March 1940), when the Soviet armoured formations were blocked and systematically destroyed in front of the Manerheim Line or in the frozen forests north of Lake Ladoga. The German offensive planned within the Barbarossa Operation was stopped with heavy losses and costs just in front of Moscow in the winter of 1941. Only one year later were the Soviets able to defeat their enemy at Stalingrad, a turning point that indeed changed the course of war on the Eastern Front. The 40th Soviet Army, in a unique configuration and with a unique combat power at that time, was slowly torn down by mujahedeen guerrillas during the Russo-Afghan's ten years conflict began in 1979. The Battle of Grozny in late 1994 highlighted the serious dysfunctions of the post Cold War Russian armed forces, especially regarding the command and control system, poor training, the difficulty to effectively execute integrated air-land operations, and the vulnerabilities of armoured capabilities. Within hours, the 131st Motorised Rifle Brigade also known as the *Maikop Brigade* was destroyed by the Chechen resistance, resulting approximately 800 dead soldiers and 150 armoured vehicles damaged, many of them totally destroyed (Galeotti, 2015, p. 37). The success in Georgia was largely due to the inability of the Georgians to meet the decisive conditions for the achievement of their operational objectives. Numerical and technological superiority was also an asset for the Russian Army in that conflict and was exploited in a climate where own losses and collateral damages were not considered important (Modern War Institute, 2018).

Although, many times the Russia's involvement in military conflicts rather revealed its forces "*Potemkin Army*" condition, their ability to quickly adapt should not be underestimated. Stalin replaced the incompetent commanders on the Finnish front and massed more tanks, artillery and aviation on the battlefield and finally the victory was obtained. The encirclement and destruction of the 6th German Army at Stalingrad, as a result of an extensive enveloping manoeuvre, pointed the moment when the transition to a counteroffensive was feasible. The soldiers of the 40th Army gradually adapted their tactics to the requirements of guerrilla warfare and they significantly improved their ability to survive on the battlefield. The transformation of the Russian Army after the Russian-Chechen wars generated the premises for the integration of new capabilities at the tactical and the operational level like EW, PSYOPS, UAS, long-range fires. Therefore, the hybrid operations conducted in 2014 were a success.

A reliable evidence regarding the Russian Army's flexibility is the way in which the combat operations in Eastern and Southern Ukraine were conducted after failing to seize Kyiv. The initial ineffective Blitzkrieg was replaced by a methodical approach in Donbas, including the area of the cities of Iziurm, Severodonetsk and Lisichansk. This type of approach is remembering JFC Fuller's words that comprising the essence First World War's doctrine: "artillery conquers, infantry occupies". In the opening speech at RUSI Land Warfare Conference on 28 June 2022, the British Army's Chief of Staff, General Patrick Sanders, drew attention about the Russian Army's capabilities to adapt. Therefore, underestimating the Russian Army is a premature action according to General Sanders' point of view (<https://www.army.mod.uk/news-and-events/news/2022/06/rusi-land-warfare-conference-cgs-speech/>).

In the end, I would like to highlight several points of interest that are relevant for the Western armies' transformation and adaptation process to the changing character of the war and its operational requirements, as they result from this conflict. The Russian-Ukrainian conflict exemplified that the numerical superiority needed to obtain mass in the battle's decisive points is not sufficient to prevail. The force ratio was 10 to 1 in favour of the Russian forces. However, their inability to achieve superior combat power, as well as to sustain prolonged operations, ultimately generated the failure of the offensive.

Contemporary, ground large-scale combat operations do not necessarily involve linear and contiguous areas of operations. However, it is almost impossible to organise this kind of AO, given the forces' insufficiency and the weapon systems' lethality. The Battle for Kiev involved multiple clashes and skirmishes in the key terrain areas, creating non-linear and non-contiguous areas of operations. The operations' approach for this situation requires the use of mobile forces, but also of long-range and high-precision weapon systems. The accurate and timely information are essential as well as the operational flexibility. But the more important thing to the success in modern combat operations is the mental flexibility of commanders.

The poor experience of Western armies in terms of conventional combat operations generates an acute need to make a transition in terms of conceptual thinking and also the mental attitude to these kinds of operations. The tactical commanders must be aware of the differences between counterinsurgency and combat operations, particularly the increased risk of mass casualties in the latter. In this context, the commander's contribution to preserve unit's morale

is paramount. The higher echelon's frustrations in exercising a close control of the operation as well as its limited support capabilities must be known and understood by the field commanders. Therefore, the subordinates' initiative facilitated through a mission command based philosophy is essential in a climate characterised by friction, uncertainty and ambiguity specific to the armed conflicts.

The Ukrainians' mobilisation process in order to build their force required for the capital's defence could be another lesson. The insufficiency of the regular forces determined a requirement to create a hybrid force where the reservists and volunteers were quickly integrated within the conventional forces and the Special Forces' elements were involved at the tactical level supporting their actions during the critical moments. In conclusion, the Western armies must have in mind to create a *tool* that allows the mobilisation of the necessary human resources to complement the regular forces. Maintaining a minimum reserve that could be adjusted according to the context is also an imperative.

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The deficiencies in the planning of the offensive operation and the Russians' ill execution of the plan should not undermine the intensity of the fighting or the sacrifice and professionalism of the Ukrainian forces. No matter what the outcome of the war will be the Battle for Kyiv will remain a landmark of this conflict and even for contemporary conventional warfare. The battle was decisive, due to the strategic importance of Kyiv for both opponents. The capture of the capital was essential for the Russian Federation in order to gain control over the entire country. The ability to resist and repel the aggressor from the capital area was crucial for the Ukrainians and it was a proof of their political and military determination not to give up without fighting. The Russians' superiority deceived them to gamble on a swift operation, planned and executed "by the book". But, the Ukrainians read that book too.

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LETHAL AUTONOMOUS WEAPON SYSTEMS – EMERGING AND POTENTIALLY DISRUPTIVE TECHNOLOGY –

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The renewal of the competition for the super power status has led to the revival of the emphasis on defense planning, by the great powers, on the capabilities intended for so-called high-end conventional, technological sophisticated warfare, which involves large-scale and high-intensity military actions. Weapons that can be linked to waging high-end warfare actually include the military uses of the lethal autonomous weapon systems (LAWS) and artificial intelligence (AI). The connection between robotics, and autonomous systems and AI has the potential to change the nature of warfare. Theoretically, a lethal weapon system should be considered autonomous if it is designed so that it can modify its integrated programming, does not take into account the objectives initially set and modifies its rules of engagement without human intervention. Human judgment will remain essential, but the line between what humans and machines do best will constantly be shifting in the coming years. The most critical dimension of autonomy is the task the machine is performing. There are significant expectations and challenges, opportunities, and risks associated with LAWS across the full range of military operations. LAWS will influence military operations in the future and will have at least an evolutionary – if not revolutionary – effect.

Keywords: lethal weapons; drone; artificial intelligence; human operator; automation;

PRELIMINARY CONSIDERATIONS

Events in recent years, particularly since 2014, have tested, if not undermined, the strategic assumptions underpinning NATO's posture. To Europe's east, Russia occupied Crimea and launched a separatist war in eastern Ukraine, is modernising its conventional and nonconventional forces, and launched an invasion of Ukraine on 24 February, a "special military operation" to protect the civilian population and to "demilitarize" and "de-Nazify" Ukraine. The United States and its allies and partners have taken steps to accelerate the delivery and maintain an effective assistance package in order to support Ukraine to deny Russia's offensive that is more limited in terms of territory, but not in terms of brutality and, finally, the achievement of conditions for Ukraine's offensive actions. Ukraine has repeatedly requested more advanced weapons, including LAWS, aircrafts and air defense systems to increase the range, distance, and lethality of its military actions. The LAWS proved to be among the most effective weapons in the fight, for both sides.

Russia also increased its military activities in Europe's north, particularly by adding nuclear-capable missiles to Kaliningrad (a Russian territory on the Baltic Sea that is not contiguous with Russia itself) and Belarus, enhancing its air patrolling activities close to other states' airspace, and increasing its naval presence in the Baltic Sea, the Arctic Ocean, and the North Sea. Taken together, these moves have heightened NATO concerns about Russian aggression and its implications for NATO territories, particularly Central and Eastern European NATO allies. To Europe's south, instability resulting in part from the "Arab Spring" led to collapse of states, civil war in some instances, and significant refugee flows into Europe. This has led to political tensions across the broader European Union, as well as to concerns about terrorists inserting within refugee flows.

The renewal of super power status competition with Russia, which was underscored by seizure and annexation of Crimea in March 2014 and subsequent actions in Ukraine, has led to a renewed focus in U.S. and NATO defense planning on strengthening military capabilities for countering potential Russian aggression in Europe.

The challenges generated by emerging and disruptive technologies in the weapon realm can be represented by five significant and potentially disruptive technological developments: hypersonic weapons, missile defense, artificial intelligence and automation, counter space capabilities and computer network operations (cyber). (Andrew Futter, p. 1). This article will highlight only details specific to lethal autonomous weapon systems and tries to assess the comparative influence of LAWS and AI particularly in three domains: command and control; delivery platforms and vehicles and conventional applications of autonomous systems with effects on international stability and security.

Weapon acquisition programs that can be linked to preparing for high-end warfare include (to mention only a few examples) those for procuring: advanced aircrafts and the next-generation long-range bombers, highly capable warships (attack submarines and destroyer), ballistic missile defense capabilities, longer-ranged land-attack and anti-ship weapons, new types of weapons such as lasers, railguns, and hypervelocity projectiles, new intelligence, surveillance, and reconnaissance capabilities, military space capabilities, electronic warfare capabilities, military cyber capabilities, hypersonic weapons, and the military uses of robotics and autonomous unmanned vehicles, quantum technology, and artificial intelligence.

The result of employment in combat and the accomplishment of aim and purpose by the semi-autonomous systems conclude that fully autonomous weapon systems will become more and more feasible for military leaders. The progress of LAWS is recognised as taking place or predicted to materialise between numerous probable equal or asymmetric opponents. (Congressional Research Service, 2016, summary).

The great powers' approach to LAWS is largely determined by the perceived threat from the opponents, combined with lessons learned from continuous conflicts in Syria and Ukraine about how the future battlefield will look like. Military strategists consider decisive, information dominance on the battlefield, in Ukraine and view LAWS-suited technology as the key to fulfilling that aim. The combination of the use of different types of LAWS, along with countermeasures against those systems, is going to be the area where the military will put a strong emphasis. In Ukraine, The Russian Federation has allegedly deployed an AI – enabled

Kalashnikov ZALA Aero Kub-BLA “loitering” munitions, while Ukraine has used Turkish-made Bayraktar TB2 drones, which have some autonomous capabilities.

Autonomy/automation is the application of AI to particular tasks, some of which might involve robotics and therefore automated or autonomous weapon systems. There are different variants of autonomy in terms of function and sophistication. These distinctions exist along a continuum from discrete automated systems to more capable and goal-orientated autonomous systems. The age of autonomous weapons has arrived. Today on the globe, at least thirty nations have weapons that can search for and destroy enemy targets all on their own. From Israel’s Harpy drone to the American submarine-hunting robot, Sea Hunter, the implications resulting from the granting of weapons the freedom to make life and death decisions and the legal and ethical issues around their use, all are consequences of next-generation warfare. As a result, NATO countries will promote innovation and increase their investments in emerging and disruptive technologies. (NATO, 2022, p. 6).

AI essentially allows robotic machines to operate without human intervention based on interaction with their environment, albeit to different extents. Like AI, automation has been used in aspects of nuclear early warning, targeting and delivery systems for many decades, although most involve a high degree of human control. In spite of the fact that autonomous weapons were initially considered a scientific experiment, the results of their employment in battle determine a reconsideration and a multilateral assessment of LAWS. In the last period of time, the democratic great powers have tried to find out solutions to neutralize nuclear deterrence and eliminate the risks of nuclear escalations. The solutions were represented, among others, by the development of AI and the use of LAWS. Anyway, both solutions are accompanied by risks.

Usually, the states accept to acquire lethal systems with large autonomy, even if these present relevant risks, to protect and secure the assets that have the mission to execute the second strike. Even so, conventional military applications of autonomous systems have the capacity to affect both, the nuclear forces’ approach and the stability generated by the first strike, preventing triggering an unexpected war (Horowitz, Scharre, Velez-Green, 2019, p. 1).

CONCEPTUAL CLARIFICATIONS

So far, lethal autonomous weapon systems do not have a definition discussed or negotiated and then accepted by all parties in international organisations. In specialised literature, LAWS represent or describe a particular category of weapon systems that utilise sensor suites and computer algorithms in order to, without assistance, detect a target and employ an onboard weapon system to tackle and annihilate the target without manual operator control of the system.

In the UN Report of International Rescue Committee, Autonomous weapon systems were defined as weapons that can without assistance decide on and engage targets, i.e. with autonomy in the “critical functions” of acquiring, tracking, selecting, and attacking targets. (ICRC, 2014, p. 1).

Most definitions are mainly based on the mission of the human operator with respect to target determination and employment decisions, rather than on the degree of technological complexity of the weapon system. For simplicity, this article will use the term LAWS to describe any system that fits the definitions shown in figure no. 1.

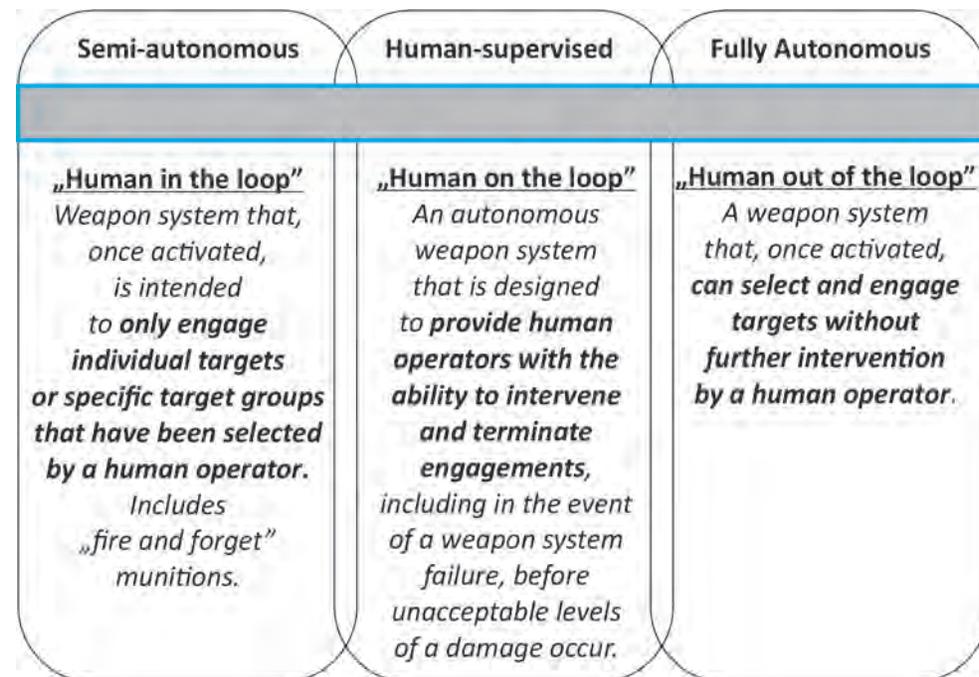


Figure no. 1: Spectrum of Autonomy in LAWS (Caton, 2015, p. 3)

Autonomy is a capability (or a set of capabilities) that enables a particular action of a system to be automatic or, within programmed boundaries, “self-governing”. This does not involve making independent decisions and uncontrolled actions. (Department of Defense, 2012, p. 1).

Autonomy signifies the capacity of a system to function and make suitable to changing circumstances with reduced or without human control. Despite the concentration in much of the literature on the apparatus using or applying mechanical power and having several parts, each with a definite function and together performing a particular task, autonomy is a much wider concept that includes layouts such as automated movement coordination and automated process of selecting, organizing, and looking after the content in a collection of systems. Autonomy also includes systems that can diagnose and repair faults in their own functioning, such as identifying and fixing security vulnerabilities. (National Science and Technology Council Committee on Technology, 2016, p.10). On the other side, automation occurs when a machine works alone and previously could be put into function by an operator. The expression has a connection to the same extent to the physical work and mental or cognitive work that might be substitute by AI.

States Parties to The Convention on prohibitions on the employ of Certain Conventional Weapons which may be deemed to be excessively injurious or to have indiscriminate effects (CCW) are talking about practical, juridical, military, moral principles, and other important topics or problems connected with emerging technologies, in spite of the fact that is obvious that there is no mutual agreement of LAWS. Some States have assimilated LAWS with remotely piloted airplane or military “drones”, a view that the United States disapproves, as remotely - piloted craft are, by definition, directly directed by operators just as manned aircraft are. The other States have concentrated on AI, robot armies, or whether “meaningful human control” – an undefined explicitly term – is exercised over life-and-death decisions.

A definition used by the U.S. Department of Defense, defines LAWS as “a weapon system that, once activated, can select and engage targets without further intervention by a human operator. This includes human-supervised autonomous weapon systems that are designed to allow human operators to override

the operation of the weapon system but can select and engage targets without further human input after activation". (Department of Defense, 2017, p. 14). It specifically excludes: cyberspace systems for cyberspace operations; unarmed, unmanned platforms; unguided munitions; munitions manually guided by the operator (e.g., laser- or wire-guided munitions); mines; or unexploded explosive ordnance. (Caton, 2022, p. 4). A vital theme is the requirement for LAWS to be projected in this way to give the permission commanders and operators to exercise suitable or proper in the circumstances levels of human judgment over the employ of force. (Department of Defense, 2017, pp. 4,5,14).

In order to comply with provisions of CCW, respectively, to not be excessively injurious or to have indiscriminate effects, the human-supervised autonomous weapons used for rocket defense of manned installations or platforms – but that do not target humans – and autonomous weapons that *"apply non-lethal, non-kinetic force, such as some forms of electronic attack, against materiel targets"* are exempted from this senior-level review. (Congressional Research Service, 2020, p. 16).

LAWS are a class of weapon systems capable of independently identifying a person, object, or place selected as the aim of an attack and employing an available or situated on a ship, aircraft, or other platform weapon system to engage and destroy the target without manual human control. LAWS require computer algorithms and sensor suites to classify an object as hostile, make an engagement decision, and guide a weapon to the target. This capability would enable the system to operate in environments where communications are difficult to operate or are denied and traditional conventional assets may not be able to operate. This definition's principal characteristic is the role of the human operator with regard to target selection and engagement decisions. This assumes that the system employs autonomy for fighting connected functions containing, but not restricted to the following operations: acquiring, tracking, and identifying possible targets; selecting prospective targets; prioritising selected targets; the choice, judgment, or control of when to fire; or giving closing direction on selected targets, on the condition that human control is maintained above the decision to select distinct targets and clearly defined or identified target categories for attacking.

There is a system of lock-on-after-launch homing munitions that relies on tactics, techniques, and procedures to increase the expectation that the solely targets within the searcher's acquisition list when the searcher initiates are those particular targets or clearly defined target groups that have been determined by a human operator. Previous to be deployed the LAWS is examined to shall make certain that: the system project integrates the required capabilities to authorize commanders and operators to employ suitable degrees of human judgment in the employment of force; the system is projected to fulfil engagements in a period of time in accordance with commander and operator goals and, if unable to do so, to bring to an end actions or search supplementary human operator inputs prior carrying on the combat and the system project; contains safeties, anti-tamper devices, and information assurance; tackles and reduces the possibility or outcomes of failures that could cause not planned combats or to loss of control of the system. (Department of Defense, 2017, p. 7).

Regarding the role of the human operator, the policy and responsibilities for the development and use of autonomous weapon systems require that all systems, including LAWS, are projected to permit leaders and persons who operate equipment to exert, suitable or proper in the circumstances, degrees of human judgment regarding the employment of force. In addition, human judgment concerning the employment of lethality does not demand manual operator conduct of the weapon system, how is it frequently understood, but rather comprehensive human participation in decisions with reference to how, when, where, and why the LAWS will be employed.

Some states' policy (i.e. UK) is based on a distinction between automated weapon systems and *"fully autonomous weapon systems"*. For them, an automated or automatic system is *"...programmed to logically follow a pre-defined set of rules with predictable outcomes"* whereas an autonomous system is *"...capable of understanding higher level intent and direction"*. An autonomous weapon system would be capable of understanding and perceiving its environment, and deciding a course of action from a number of alternatives without depending on human oversight and control. The understanding is that the overall activity of such a system would be predictable but individual actions may not be. (ICRC, 2014, p. 10).

The factors in determining levels of autonomy in weapon systems include: the capability of the weapon system of carrying out a military mission or task; the robustness of the system against failures and enemy hacking; a design that ensures human judgment is retained for appropriate decisions; and the capability of the system to be used in compliance with international humanitarian law, as determined.

There are various ways to discuss autonomy in weapon systems. The definitions of the terms, and even the taxonomy of existing systems, are not always consistent among authors on the subject. In fact, “*what is autonomy?*” the synthesized view of the many definitions acknowledges a common sequence of “*autonomy*” in weapon systems based primarily on two factors: (1) *the target specificity* (the geographic, temporal, and descriptive guidance designating the target of lethal force) provided by human operators when the weapon system is set into motion, and (2) *the execution flexibility* (scope of potential self-initiated action) in service to assigned goals. (Congressional Research Service, 2016, p. 5).

Autonomy, outside of the technical literature, operates primarily as a general expression for a variety of concerns involving decision-making and predictability of increasingly computerised weapon systems. Definitions that are particular to non-technical literature generally define autonomy in terms of ethically relevant sub-processes of the system as a whole, such as targeting, goal seeking, and/or the initiation of lethality. Lethal autonomy is frequently defined in the literature solely by whether or not a human makes the targeting decision. (Ibid., p. 6). Instead of viewing autonomy as an inherent feature of an unmanned vehicle in isolation, the projection and operation of autonomous systems needs to be considered in terms of human-system collaboration. Due to software complexity, autonomous systems present a variety of challenges to commanders, operators and developers, both in how these systems interact in dynamic environments and in human-system collaboration.

Both the target specificity and execution flexibility of an autonomous system may vary by conflict, mission, or even individual objective. Therefore, a particular weapon system occupies a range rather than a point within the continuum of autonomy determined by its potential uses, and has a specific degree of autonomy only upon being set into motion with these parameters assigned. (Ibid., p. 5).

Taking into consideration that are misperceptions about autonomy over taking decisions, it is required to be clarified and understood, by the military leaders, that all LAWS are observed and directed in the execution of missions by human operators to some degree, and the software of autonomous systems includes or contains, the project point or level beyond which the actions and decisions delegated to the computer do not or may not extend or pass.

Artificial intelligence is a transformative technology. The great powers are developing AI applications for a range of military functions. The expression artificial intelligence was coined in 1955 by John McCarthy, a computer scientist, to describe the proposed objective for a debate on computers as a thinking mechanism. To this day, however, there is no generally accepted definition for AI in commercial, academic, or government communities. (The Institute for Foreign Policy Analysis, 2019, p. 4). The researchers in the field of advancement of AI broadly seek to understand the processes, significant as a cause or basis of thinking and intelligent comportment and their implementation in an apparatuses using or applying the mechanical power and having several parts, each with a definite function and together performing a particular task.

The US Secretary of Defense uses the following definition of AI, where considers AI as ... “*any artificial system that performs tasks under varying and unpredictable circumstances without significant human oversight, or that can learn from experience and improve performance when exposed to the action of new data sets*”. (Congressional Research Service, 2020, p. 1). Any artificial systems that perform these tasks can be created to a specified degree in computer software, physical hardware, and additional circumstances that form the setting for being fully understood and assessed, so far not investigated. Such systems can fulfil tasks demanding human-like ability to see, hear, or become aware of something through the sensors, acquiring knowledge and understanding, acquisition of facts, information, and skills through experience, study, or by being taught, making plans, imparting or exchanging of information and or physical activities. The field of AI encompasses many methodologies and areas of emphasis, such as machine learning, deep learning, neural networks, robotics, computer vision (image processing), and natural language processing. The armies study the application of AI for many fields, including: intelligence collection and analysis, logistics, cyber

operations, information operations, command and control, and in carrying out a variety of semiautonomous and autonomous vehicles.

The domain of AI has noticed remarkable increase in last period of time. Many of these latest benefits have resulted from “*deep learning*”, a type of machine learning based on artificial neural networks in which multiple layers of processing are used to extract progressively higher level features from data. Anyway, previous “*first wave*” AI systems that use rule-based decision-making logic have been putted into service in automated and autonomous systems for decades, including in nuclear field. (Horowitz, Scharre, Velez-Green, 2019, p. 5).

AI constitutes also coding, computer systems and software capable of performing tasks that require intelligence if undertaken by humans. It is not one discrete system, but something that can be applied in many different ways depending on the particular task. It is useful to distinguish between narrow AI, which has specific goals and is limited by its programming and the problem to be solved, and general AI (not to be confused with artificial general intelligence – the notion of a super intelligence), which involves writing software that allows systems to “*learn*” by analysing data sets and then to make decisions. The majority of AI, and especially the systems currently used across the nuclear enterprise, are rules-based “*if-then*” types, principally because they are predictable. However, the computing and information technology revolution has created the requisite processing power and expertise to allow for the possibility of wider applications. (Futter, 2021, p.7).

It can be said that we have entered a “*fourth industrial revolution*”, characterised by rapid and converging progress in the field of AI, robotics, the Internet of Things, quantum computing, nanotechnology, biotechnology, and 3D manufacture and other technologies. In particular, AI is a critical and rapidly ascension of technological development that presents major implications on national military and economic security. (The Institute for Foreign Policy Analysis, 2019, p. 3). In theory, fully autonomous, computer-controlled weapons do not exist yet, UN officials say. The debate is still in its early days, and the experts have at times grappled with basic definitions. The United States has argued that it is premature to establish a definition of such systems, much less regulate them.

EVOLUTION AND OPERATIONAL REQUIREMENTS ASPECTS

The use of LAWS in warfare is not quite a new concept. It could be argued that the development and implementation of such systems have evolved in the last century and have accelerated significantly after the September 11, 2001 attacks on the US LAWS is very extensive and is not limited to: autonomous weapon systems; robots; drones; unmanned systems; unmanned vehicles and unmanned platforms. The LAWS are extending the rapid and continuous integration of capabilities across multiple theatres of operations. (Jeffrey L. Caton, 2022, p. xi). An extensive diversity of matters is subject to dispute in the field of study literature regarding the consideration and evolution of lethal autonomous weapon systems. Although an exact taxonomy regarding the examination and progress of LAWS does not exist, the numerous topics under discussion can be beneficially separated into those concerning risks and potential benefits, juridical matters, and moral or ethical concerns.

The military leaders argued that likelihood conflicts within a sophisticated, highly contested, anti-access/area denial environment would be won by the side with an information advantage, enabling the ability to outpace, outthink, and outmanoeuvre adversaries across multiple domains. In order to maintain its information advantage and dominate this new battlefield, the armies are assumed to adopt a network-centric approach (connecting every sensor with every shooter) in an attempt to transfer data to weapons reaction speed to execute the joint of all domain operations in order to destroy an adversary by attacking them from all domains. Over the past several decades, the armies around the world have been successfully incorporating autonomous functions into their weapons. Currently, there are four Joint Capability Areas envisioned for unmanned systems to support: battlespace awareness, force application, protection, and logistics. While many of the basic requirements of locomotion, sensing, navigation, and connectivity were solved at the prototype level in the 1980s and 1990s, and further refined through combat experience in the 21st century, there still remain significant technological challenges for autonomous weapon systems development.

The main technological challenges are as follows: interoperability and modularity; communication systems, spectrum, and resilience; security: research and intelligence/technology protection; persistent resilience; autonomy and cognitive

behaviour, and weaponry. Tackling these technologies in a concerted fashion may yield dramatic improvements that facilitate mission performance, endurance, reliability, and synchronisation at reduced levels of human risk and logistics burden. (Caton, 2022, p. 16). The researchers recognised six decisive domains in which advances in autonomy would have significant benefit to the unmanned system that can be summarised thus: perception, planning, learning, human-robot interaction, natural language understanding, and multi-agent coordination.

The army science and technology community identified the need for enhanced capabilities in five areas: adaptive tactical reasoning; focused situational awareness; safe, secure, and adaptive movement; efficient proactive interaction with humans; and interaction with the physical world. (Caton, 2022, p. 19). The LAWS assures commanders access to information to afford a great numbers of courses of action to carry out simultaneous and sequential operations using the surprise and the rapid and continuous integration of capabilities across all domains (air, naval, terrestrial, spatial, cyber) to achieve physical and psychological advantages and influence and control over the operational environment. The armies' leaders contend that the use of LAWS will be crucial for operations in all fields across a range of conflicts, both because of their capability and performance advantages and because of their ability to take greater risks than manned systems. The increased speed and the effects of the war combined with an exponential increase in the available data make military leaders plead for efficient command and control systems that would optimise situational awareness, rapid decision-making and the ability to direct forces in various theatres (aerial, spatial, cyber, terrestrial, naval). The use of AI is growing across a wide range of sectors. Great powers among which the United States, the United Kingdom, France, Germany, China, and Russia are currently investigating systematically modern AI applications for the reason of preserving an asymmetric superiority over opponents. There are many primary forces that drive the efforts for developing LAWS, including changing the international security environment, especially the strategic shift to Asia-Pacific theatre and the resulting anti-access/area denial challenge, the affordable technical solutions, and the military effectiveness. Given these circumstances, the armies will develop and field affordable, flexible, interoperable, integrated, and technologically advanced unmanned capabilities.

Prior to being released to the field LAWS have to formally completed operational test and evaluation. This supposes three phases, respectively, the requirements and development phase, test and evaluation and the transition to operational deployment. (Department of Defense, 2012, p. 56). Finally, the LAWS as technology, have to be affordable, and realistic in order to field a network that can securely and reliably connect sensors to shooters and support command and control in a lethal, electronic warfare-rich environment.

AI has applications across a variety of sectors, including: Cybersecurity – autonomous detection and decision-making to improve reaction times to threats; Defense – autonomous and semi-autonomous weapons systems; Space exploration – spacecraft and rover autonomy. Before being deployed LAWS the armies have to solve the following aspects: the development of autonomy-related applications for use across the full range of military operations and the imperative technologies to the development of LAWS. AI is being incorporated into a number of other intelligence, surveillance, and reconnaissance applications, as well as in logistics, cyberspace operations, information operations, command and control, semiautonomous and autonomous vehicles, and lethal autonomous weapon systems. (Congressional Research Service, 2020, p. 10).

Autonomous weapon systems, (also referred to as human *“out-of-the-loop”*): *“a weapon system that, once activated, can select and engage targets without further intervention by a human operator”*. Examples include some *“loitering”* munitions that, once launched, search for and attack their intended targets (e.g. radar installations) over a specified area and without any further human intervention, or weapon systems that autonomously use electronic *“jamming”* to disrupt communications. (ICRC, 2014, p. 6). A weapon system with *“full autonomy”* in target selection and attack potentially offers increased capabilities in force protection, particularly in situations where time is limited, and it further removes the risks for the user of the weapon system and their soldiers. These systems may offer savings in personnel, associated costs, and potential utility for *“dull, dirty, dangerous, and deep”* missions. Fully autonomous weapon systems may not be useful in low intensity conflicts but they could find a role in high-intensity conflicts against military objects, and in very limited circumstances. These situations might include time-critical defensive situations, particularly those where the tempo of operations and time pressure for a response is high.

The issue here is not that the apparatus will make such miscalculations and operators will not. It is similar with the distinction between operator miscalculation and algorithmic error, like the difference between writing and tweeting. The dimension, domain, and speed of killer robot systems – governed by one targeting algorithm, deployed from one side to the other of a whole mainland – could cause misidentifications by operators similar to a recent US drone strike in Afghanistan seem like mere rounding errors by comparison. However, large scale proliferation is just as negative. The states could compete to develop progressively highly destructive or damaging varieties of autonomous weapons, including ones having the ability to assemble chemical, biological, radiological and nuclear arms. The ethics risks of increasing rapidly weapons lethality would be increased by escalating weapon employ. High-end autonomous weapons are likely to lead to more frequent wars because they will decrease two of the primary forces that have historically prevented and shortened wars: concern for civilians abroad and concern for one's own soldiers.

The weapons are likely to be endowed with valuable moral regulators projected to reduce collateral damage, using what is called the *"myth of surgical strike"* to control ethical protests. Autonomous weapons will also minimise both the need for and risk to one's own soldiers, dramatically altering the cost-benefit analysis that states experience while triggering and carrying on wars. Asymmetric wars – that is, wars waged on the soil of nations that lack competing technology – are likely to become more common.

Targeted killings until very recently by drones had been limited to non-state actors. Until, for the first time in January 2020, a State armed drone targeted a high-level official of a foreign State and did so on the territory of a third state. It could have maintained that drone strikes were the preferred option for decision makers and military alike for their relative efficiency, effectiveness, adaptability, acceptability, deniability, and political gain but it could be noted that their benefits were as illusory as the *"myth of a surgical strike"*. Because of the current absence of effective oversight, it was practically impossible to know whether a person killed in a drone strike was, in fact, a lawful target, adding that harm to civilian populations, including deaths, injuries and trauma, was likely largely under-reported.

In fact, autonomy is already used for a wide variety of military tasks, including many related to the use of force. These include: identifying, tracking, prioritising and cueing targets; deciding the timing of when to fire a weapon; manoeuvring and homing in on targets; and detonation timing. According to research in the field, at least 30 countries have defensive systems with human-supervised autonomous modes that are used to defend military bases and vehicles from short-warning attacks, where the time of engagement would be too short for a human to respond and, in a few rare exceptions, autonomy is used for weapons to select and engage targets on their own. (Scharre, Horowitz, 2015, p. 11). The military services contend that enhancing old processes and capabilities is insufficient. Each service is advocating for this type of advanced technology to support operations in a highly contested fight, ensuring not just means of transport, but aircraft, munitions, satellites, ships, submarines, tanks, and people are at the right place at the right time prosecuting the right target with the right effects, in seconds. The LAWS combine the strike and intelligence, surveillance, and reconnaissance missions into a single platform by turning it into a new revolutionary capability. One of the main operational tasks is to support missions to defeat improvised explosive devices and eliminate high value targets. Enemy LAWS will complicate air, ground, and maritime operations by adding new low-altitude, ground, and amphibious threats to the force that must be countered. This concern will require the development of friendly countermeasures, including tactics, techniques, procedures, and training that enable the force to operate in the emerging environment.

Autonomous systems could be used to conduct remote sensing operations in areas that were previously hardly accessible for manned and remotely-controlled systems, such as in the deep sea. Autonomous unmanned systems such as aerial drones or unmanned underwater vehicles could also be seen by nuclear weapon states as an alternative to intercontinental ballistic missiles as well as manned bombers and submarines for nuclear weapon delivery. These would be recoverable (unlike missiles and torpedoes) and could be deployed in ultra-long loitering periods – days, months or, even years. (United Nations University, 2018, p.14). In the end, autonomous weapons will erode the base or foundation of humanity's final temporary solution against war crimes and atrocities: the international laws of war. These laws, systematised in treaties reaching as far back as the 1864

Geneva Convention, are the international thin blue line separating war with honour from massacre. To address the growing controversy regarding drone attacks, internationally recognised legal experts have made a detailed legal analysis that examined both the “*jus ad bellum*” (right to war) and “*jus in bello*” (waging a war, international humanitarian law) principles. In general, they concluded that there is little reason to treat drones as distinct from other weapons systems with regard to the legal consequences of their employment.

CONCLUSIONS

LAWS will likely continue to grow in both capabilities and numbers. This growth is an international phenomenon that includes military, government, and commercial applications in all domains – air, land, and sea. AI is a high-speed advance domain that constitutes a crucial influence in the time ahead on international security and stability for the reason that represents a great number of prospective benefits. The military utility of LAWS was demonstrated in combat operations. Fully autonomous is more than just mobility, it is about decision-making. AI and implicit LAWS have significant potential to upset the foundations of nuclear stability and undermine deterrence in the long term, especially in the increasingly multipolar strategic environment.

Given the range of AI applications across sectors, interagency coordination will likely be an important mechanism for ongoing efforts, including consideration of adaptive regulatory approaches to allow for rapid technology advancements. Advance in military armament recently is frequently assessed by a weapon’s capability to keep the crew and staff outside of the battlefield and its capability for force-multiplication. These capabilities serve to decrease costs related to waging war.

Autonomous weapon systems in use today – “*autonomous*” or “*supervised autonomous*” according to the definitions provided – presents constraints in several respects: first, they are limited in the tasks they are used for (e.g. defensive roles against rocket attacks, or offensive roles against specific military installations such as radar); second, they are limited in the types of targets they attack (e.g. primarily vehicles or objects rather than personnel), and third, they are used in limited contexts (e.g. relatively simple and predictable environments such as at

sea or on land outside populated areas). The role of the weapon system – defensive or offensive – and the type of target – the military object (so-called “*anti-materiel*”) or combatant (i.e. anti-personnel) may also be key factors affecting their utility. The military services, too, are increasingly experimenting with autonomy and unmanned systems.

Nevertheless, it is still possible that “*fully autonomous weapon systems*”, operating without human supervision, may be of military decisive value in critical situations - such as responding to an overwhelming attack, or where a mission is critical but communications links are not available or “*jammed*” – provided that the user is confident that the weapon system would perform better than humans in the same situation. The LAWS – frequently associated with killer robots – was used to kill human beings for the first time in history in 2020 during the Libyan civil war, as claimed by United Nations Security Council report. The study of past similar events, legitimate thereby the outset of the last major weapons competition, one that has the capacity to become the last for humankind.

The emerging potential of AI, to the same extent, is also significant for nuclear weapons, strategies, and doctrines. AI could also be a stimulus for harmonizing the differences between these fields. This interpenetration of AI with nuclear field and doctrines requires greater critical study, research and examination not only by the military and researchers but also by international fora. The great powers have realized that the field of AI that just coming into existence and beginning to display signs of future potential could play a decisive role in the development, improvement, and multiplication of their striking and retaliatory capability, including the capability to respond to a nuclear attack, executed by surprise. The progresses belonging to the last period of time in AI, machine learning, and autonomous has the potential to erode, to a great extent, the base of nuclear strategy, this aspect has the possibility, to be favourable, advantageous, or not optimistic, desirable in the same extent. First of all, will be able to strengthen the stability and decreases the possibility of error of judgment and incidental exacerbation. Secondly, could stimulate the counterparts to reply with disruptive actions that could escalate the threat of a nuclear war.

Autonomous lethality ensures overwhelming developing relevance, during military operations and plays a key role in strategic deterrence. Growingly autonomous lethal weapons systems, which do not have, or do not need a crew

or staff and are authorised to apply the capacity to cause death or serious harm or damage in the absence of human action, will perform a decisive role in the probability of triggering wars. States who used drones on the grounds of self-defence, defined in a very elastic fashion against purported terrorists, risked creating a situation where there will be no “red lines” really. As more government and non-state actors acquire armed drones and use them for targeted killing, there is a clear danger that war will come to be seen as normal rather than the opposite of peace. The war is at the risk of being normalised as a necessary companion to peace, and not the opposite. In the absence of greater regulations of the weapons, and official forums to discuss the deployment of drones specifically, we can be witnesses to their growing use and this fact increase the danger of a global conflagration.

This diplomatic process and the potential verdict of international law could check or halt the development of AI-enabled weapons, especially ones where machines select and attack targets without human intervention.

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GEOPOLITICAL CONFIGURATIONS ON THE PONTO-BALTIC ISTHMUS IN THE CONTEXT OF THE AGGRESSION IN UKRAINE

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Starting the study from the theory of the Heartland, drawn up by Halford John Mackinder, according to which who rules Eastern Europe rules the world, we identify the geopolitical importance of the Ponto-Baltic isthmus. The region imaginarily bordered to the North by the Baltic Sea and to the South by the Black Sea has been a hotspot throughout history. Thus, the strategic importance of the Ponto-Baltic isthmus and the conflicting interests in the region are the current reasons for the confrontation between the Russian Federation and the West. The illegal aggression of the Russian state in Kyiv confirms the hypothesis that Moscow is the main threat to the security and territorial integrity of the states of the Ponto-Baltic region.

In this respect, to become aware of the regional geopolitical realities, in the first part of the research both the geographical coordinates of the Ponto-Baltic isthmus and the historical coordinates stated at the national level will be outlined, in keeping with the writings of scholars such as Simion Mehedinți and Nicolae Iorga.

Afterwards, the strategy of the Russian Federation in the region will be analysed, in relation to the permanent fuelling of conflicts on the territory of states that pursue their Euro-Atlantic vision. Romania's role in the Ponto-Baltic region will also be identified, through its status of a regional pivot and a relevant actor in the process of consolidating NATO's eastern flank.

The research will be the result of the cross-use of quantitative and qualitative methodologies, for an in-depth approach to the subject under study.

Keywords: Ponto-Baltic isthmus; Black Sea; Baltic Sea; Heartland; NATO;

GEOPOLITICS OF THE PONTO-BALTIC REGION

The Ponto-Baltic region, identified in specialised works under other names such as the *“Ponto-Baltic Isthmus”* or *“Intermarium”*, has been known since the 20th century as the *“Great Eastern Isthmus”*, according to Polish historians (Ilyn, 2012, pp. 62-75).

In terms of territory, the isthmus includes the states that are found along the North-South axis, between the Baltic Sea and the Black Sea, respectively: Estonia, Latvia and Lithuania, Belarus, Poland, Romania, the Republic of Moldova, Hungary, Slovakia and Ukraine¹. Thus, we can say that the less defined western and eastern territorial limits are the western extremity of the Carpathian Mountains and the maritime coast of Georgia respectively (Popescu, 2021, p. 233). The predominant landscape of the region is the plain connecting North-South, East-West directions, having a varied range of natural resources such as wood, ores and hydrocarbons (Suciu, Muntele, 2022).

From a geostrategic point of view, the vast territory of the Ponto-Baltic isthmus has been a hotspot throughout history, an area of conflict between East and West. From a military point of view, the region has enabled rapid retreat manoeuvres, strategic withdrawal respectively, their success being increased by the continental climate conditions, with hot summers and frosty winters (Prisăcaru – 1, 2018).

In this respect, we can refer to the interwar period, after the signing of the Ribbentrop-Molotov Pact, when the USSR and Nazi Germany decided to divide the spheres of influence in the buffer zone between the Black Sea and the Baltic Sea (Ibid.). Thus, the Ponto-Baltic isthmus became an area controlled by the two totalitarian powers, witnessing the outbreak of the Second World War by Poland being attacked in September 1939 (Ibid.).

The Ponto-Baltic isthmus, an inter-civilisation shift located between the West and the East of the European continent, has been the reason of geopolitical and geostrategic disputes over time by various states and peoples, which are constantly seeking to obtain control in the region. These intentions derive from the theory drawn up by Halford John Mackinder, according to which who rules Eastern Europe rules the world (Dobrescu, pp. 48-65). In this sense, by reference to the 21st century, the region is a subject of dispute between the West and the Russian Federation.

¹ Moreover, the region also includes certain regions from Bulgaria, Serbia, Slovenia, Austria, Bosnia și Herțegovina, Czechia, Croatia, Germany and the Russian Federation.

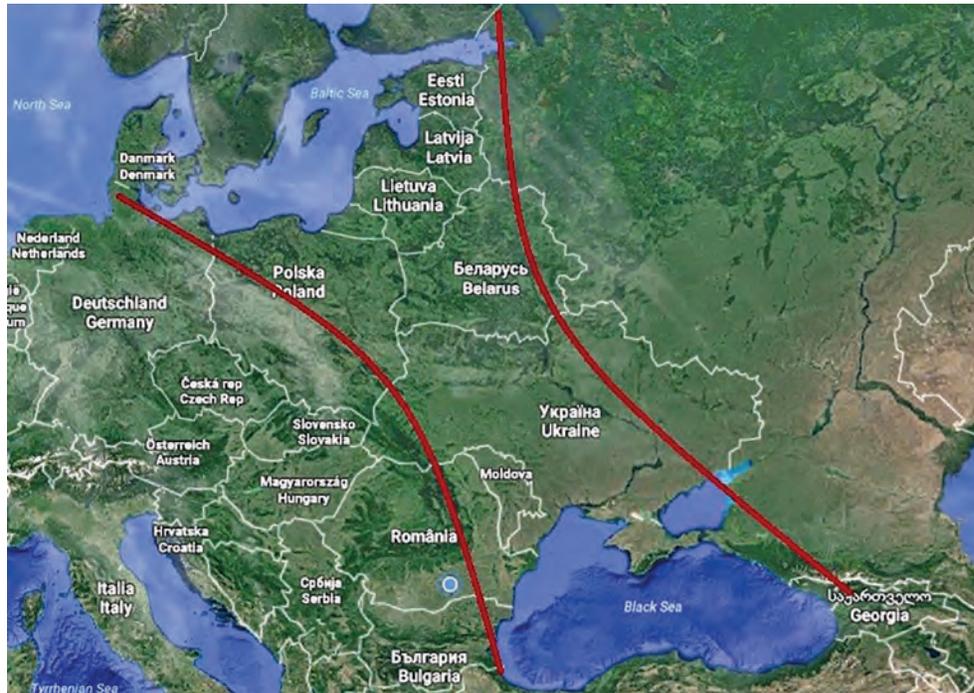


Figure no. 1: the Ponto-Baltic Isthmus – estimated Eastern and Western borders (Popescu, Ibid.)

Mackinder, a representative of the Anglo-Saxon geopolitical school, identifies Eastern Europe in his theory as the Heart of the World, a pivotal area that includes the basins of the Black Sea and the Baltic Sea, as well as the nearby rivers (Ibid.). Referring to historical coordinates, namely the enclosed sea status of the Mediterranean Sea during the period in which the Roman Empire ruled over it, Mackinder comes with the idea that the Black Sea and the Baltic Sea could become enclosed seas, under the dominance of the state power that will control the Heartland (Ibid.). Thus, the theorist stated the following theory:

“Whoever rules Eastern Europe commands the Heartland.

Who rules the Heartland commands the World-Island.

Who rules the World-Island commands the world” (Mackinder, H.J., 1962, p. 150).

Although he is a controversial theorist, in order to counterbalance the current imperialist initiatives of the Russian Federation, Mackinder’s strategic idea according to which Western Europe must counter any intention to control the Eastern Europe resources (Dobrescu, pp. 48- 65) is relevant again.

Strategically, Mackinder’s Heartland was in constant confrontation with Spykman’s Rimland, the two regions tending to expand into each other’s territory (Ibid.).

Nicholas Spykman, a professor of international relations, launched the theory of shores during the Second World War, based on Mackinder’s analysis. The researcher expanded the theories of the Anglo-Saxon geopolitical scientist, connecting them to the new global vision, a strategic game from the American perspective at the international level being formulated (Ibid.). Thus, Spykman focused on the coastal strip surrounding the Eurasian continent, reaching the following conclusion:

“Who controls the Rimland rules Eurasia.

Who rules Eurasia controls the destinies of the world” (Dobrescu, pp. 65-67).

In the current context, in a theoretical parallel, we can discuss the existence of a strategic Rimland outlined by the Black Sea and the Baltic Sea, a region with a significant strategic role in fighting the threats posed by the Russian Federation against the Euro-Atlantic actors.

The geostrategic importance of the two seas that define the Northern and Southern border of the Ponto-Baltic region can be analysed by referring to the theory of maritime power, formulated by Alfred Mahan.

In his work – *“The Influence of Sea Power upon History”*, the American author analyses state power from the perspective of geographical positioning, access to the sea being an advantage in defending a territory beyond its continental borders (Coman, 2018). Thus, taking into account the possibilities of development, Mahan formulated the idea that the control of certain sea areas (routes, crossing points, canals, straits) is favourable from an economic point of view (Ibid.). In close connection with the geographical positioning are the conformation of the shores, the coastline being analysed from the point of view of the outline, length and number of ports, as well as the density and mentality of the population, respectively the abundance of resources (Ibid.).

Mahan’s theory was implemented by President Roosevelt, the USA development in strategic terms starting with the acquisition of the Panama Canal in 1903 (Dobrescu, p. 45). Since then, the US has continued to shape its status as a sea power by building a militarily strong navy.

The geostrategic importance of the Black Sea and the Baltic Sea has determined the deployment of US naval forces components in the region. The strategy of the Russian Federation is based on the two territories opening to the Black Sea, the Baltic Sea, the Crimean Peninsula and Kaliningrad.

In a time when we are witnessing a change in the world power games, by referring to the stated geopolitical theories, we can formulate the idea that the Ponto-Baltic region is at the confluence between them.

SIMION MEHEDIŢI AND NICOLAE IORGA – GEOPOLITICAL VISIONS

The role of the Ponto-Baltic isthmus, as well as the importance of a state's sea power were debated topics throughout the development of Romanian geopolitics.

In this respect, the scholar Simion MehediŢi, founder of the Romanian Geographical School, considered that the geopolitics of a people is determined by aspects of the dynamics of spaces and peoples (Săgeată, 2018). Simion MehediŢi focused on a central theme, analysing the state from the perspective of actors in the vicinity. Thus, *“the Ponto-Baltic isthmus, the Ponto-Mediterranean straits, the Danube and the Carpathians”* were of special significance for Romanian geopolitics (Ibid.). Regarding the importance of a state's access to the sea, MehediŢi stated in his writings that *“the seashore is the most favourable façade”* (Pintescu, 2005), thus *“all the nations that want to have a great future turn towards the sea and the ocean”* (Ibid.) Likewise, the Romanian scholar identifies the province of Dobrogea, located in the proximity of the Black Sea, *“the strip of land between the Danube and the Sea”* (Ibid.), as *“the natural façade of the Romanian state towards the free path of the Ocean”* (Ibid.).

The importance of a state's sea power was also addressed by historian Nicolae Iorga, who delivered a series of courses published in 1913 and 1919, *“The Question of the Danube”*, respectively *“The Question of the Oceans”*.

Referring to Romania's status as a regional pivot on the European continent, Nicolae Iorga mentioned the following aspects that are to be found in the first issue of the Romanian geopolitical magazine: *“Romania has the good fortune – and the danger, naturally – of being at such a geopolitical crossroads. We are what Nicolae Iorga called: a State of European necessity. (...) Our state is, therefore, in the attention of the East and the West, the North and the South... It holds, as has been said, a truly key position”* (Geopolitica și Geoistoria, p. 3).

THE INFLUENTIAL STRATEGY OF THE RUSSIAN FEDERATION IN THE PONTO-BALTIC AREA

Over time, the Russian Federation has pursued an aggressive foreign policy based on influence at the level of the former Soviet republics. In this sense, the independent states located in the Eastern European area were deeply mutilated at the political, economic and social level by the Soviet reminiscences. The need to exert its influence in the region was caused by its reluctance to the North Atlantic Alliance and the European Union expansion. Thus, the states in the Ponto-Baltic area are in continuous tension, being considered by the Russian state as a *“close foreign area”* (Brau, Racz, 2021).

Politically, the strategy of the Russian Federation is based on the activity of pro-Russian parties, led by the oligarchic regime in the states located in the Ponto-Baltic region. To achieve its goals, the Russian state uses tools of soft power, propaganda and promotes fake news, by which the political candidates affiliated with Moscow's interests manage to promote their vision in the pre-election campaigns. Examples in this sense can be found in the Republic of Moldova, where citizens support the *“Șor”* Party², respectively the Socialist Party.

In economic terms, the Russian state profits on the energy dependence of the states (natural gas, mineral fuels), respectively on the implications in the banking system. Examples in this sense can be Comerțbank (a financial institution founded during the USSR, with a majority shareholding by certain Russian citizens) and Moldindconbank³.

Socially, Moscow relies on Russian-speaking or Russian-origin minorities, found in significant proportions in the former Soviet republics. As for Ukraine, the Russian state has capitalised on the Russian-speaking community both to invade Crimea and to maintain the currently escalated war-level armed tensions in the Donbas. The Republic of Moldova is in the same situation, attempts being made on its territory to resolve the frozen conflict in Transnistria for at least two decades. In order to keep the population under its sphere of influence, the Russian Federation runs disinformation campaigns with the objective of removing any Western model of government.

In military terms, the Russian state amplifies tensions in the Ponto-Baltic region by militarising Kaliningrad and placing the Russian fleet in the waters of the Baltic Sea. From a strategic point of view, the move was advantageous until 2022, taking into account the neutrality of Sweden and Finland, states not affiliated to the Euro-Atlantic structures. The annexation of Crimea in 2014 was also militarily relevant, when the Russian Federation secured its presence in the Black Sea, destabilising the regional climate.

ROMANIA'S ROLE IN THE FRAMEWORK OF THE PONTO-BALTIC INTERMARIUM

In terms of the historical past of the region, we identify Romania's path, a state that was under Soviet occupation for a period of 14 years, then experienced a socialist policy during the presidency of Nicolae Ceaușescu, ousted after the fall of communism in the Eastern European area. After a series of governmental changes,

² For more details on the president of the party, *Ilan Șor*, http://alegeri.md/w/Ilan_%C8%98or.

³ *Acționarii Moldovei, cine deține băncile moldovenești*, <https://newsmaker.md/ro/actionarii-moldovei-cine-deține-bancile-moldovenesti/>.

the year 2004 was marked by the accession to the North Atlantic Alliance, and the year 2007 by the accession to the European Union. Joining the Euro-Atlantic structures has been considered Romania's best strategy to develop and ensure a balanced security climate.

Thus, in terms of aligning with Western values and visions, Romania is a regional pillar of stability, maintaining good relations both with neighbouring states and with the United States of America (Mureşan, 2020). Romania's strategic importance was understood after 2014, when the Russian Federation occupied the Crimean peninsula. The entire Euro-Atlantic community contested the aggressive act carried out on NATO's Eastern border, with the riparian states playing from that moment an important role in preventing and combating threats in the region⁴.

The awareness of the importance of the Black Sea, located at the confluence between East and West, as well as the desire to increase the level of cooperation and development within NATO and the EU have brought about Romania's involvement in the creation of regional cooperation platforms, such as The Three Seas Initiative in 2015, respectively Bucharest 9.

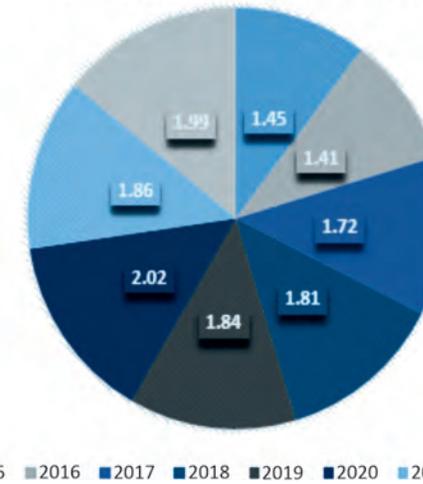
Bucharest's relations with regional actors led to Romania's involvement in trilateral associations such as Romania-Poland-Turkey, Romania-Poland-Ukraine, Romania-Ukraine-Republic of Moldova, respectively Romania-Bulgaria-Turkey (Simileanu, 2021). By means of these joint cooperation initiatives in order to ensure multidimensional security, the states on the NATO Eastern flank create a barrier against the threats posed by the Russian Federation (Ibid.).

In terms of Romania's relationship with the United States of America, it developed gradually, after 1997, when Romania laid the foundations of a strategic partnership that became both a national foreign policy landmark and a means of supporting domestic political, economic, military and administrative reforms (Ministerul Afacerilor Externe). The USA also supported Romania's efforts to integrate into the North Atlantic Alliance, an action substantiated by the involvement of the Romanian state in combating terrorist threats by deploying military personnel to Afghanistan and Iraq (Ibid.). Romania's bilateral relations with Washington were marked by a series of events, namely the signing of the Agreement regarding the actions of US forces on the national territory (2015), the signing of the Agreement on the location of the US anti-missile shield on the national territory (2011), the adoption of Joint Declarations on the Strategic Partnership for the 21st century (starting in 2011), the signing of the US-Romania Memoranda of Understanding (2019) (Ibid.).

⁴ Administrația Prezidențială/Presidential Office, 14 June 2021, NATO. *Comunicatul summitului NATO de la Bruxelles*, <https://www.presidency.ro/ro/media/comunicatul-summitului-nato-de-la-bruxelles-14-iunie-2021>.

Starting from 2017, Romania committed to allocate 2% of the annual gross domestic product for a period of ten years to meet NATO military power goals⁵. Thus, the rise achieved by 2022 led to the modernisation of equipment and infrastructure, pursuing the objective of "developing and maintaining (...) robust and resilient, credible, interoperable, flexible and effective defence capabilities" (Ibid.).

Romania's Defence Expenditure between 2015 and 2022 (GDP)



(The data for this diagram come from *Defence Expenditures of NATO Countries 2014-2022*, June 2022⁶)

In the context of the Russian-Ukrainian war, Romania has once again proved its strategic importance, as one of the main transport routes for Ukrainian refugees and donations from the West⁷.

CONCLUSIONS

The level of security and development of the Eastern Europe states must represent a continuous concern both at the level of the internal politics of each regional actor and for international organisations. Defending NATO's Eastern flank and respecting the Euro-Atlantic vision is a prerequisite in order to counter

⁵ Biroul de Presă, Ministerul Apărării Naționale/Ministry of National Defence, Press Office, 2021, *al cincilea an consecutiv de alocare a două procente din PIB pentru apărare*, https://www.mapn.ro/cpresa/16892_2021,-al-cincilea-an-consecutiv-de-alocare-a-doua-procente-din-pib-pentru-aparare.

⁶ NATO. *Defence Expenditures of NATO Countries 2014-2022*, June 2022, https://www.nato.int/cps/en/natohq/news_197050.htm.

⁷ Ministerul Afacerilor Externe/Ministry of Foreign Affairs. *Minister Bogdan Aurescu Presented Romania's Contribution to Countering the Effects of Russia's War against Ukraine at the UN Security Council in New York during the Debate on Maintenance of International Peace and Security – Conflict and Food Security*, 23 May 2022, <https://www.mae.ro/en/node/58731>.

the anti-Western tendencies of the Russian Federation, materialised over time by fuelling tensions on the territories of the former Soviet republics. In this sense, to lessen the pressure exerted by the foreign policy of the Russian state in the Ponto-Baltic area, the states in this area must create a common front and increase cooperation both within the EU and NATO, as well as within the cooperation platforms developed regionally.

Getting to know the threats to which the Euro-Atlantic community is subjected at the macro level, and the states of the Ponto-Baltic region at the micro level respectively, given their geographical positioning and the transition to Western traditions, is a key moment for the development and implementation of a better forecast and countermeasures strategy.

In relation to the Ukrainian state and the constant aggression to which it has been subjected, namely the annexation of the Crimean peninsula in 2014, the fuelling of tensions in the regions on the Eastern border, Donetsk and Luhansk, culminating in the invasion of the territories, the entire Euro-Atlantic community must formulate a “*lessons learned*” chapter to lay the foundations for new foreign policy strategies. In this sense, the following aspects must be taken into account:

- a. The objective of the Russian Federation to maintain the Eastern European states in its sphere of influence is a desire for which it will fight at any cost.
- b. Any disagreement between NATO and EU members is a vulnerability that will be exploited by the Russian state.
- c. Regional cooperation formats must develop and act in alignment with the Euro-Atlantic vision, with the role of strengthening cooperation and not destabilising the internal climate of NATO and the EU.
- d. The military modernisation of the former Soviet republics with Western technique and equipment is an objective that must be achieved in the shortest possible time.
- e. Analysing the current military conflict, NATO partners must act in order to comply with their commitments to earmark at least 2% of the gross domestic product for defence.

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THE PROACTIVE NATURE OF WARNING IN ANTICIPATING CRISIS SITUATIONS

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Adequate use of warning can contribute decisively to avoiding or reducing major consequences in case of crisis situations. This paper intends to emphasise the contribution that strategic warning can have in the proactive development of the decision-making process. The paper analyses the way in which the issue of warning was approached by a number of experts in the field. At the same time, it is noted that paying adequate attention to medium and long-term analysis methods could contribute to an effective transition towards a proactive approach to warning, in order to avoid strategic surprise, adapt strategies and maintain competitiveness in the operational environment.

Keywords: warning; crisis; proactive; risk; trend; Ukraine;

INTRODUCTION

During the recent years, humanity has faced at least two major crisis situations, with relatively different origins and typologies, but with similar security implications. The first, having as its starting point the medical field – the Covid 19 pandemic, the second, having a primary expression in the military field – the Russian aggression on Ukraine.

In both situations, the causes, developments and possible consequences were discussed, the understanding of these elements being absolutely necessary for the decision-making level. In both cases, warning played an important role, regardless of whether it was expressed through an explicit or implicit form.

The concept of warning is not a novelty, as it has seen numerous theoretical and practical developments over time, especially in the form of early warning systems and related to their role in anticipating or even preventing crisis situations. Against the background of the multitude of fields in which the implementation of warning systems has been attempted and of the particularities specific to each of these fields, it is difficult to articulate a comprehensive definition of warning.

Starting from this aspect, we intend to bring back into discussion the anticipatory character of warning and to emphasise the contribution that strategic warning may have in the proactive development of the decision-making process.

In this regard, the paper analyses the way in which the issue of warning has been approached over time by a series of experts in the field. The paper starts from the premise that any data/information recorded before or during a crisis could, at a given moment, become the starting point for issuing a warning, to be used within the decision-making cycle. For this to be achieved, it is necessary to have a sufficiently well-organised and developed decision-making support system, so that it actively contributes to the transformation of data/information into a warning.

In order to support the proactive nature that warning can have, the paper uses the principle of identifying trends, insisting on the need to understand their nature. Specific methods for trend analysis are not detailed in the paper, but it should be mentioned that such methods have experienced different developments in recent

years, being used, at a given moment, including at some decision-making levels in Romania (Chifu, 2013).

On the other hand, the paper proposes a graphic representation of the main concepts and processes mentioned within the following pages, with the intention of highlighting the way warning may be regarded through its proactive character, respectively the analytical spectrum. At the same time, the last part of the paper contains a brief exemplification of the stated theoretical aspects, based on recent developments in Ukraine.

WARNING BETWEEN STRATEGIC AND TACTICAL LEVELS

From an etymological point of view, the notion of warning is related to the action of preventing in relation to the consequences of a possible situation (DEX, 2016). Some English definitions of warning also address the aspect of understanding a possible danger or a possible problem that would manifest itself in the future (Cambridge, 2013). Seen from the perspective of managing crisis situations, warning is rather a process whose objective is to issue a notification, in order to adopt preventive measures. Depending on the type of the crisis, this notification may refer, for example, to a potential hostile act (in the case of political-military and security crises), to a possible humanitarian/natural catastrophe (in the case of crises generated by disasters) or to possible dangerous developments (in the case of crises related to the economic/financial/banking field and the protection of critical infrastructures) (Popescu, 2018).

However, one should note the multitude of approaches related to the warning process, as well as the technical and conceptual challenges related to this process, aspects that make it difficult to articulate a clear and comprehensive characterisation of the warning.

Basically, the usefulness of forecasting and anticipating risks in the decision-making process is given by the contribution to reducing uncertainty, especially on the mid- and long-term (Trujillo-Cabezas, 2020). Technological developments specific to the current environment contribute to accelerating the dynamics of actions, but at the same time, they reduce the time gap between the strategic and tactical levels. A major challenge is related to the management of the flow of data and information, accepting that the way it contributes to knowledge and understanding of the operational environment is relatively different at the tactical/operational versus the strategic levels (COPD 2.0, 2013).

From a strategic perspective, it is more important to create an overview of the operational environment, to understand the general context and possible future developments. The strategic level calls for mid- and long-term assessments, which provide us with a broader perspective on visions and concepts related to strategic goals and the desired end state (Pherson, 2021).

The tactical level is more concerned with those data and information that directly support operations and to a lesser extent with the overall context in which they are conducted. That is why, at the tactical level, evaluations generally refer to specific actions, and focus, in particular, on aspects related to maintaining the operational rhythm and analysis of responsibilities, down to the individual level.

In an attempt to create a bridge between the tactical and the strategic level, the operational level provides recurrent evaluations of the activities and functions necessary for the implementation of strategies (Pherson, 2021).

A useful debate would concern the role that warning could have in anticipating future developments or actions impacting the operational environment and/or entities within. Cynthia Grabo, well-known for theorising the field of strategic warning, believes that warning can be characterised as *“a theory, a deduction, a perception, a belief. It is the product of reasoning or of logic, a hypothesis whose validity can be neither confirmed nor refuted until it is too late.”* (Grabo, 1987). Grabo notes that, despite multiple approaches of the concept of warning, there is no clear and universally accepted definition of strategic warning, and argues that for many, strategic warning is synonymous with a warning information that can be provided as early as possible by a system intended for this purpose (Grabo, 2002). Such an approach relates to a classification of the possible types of warning strictly to the temporal axis, essentially to the moment of providing the information, without taking into account a clear reference to the imminence of the action that is the object of the warning.

On the other hand, taking into account the level of certainty, Grabo notes that a comprehensive analysis of a set of information could only be possible when the adversary's action reaches such a high level of probability that it turns it into imminent (Grabo, 2002). The search for a minimum level of certainty for the aspects subject to a warning may cause a transition of utility of the warning from the strategic to the tactical. Thus, using available information to issue a warning would be done only when enemy action is imminent or has already been already triggered. Such warning would be useful rather to leaders from the operational-tactical area, to lead to current operations and plan future ones (Grabo, 1987) and less to strategic level leadership.

From John Bodnar's (2003) perspective, warning can be considered a fitting of indicators from a past or current moment into a model representing the future. In his view, in the substantiation of the warning there is a dependence on a series of models or mental images related to the environment of interest and the way that different elements of this environment interact (Bodnar, 2003). Bodnar claims that an analysis process is necessary to generate such models, and that the main objective of strategic warning is to generate a model of the environment, through which to provide current information with the necessary context for framing reports and syntheses on the short term (Bodnar, 2003). J. Bodnar proposes a differentiation between the warning aimed at the strategic level and the one aimed at tactical level, based on the way resources are used. Thus, warning may be considered more tactically useful when it refers to an enemy action that can be countered with available resources. When it refers to an enemy action that requires a significant reallocation of resources for an effective response, warning is rather aimed at the strategic level (Bodnar, 2003).

As part of an analysis of the evolution of strategic warning, Gentry J. and Gordon J. (2018) introduce a classification of the types of warning, depending on the moment of the actual triggering of the crisis situation. In this way, they appreciate that warning is more useful for the tactical level when it refers to any moment following the outbreak of hostilities, while for the strategic level the warning must refer to moments prior to their triggering (Gentry, Gordon, 2019).

Basically, it can be considered, in the absence of a strategic orientation, that the collection mechanisms cannot be correctly used to obtain additional information, and the signals that can trigger warning mechanisms at the tactical level could be misinterpreted or even ignored (Grabo, 1987). In other words, limiting knowledge of the broader context of the threat (normally provided by strategic warning) considerably affects the warning process at the tactical level and available resources may be unable to act effectively.

WARNING FROM THE PERSPECTIVE OF THE PROACTIVE COMPONENT

This paper started from the premise that "*being proactive*" implies the existence of an action that aims to generate a positive result (Cambridge, 2013). For this action, an active attitude is necessary, as a premise for generating a positive result in the perspective of a future context.

On the other hand, the reactive attitude entails the existence of a reaction, determined by an event or an action. We can thus consider that the difference between the proactive and the reactive character is given at least by the relationship of determination to an event or an action. In the case of the proactive component, the anticipatory element is more significant, and the future context in which the positive result is desired to be generated is rather an estimated one, with the level of probability of the estimate possibly validated over time. The anticipatory element can be present also in the case of the reactive component, but the level of certainty of the event or action that determines the reaction is higher than in the case of the proactive component.

When not generated by intuition, anticipation is the result of an intensive process of estimative analysis. Usually found at the strategic level, this process is deeply forward-looking and involves a proactive component in addressing the courses of action that decision-makers have available to respond to stimuli (Pherson, 2021, p. 14).

The estimative analysis is oriented, among other things, to the identification and understanding of the nature of some trends (Postma, Papp, 2021) as well as the possible risks, negative or positive, that could accompany the respective trends.

The notion of "*trend*" is used to express the evolutionary aspect of a situation. Liebl and Schwarz (2009) note, however, that this term has generated multiple confusions, especially in the area of strategy and management. Thus, although the term is used in numerous works, many authors avoid defining what they mean by "*trend*" (Liebl, Schwarz, 2009). This situation is not found, however, in the statistics area either, where the "*trend*" is very clearly defined and, at the same time, very useful in forecasting some models in the economic field (Ștefănescu, Dumitriu, 2018). However, although it can be accepted that data is the foundation of trend analysis, the usefulness of a strictly quantitative approach in the field of strategic management is debatable.

It should be noted that the pyramidal representation of the link between "*data*", "*information*" and "*knowledge*" (also known as DIKW¹) is considered in the paper. The use of this pyramidal model does not, however, imply the acceptance

¹ The DIKW diagram (Data-Information-Knowledge-Wisdom) represents a graphical model in pyramidal form, which refers to the relationship between data, information, knowledge and wisdom. This model is still used as a theoretical foundation in fields such as information science, being attributed, in some articles, to theorists Stephan H. Haeckel and Richard Nolan (Tariq, 2013).

of the existence of a hierarchical relationship between the concepts that are the object of the representation. This aspect is relativised in the paper, by taking into account the differentiation between “data” and “information” based on their dynamic character² (Sanders, 2016). Also, from the author’s point of view, the contextualisation of data is a condition for it to be considered information.

Returning to the estimative analysis, one of the objectives is represented by issuing warnings, which, when accepted and assumed at the decision-making level (Grabo, 1987), can generate the necessary conditions to avoid strategic surprise (Schwarz, 2005). On the other hand, the absence or ignoring of such an analysis mechanism could represent a potential source of failure at a strategic level (Haghani, 2018), given that we admit the fact that no development having a crisis potential occurs without issuing signals in advance (Schwarz, 2005). If correctly understood, these signals can help identify emerging trends and, subsequently, issue a warning regarding the effects of these trends.

The transformation of data (collected by different sensors) into information, through contextualisation and dynamism, contributes to the identification of trends. This process is represented in *figure no. 1* by the fundamental questions “who?”, “what”, “where?” and “when?”. Afterwards, the information would be used in the development of knowledge (“how?”), understanding (“why?”) and interpretation (“with what purpose?”) of certain actions (Corduneanu, 2020, pp. 73-82).

However easy this transformation may seem, it represents a whole process, whose complexity should not be treated simplistically. Through this framework and through the answers to the fundamental questions, formulated with the help of descriptive analysis, explanatory analysis and evaluative analysis, the premises of a transition from a reactive to a proactive approach (Pherson, 2021, p. 14) of different situations with risk or crisis potential are generated.

Such a construction could as well be based on the principle developed by Schwarz (2005), who believes that the objective of a warning system at a strategic level is to understand, as precisely as possible, the nature of the trends identified. Misunderstanding or even partial understanding of trends could result in inadequate implementation of strategies (Liebl, Schwarz, 2009).

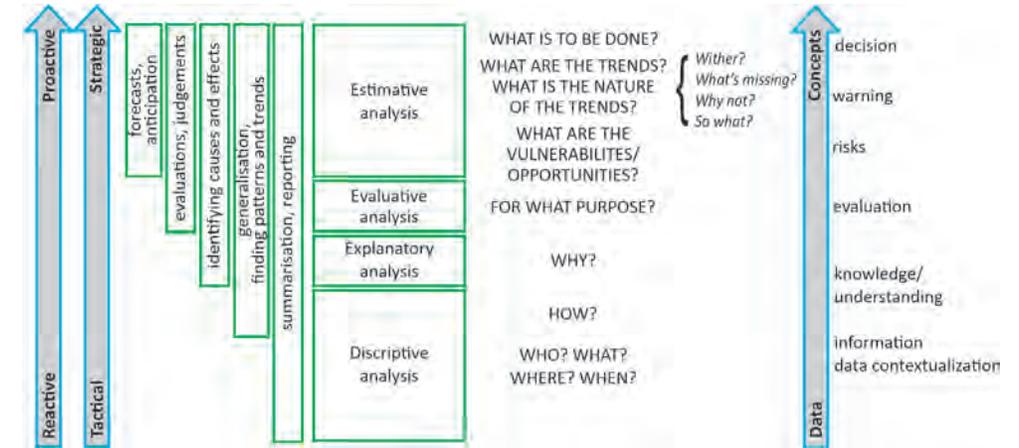


Figure no. 1: A possible model regarding integration of warning in the analytical spectrum, proposed by the author³

In an attempt to establish a series of limits for the definition of the trend as a strategic issue, Schwarz notes that the specialised literature starts, among other things, from the assumption that a trend has a life cycle, which overlaps many times with the cycle of (public) attention enjoyed by a topic: a lower importance in the first part of the topic’s existence, until a critical point of interest is reached; subsequently a steep increase, until a saturation level is reached; respectively a decrease, until the disappearance of interest, usually by normalisation (Downs, 1972; Postma, Papp, 2021).

Starting from the life cycle of a trend, Postma and Papp (2021) consider it relevant to classify them into at least three categories, having the following characteristics:

- lasting up to 5 years (micro-trends) – they can take the form of phenomena or events; have the lowest level of abstraction; their monitoring and analysis supports the identification of meso-trends;
- lasting between 5 and 10 years (meso-trends) – they capture changes in specific areas of society and are visible in various sectors, industries, groups, regions, states; they must be analysed individually, because the conclusions resulting from the study of a trend are not automatically applicable in another situation;

² J. Sanders believes that data can be defined as “organized spatial representations within a flow of information” that “exist only in the presence of a modelling agent, which is able to manipulate static components to form a representation”. According to J. Sanders, an information flow can be built by overlapping data, represented in terms of properties of the given flow (Sanders, 2016).

³ The proposed model represents an adaptation of the Pherson model for representing the analytical spectrum (Pherson, 2021, pp. 14, 43) and the integration in this representation of the Liebl-Schwarz model regarding the understanding of the nature of trends (Liebl, Schwarz, 2009, pp. 12-13). The author’s intention was to create a model representing the main concepts and processes mentioned in the paper, which would highlight the reporting of the warning to the proactive character, respectively to the analytical spectrum.

- lasting over 10 years (mega-trends) – refers to changes in society (such as demography, economy, culture, technology, ecology, politics); their effects are visible when their evolution exceeds a critical point and when they have determined several meso-trends; mega-trends can be identified by analysing some meso-trends; on the other hand, the identification and understanding of mega-trends, their critical points and the duration of their life cycle, could contribute to the anticipation of meso- and micro-trends (Postma and Papp, 2021).

Schwarz and Liebl (2009) believe that, in order to have a strategic potential, a trend must first of all have a novelty character, and its manifestation must not yet represent a quantifiable phenomenon and/or action, which have already been identified and evaluated (Liebl, Schwarz, 2009). In the view of Schwarz (2005), the purpose of identifying the strategic potential of a trend is more than *“being faster than the competition”* or *“being better prepared in the face of a crisis”*. The effort within a warning system should be channelled, first of all, towards understanding the nature of a trend and not necessarily towards identifying its direction of evolution. From this perspective, we can consider that the set of questions that Schwarz and Liebl developed for identifying and understanding new trends is still useful:

1. *“Whither? Which contexts are involved in a trend? What can be regarded as the new in this constellation? What is the current stage in the life cycle of this trend – normalization or post-normalization?”*
2. *“What’s missing? What is the paradoxical element of the trend? What is the corresponding countertrend? Are there any contexts which would be needed to allow the trend to advance in its process of normalization?”*
3. *“Why not? Are there any contexts which could prevent the trend from moving on in its normalization process? How could the trend relate to other trends – i.e., does the trend have some contexts in common with other trends?”*
4. *“So what? What aspects of the trend match our expectations or seem familiar? What is unexpected or represents an anomaly? What aspects of the trend challenge the premises of the current strategy? In what contexts will the trend cause the maximum damage? In what contexts will the trend provide the greatest strategic potential?”* (Liebl, Schwarz, 2009).

These questions, added to the answers to the fundamental questions (*“who?”; “what?”; “where?”; “when?”; “how?”; “why?”; “to what end?”*), could complete

the process represented in *figure no. 1*, by identifying positive (interpreted as opportunities) or negative (interpreted as vulnerabilities) risks. Starting from the risk analysis, warnings can then be formulated, which will produce the adaptation of strategies to future realities and give these strategies a proactive character.

APPROACHING WARNING FROM THE PERSPECTIVE OF THE COMPETITIVE ENVIRONMENT

The experience of some important companies during the crisis generated by the pandemic, summarised in a study developed within the analysis company McKinsey, by a team led by Alfonso Natale (2022), highlighted the need for investments in forecasting and risk assessment capabilities as a possible way to building resilience. At the same time, the study identified the intention of large companies to make the transition from a reactive to a proactive crisis management. In this sense, actions were considered necessary to improve the capabilities of reporting and capitalising on data in a timely manner and in greater depth. Companies have also taken into account the possibility of integrating digital solutions to identify trends, as well as to perform estimative analyses. In this framework, it was noted the willingness of some companies to move towards a holistic approach, in the sense that the attention is no longer focused on a specific group of risks, but tends towards a longer-term environmental assessment, which overcomes the reactive approach to uncertainty (Natale, Poppensieker, Thun, 2022). In this way, companies believe that the resilience gained through warning could represent a competitive advantage during crises.

However, the study mentioned above highlighted also the difficulty of maintaining this approach on the long term. Thus, it cannot be excluded that, due to the fading of the impact of a crisis over time, after crossing it, a temptation to change the general effort of the companies towards immediate priorities could emerge. Such a change in approach could have the effect of reducing the ability of companies to respond to the challenges of future crises (Ibid.).

On the other hand, we must not lose sight of the fact that, although many of the consequences of a crisis are observable in a time horizon close to it, there are also effects that remain active over a longer period after crossing the crisis, being possible even to generate new challenges to systems and organisations or even new crisis situations (Chifu, 2013; Banu, 2021).

An essential element in understanding trends as a basis for issuing warnings can also be the development of the warning architecture. The dynamism of this architecture can ensure efficient communication between both the elements and structures within, and with similar external structures. In this way, isolation situations of some of the components or even of the system as a whole can be avoided.

In order to understand a trend, a unitary way of reporting towards their identification and characterisation is necessary in the entire warning architecture. Despite the differences between the strategic, operational, and tactical levels that were mentioned earlier, it is unlikely to have within an organisation the possibility of duplicating sensors and/or other data and information gathering structures, in order to have an exclusive allocation to each of the three levels. For this reason, it can be considered that the knowledge-understanding-evaluation-warning process will be based on the same set of data for all levels – strategic, operational or tactical.

In practical terms, from data collected at a present moment can result information for short-term assessments that directly support the conduct of operations. The same data and information, analysed in a different context, can support the answers to the set of questions proposed by Liebl and Schwarz for identifying trends. In this way, the understanding of trends can substantiate mid- and long-term evaluations, respectively issuing warnings, for the proactive adaptation of strategies, in order to achieve objectives and maintain competitiveness in the operational environment.

In the early 1980s, when the foundations of concepts such as *“competitive intelligence”* (Corduneanu, 2020) were laid, by taking over the warning principles used in state structures (Barnea, 2020), W.A. Reinhardt made a series of observations regarding the appearance of changes in the operating environment of companies, appreciating that growing economic markets can no longer be considered isolated. Among the factors generating change, Reinhardt identified at that time: the impact of non-economic elements, the acceleration of changes at the social and economic level caused by the introduction of new technologies, the enhancement of the influence of governments in the economy, the emergence of new economic and social powers, the profound alteration of demographic structure and educational standards (Reinhardt, 1984). Surprisingly or not, some of these factors can be found among the causes of change of the current environment.

At the same time, Reinhardt proposed the implementation of strategic warning systems within companies, as a way to reduce the growing uncertainty of the operating environment. In this sense, Reinhardt introduced several principles for the foundation of his theory, principles that could be considered valid even today, as follows:

“-social and political changes do not happen accidentally; they are ‘made’ by people and guided by people’s interests.

-the changes are underlain by specific development mechanisms and relatively stable dispersal patterns.

-changes in the company’s environment are triggered by specific events.

-changes are often pushed or directed by precursors.

-changes in the company’s environment often cast their shadows ahead.”

(Reinhardt, 1984).

The model of the warning system proposed at that time by Reinhardt to be applied within companies was deeply inspired by the military early warning systems, specific to the Cold War, which were mainly based on the monitoring of predetermined indicators. The architecture of the Reinhardt model was, in fact, an adaptation for the economic environment of a surveillance system, composed of a series of sectorial radars (the company’s departments), the relevant signals collected by them being transmitted to central stations (the upper management level). An integrated analysis was carried out at this level. After implementing this system for a period of five years, Reinhardt noted the advantages that systematic and consistent anticipation brings to the company, as well as the fact that environmental analysis must be extended to changes in other areas than those in which the company operates, including in the political and social fields. One of the challenges observed was represented by the management of the information flow, being necessary to achieve a balance between the need to filter data and information and the need not to concentrate knowledge in a single point (Reinhardt, 1984).

The need to create architecture that supports the consistency and the systematisation of thinking and taking action has been maintained until now, being also mentioned by contemporary specialised literature. The main conceptual evolution compared to the period of development of the Reinhardt’s model could be represented by a greater depth of interconnection between domains. The proactive component could be added to this, considering that the warning systems and going through a crisis should also be seen as opportunities for adjustment in front of the following crisis situations (Mitroff, 2020).

Avner Barnea proposes an inter-organisational approach of the analysis of warning, starting from the idea that both the private and the state environment have developed over time warning systems using similar principles. A. Barnea believes, however, that a more efficient evaluation of errors is carried out within private companies, especially when errors are made by the decision-making levels (Barnea, 2020).

Barnea's finding seems to be supported by the developments during the pandemic, the state system, in general, and the military, in particular, having the opportunity to adapt to the new environment starting from the lessons identified by private companies. Many of the private economic structures that have gone through the crisis generated by the pandemic have been able to quickly identify new solutions, starting from the reconfiguration of logistics chains (rearrangement of logistics hubs; shortening the size of logistics chains; readjustment of stocks according to the anticipation of needs), up to reconfiguring decision levels to ensure the continuity and solidity of decision-making chains (by applying the concepts of digitisation and remote work, as well as keeping only strictly necessary elements in the field) (Natale, Poppensieker, Thun, 2022).

The main problem identified by Barnea in relation to warning failures is not represented, however, by a lack of information, but rather by the combination of organisational limitations, analysis failures and a possible problematic relationship with the decision-making level (Barnea, 2020).

The attention paid to strategic warning should remain high, but focusing exclusively on the aspect of reducing negative effects creates the conditions for failures to be more visible than successes. Many of the reforms implemented in the strategic warning architecture were generated and/or driven by failures (Barnea, 2020), an aspect that highlights the reactive nature of adaptation.

WARNING THROUGH THE LENS OF THE CONFLICT IN UKRAINE

The non-identification, misinterpretation or possible ignoring of some of the trends existing before 2014 may have caused the lack warning signals regarding the appearance of the so-called "*green men*" in the Crimean Peninsula at the beginning of 2014. Thus obtained the Russian Federation the strategic surprise not only regarding the Ukrainian authorities, but also in the case of the international community (Bruusgaard, 2014). In the absence of strategic warning, the tactical level structures of the Ukrainian armed forces were deprived of the ability

to formulate an adequate response to the situation at that moment, any warnings issued at that level losing their usefulness.

On the other hand, it can be noted that before the invasion of Ukraine in February 2022, a better understanding of the risk was achieved, possibly on the basis of a better monitoring of the operational environment, doubled by identifying trends, the use of predictive assessments, and the dissemination and communication of the warning. This enabled undertaking steps to prepare a better response capacity compared to 2014, both in political-military and diplomatic terms (ISW, 2022). Unlike the situation in 2014, understanding trends and the existence of strategic-level warnings provided enough time for Western states to provide assistance to Ukraine in preparing a more robust defence strategy. Moreover, a new approach was chosen for disseminating the warning, with the mass-media having at their disposal numerous open sources as a basis for their reports, thus increasing the level of credibility of the published information. In this regard, the contributions of the private sector and social-media are noteworthy, practically allowing both mass-media and private individuals to directly follow the mobilization effort of Russian forces on the border with Ukraine (Abdalla, Davies, Gustafson, Lomas, Wagner, 2022).

It can be assessed that this approach had a proactive character and, despite the fact that it did not prevent the invasion of Ukraine, it forced Russia in many moments to cede the initiative and adopt a more reactive attitude.

Monitoring activities undertaken by the Russian forces especially starting with the spring of 2021 – e.g., the deployment of forces in the Southern Military District at the end of March 2021, in the north, east and south of Ukraine (Gressel, 2021), the conduct of the joint strategic level exercise Zapad 21 (Kofman, 2021) – allowed obtaining data and information that could be used in the process of developing knowledge, understanding and interpretation of Russian actions.

It can be appreciated that understanding the nature of the trend identified in this case (from escalation at the border with Ukraine to generating the premises of a large-scale action on Ukrainian territory) included, among other things, an effort to understand the context in which the political decision for a large-scale action could have been made and the rationale that might underpin it.

The novelty of the trend could be considered the very fact that it represented the largest concentration of Russian forces in the period following the dissolution of the USSR, to which was added a change in the willingness of Belarus to play a role in Russian actions (Abdalla et al).

The difficulty of identifying trends, interpreting data and using it in predictive analysis so as to obtain the anticipation needed for strategic warning, especially with regard to the timing of Russia's actions, could be highlighted in this case by the significant differences between the assessments regarding the developments in Ukraine that were made at that time by states with proper strategic analysis capabilities (Ibid.).

CONCLUSIONS

Analysing warning from the perspective of proactiveness, it can be stated that the effective transition from a reactive attitude could be achieved when the process of knowing-understanding-evaluating creates the possibility of disseminating a warning or a warning product as soon as possible before the moment of a crisis. At the same time, the running of this process allows the reallocation of enough resources for an answer, if this is necessary (according to the Gentry and Gordon approach, respectively the Bodnar approach). Increasing the level of certainty, however, might not always be a guarantor of the ability to act proactively, considering the possibility of losing the anticipatory nature of the warning and decreasing its usefulness for the strategic level (Grabo's approach).

Because of the wish to reduce uncertainty and avoid exposing the organization to situations that can generate surprise, at the decision-making level there could sometimes exist the temptation to turn to more concrete elements, usually provided by current information. Although current information can represent a source of information for strategic level warning, the more descriptive aspect of the analysis made at this level and the time horizon make it difficult to identify trends.

On the other hand, it is noted that paying adequate attention to medium and long-term analysis methods offers the possibility of an efficient transition towards a proactive approach to the decision-making process. Identifying trends and understanding their nature can represent one of the useful methods for anticipating developments with crisis potential, accordingly adjusting decision-making at the strategic level and orienting the tactical/operational levels.

Warning systems are easier to use in the fields where data collected by the sensors are easier to measure. For this reason, trends can be easier to identify in areas closer to the statistical area. The specialised literature abounds in developments regarding anticipation or prevention in areas such as the prevention of natural, financial-banking or medical disasters. In terms of preventing conflicts with military development, social crises or political crises, anticipating risk-generating trends

is more difficult, especially when attention is focused on a certain type of risk, usually generated by the relationship with an adversary/competitor and the effort to obtain a strategic advantage in relation to it (Barnea, 2020).

Developing an integrated warning architecture, which promotes a unitary way of reporting on the identification and characterisation of trends, could represent a basis for the development of new models of understanding risk in an environment characterised by competitiveness. Starting from the way that civilian companies adapted to recent crises, a logical evolution would be to integrate new technologies in the warning architecture.

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DISRUPTIVE TECHNOLOGIES IN THE CONTEXT OF EUROPEAN DEFENCE COOPERATION

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The development of disruptive technologies represents one of the main themes of the contemporary security agenda not only from a national perspective but also at the level of multinational cooperation. In this regard, the European cooperation carried out under the institutional auspices of the Common Security and Defence Policy has gradually addressed the impact of disruptive technologies on the way of structuring the EU's response to contemporary security challenges. The approach to this subject has gradually evolved towards profiling a distinct typology at the level of which the specific character also derives from the particular parameters of the mode of interaction between the EU institutions. Equally, the specific nature of the European approach also concerns the way of financing the process of developing capabilities of this type, including in terms of complementing the national effort through opportunities offered by the EU budget. From this perspective, it can be concluded that the issue of disruptive technologies will become more and more visible on the European cooperation agenda, including in terms of the priorities advanced through the Strategic Compass as well as at the level of practical initiatives launched in the CSDP context, as is the case with PESCO and EDF.

Keywords: Strategic Compass; PESCO; European Defence Fund; Common Security and Defence Policy; Disruptive Technologies;

INTRODUCTION

This communication is underpinned by research on the direct sources regarding the European cooperation in the field of security and defence, which is required for identifying the guidelines and trends in this area. The methods used for this communication are centred on scientific documentation, supported by direct research and personal experience. At the same time, there were used content analysis, comparative study, case study, all of which being approached from an analytical perspective on the developments of this subject for the past decades.

The adaptation of European cooperation to the trends of the security environment has been a constant that has accompanied the process of developing the EU's profile in the field of security and defence. The conceptual premises of what can be called the "European approach" regarding the applicability of emerging and disruptive technologies in the context of defence have evolved especially in the last decade. The way of institutional-functional framing of this component at the level of the European Union has registered a distinct evolution, influenced both by the particular profile of the security and defence dimension, as well as by the intergovernmental nature of European cooperation in the field of defence. The first approaches regarding the implications of technologies in the field of defence can be found in the activities carried out by the European Commission regarding the development of research at the level of the European Union. Thus, through the communications adopted by this institution in the period 1996-1997, the emphasis was placed on the interaction of civil and military technologies, within an integrated approach that could be exploited industrially. In this regard, it is cited the American experience¹ related to the integration of military and civil research activities within companies (Implementing European Union Strategy on Defence-Related Industries, p. 19).

The European Commission's actions during this period have set the direction for future actions in the field of critical and, subsequently, disruptive technologies. From this perspective, it can be considered that the preferred approach in this field will wear the community coat, a situation that will be maintained in the next

¹ The European Commission approach was focused on the merger between Boeing and McDonnell Douglas, carried out on 1 August 1997.

two decades. The focus was placed on the research component in the field of security, simultaneously with the initiation of initial steps for their industrial exploitation. The landmarks of this approach were adopted at the level of the decision of the European Council held in Lisbon, on 23-24 March 2000, aiming at the creation of the European Research Area (ERA). The main objective of the approach was aimed at the voluntary integration of national research segments within a European matrix, structured according to efficiency and competitiveness coordinates (European Council, Lisbon, pp. 5-7).

The parameters of the decision of the heads of state and government gathered in the Portuguese capital were structured starting from the benchmarks advanced by the European Commission a few months earlier, through a communication on the creation of the ERA [COM(2000)6]. Within it, the potential of dual use and the applicability in the military field respectively indicated concrete options for capitalisation targeting the fields: aeronautics, advanced materials and information technologies. As in the case of the previous communications, the approach to this topic came against the background of the political-military developments aimed at establishing the EU's profile in the field of security and defence. This is the case of the Treaty of Amsterdam (signed on 2 October 1997), which introduced the possibility of creating a common defence policy at EU level, establishing, at the same time, the post of High Representative for Common Foreign and Security Policy. At the same time, the first elements of the EU's operational agenda were advanced by adopting the missions² it could fulfil (Treaty of Amsterdam, Art.J.7). Similarly, the decisions of the European Council of March 2000 responded to the progress made during the previous year in terms of developing the EU's capacity to carry out crisis management operations and structure the cooperative relationship with NATO. The decisions of the European Council of December 1999 are placed in the same context. Thus, the first EU Headline Goal is adopted, aimed at the creation, by 2003, of a Rapid Reaction Force of 50-60,000 soldiers.

A PRAGMATIC APPROACH

Under the influence of the progress related to the operationalisation of the Common Security and Defence Policy, derived from the implementation of the provisions of the Treaty of Amsterdam, the issue of developing the capabilities necessary to engage in operations would gain increased relevance. The role

² Known as *Petersberg tasks*, which included: humanitarian and rescue tasks; conflict prevention and peace-keeping tasks; tasks of combat forces in crisis management, including peace-making; joint disarmament operations; military advice and assistance tasks; post-conflict stabilisation tasks.

of ERA aimed at overcoming compartmentalisation in the field of research and, subsequently, strengthening the synergy between the civil and military segments [COM(2000)6, p. 9]. The implementation tool was represented by the Framework Programs, used in the context of European cooperation since 1984, through which funding resources were to be secured. For the reference period, Framework Programs 6 – FP6 (2000-2006) and 7 – FP7 (2007-2013) became applicable. In the latter, the topic of security was introduced, through which EU research entities could advance projects that capitalised on the potential for dual use through funding from the community budget. The financial envelope of the entire program targeted 50.521 billion Euros, of which the security component benefited from 1.35 billion Euros. Likewise, the thematic inventory of the other segments also included fields associated with emerging technologies such as nanotechnologies, advanced materials, new technological productions (FP7 in Brief, p. 17).

The objectives of the security component essentially aimed at three levels: developing technologies and knowledge to ensure the security of citizens in the face of the threats of terrorism, organised crime, national disasters and industrial accidents; ensuring the conditions for the efficient use of leading and emerging technologies; increasing the competitiveness of the European profile industry. Within this approach, the provision of infrastructure security, border security, as well as the creation of conditions for restoring the level of security and safety in the event of a crisis were considered.

In this context, more than 100 projects in the field of security have been advanced and have benefited from funding through FP7. The dual-use approach was particularly visible in terms of critical infrastructure protection (including the cyber protection component), intelligent surveillance, CBRN, communications security (Info Day, 2010). Subsequently, the inventory of areas addressed in the context of security would significantly expand at the level of the successor program, Horizon Europe 2020 (2013-2020) with a particular focus on the resilience capacity and interoperability between national systems. At the same time, a better connection to the developments recorded in the context of the Common Security and Defence Policy was considered, an approach that was translated at the level of the program within an additional theme aimed at preventing conflicts and achieving peace. In their entirety, the financing component for security amounted to 2.5 billion Euros with the potential of co-financing projects of up to 70% of the associated costs. Starting from these elements, the continuity of financing for the projects in the security area was ensured at the level of the new Multiannual Financial

Framework (2021-2027) through the new Framework Program “*Horizon Europe*” with a total budget of 95.5 billion Euros of which the “*Civil Security for Society*” component benefits from approximately 1.6 billion Euros.

CONCEPTUAL CLARIFICATIONS

Obviously, the emergence of FP7 represented the essential change in the development of research on the security dimension and, subsequently, the exploitation of the potential for dual use of technologies on the military component. During the duration of the afore mentioned framework programs, the European Defence Agency (EDA) role in promoting projects relevant to emerging and disruptive technologies was relatively modest, being oriented, rather, towards a role of coordinating the process of developing the capabilities needed to be deployed in operations. Responding to the provisions of the European Union Treaty, EDA’s activity was oriented towards stimulating cooperation between member states and creating a collaborative culture in the field of capability development. We can thus speak of a portfolio of projects developed under the auspices of the EDA that aimed at the “*classical*” side of capabilities, simultaneously with the development of the conceptual and strategic framework necessary for the management of the military & defence dimension of the European Union. If at the level of the European Commission, the first decade of the 21st century recorded practical initiatives for the generation and financing of some research projects, the activity of the EDA was aimed at completing the strategic normative deficit that existed on the defence area.

The paradigm of this approach was structured, in essence, by combining the intergovernmental nature of European cooperation in the field of defence with the economic and strategic implications that the technological advance had on the process of developing capabilities. On these coordinates, the adoption by the Steering Committee of the EDA, gathered on 19 November 2005 in the format of defence ministers, of the collective benchmarks in the field of research & technologies (R&T) that the member states could implement at national level is placed. They were aimed at strengthening the R&T profile at the level of defence spending, such as: 2% of total defence spending, respectively 20% of total R&T spending for the financing of collaborative projects. Also, the first elements associated with a conceptual agenda can be identified at the level of the European Defence Industrial and Technological Base Strategy (EDTIB), adopted at the level of the EDA

Steering Board on 14 May 2007. The main objective of this approach was to ensure the functional connection between the process of reform and modernisation of the armed forces and technological progress.

The profile of the initiative was aimed at strengthening the competitiveness of the way of generating capabilities at the European level, with an emphasis on the rapid exploitation of the latest technologies. Also, the EDTIB had to work in an integrated and complementary manner with civil technologies, including from the perspective of eliminating technological dependencies. The importance of capitalising on technological progress in the field of defence was thus profiled as one of the main features of the EDTIB. Obviously, at the time, the issue of disruptive technologies was not individualised, the approach generated by the EDTIB Strategy having, rather, an indicative character.

Subsequently, the first Capability Development Action Plan (CDP) was agreed (8 July 2008), intended to act as a guide for the orientation of European defence cooperation, under the institutional auspices of ESDP. The priorities advanced on this occasion included 12 domains/areas relevant to ensuring operational efficiency (CDP Background Note, p. 2). The emergence of the CDP must be placed in the intergovernmental context of European cooperation in the field of defence, representing a first attempt to coagulate a common vision at the level of the member states. The emphasis placed on the operational component, generated by the constant increase in the number of operational engagements, left its mark on the CDP profile, the aspects related to the implications of emerging or disruptive technologies not being very well outlined.

In connection with the adoption of the first CDP, the European Defence Agency promoted a Strategy on cooperation at the European level in the field of armaments. The importance of this document can be viewed from at least two perspectives. The first concerned the difficult financial conditions that the economic crisis of 2008-2010 had generated at the global level and that had contributed massively to the reduction of defence budgets. The second perspective was associated with the need to make the governance of capabilities more efficient, both by optimising expenses and capitalising on the potential of new technologies. Along these lines, the Armaments Strategy was intended to be a bridge between the priorities assumed at the political level through the CDP and the industrial segment.

A few months away, the EDA endorsed the EU Strategy on Defence Research and Technologies (EDRT) whose main rationale was to manage challenges

to the competitiveness of EDTIB. The solutions proposed by the new strategy aimed at expanding the cooperative model in the generation of projects in the context of European cooperation. The starting point in this endeavour was represented by an inventory including 22 key technologies that were to be promoted as priority for R&T investments. The means considered essentially were aimed at three levels:

- Strengthening the interaction between the technological-industrial base and the supporting capacity, by connecting all existing R&T infrastructure elements in Europe.
- Stimulating the technological advance, centred on the idea of bringing the civil R&T components closer to the defence one. The central objective was to identify emerging and disruptive technologies that would enable the technological advance for Europe (EDRT Strategy, p. 8).
- Improving the efficiency of R&T collaboration, through an extensive set of measures including those aimed at investments, improving the management of research projects, as well as accelerating the integration of new technologies into research programs.

Obviously, the dual nature of disruptive technologies required a comprehensive approach to how to implement the objectives of the R&T Strategy. Keeping this process within the institutional perimeter of intergovernmental cooperation could not bring the expected results considering that the civilian dimension of this type of technology was under the management of the European Commission. Based on these considerations, on 8 May 2009, the EDA Steering Committee adopted the decision to deepen the dialogue and cooperation with the specialised structures of the Commission in order to synchronise the steps carried out by these entities in the field of R&T, so as to ensure the complementarity and efficiency of the way of use of resources. On this occasion, the foundations were laid for an institutional cooperation within the European Security and Defence Cooperation Framework that represented the unification level between the activities of the EDA and those of the European Commission, the latter aiming almost exclusively at FP 7. Later, the European Council of 19 -20 December 2013 advanced a new cooperation agenda between the two entities with the aim of strengthening civil and defence research, including the main technologies and those related to energy efficiency (European Council, December 2013).

PRACTICAL DEVELOPMENTS WITHIN THE NEW STRATEGIC PARADIGM

Under these auspices, starting from 2013, a regular process of deepening the synergy between projects was initiated in the fields of: advanced materials, nanotechnologies, advanced production and processing. Within this mechanism, the preferred modality concerned the presentation by consortia created on the basis of calls for projects. This process will also lead to much more visible results in terms of the development of defence research through the launch by the European Commission of the Preparatory Action in the field of defence research (PADR 2017-2020), with a budget of 90 million Euros. Within this approach, for which EDA was designated as the implementing agent, the field of disruptive technologies has seen significant developments in several project calls. A set of 5 projects integrated in the call PADR-FDDT – EMERGING 03-2019 benefited from 7.5 million Euros funding for the use of disruptive technologies, especially artificial intelligence, in terms of: autonomous positioning, navigation, cost efficiency for deep strikes, strengthening individual combat ability. Projects developed in the context of the call PADR-EMS-03-2019, totalling 10 million Euros, aimed at the development of a multifunctional radio frequency system including radar, communications and electronic warfare functions were added. In the same context, we can also find the projects developed in the context of PADR – US 03-2019 aiming at the development of standards for autonomous military systems, totalling 1.5 million Euros (Council Decision financing PADR, p.7-10).

The substantive change was registered in the 2016-2018 interval, manifesting itself on several levels, the most important of which is the one related to the adoption, on 28 June 2016, of the Global Security Strategy (EUGS). As in the case of other areas of European security and defence cooperation, the document developed under the coordination of the High Representative, determined significant developments regarding the interaction between emerging technologies and the EU's profile in the field of security and defence. The global character of external action was placed in connection with technological progress. In this regard, the main premise advanced by the EUGS was that member states cannot effectively develop their defence capabilities in the absence of viable industrial and technological tools. The key in which they were promoted emphasised the importance of the capacity for autonomous action as well as the development of the ability to cooperate between member states, supported by adequate funding. In essence, three main directions with relevance to the subject of this communication were targeted.

First of all, it was about the funding of research at the European level, a level at which the progress made until the adoption of the EUGS was required to be capitalised on in the context of cooperation between the member states. Secondly, the aim was to develop the potential of capitalising on the applicability of technological progress to the military field, a direction of action already addressed indirectly through the programs managed by the European Commission. Thirdly, the EUGS indicated that the achievement of tangible progress could not be anticipated in the absence of a European industrial component with relevant potential (EUGS, p. 21).

Within this context, the topic of cyber security has been singled out as a priority for capitalising on technological progress. The objective of protecting the member states and the Union against cyber threats entailed strengthening the technological capabilities from the perspective of threat management, protection of critical infrastructure as well as reduction of cyber-crime. Obviously, this objective could be achieved by capitalising on existing projects, being easy to identify the elements of continuity in terms of infrastructure protection. Thus, the EUGS can be seen as having an intrinsic value of political revalidation of the directions initiated through the framework programs as well as a way to investigate new possibilities of using innovation and communication systems capable of ensuring data integrity, storage and certification of the associated digital products or related services (Ib., p. 22).

It also indicates the need to develop cyber elements at the level of CFSP operations and missions. Similarly, the Global Strategy brought additional elements of orientation regarding the greater applicability of technologies at the level of defence and security capabilities, emphasising the importance of investments in areas such as: ISTAR, remotely guided aerial systems, satellite communications, autonomous access to space and permanent ground observation. Also subsumed under the effort to ensure the resilience of the EU and member states, it indicates the importance of investments in related digital capabilities aimed at protecting data and communications infrastructure, including by considering opportunities for cooperation in research, training and procurement. From this perspective, the importance of the member states fulfilling the benchmarks adopted at the EU level in 2007 was reiterated.

Practically, the EUGS validates itself as a turning point in the evolution of CFSP, from the perspective of the package of initiatives that were generated starting from the guidelines and directions of action advanced by it. The focus was placed on stimulating cooperation between member states, embodied in a series of typologies aimed at strengthening the link between the process of developing

capabilities, technological progress and European industry. Within this approach, there were also concrete proposals aimed at a better alignment of European efforts in the field of R&T, by harmonising the programs carried out in different formats. Also, the systematic capitalisation on the results of cooperative research programs at the level of defence capabilities development process was also considered. This approach was also aimed at strengthening the interaction with the field of innovation, having direct effects on the potential of disruptive technologies for the consolidation of EDTIB (Implementation Plan on Security and Defence, p. 23). Thus, it can be noted the adaptation of the way of approaching the issue of critical-disruptive technologies, their management passing into the perimeter of the synergy between the EDA and the structures of the European Commission. One can even talk about a division of labour in this paradigm, according to which the role of the member states and political coordination were more concentrated in the area of responsibility of the EU Council and the member states.

The EUGS guidelines were also reflected in the substantive review of priorities in the field of defence capabilities. The instrumentalization of this option became visible through the revision of the Capability Development Plan (CDP). The analytical process used to manage the comprehensive nature and level of ambition advanced by the EUGS also included a substantial component, dedicated to the assessment of strategic trends in the development of technologies. The evaluations carried out under the coordination of the EDA revealed the convergence of opinions regarding the impact of disruptive technologies at the societal level, from the perspective of increasing computing power, expanding the fields of use of artificial intelligence and the human-machine interface. The same situation was found with regard to the new production techniques and the materials used whose impact was becoming visible at the level of civil and military products (Exploring Europe's Capability Requirements for 2035 and beyond, pp. 13-14).

At the same time, the potential of these technologies in the military field was validated, however, the adverse effects of technological progress that could cause disruptions in the decision-making process at the political and military level were emphasised. There was also taken into account the risk that with the global growth of technologies, these types of tools/capabilities would become much more readily available to the adversary. Thus, the paradigm in which the implications of technological progress were viewed was established both from the perspective of the multidisciplinary impact on society, and from the perspective of doctrinal potentials in the conduct of war. The main line of thought was that of operational

interconnectivity on all manifestation components (air, land, sea), simultaneously with the blurring of the conventional-asymmetric border. At the same time, the location of the operations was anticipated to transform, alongside the classic geographical assumptions, being emphasised the importance of ensuring control in space and in the cyber environment.

The temporal perspective associated with the analysis process carried out in support of the CDP aimed to identify the trends that could emerge on the horizon of 2035. In this context, the concept of *“innovation in the field of defence”* was advanced, whereby technological progress was adapted to military applications, unlike previous approaches where it influenced technological development in the civilian sector. The second aspect aimed at the so-called *“democratisation of emerging technologies”* in which the accessibility of state and non-state actors to dual-use products is becoming wider, offering much cheaper solutions compared to the classic approach. Moreover, the relative uncertainty associated with the technological development does not allow ranking the way in which emerging technologies will evolve or more precisely which of them will gain dominance. Based on these considerations, the technologies identified in the EDA assessment as being able to influence the profile of defence capabilities are aimed at: artificial intelligence; sensors; human interface technologies; autonomous systems; nanotechnologies; synthetic media; virtual and augmented reality; smart materials and composites; satellites; advanced manufacturing products; electronic warfare and countermeasures; precision energy weaponry; communication systems; energy generation and storage.

The reflection of the conclusions of the analysis process carried out in the context of the CDP review was to be found in the adoption, at the level of the EDA Steering Committee, of a new set of 11 priorities for the development of capabilities that included: support capabilities for cyber incident response operations; spatial information and communication services; information superiority; ground combat capabilities; medical and logistical support; naval manoeuvrability; submarine control; air superiority; air mobility; integration of air capabilities in the aviation sector; multidisciplinary capabilities to meet the EU level of ambition. In connection with this dimension, EDA has promoted a set of benchmarks for identifying emerging and disruptive technologies aimed at their impact on the conduct of war. Thus, six technologies with a major impact were identified regarding: artificial intelligence, data analysis, robotic and autonomous systems, hypersonic and space weaponry, advanced materials, quantum technologies (European Defence Matters, p. 6).

At the level of each of these, the issue of emerging technologies was found as an integral part of the foundation of the generation process. At the same time, the CDP priorities will be used to guide the processes carried out at the level of the initiatives developed in the context of the implementation of the Treaty of Lisbon, as is the case of the Permanent Structured Cooperation (PESCO), launched in December 2017 through the voluntary participation of 25 member states in order to develop integration of the process of generating capabilities as well as strengthening the operational capacity of the EU (PESCO Notification, 2017). The way of operationalising these objectives is achieved by generating collaborative projects on different components of capabilities that respond to the priorities in the CDP. Following the successive rounds of expansion of PESCO activities, the number of projects developed by the participating states has reached 60.

In the same context, the Coordinated Annual Review on Defence (CARD) was initiated at the end of 2016 with the aim of inventorying the existing capabilities at the European level and identifying the cooperation options that the member states want to undertake in order to overcome the deficiencies. Practically, this initiative represents a platform for interaction between member states carried out within regular intervals (cycles). The recommendations formulated following the development of the first CARD cycle (2019-2020) indicated the existence of six categories of fields that the member states are interested in considering at the level of national capability development processes (the future European tank, the system of the future soldier, ships patrolling, combating autonomous aerial systems, space defence applications, military mobility). Moreover, the recommendations of the first CARD cycle also target R&T aspects that have been identified as having substantial potential interest from member states for the development of joint projects. They include artificial intelligence, cyber defence, new sensor technologies, emerging materials and energy propulsion systems, robotics, autonomous systems (CARD Report, p. 7).

EUROPEAN DEFENCE ACTION PLAN

By far the most important initiative launched in the process of implementing the EU Global Strategy and, subsequently, the review of the Capability Development Plan, was represented by the European Defence Action Plan (EDAP). It was launched by the European Commission in November 2016, being structured on three complementary components and targeting the entire capability development cycle, with an emphasis on the R&T dimension and industrial purpose. Specifically,

the EDAP included the launch of a European Defence Fund (EDF), simultaneously with the development of investments in the capability generation chain and the consolidation of the single market in the field of defence.

Of this package, the major relevance for the theme of this communication concerns the creation of the EDF, which will include a consistent dimension in terms of financing cooperation projects based on emerging technologies. Basically, by launching the EDF, the aim was to promote a much more ambitious approach regarding the efficiency of European cooperation in the field of defence, by increasing the financing possibilities of cooperative projects developed with the participation of the member states. Structurally, the EDF was designed in two components/windows, capabilities and research, with a budget of about 8 billion Euros (5.6 billion – capabilities, 2.3 billion – research). From the perspective of being part of the EU's new multiannual financial cycle (2021-2027), the entry into operation of the new initiative was set for 1 January 2021. To facilitate this process, a transition period (2019-2020) was established in which the procedures and the operating mechanism that will govern the operation of the EDF will be set up.

In this regard, on 18 July 2018, the decision was adopted to launch the European Defence Industrial Development Program (EDIDP) with the following main objectives: to develop the competitiveness, efficiency and innovation capacity of the defence industry at the European level; to support cross-border cooperation between EU member states; to streamline the way to capitalise on research results in the field of defence to support the competitiveness of the defence industry (EDIDP Regulation, pp. 1-2). In this respect, the EDIDP represented a premiere, being the first program through which cooperation projects developed by member states in the field of defence could be directly financed. The financial envelope associated with this new instrument was 500 million Euros for the period 2019-2020.

In order to structure the project proposals, in the two years of operation, approximately 20 calls for projects were launched in a wide range of fields such as: air capabilities, CBRN, cyber, defence technologies supported by artificial intelligence, innovative solutions in the field of defence, monitoring space, underwater control, air superiority etc. The share of projects related to emerging and disruptive technologies increased significantly between the two stages of the EDIDP, a trend also reflected in the evolution of the number of entities on the territory of the EU member states that benefited from support through the EDIDP. Thus, for the first year of operation, a number of 223 entities were connected to the projects that benefited from financing through EDIDP, their number almost

doubling for the second year (420). Based on the themes advanced through the calls, 42 projects were selected for funding, most of them having components associated with emerging/disruptive technologies. A special place was occupied by the use of algorithms specific to Artificial Intelligence in the field of identifying explosive devices, an approach that was used within one of the projects that obtained funding.

However, considering the complexity of advanced projects as well as the interaction of various types of technologies in the solutions thus promoted, it is difficult to precisely establish the share of the disruptive component at the level of EDIDP projects. The profile of the entities that were involved in their development offers, instead, a series of indications regarding the significant presence of those whose activity is in the field of disruptive technologies. Thus, one can estimate the innovative character of the EDIDP in which the share of aspects related to new technologies and innovation represented a component of 40-50% of the funding granted. An additional indicator is the fact that from all the entities participating in the consortia that promoted eligible projects, the largest share is represented by new entities, connected to the new trends in the field of research and development.

Starting from the experience gained through the two EDIDP cycles, on 1 January 2021, the European Defence Fund began to operate. The aspects related to the functionality of the EDF remained largely unchanged, the agreed elements for the operation of the EDIDP being taken over in the transition process. The same situation can be found with regard to the eligibility criteria of the entities participating in the project competitions on the two windows, namely the obligation to form consortia with the participation of at least three entities from at least three member states (EDF Regulation, p. 151). Basically, it is worth mentioning the added value of the EDF, much more visible in terms of research funding, the new instrument intending to work in complementarity with other approaches and programs developed in different institutional contexts, as is the case with the type of framework programs. From this perspective, the EDF's role was to finance research efforts with a certain level of maturity and with increased relevance to the field of defence, which could target the development of new products, as well as upgrade programs for existing products on the market.

A distinct note of flexibility aimed at approaching the field of disruptive technologies. At the level of the regulatory framework of the operation of the EDF, this dimension was appreciated as extremely important from the immediate and long-term perspective for the development of relevant defence capabilities in the context of an increasingly fluid security environment. Thus, the support through

the EDF of projects with significant potential for the development of the applicability of disruptive technologies in the context of defence represented a major funding priority. On these coordinates, the characteristics of the industrial-technological segments that had this issue in their portfolio, the vast majority of them belonging to the civil segment, were considered. In order to capitalise on their experience, in the structuring of the operating mechanism of the EDF, the development of a substantial dialogue with the respective entities was considered, including from the perspective of using this instrument in the acquisition stages prior to commercial circulation. Basically, the EDF wanted to be a connecting element for supporting activities developed in a European context during the cycle between research and product development, an approach in which disruptive technologies represented a distinct benchmark for the allocation of financial resources. A direct expression of the interest in capitalising on the financial opportunities created by the EDF was also the fact that in the conceptual foundation of the new instrument a European perspective on disruptive technologies was also promoted.

Obviously, this approach came to fill a framework void at the EU level as well as to provide additional elements of orientation in the analysis of the cooperation projects that will be the subject of the competition under the auspices of EDF. From this perspective, “*disruptive technologies*” were those types of technologies, new or enhanced, that bring radical change, including conceptual and practical paradigm shift in defence by replacing existing technologies or optimising obsolete technologies. Different nuances are distinguished in relation to the benchmarks of the approach used in defining disruptive technologies on the other side of the Atlantic, especially in terms of the emphasis placed on their role in the development of new types of industries. However, one cannot speak of the absence of practicality in the prioritisation of disruptive technologies at the European level, the EDF even bringing more substance and cohesion to European cooperation through the distinct allocation of financial resources for projects targeting disruptive technologies. Thus, it was established that a percentage of 4-8% of the total EDF budget should be allocated to the financing of projects in the field of disruptive technologies (EDF Regulation, p. 162). A simple mathematical exercise shows us an exponential increase in allocated resources that can exceed 630 million Euros, multiplying substantially at the level of economic growth.

Within the project calls for EDF 2021, a distinct window has been created for disruptive technologies with a funding potential of up to 60 million Euros in the first year of operation of the new instrument. Projects approved for implementation

include: quantum technologies for defence; applications for optical sensors; new materials and defence technologies for additive manufacturing. The disruptive technologies component is added to the other areas addressed at the EDIDP level maintained at the EDF level to ensure the continuity of cooperation programs whose implementation requires an interval of more than two years. Thus, the accumulation of financial resources allocated to innovative and disruptive technological fields has increased significantly reaching, in reality, the level of 25-30% of the total financial envelope of 1.2 billion Euros, which corresponds to the first year of the EDF [EUROPEAN DEFENCE FUND (EDF) CALLS 2021, pp. 2-3].

CONCLUSIONS

As it can be seen, the issue of disruptive technologies has been a theme constantly addressed in different forms associated with emerging, critical or dual-use technologies at the level of the European agenda. The progress made can be viewed from two temporal perspectives. The first covers the period up to the launch of the EU’s first objectives in the field of security and defence, in which concrete achievements cannot be considered substantial, given the limitation to the field of civil security. The relevance of this period resides, however, in the creation of that institutional and procedural *acquis* that will be used in the subsequent period as well. Also, the importance of the first years is also distinguished from the perspective of keeping the subject of technologies of this type on the European agenda, being created, at the same time, the first elements of connection with the operational agenda of the EU in the field of crisis management.

With the adoption of the EU Headline Goals (1999, 2003), the approach to technological progress in the European context entered another stage in which the priorities and directions of action applicable in the military and defence area were established much more clearly. The progress recorded is among the most notable, not only from the perspective of the development of the conceptual framework but also by expanding the financing possibilities of projects associated with innovative technologies. Practically, their connection with the field of defence was consistently substantiated, establishing this direction of action as being able to generate significant opportunities in economic and industrial terms. It is also during this period, as it follows from the previously presented elements, that the diversification of institutional approaches was recorded, from the perspective of the actors involved as well as in terms of the subjects managed at the level of research programs.

The launch of the European Defence Fund opens a new stage having as the main characteristic the maturation of the European approach in the field of innovative technologies, with a particular focus on disruptive ones. The premise that the EDF advances at the level of European cooperation for defence is that of a robust financing that will develop in the immediate period ahead, which will allow the consolidation of the industrial profile of this dimension of cooperation. At the same time, the emphasis placed on the development of research of this type represents a politically validated course of action at the EU level as one of the main directions for the development of defence capabilities in the European context. The Strategic Compass adopted on 21 March 2022 by the Council of the European Union provides additional guidelines, indicating the importance of deepening cooperation in this field and capitalising on the opportunities for the applicability of technological progress in the field of defence.

This evolution, which is very clearly emerging as the future course of action, offers major opportunities for the member states, participation in the project competitions run under the auspices of EDF being already a direction for action that the entities in the EU space have begun to capitalise on, starting from the experience of participation in the EDIDP 2019-2020. The attractiveness of the resources allocated to the field of defence is also a certainty that is strengthened every year by increasing the financial volume that the EU mobilises to support cooperation between member states. Also, the consolidation of the weight of projects in the field of disruptive technologies represents a trend that can be capitalised on by a wide range of entities, with not necessarily robust potential and visibility, but whose dynamics can make a difference in the competition of projects for projects of this type.

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ACHIEVING INTEROPERABILITY IN A FEDERATED ENVIRONMENT AND IN THE CURRENT SECURITY CONTEXT

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Joint missions, exercises and deployments have shown that it is crucial to continuously coordinate processes, training, documents and technologies on a multinational basis. Interoperability on the battlefield, be it on land, in the air, in space, at sea and in the cyber and information space, can often be achieved only after many years of technical and procedural preparation. Time that is no longer available when establishing concrete mission networks, as the war in Ukraine is currently showing us. With Federated Mission Networking (FMN), a framework was created and established that allows a significant reduction in this lead time and at the same time a certain degree of national autonomy in the choice of individual communications and information technology solutions.

Keywords: interoperability; capabilities; Federated Mission Networking; communication and information technologies;

INTRODUCTION

Today we find ourselves in an ever-changing security environment, constantly facing new challenges and threats, challenges that are becoming more complex and persistent, both in Europe and beyond, affecting our societies every day. Many of these threats are of a hybrid nature, developed simultaneously and many-sided. Nations cannot face these challenges alone and even for NATO as an alliance they represent a considerable effort. The effort is necessary, but it often far exceeds the resources and means that individual nations can provide.

However, federation as an organisational model and the idea of “connecting forces” seem to be a promising way of meeting this challenge. And in a federated working environment interoperability is essential. For forces to work together effectively and quickly, they must be able to communicate and exchange information seamlessly. This can be a challenge in today’s security environment, where, as mentioned before, the threat spectrum is constantly evolving and new security challenges are emerging.

Fortunately, there are solutions that can help to achieve interoperability in a federated environment. One such solution is the *Federated Mission Networking (FMN)* approach. FMN is an established way of connecting forces and enabling them to operate effectively and rapidly. It provides a high level of assurance and instant availability, and it can be federated to meet the needs of different missions. A federated way ahead addresses the urgent requirements of now, while also providing the framework for illuminating the way towards identifying the innovation and transformation needed in the medium and long term.

WHAT IS THE FEDERATED MISSION NETWORKING?

Federated Mission Networking (FMN) is an established way that forces can connect, interoperate and operate effectively and rapidly. This is required for the successful accomplishment of a military mission in today’s modern era. FMN’s aim is to establish a common technical, procedural and training basis among NATO’s member and partner states and other organizations in order to have for their forces

interoperability of critical information systems whenever needed for coalition operations.

FMN is not a network; it is a set of standards and practices for interoperation, with a means of optimising effort and reusing resources while benefiting from unrestricted information exchange.



Figure no. 1: FMN Logo

In order to meet certain requirements like comprehensive interoperability, high-level of assurance, instant availability and the ability to be federated, something needed to be done before any mission. The FMN provides the necessary framework for forces to connect and interoperate in a federated environment.

The idea raised during conducting the International Stabilization and Assistance Force (ISAF) in Afghanistan back in 2001. During that time it became apparent that NATO and Partner nations' ability to cooperate in a multi-national mission environment was not what military leaders expected it to be. In order to gain a common operational picture, NATO created a single information domain that was supported by the Afghanistan Mission Network (AMN). The idea being that greater situational awareness facilitates more effective decision making and thus leading to conducting the mission more effectively.

In the following years, the idea of a mission network was taken further. Not only on the technical side, where a generic blueprint for future mission networks was drafted, but also procedurally. The simple idea is to work together – federated – at all times, preparing for possible missions in a networked environment.

FMN is the way that forces are connected and operational effectiveness is rapidly achieved, which are required for the successful accomplishment of a military

mission.

FMN is a NATO initiative that aims to make possible connecting forces in operations. Not only for the sole use of NATO Nations, but in a coalition environment in which also Non-NATO Nations (NNNs) are to be integrated as well as other organizations such as the European Union (EU), Non-Government Organizations (NGOs) or other.

Being FMN Affiliates is a commitment to carry out the following activities on an ongoing and systematic basis:

- maintaining and developing the capabilities that are required to activate and operate mission networks in a federated environment – in this way, national procurement programmes become part of NATO's process of implementing FMN capabilities;
- ensuring CIS security and interoperability requirements by participating in technical verification, operational validation, security assessment and accreditation processes and activities, as well as collective training activities;
- activating national capabilities, according to jointly agreed procedures, for a specific instance of the mission network for the operation/mission in which the Affiliate participates in the multinational coalition.

The FMN initiative has today 38 affiliates – all 30 NATO member nations, 7 NNNs and one organisation that happens to be the NATO Command Structure as an Affiliate (NCsaaA). There are also other organisations that have indicated their desire to join the FMN and which, in the meantime, have the status of “observers” who can participate in FMN activities but without voting rights.

There are four different roles that define an affiliate participation – in addition to the observer role, affiliates can contribute fully, partially or simply as consumers to the services of other affiliates and help designing the FMN framework. A governance and management structure (FMN Management Group), involving all affiliates, has been established to develop a mission agnostic framework whereby “episodic” mission networks can be deployed (the term used is “instantiated”) in exercises and operations with all, or a group of affiliates participating and led by anyone of them.

The main goal of the FMN is to make possible a “Day Zero” Interoperability among all affiliates. This is to be achieved by means of a federation of networks, where each stakeholder (Affiliate) retains control of their own capabilities (since

their very design and implementation) and affairs while accepting and complying with the requirements laid out in pre-negotiated and agreed arrangements in a collective fashion.

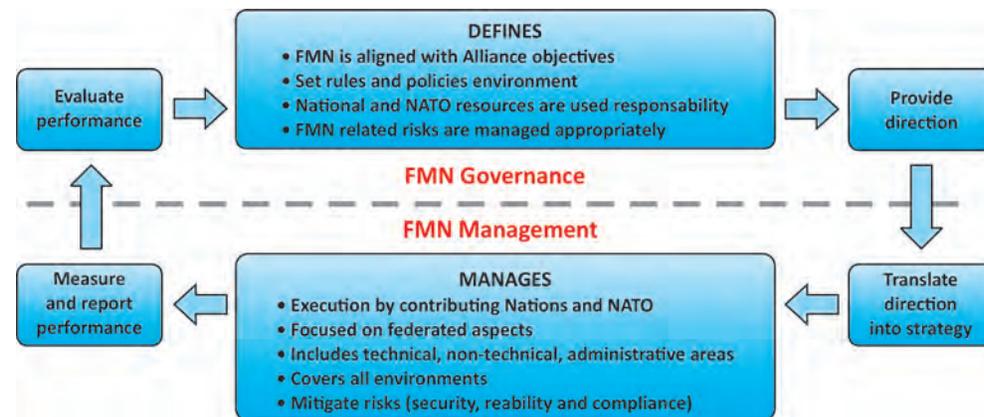


Figure no. 2: FMN Governance and Management Cycle (NFIP, 2015, vol. I)

The FMN is to be “built on trust”, which means that all Affiliates rely on the belief that each one is fulfilling their duties accordingly and performing all activities as devised in the corresponding FMN Framework documents.

FMN MISSION

Simply put, the mission of FMN is: Enhanced Operational Readiness & Effectiveness Today and in the Future. In the coming years, FMN will improve command and control (C2) and decision-making in coalition operations through improved secure information exchange and collaboration. It will provide the agility, flexibility, security and scalability needed to manage the emerging requirements of any mission environment in coalition operations. FMN is based on principles such as cost effectiveness and maximum reuse of existing standards and capabilities in order to not to create overburden to the Affiliates by forcing them to procure additional systems or equipment.

FMN VISION

To support this mission, the vision of FMN (SH/CCD J6, 2018) is: Day Zero Interoperable Forces. The FMN vision has two components, one for the current strategic environment (1) and one for the future (2):

(1) “Operate Together: Exploit our Strategic Advantage”. FMN Ready Forces enable an environment where the establishment of a Mission Network uses the planned guidance and instructions prepared and maintained by standing FMN structures to enable the rapid plug-and-play of forces arriving in theatre. Shortfalls identified during the planning and operation of these networks, together with lessons learned, are fed back into the governance and management processes of the standing FMN structures. FMN ensures that Affiliate forces communicate, train and operate effectively together from the start.

(2) “Adapt Together: Effectively Transform Capabilities to Maintain our Edge”. In an era of constrained resources and a wide range of potential missions, FMN reflects the need for “federation” as the means to achieve economy of scale and maximum reuse while achieving the full benefit of information sharing. In order to better prepare for future operations, FMN will enable the rapid deployment of forces by federating capabilities, supporting the efficient use of resources, while also enhancing interoperability and information sharing.

FMN CAPABILITIES

As the mission and vision suggest, supporting forces in achieving “Day Zero Interoperability” will require a concerted effort by all FMN Affiliates to improve the way they train, plan and operate together while adapting the way they transform their national capabilities to ensure even more effective training, planning and operating together in the future.

Developing the operational capability of FMN Ready forces is about optimising their action to fulfil their mission and support emerging and evolving requirement cycles. This involves:

- investment in FMN-compatible technology and equipment;
- investment in human capital through training, education and partnerships;
- doctrinal development/adaptation, standardisation processes and lessons learned;
- developing FMN capabilities.

Capabilities are to be achieved through an incremental process, following a chain of phases or stages called “*spirals*”, each of them incorporating new capabilities into existing ones. In other words, the technical specifications of the network are developed in spirals where each generation adds functionality to the previous one, thus accelerating the established procurement processes.

The strategic objective of developing FMN capabilities involves ensuring interoperability from the outset. The objectives of the development of FMN capabilities could be broken down into smaller component stages (MCM-0194, 2018), and for each stage a plan is drawn up to achieve the objective over the main time horizons: short, medium and long term.

In the short term, the main objective is to optimise the current mission environments. This can be described as the synchronisation of capabilities already in use in order to mitigate interoperability gaps and reduce the time required for efficient information exchange. Given the resource limitations and time constraints inherent in capability development as well as the complex and unpredictable nature of the modern security environment, it is imperative to harness the potential of capabilities that are already in use in current operations. By examining capabilities in both technical and procedural manner, and by drawing on knowledge gained from past and current operations, agreement can be reached on policy and procedural changes as well as technical and procedural solutions. Achieving this goal in the short term can bring immediate benefits and, more importantly, can foster an environment in which affiliates are more willing to invest the resources necessary to develop future capabilities.

When we talk about medium term, the focal objective is adaptation of existing capabilities. This is the harmonization of current capabilities to enable affiliates to benefit from prior and current investments. Taking into account the speed of strategic defence planning processes, it is necessary to develop changes for existing capabilities in order to more quickly achieve an acceptable level of interoperability. By using commonly agreed-upon standards and specifications, affiliates can create technically feasible modifications for their current systems. When used in concert with strict adherence to procedural change and implementation guidelines, current affiliate capabilities can be adapted and utilized to provide solutions for better coordination and collaboration. Collaboratively developed operational planning processes and standard operating procedures (SOPs) will further ensure more seamless multinational operations.

And finally, in regards to the long term, the objective is to achieve Interoperability by Design. This can be defined as the alignment of FMN capability development with the affiliates’ defence planning processes. By building national and organizational capability development on a common set of agreed-upon standards and specifications, the creation of innately interoperable systems can deliver desired end states for a range of future mission environments. These opportunities can be leveraged by every affiliate, regardless of their chosen level of ambition, and can provide the framework necessary for the future of multinational operations.

THE CHALLENGES AND THE BENEFITS OF FMN

Achieving interoperability between forces has always been a challenge, but it is even more difficult in the current security context.

There are a number of challenges that need to be overcome in order to achieve interoperability. They include: cultural differences; linguistic barriers; differences in doctrine and procedures; politics and egos. These challenges can be overcome, but it requires a lot of hard work and the cooperation of all involved.

NATO defines interoperability as “*the ability for Allies to act together coherently, effectively and efficiently to achieve tactical, operational and strategic objectives*” (NATO AAP-6, 2010). Interoperability is vital to success and is a strong prerequisite for maintaining its competitive military advantage.

Interoperability must be brought into usual military practices, by adding it to the whole spectrum of doctrine, organization, training, materiel, leadership, personnel, facilities (DOTMLPF); this will enable strategy-led, resource-informed, funded capabilities with clear responsibilities through-life and interoperability by design.

In the AAP-6 definition for interoperability and further elaborated in the NATO Interoperability Policy, there are three main dimensions of interoperability in NATO: People (e.g. language, terminology, training); Process (e.g. doctrines, procedures); Technical (e.g. hardware, systems). These are complementary to each other and conditioned by national and international provisions. In many cases weaknesses in one can be mitigated by strengths of the others.

Developed, agreed, implemented, tested, used and maintained standards that cover all dimensions are essential to achieve interoperability. The principle of “*consistency*” and “*coherency*” of interoperability from this policy states that: interoperability shall be achieved through a constant and comprehensive coordination of interoperability and standardization aspects between all relevant stakeholders.

BENEFITS OF FMN FOR INTEROPERABILITY

Interoperability is the way which we can use to better shape the strategic environment (Pehin, Mahony, Germanovich, Lane, 2020) because it gives commanders the flexibility to achieve strategic objectives using the most appropriate means, and one of these means is the FMN. The Federated Mission Networking is an established way through which forces can connect, interoperate and operate effectively and rapidly. In today's modern era, this is required for the successful accomplishment of a military mission.

In addition to flexibility, interoperability allows much more efficient use of resources, which is exactly what the FMN initiative brings, by pooling and using complementary skills, technologies and know-how. Also, the FMN initiative is mainly based on maximum re-use of existing and planned capabilities. FMN specifications are mostly interoperability requirements that focus on qualitative rather than quantitative aspects. They become quantitatively dimensioned requirements once they are addressed by each affiliate in an operational context.

The FMN initiative puts interoperability at the forefront of capability development. Realising the operational benefits of federation requires a change in the way that the business of "interoperability" is performed by FMN Affiliates. Persistent networking between FMN Affiliates shall enhance the interoperability in the three dimensions applicable in an operational environment: people (representing the operator's needs), processes (to support decisions) and technology (offering tools to support decision-making and Command and Control).

In other words, the main goal of FMN capabilities development is to ensure interoperability from the design phase, at all levels – strategic, operational, tactical and across all dimensions – technical, human and procedural. At FMN everything revolves around the interoperability of FMN Ready Forces – whether on land, at sea, in the air, in space or cyberspace. The overall objective for the interoperability resulting from FMN is to provide multinational force commanders with the effective command and control capability from Day Zero.

The FMN is largely based on existing NATO standards and interoperability specifications. The solutions contained therein open up the possibility for nations not only to address NATO standards in a systematic way, but also to reuse them as ready-made solutions in operational areas that may be outside NATO or not under NATO's responsibility.

And the method used by the FMN for capability development, the so-called spiral development, in timelines that are clearly time-bound, allows for coordinated multinational capabilities to be developed in a spiral, including the necessary processes, but also training, education, documentation and technology, which are then immediately available to the commander. The added value for developing one's own national capabilities is that the process becomes much more transparent and we can also see at the national level which interoperability standards are actually used by other nations.

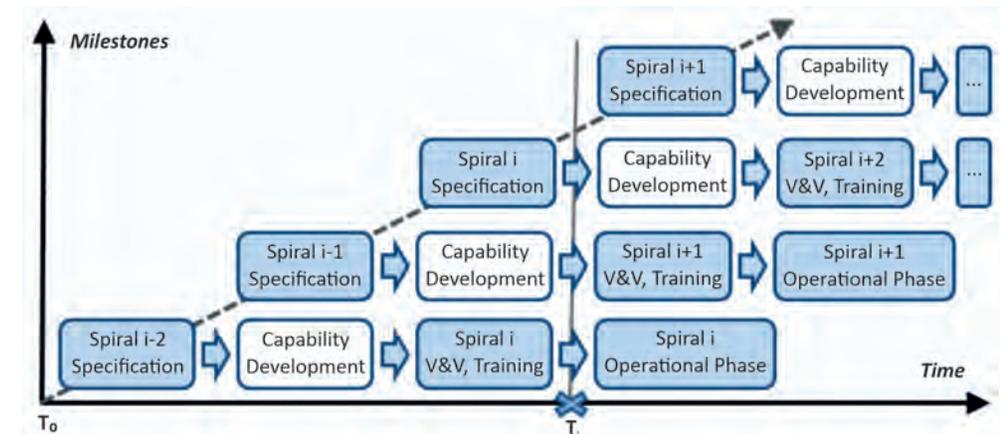


Figure no. 3: Multiple Overlapping Spirals (NFIP Vol. I)

Nations have conducted multinational operations for decades, but coordination and synchronization of multinational forces can challenge even the best operational commanders. FMN capabilities and procedures have propelled interoperability into the Information Age; from integrated core services to seamlessly shared situational awareness, FMN has already proven itself to be the best way to achieve effective joint multinational interoperability.

CHALLENGES OF FMN

In order to achieve interoperability in a federated environment, several challenges need to be overcome. One of the biggest challenges is ensuring that all systems are compatible and can communicate with each other. This requires a high level of assurance and testing to ensure that systems will work as intended.

Another challenge is making sure that all systems are available at all times. This requires careful planning and execution to make sure that systems are up and running when they need to be.

But, in order for forces to be able to successfully accomplish a military mission in today's modern era, comprehensive interoperability, high-level of assurance, instant availability and the ability to be federated are required and the FMN is the best way to achieve these requirements.

Every military leader wants to achieve interoperability with coalition partners likely during the planning and execution of any multinational Joint Operation. Few however are able to articulate what this kind of interoperability means, how it can be achieved and how the resulting capabilities could be optimally used for strategic, operational and tactical planning.

At the Fourth FMN Seminar 2022, the FMN operational champion, General Zanelli, based on the gained experience from previous operations, came to the conclusion that: *“Commanders must be able to provide clear orders and intentions”* and *“the FMN interoperability initiative can give Commanders that ability”*. During his speech, General Zanelli spoke directly to the operational community, urging them to use FMN-compliant capabilities in operations and to advocate for their implementation in their nations. General Zanelli challenged Commander's on the need for interoperability by stating, *“When we look at SACEUR's vision for the Defence of Europe, we need a force that can deploy at the speed of relevance. Critical to this is the ability to communicate: to be able to plug in and fight with any nation in the alliance”*. He reminded Commanders that FMN is not just a communicator's business but that they as Commanders must take responsibility for interoperability and the communications infrastructure.

THE WAY AHEAD FOR THE FEDERATED MISSION NETWORKING

MG Schloesser – FMN Management Group Chair – in his closing remarks at the Fourth FMN Seminar 2022, reminded the participants that Federated-Mission-Networking is not just three words but that they form the pillar for building interoperability; technical, procedural and human. He stated that, *“FMN provides the ability for connecting forces across all mission types and across all domains. It is the way to exchange valuable C2 information during coalition operations”*.

General Schloesser reinforced the FMN Vision of Day Zero interoperability and once again stressed that FMN is an operational enhancer. MG Schloesser quoted Admiral Bauer's statement, *“FMN is needed now more than ever”*.

The world continues to add complexity without regard to our readiness or ability to adapt to these changes. The strategic objective of FMN capability development is to create *“interoperability by design”*; but this can only succeed if we proactively look forward to the standardization of future capabilities, while persistently adapting current capabilities. It has already been initiated the development of the future C2 interoperability by capitalising on cyberspace and multi-domain operations (MDO).

The federated part of FMN does not only allow the singular exchange of information, but also the exchange and re-use of services across borders and demarcations in a trusted and secure environment, a clear advantage to the *“competing”* aspect of MDO, not only in saving resources but also in the ability to afford a continuous and flexible system of capabilities and services that are able to give a blended response to conventional, asymmetric and hybrid challenges, all deliverable across multi-national and military services.

FMN has proved its benefits in recent years and will evolve in ways fostering the challenges of MDO driven by the operational and political needs. Any future multinational operations in the NATO-related environment will no doubt be conducted using integrated FMN processes.

FMN does not only support current NATO initiatives like MDO, NATO Warfighting Capstone Concept (NWCC) or The Concept for the Deterrence and Defence of the Euro-Atlantic Area (DDA), but, all of these initiatives cannot be executed efficiently without properly implementing FMN compliant products, principles and processes, because all of these initiatives are highly dependent on the ability to collect, share and utilize information – which is exactly the fundament of the FMN.

Also, FMN provides another advantage to the employed business processes by the evolutionary way it is set up, it therefore provides a way to handle the progress needed in overcoming the digital challenges.

CONCLUSIONS

Interoperability is the key to success in any mission. In order to achieve interoperability, FMN plays a critical role in allowing for rapid connection and communication between forces. The current security context makes interoperability even more important, and FMN is the best way to ensure success.

FMN is a NATO interoperability initiative which provides a framework for establishing necessary connectivity among coalition partners and in this way they can operate effectively and rapidly. In today's modern era, this is what is required for the successful accomplishment of any mission.

NATO is facing now a set of security challenges of unprecedented complexity and of potentially increasing gravity. The current security environment demands a fresh approach, built on policy that encourages NATO nations to connect much more closely and flexibly, among themselves, with the NATO command structure, and with partners.

Enabling and empowering the Alliance's constituent parts, in a persistent federated approach, is the way to tackle complexity, uncertainty, the rapid acceleration of change, the need for a persistent 360-degree perspective on threats, and the requirement for new levels of strategic understanding and awareness as well as innovative approaches to partnerships.

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THE STRATEGIC COMPASS – A STRATEGIC BOOST OF CONFIDENCE IN EUROPEAN SECURITY –

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Issued in March 2022, the Strategic Compass is meant to create an active and, at the same time, reactive framework on the managing of EU security and defence related aspects. After several failures in the process and much criticism on EU’s inability to stand on its feet when it comes to protecting itself, the Strategic Compass comes with magic words, such as “reducing dependencies”, or the four directions – Act, Secure, Invest and Partner.

The aim of this article is to provide a critical analysis of the Strategic Compass from the perspective of the confidence bestowed in the power of the European Union to actually become a security provider “for real”. Although the likelihood of that occurring in the near future is remote, the European Union has finally reached the mindset of turning the Strategic Compass into on the ground capabilities.

Keywords: Strategic Compass; security; defence; capabilities; crisis management;

INTRODUCTION

Ever since its inception, the founding fathers of the European Communities (and later of the European Union) attempted to create a security and defence branch, that could assist the Europeans in their protection. After all, the 1950s were difficult times. The Second World War had ended, leaving the global stage dominated by two actors – the United States of America and the Soviet Union. While the former was an ocean apart from Europe, the latter was growing in strength at the European expense. Also, the Europeans bore in mind the fact that, had it not been for the Pearl Harbour attack, the USA would never have engaged in a war that was not theirs.

As a result, immediately after establishing the first European Community, decision-makers in Paris started focusing on creating another one dedicated to the defence of the European continent. However, others considered this attempt to be far-fetched – after all, one has NATO to rely on – and decided not to support and engage in such a project. The project was revised several times throughout history, going from just a plan, to a report and finally to a full-fledged strategy. The European Security Strategy of 2003 was a brave attempt to carve the security tools necessary for the Europeans to start standing on their own two feet. Security-related speaking, of course. Yet, it was an ambitious project, which proved to be too far-reaching for the Union’s capabilities at the time. Another shot was taken in 2016, with the European Union Global Strategy. A shyer attempt to create a security fundament for the Union, learning from the failed lesson of the 2003 Strategy. As the document’s name shows, security cannot be reached simply by relying on oneself, but is in fact, a result of a global approach. Even the direst of EU critics agreed that the 2016 Strategy was highly tempered and thus, more likely to succeed. To add more strength, it was followed by the 2020 European Commission Security Union Strategy and the Defence and Space Packages presented by the same European Commission in February 2022. To the EU enthusiasts, this is the story of the Union becoming strong. For its sceptics, it is a never-ending line of attempts to show its wannabe-strength.

And then, on 24 February, 2022 the war in Ukraine broke out. The following month, in March, the European Union released “*A Strategic Compass for Security and Defence*” document. Although the document has been under scrutiny and discussion since November 2021, the timing of its release is pretty interesting, to say the least. Almost a month into the war in Ukraine, the European Union put together a list of four directions – Act, Secure, Invest and Partner, intended to create a framework of action that could actually turn the EU into an effective resistant power against any threat.

However, given the history of similar attempts, one is justified to ask: is this another attempt that will result in “*more talk, less action*”, or will the EU really start working on defence this time? The time is not ripe enough to provide an answer. Yet, one cannot leave aside the fact that, capability in hand, or not, the Strategic Compass could be interpreted as a veritable boost in confidence in the EU security and defence capabilities. Or maybe not?

The aim of the present article is to assess the contents of the Strategic Compass from two perspectives. One is the confidence it aims to build in the Union’s capabilities to resist and respond to crises. The other is the connection of this intended confidence-building and the context in which it manifests.

SETTING THE SCENE

The authors of the document seem to have a penchant for “*magic sets*” of words. The first few pages unravel these words very clearly: decision-makers need to be equipped with “*the mind-set, the means and the mechanisms*” to be able to defend and protect “*our Union, citizens and partners*” (Strategic Compass, 2022, p. 5). Furthermore, should one be interested in preserving “*dialogue, diplomacy and multilateralism*”, one need to “*learn the language of power*” (Ibid., p. 6). In other words, the age of diplomacy and casual talk is long gone. We now need to fight power with power. The easiest way to do that would be to invest in buying weapons and training personnel. As that is what everyone thinks of when hearing the need to put power behind any action.

But the Union’s approach is a smart powered one. Weapons, planes and personnel are highly necessary. But apart from recognizing their utility and need, the manner of accessing them is equally important. And while others would simply say “*with money*”, European decisions-makers resort to “*actions, security, investments and partnerships*”.

Although the means of conducting the war in Ukraine is taking us decades back to the Second World War, it was high time that anyone shouted out loud that preparing for conflict does not mean simply buying weapons, recruiting and training troops. It is all about identifying partners and their strength, as well as joining forces together to be able to benefit from such strengths. And these are not just mere words put on paper. The EU will intensify its efforts in the framework established by the United Nations and NATO and will cooperate with its regional partners – the OSCE, African Union and ASEAN. Consequently, what the Strategic Compass aims to do is strengthen the strategic autonomy of the European Union, in order to build a stronger EU that would become complementary to NATO.

QUICK OVERVIEW OF THE STRATEGIC COMPASS

Keeping the line of the European Union Global Strategy, the Strategic Compass sets a wide range of geographic interests (be they immediate or more far-reaching): Russia (of immediate interest, of course), China, the Western Balkans, the Eastern Neighbourhood, the Arctic, the Southern Neighbourhood, with the problematic Libya and Syria, Africa and its plethora of troublesome areas (the Sahel, Central Africa, Mali, Guinea, the Horn of Africa, and Mozambique Channel), Asia with its problematic Afghanistan and North Korea, Latin America and the exotic Indo-Pacific area.

Geographic interests are married with emergent threats and challenges: terrorism and violent extremism, proliferation of weapons of mass destruction, state and non-state actors that resort to hybrid and cyber threats, as well as disinformation, destructive technologies, maritime security threats, climate changes, environmental degradation, natural disasters, health crises and competition for natural resources.

There are four dimensions of looking at the Strategic Compass – crisis management, resilience, capability development and partnerships (Sweeney, 2022, p. 196), each having a correspondent in the four directions of the document – Act, Secure, Invest and Partner.

In terms of actions (Strategic Compass, p. 11), the Strategic Compass is highly determined: act promptly in an integrated manner, expand already existing facilities to make them more comprehensive, scenario-based planning, focusing on interoperability as the key action, create live exercises for civilians and military alike (an indicator that the pandemic and its adjoining crises did not go unnoticed). A novelty in that regard is the launch of the civilian missions of up to 200 people that could be deployed in 30 days, even in complex conditions.

Why have another focus on security? (Ibid., p. 12) NATO is all about security, some critics might say. However, given the crises that the EU underwent in recent years, it is a fact that its capacity of resilience was being tested with the effect of diminished security for all. Furthermore, the Europeans need to build a common strategic culture, for all member states to be able to have a coordinated management of hybrid and cyber threats, of disinformation and diplomacy altogether. In that regard, the Strategic Compass introduces the EU Single Intelligence Analysis Capacity and the EU Hybrid Toolbox, two instruments that can take the Union a step forward from the numbness in which it can be found now. There is already an EU Cyber Defence Policy, a Hybrid Fusion Cell focusing on prognosis and situational awareness, to be followed by EU Hybrid Response Teams and the EU Hybrid Toolbox, the latter focusing on prevention, cooperation, stabilization, deterrence and recovery, followed by solidarity and mutual assistance. Cyber strengthening is meant to ensure protection not just of communication, but also of space, air, soil and sea.

The section focusing on **investments** (Ibid.) highlights an issue that has been previously left aside. It is a fact that more and more organizations underline the need for a joint venture of private and public investments in all areas of interest. When it comes to the European Union, investments are necessary to fill voids as far as critical capabilities are concerned, to reduce strategic dependencies and the vulnerability of supply chains. Again, critics might say: we already have PESCO and the European Defence Fund, why bother more? It is good that one has the above-mentioned infrastructures, because they can offer the framework to create more means of investment in European security. To be more productive, the Defence Innovation Hub shall be created within the European Defence Agency.

Explaining the presence of **partnerships** (Ibid, p.13) in the Strategic Compass is not that difficult. After all, according to the European Union Global Strategy, the EU aims to become a global actor, and that can be done first and foremost by forging partnerships that work not just on paper, but in real life as well. Russia's aggression in Ukraine demonstrated once again how essential the EU-NATO Strategic Partnership is for Euro-Atlantic security. But partnerships need not be strengthened only on security issues – more consistence should be added to the EU-UN existing partnership, focusing on peace operations and crisis management for the 2022-2024 timeframe, and cooperation with OSCE should be strengthened on matters of conflict prevention in key areas such as the Western Balkans, Eastern Neighbourhood and Central Asia.

Another issue raised by the Strategic Compass is the need for tailoring bilateral partnerships (Ibid., p. 53) that are highly particularized and specialized to correspond to every need: with the USA, UK and Canada for defence and security aspects, with Norway for economic matters, with Turkey for participation in CSDP missions, with the Western Balkans for critical infrastructures, cyber threats, counter-terrorism and democratization, with Georgia and the Republic of Moldova on security and defence matters to increase their resilience, with the Southern neighbourhood to manage migration, with Africa, on security, assistance for stability and economic support, with the Indo-Pacific on naval cooperation, security architecture and capacity-building, and with Latin America on security and defence, cyberthreats, organized crime, climate change and maritime security.

An element of particular interest to this document is the fact that threat analysis shall be conducted every three years. This means that European decision-makers have finally understood that the evolution of threats is more rapid than that of the tools devised for their counteracting. Unlike previous strategies, the Strategic Compass is meant to be updated every three years, depending on the evolutions within the international environment. This must be done in accordance with a consistent observation of the fluidity of the international arena, and the many events populating it. The Strategic Compass shall be revised in 2025, which is a very reasonable term, given the evolution in occurring crises.

FROM TALK TO EFFICIENCY

The starting point of the Strategic Compass was in June 2020, in an effort to harmonize all 27 member states' perspectives on threats and security issues. At the time, the list of commonly identified threats consisted of: competition between great powers, instability in the immediate neighbourhood (the focus back then was the Russian Federation and its proffered threats, as well as the Middle East, which generated tensions through the excessive numbers of migrants emerging from within), transnational threats, cyber and hybrid actions (Atlamazoglou, 2022).

Leaving aside the 2020 European Commission Security Union Strategy, the Strategic Compass is coming to replace the European Union Global Strategy of 2016 and The Integrated Approach to Conflicts and Crises of 2018. A closer look in comparison highlights the supremacy, at least in theory, of the 2022 document. The Integrated Approach refers to partners on multiple levels of governance, and the EU willingness to intervene in the management of the conflict cycle,

from prevention to management and post-conflict recovery (Council of the European Union, 2018, p. 2). The Global Strategy refers to security of the European Union as depending on engaging with others abroad – “*security at home depends on peace beyond our borders*” (EUGS, 2016, p. 7). After putting one’s fate in others’ hands, the Strategic Compass removes any talk on “*multilateral governance*” or “*global governance*” and places resilience as the sole responsibility of member states. A reason for that might be the fact that the world in 2022 is more dangerous for the European Union, with a war wreaking havoc in its vicinity. Nevertheless, the Strategic Compass is not oblivious to the primacy of the Global Strategy in referring first to the “*strategic autonomy*” term. Although mentioned, it remains unclear as to what representation should this autonomy take – in terms of material or human resources.

A sign that the Strategic Compass is more “*down to earth*” than its predecessors is the enrichment of the toolboxes available to the European decision-makers to deal with threats. A step further from other more theoretical strategies, the Strategic Compass operates with several toolboxes. One of them is the Foreign Information Manipulation and Interference Toolbox, followed by the EU Hybrid Toolbox and the EU Cyber Diplomacy Toolbox that should be enhanced in the future. Appealing to these toolboxes is not without significance. It is a sign that the European Union has been eager to fit issues into patterns and devise appropriate means of tackling them. Before the Strategic Compass, the EU boasted with a non-military toolbox and is continuing to do so.

WHY DO WE FEEL IT IS NOT ENOUGH?

Apart from the ongoing war in Ukraine, that has shattered any theoretical perspective one had on the conflicts of the future, the coming decades show sombre perspectives: changes in population growth, redistribution of global power, shifting of the geo-economic centre of gravity. Faced with that, decision-making units need sets of documents and tools that should record such troubles and devise the appropriate strategic means of management for each of them.

However, there are voices that claim that despite its more precise approach, the Strategic Compass is in fact missing strategic foresight, and would need pairing with the new NATO Strategic Concept (Blockmans, 2022) in that regard. Others see it more as a “*wind chime*” rather than a compass in itself (Kaim, 2022), and that was months before its release.

According to the contents of the documents, at least by intention, the European Union is determined to become a power-broker (Atlamazoglou, 2022). Strikingly, the choices expressed so far turn it into a rather regional actor, and not a global one as intended. One must not forget the setting of the scene: the context in which the negotiations on the Strategic Compass began versus the ones in which it was actually issued to the public. In November 2021, the debate was focused on the withdrawal of the US troops from Afghanistan and the fall of Afghanistan to the Taliban, the tensions between the EU and UK/USA on account of the signing of the AUKUS pact, fears of Russia and China, the post-pandemic world and the management of the post-Brexit situation, to name but a few. However, in March 2022, the situation was completely 180 degrees different. A war was on-going at the borders of the EU, and the rest of the above-mentioned issues fell into a distant background.

According to Sweeney, although an “*aspirational project, the Strategic Compass is part coherent and part-inconsistent in its current form*” (Sweeney, 2022, p. 193). The focus of the Strategic Compass is more on “*what threats to balance*” rather than on “*what interests to pursue*”. Should this focus be maintained like this, it will not help transform the EU into a global actor (Blockmans, 2022, p. 8).

More critical authors claimed from its very first issuing in November 2021, when the political debate was started upon the document, that it was lacking in several areas: an absence of political willingness manifested by all member states to contribute equally to security matters, that was not to be eliminated through any tool, failure in prioritization and a rather unclear manifestation of ambition, excessive institutionalization which led to the diffusion of responsibility among institutions, and uncertainty on which should come first in terms of power: strategic autonomy or reliance on partnerships (Kaim, 2022).

There are several issues that the Strategic Compass fails in addressing appropriately. One of them is the Black Sea and its relevance, not just to the EU but also to NATO. There are also the outer space and cyberspace, which are somehow neglected by the document. Outer space and its potential for weaponization by China is left unhindered. Aside from cyberthreats that have become a reality lately, there is also the dimension of intelligence cooperation that the Compass aspires to, but is not approaching thoroughly through its instruments (Paul, 2022). Furthermore, the Compass digs little into the issue of emerging and disruptive technologies such as Artificial Intelligence and quantum computing that could become the tools of future conflicts.

While acknowledging throughout time the need to invest in technological research and development, the European Union failed to produce practical approaches and tools that could be used to manage future threats that resort to the latest discoveries in field. As the United States of America and China attempt to introduce emerging and disruptive technologies in their armed forces, in an effort to further enhance their military response, the European Union is satisfied only with highlighting innovation in the field, with no concrete plan of integrating it (IISS, 2022).

Another aspect that needs to be taken into consideration is the fact that the Strategic Compass fails to approach security from an economic point of view: it does not refer to the impact of food or energy for example. It also fails to deal with a reality pointed out by the pandemic – the break in supply chains that is likely to impact the world more than just in terms of hunger (Paul, 2022).

The Partnership section is the least developed one (Blockmans, 2022), even though the others also lack in substance. The partnership approach is mainly regional, instead of global. What is more, the alliance with the United States of America seems to be taken for granted, as the USA is vowed to remain an ally, despite any changes that might occur internally. However, should one go back to the Trump administration and its many faulty views on US international involvement and the value attached to some alliances (the no-more-funding of NATO unless European states start pitching in), eyebrows will likely be lifted by the confidence placed in such cooperation no matter what!

There are several centrepieces of the Strategic Compass that might lure one into belief at first sight. One of them is the EU Rapid Deployment Capacity. Others are the “*full spectrum capabilities*” or the “*live exercises*” to be performed. The EU Rapid Deployment Capacity is intended to have land, air and maritime capabilities that would be mobilized in a rapid response to threats. However, the issue lands into redundancy (Atlamazoglou, 2022), as NATO has an already highly operational NATO Response Force and a Very High Readiness Joint Task Force, to which EU member states are contributing as well. As the Strategic Compass is vowing to help support NATO in its endeavours, the very existence of an EU Rapid Deployment Capacity places one in confusion over doubling of resources and creating obstacles in joint ventures, instead of a more fluid manner of cooperation.

Before the launch of the Strategic Compass, there were authors such as Howorth (Howorth, 2022), who argued that the strategic autonomy envisaged by

the EUGS would only be of benefit to the strengthening of the cooperation between the EU and NATO. And indeed, the Strategic Compass also refers to coordinating with the United States and NATO in multiple directions, in an integrated approach of applying existing frameworks of tackling threats on a global level. However, words on paper do not fit the reality on the ground, and there are still lacks in coordination. For instance, hybrid threats is an issue where the Strategic Compass and the NATO Strategic Concept should be harmonized (Blockmans, 2022).

It is a fact that the Strategic Compass would work better if states had a strategic culture in place. However, although a much coveted aspect, the “*security culture*” as a concept still has several steps to be performed before it becomes a fully fledged reality. This brings us back to the lacks of the European system altogether. Despite criticism on its viability in the long term, the Strategic Compass paints an accurate view of the world as it is, identifies and expands areas of threat and highlights the need for the EU to become more effectively responsible for its members, its vicinity and the world in ensemble.

CONCLUSIONS

The Strategic Compass is definitely an upgrade to European security. It is also a blue print for security and defence, but to what extent?

In a time when we are dealing with a return of the “*power politics*” (Kaim, 2022), the document attempts to establish a consensus of action in terms of providing security for the European Union in ensemble, for the member states in particular, and for citizens ultimately. According to the contents of the document, at least by intention, the European Union is determined to become a power-broker (Atlamazoglou, 2022). Strikingly, the choices expressed so far turn it into a rather regional actor, and not a global one as intended.

There is also the perspective that the defensive posture of the Strategic Compass is likely to affect the “*multi-layered*” dimension of the CSDP (Bargues, 2022). However, these might be similar excuses as the ones looked up for in the case of the lack of efficiency of the CSDP itself, which is wonderful on paper, but not self-supporting in reality.

Leaving aside the debate on whether the continent is going back to the Great Power politics, the Strategic Compass is an instrument that places the European Union among those actors very much interested in developing their own capabilities in terms of defence. Yet, despite its meticulous planning of actions, security

operations, investments and forging of partnerships, the Strategic Compass still does not provide an effective change in what the European Union can do to protect itself, its members and citizens.

What about confidence? Are the Europeans more confident in EU security because of the Strategic Compass? Not likely! After all, the document acknowledges the war in Ukraine in its early pages, but its structure and content show that it was drafted before the war broke out and the directions are not correlated with the reality of war. However, to be more accommodating, one could see the Strategic Compass as a new form of engagement and commitment of the EU to becoming autonomous in providing for its own security. It is not sufficient for the future, but is all that we have now.

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STRATEGIC TRENDS OF INTERNATIONAL SECURITY ORGANIZATIONS TO ACHIEVE/CONSOLIDATE REGIONAL AND GLOBAL SECURITY

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This article is an overview of the international strategic context in the next 20 years, designed to guide the work of international security organizations in achieving/consolidating regional and global security. The analysis is based on the work of international organizations as sound judgments on different alternative strategies that focus on the challenges of the most likely future themes.

According to the assessment, the period up to 2040 will be a period of transition, characterized by instability, both in the relations between states and in the relations between groups within states. The world is likely to continue to face the reality of a changing climate, rapid population growth, resource scarcity, resurgence of ideologies, and above all, shifts in global power from West to East.

No state, group or individual can face these challenges in isolation, only collective responses will be adequate. Therefore, the struggle to establish an effective system of global governance capable of meeting these challenges will continue to be a central theme of the age.

Globalization, global inequality, climate change and technological innovation will affect the lives of everyone on the planet. There will be a constant tension between greater interdependence between states, groups and individuals, and increased competition between them. Dependence on complex global systems, such as global supply chains for resources, is likely to increase the risk of systemic problems.

Keywords: strategic trends; climate change; globalization; global power; inequality; innovation;

INTRODUCTION

Strategic trends determine how the likely changes that may occur in the next 20 years are perceived, especially taking into account trends in the following fields: social, resources and environment, economic, geopolitical, scientific-technological and military. I specify from the beginning that this analysis does not develop the newer problems of the pandemic and the Russian-Ukrainian war because these challenges are the subject of substantial analyses, having been allocated articles with a specific destination.

Lack of reaction or slow reaction to change always leads to additional costs or even irretrievable losses. In the context of security, where such costs are identified through interests, values and international (national) security, efforts are needed to be prepared for change, such as an effort to focus on the challenges we will face in the future, so that these trends can be used in the development of medium and long-term strategies needed by international security organizations to support the planning process of achieving/strengthening regional and global security.

The approach to strategic trends at the level of international security organizations required documentary research and content analysis of some concepts regarding security and international cooperation, studies on the structural development and policies of security organizations, comparative analyses of approaches in the field of security implementation, implemented by different member countries of the organizations, in order to identify the significant aspects that are the basis of the optimization of the cooperation activity. Structural correlation was another method approached in order to express the analysed information.

For example, under the UN mandate, international security organizations are required to act to guarantee peace, resolve disputes and ensure international security. Although the UN mandate has universal applicability and any conflict that threatens international peace and security can be placed on its agenda, the manner in which the crises were addressed often depended on the interests of the great powers, namely the five permanent members of the Security Council¹ (Almășan, 2012, pp. 138-149).

¹ Permanent members – China, Russian Federation, France, Great Britain, USA – have veto power in the Security Council.

In the next 20 years, all aspects of human life will change at an unprecedented pace, bringing new characteristics, challenges and opportunities for societies. During the mentioned period of time, the world will face increasingly acute climate changes, rapid population growth, diminishing resources, the rebirth of some ideologies and the change in the balance of power between the West and the East. In our view, at least three areas of change will affect the lives of everyone on the planet: *climate change, distribution of power and globalization*.

Climate change will shape the physical environment in which the population will live, influencing access to habitable areas, food and water. The volume of the *global economy* will probably grow faster than at any other stage in human history, and in socio-economic terms it will become more integrated, it will create global interdependencies. States and groups will not be able to face the challenges in isolation, but only through a collective approach to them. The centre of gravity of this period will be the identification and application of a functional system of global governance, capable of responding to the challenges, a process that will create a constant tension to achieve greater interdependence between states, groups or individuals, under the circumstances of increasing competitiveness between them. Dependence on complex global systems could affect states in the event of their collapse.

The *distribution of global power* will change, moving from the Euro-Atlantic space to Asia, as the multipolar world consolidates. This major change, coupled with other global challenges, such as climate change, dwindling resources and population growth, is likely to produce instability in international relations and fierce competition between great powers. The rise of states such as China should not be taken for granted given the nature and magnitude of the problems they face, or their overestimated influence. There will likely be several states and organizations competing for regional and global influence, but which will have to cooperate.

The *phenomenon of globalization* will probably continue, supported by the rapid development of global telecommunications, combined with the universal informational environment in which the majority of the population will be permanently online. From a political perspective, globalization will raise the level of interdependence between states and individuals within the economy, becoming an engine of development, but it will also be a source of risk, because of the exposure of local markets to the destabilizing fluctuations of the world economy. Due to the fact that globalization will generate winners and losers, especially in the labour market, life will become more competitive, dynamic and fluid, leading

to the possibility of political decisions to limit this phenomenon, to protect the refractory population from negative effects. While many people will likely improve their material situation, a significant portion will continue to face difficulties and uncertainties generated by the unevenness and fluctuations of the global market.

The analysis carried out involved identifying major trends in each of the established areas and understanding how these trends will evolve and interact over the next 20 years. The assessment of the period will be dominated by those universal issues – *the phenomenon of globalization, climate change, global inequalities and innovation* – although, in recent years, the Covid-19 pandemic has become an issue that continues to have serious economic and social consequences worldwide, and the Russian-Ukrainian war seems to be increasing in intensity and as a result increasingly affecting global security systems.

In order to provide a coherent framework and to obtain a systemic understanding of the possible human responses to these vectors of change, strategic trends can be synthesized on three major global themes: *the human environment, global power dynamics, the evolution of security and defence challenges*. This approach will allow understanding the interactions between trends and factors, distinguishing between significant long-term changes and short-term turbulence, and identifying the major challenges and opportunities of the future international strategic context.

Of course, there are no certainties about the future, with likely strategic trends varying depending on the depth of analysis from which alternative products emerge.

The strategic trends of international organizations to achieve/consolidate regional and global security will need to take a comprehensive approach and exploit a diverse range of national and international sources and expertise, both from Western and non-Western perspectives, in the business environment, government, academia, media, non-governmental organizations.

UNIVERSAL ISSUES IN THE ANALYSIS OF INTERNATIONAL SECURITY ORGANIZATIONS

The UN cannot guarantee collective security, the peaceful resolution of conflicts, nor the elimination of all forms of violence in the world, but it can contribute to the achievement of these goals through state actors and other *international security organizations*, inaugurating a world in which the renunciation of any act of violence seems the right and appropriate option. At the UN level, several actions have been carried out or are being carried out, with clear, targeted objectives for the implementation of *the 2040 Agenda*. For this stage of the approach we will highlight the four universal problems.

The Phenomenon of Globalization

In the next 20 years, the volume of transactions will expand regardless of the physical distance between those employed, transforming and improving the standard of living of the population. One of the key elements of globalization will be the continued internationalization of the market for goods, services and labour, which will integrate customers and distributors regardless of geographic location. This will be one of the engines that will accelerate economic development, but it will also be a source of risk in terms of strengthening regional and global security, as local markets become more exposed to the destabilizing fluctuations of the global economy. These developments will be facilitated by the rapid development of global telecommunications, which will create a permissive information environment in which most of the population will be continuously online.

The global economy will continue to be run on market principles where some will gain and others lose, especially in the field of labour, which will become subject to legal regulation of supply and demand. Life will be more competitive, more dynamic and more fluid. From a social perspective, those who will lose will form political, cultural, economic associations and lead a virtual life, through which they will connect with members located at a distance, but who share common interests and who want to get an advantage from the association. From a political perspective, globalization will increase the level of interdependence between states, which will be increasingly integrated by the global economy.

The physical manifestation of globalization will materialize more in the globalized core, which comprises the most economically interdependent and successful regions of the world. Instability within the globalized core is likely to adversely affect the national interests of the great powers. Resources, trade, capital and intellectual property will flow through this core, through complex networks of physical and virtual infrastructure, which will likely be vulnerable to disruption or cyber attack by multiple actors.

For all challenges in this field and related to the achievement/consolidation of security, it will be necessary, on the part of international security organizations, to apply concepts, strategies, plans, decisions or instructions to *“repair”* the deterioration of the international scene in order to achieve the desired effects, respectively security guarantees and commitments subordinated to the common interest of maintaining peace and defending freedoms.

Climate Change

It is increasingly clear that we are witnessing climate change and that the atmosphere will continue to warm on an unprecedented scale in the current century. Scientific studies show that we owe a large part of global warming to human activities, primarily through the concentration of CO₂ and other gases. The change will be accelerated by diminishing natural carbon processing and shrinking ice sheets. Current studies in the field indicate that the atmosphere will continue to warm at an unprecedented level during the analysed period. Even though the rate and magnitude of change is difficult to determine, over the next 20 years, the global temperature is projected to increase by about two degrees Celsius, regardless of the agreements on gas emissions that are vital to limiting the magnitude of change over the time horizon under consideration. These agreements will be highly politicized, especially due to the relationship between developed and developing countries.

Climate science is complex, with determined causes and related effects that do not appear immediately, so the consequences of climate change will vary in terms of impact over time, incidence and geographic extent. It will likely be an unstable and unpredictable process, involving both gradual evolution and sudden instabilities. Global emergencies will involve melting ice sheets, thermal expansion of the oceans and changing direction of ocean currents, with seawater becoming more acidic as it processes some of the CO₂ in the atmosphere. Gas emissions will generate global temperature increases, unevenly distributed at the planetary level, which will likely lead to important environmental changes (Ullman, 2021, p. 51).

On land, some regions will be in a process of desertification, others will face permanent flooding, and the *“melting”* of tundra near the arctic polar zone will produce methane, possibly in large quantities. Climate change will reduce habitable areas and alter agriculture and fertility, while tropical diseases will migrate north into the temperate zone. The risk of extreme weather phenomena will continue to increase, threatening densely populated coastal, urban and agricultural areas, with floods and storms that will no longer respect the classic characteristics of the seasons. The effects of climate change will continue to be politicized as they become apparent and the link between causes and effects is better understood, and responses are contested and influenced by vested interests.

Global Inequalities

In the next 20 years, material conditions will improve for most people, but the gap between rich and poor will widen and absolute poverty will become a global challenge. Despite rapid economic growth, there will continue to be important differences in countries such as China, India, but also in smaller Western economies. In some regions, especially sub-Saharan Africa, the current state of poverty could be ameliorated. Material differences in well-being will be accentuated by the phenomenon of globalization and increased access to telecommunications. Disparities in health care will become more apparent and will be associated with a sense of injustice and resentment, even among those who will become more prosperous than their parents and ancestors. Absolute poverty and comparative disparity will fuel perceptions of injustice to those who do not meet the expectations, increasing tension and instability within and between societies, expressed through violence such as disorder, crime, terrorism and insurgency. All these problems can lead to anti-capitalist ideologies, linked with possible religious, anarchist or nihilist movements, but also to populism and the revitalization of Marxism, disruptive actions on regional and global security.

Most states will be forced to cooperate due to growing interdependencies, intensifying competition, and the need to sustain their vital economic interests and political advantages. Individual well-being will depend on access, exploitation and opportunities of the global economy, but people will ignore the process of globalization, mostly through threats. This can be one of the results of some local measures to lessen the negative effects of globalization and market operations in some countries or communities, in the interest of socio-economic stability or competitive advantage.

These tensions will fuel risks, from the individual level to the international level, making it possible to identify different approaches or pragmatic solutions to risk management, on which the attitude of individuals and communities to fruition the change or to resist or reject it will depend. These strategies can be cooperative, obstructive, competitive or various combinations of them. For example, high representatives of the UN and the OSCE meet annually in meetings to inform themselves and coordinate activities provided in the action plans in the field (Cîrciumaru, 2010).

Innovation

Innovation will create new opportunities and generate value through the successful exploitation of new or improved technologies, removing cultural and process barriers. It will occur when the low cost of inventions will generate an explosive economic growth cycle or create a new market. Scientific breakthroughs or inventions are likely to produce a “*breakthrough*” in some disciplines, particularly in information and communication technology, biotechnology (*which will be driven by the aging population*) and energy management (*which will be driven by the need to reduce the use of carbon and fossil fuel*).

Technological development will continue to be predominantly commercial, directing inventors and entrepreneurs to identify and produce as many applications of new technologies as possible. Sensitive, niche technologies and programs with significant cost and impact will continue to be led by military or government agencies. Access to technologies and expertise will proliferate due to a wide range of audiences and users, and maintaining secrecy over sensitive technologies and systems will become difficult. Innovations will develop at an unprecedented level, and the sources of their production will multiply. No one ventures to make predictions about new or emerging technologies. The rate of change, the pace and unpredictability of innovation and development will pose challenges for decision-makers, who will have to anticipate and position themselves against direct or indirect products (Ullman, 2021).

Current assessments indicate that the fastest technological advance will occur in IT, energy, biotechnology, cognitive sciences, sensors, networks and smart materials. Nanotechnology will enable development. Technological development will serve many people, but the application and integration of technologies will continue to be unevenly distributed, deepening the gaps in understanding, advantage, and opportunity between the haves and the have-nots.

MAJOR GLOBAL THEMES FOR THE ATTENTION OF INTERNATIONAL SECURITY ORGANIZATIONS FOR ACHIEVING/CONSOLIDATING REGIONAL AND GLOBAL SECURITY

People are and will remain the most important vector of change, surpassing societal, geopolitical and security developments. It is important to understand trends in society by analysing how physical challenges combined with societal changes and technological advancement will shape the human environment.

Demographic growth, diminishing resources and the need to address climate change will require innovative technological and organizational solutions with a profound social effect. Demographic, physical, and economic vectors will interact intensely, shaping behaviour, development, and the need for adaptation over the next 20 years.

Human Environment

This major theme examines the following factors: physical environment, societal changes and technological challenges, alongside radicalization and global health.

The physical environment

The global population is likely to grow from more than 7 billion today to around 8.8 billion in 2040, with many enjoying prosperity (*UN Population Division of the Department of Economics and Social Affairs*). Rapid population growth is likely to moderate toward the end of the 21st century, with economic development producing a progressive decline in the global fertility rate. Population resource requirements are likely to increase towards the 2040s, followed by a downward trend as technological and organizational innovations take effect and population growth declines (*Department of Economic and Social Affairs, Population Division, World Population in 2030-2040*).

The most important pressures are likely to be from competition for energy, food and drinking water, as well as global goods².

The reserves of energy, food and water will be sufficient for the growing population, but problems are likely to be related to their geographical distribution, access, cost and transport. Despite population growth, per capita consumption and gross domestic product are likely to increase, with this economic growth leading to continued reductions in absolute poverty. Economic development will be directly linked to resource consumption, and producer and consumer economies will seek political and economic partnerships to guarantee supply. The fight for energy, minerals and fertile land will intensify, as states will compete for long-term access to them (Ghiba, Chivu, 2014).

The combined effects of climate change and increasing demands for food production will diminish productivity and distribution and accelerate soil degradation in traditionally fertile areas. The inequalities between areas that possess natural

² "Global commons" are those regions shared by community members. They include those parts of the earth's surface that do not fall under the jurisdiction of nations, such as the ocean and its resources, the atmosphere, and orbital space. The only land that can be regarded as "global commons" is Antarctica.

resources or allow access to them and those without resources will become a source of claim, an ethical challenge for the economic system of the global market. Climate change and the progressive impact of rising temperatures will intensify the struggle for resources due to changing precipitation regimes, which will affect agricultural production capacity and worsen the distribution and access to resources.

Environmental changes are likely to lead to a significant increase in migration locally and regionally, and, to a lesser extent, internationally. Most of it will run unchecked and will have a significant social and economic impact.

Changes in society

On the horizon of 2040, it is estimated that the demographic profile of society will change, with the demographic growth taking place predominantly in developing countries. Limited economic development and cultural norms will result in high fertility levels in regions such as sub-Saharan Africa, parts of the Middle East and Asia, especially in countries such as Afghanistan, Syria, Yemen, Pakistan. The continuous increase in the number of the population, the aggressive economic competition and the increase in consumption, in parallel with the modernization and urbanization will lead to the intensive exploitation of all kinds of resources. These trends will be exacerbated by the consequences of climate change and the footprint of human activities.

One of the key issues will be the availability and distribution of energy, food and water, the fluctuation and imbalances in their production and distribution at global, regional and local levels. High resource challenges will intensify in already hard-hit areas, particularly in low- and middle-income regions, where population growth has a major impact on local resources and economic growth. The expansion of global media and information and communication technology will increase the sense of frustration and marginalization related to the "to have or not to have" resources, both nationally and internationally. This will lead to populism, crises and human confrontations characteristic of inter-confessional and inter-ethnic conflicts, at the local level, and when the issue of access to strategic resources necessary to support developed or developing economies is raised, the risks of international confrontations may increase (Biddle, Macdonald, Baker, 2017).

Communicable diseases will continue to affect human life, given that the usual ones will be eradicated or their effects reduced through prophylaxis and cure, and others may appear and affect the population with variable intensity and impact, having a constantly reduced frequency but great impact, potentially pandemic.

Global communications will provide groups and individuals with much greater visibility into the advantages and disadvantages of others and the additional measures by which they can exploit opportunities and gain advantages. Physical separation will diminish in importance in supporting interests, but personal and collective physical safety will remain critical in any major, successful initiative, except in those areas where long-term opportunities may balance immediate, moderate risks. The identity of persons will take a new approach, due to the increase in human complexity, as freedom of movement and association will create opportunities and fulfillments. People will continue to hold on to their personal and cultural origins, but will accept customs from their adopted cultures in order to build an identity of their own. Collective identities will evolve by accepting greater diversity of origin and culture, only if it brings an advantage to the community. Nationality and ethnicity within homogeneous ethnic groups or ideologically nationalistic states and communities will continue to exert a strong emotional influence. Cross-border migration and movement will result in the growth of diaspora and expatriate communities, which will be able to create enclaves with strong ties to countries of origin. These differences may generate tension between societies, but it will not have the effect of a “*clash of civilizations*” (Huntington, n.d., p. 164).

Technological challenges

Technology will provide partial solutions in the future, both for adapting to and for mitigating the effects of climate change. On the horizon of the 2040s, the production of energy sources with reduced emissions, able to satisfy the demands, is not estimated. Research into carbon capture technologies is likely to advance and enable the use of fossil fuels in a limited emission regime, particularly coal. Despite competition for resources, the price of carbon raised by energy demand and constrained by climate change will drive up the price of fossil fuels, spurring the development of green energy and nuclear power solutions. In general, energy supply will meet demand, but the market will remain volatile.

Supply problems will likely be exacerbated by a lack of investment in the field, and instability and deliberate state actions will drive the implementation of broader policy goals that make energy security a constant issue. If ignored, these problems could cause major energy crises that will severely affect global economic growth, having the potential to force the development of new energy sources that were previously not considered viable, but which will be necessary from an economic and political perspective (Ionescu, 2010).

The future global environment will be defined by physical, social and virtual networks. Physical systems will involve complex interconnections that include extensive pipelines, communication cables, satellites and communication routes. Virtual networks will consist of interconnected communication servers, most through the individual Internet address protocol. Widespread access to networking will enable large-scale identity change through the use of online profiles. Remote working is likely to become the norm under controlled networks, with virtual space effectively becoming the new work environment. New ideas, beliefs, grievances will be transmitted almost instantly across the globe.

Cyberspace will provide a way to protest, but also opportunities for new and old forms of crime that can allow hostile groups to quickly create effects. Almost unlimited access to information resources will expand the opportunities for research and knowledge through virtual interfaces, diminishing the effect of geographical separation between those who want to collaborate. The ease and importance of using computers in most aspects of life will lead to dependence on them and create critical vulnerabilities for attack by potential adversaries. These vulnerabilities will be reduced through reversal options, and long-term resilience will be achieved through the development of self-healing smart grids. Institutions based on hierarchical, orderly structures will be overtaken by competitors and potential adversaries who will be able to capitalize on the rapidity of communications and the formation of groups through social networks.

The development of social media technology will continue to facilitate the emergence of “*grassroots journalism*” and make it difficult for even the most autocratic states to control access to information, especially as globalized connectivity allows local news to be broadcast instantly anywhere. Under these circumstances, the tensions and instability generated by autocratic states’ tendency to quickly change public opinion by force would be brought to everyone’s attention.

Radicalization

Radicalization is defined as a process that supports political, ideological or societal reform, which can lead, in certain situations, to the generation of extremism and terrorist activities (Moskalenko, McCauley, 2009, pp. 239-260).

Extremists, violent and non-violent, are those radicalized groups or individuals who seek to cross ethical or legal boundaries. Terrorists are the most fanatical examples of extremists who use “*weaponized*” propaganda to achieve their goals.

After 2040, radicalization will continue to exist, driven by a complex range

of factors such as gradually changing political orientations, demands of groups or individuals, and social inequalities. The characteristics of fragile states, such as high levels of inequality, lack of respect for human rights, minimal social support, health and welfare systems will favour the development of radicalization (Ib.). The developed states of the liberal world will face the phenomenon of radicalization due to globalization, migration and the support of social inequalities. States' actions are likely to have a significant impact on the radicalization process. For example, during stability operations, the decisive application of military power to eliminate radical groups may attract public support for them, cause them to ally with other extremist groups, or force them to form terrorist cells. Many of the current conflicts and disputes exploited by terrorist organizations do not reveal the possibility of radical behaviour change, which enables us to say that international terrorism will continue for the next 20 years. New forms of extremism or terrorist violence are expected to emerge, both locally and internationally. In China, as a result of the polarization of societal structures and inequities between elites, urban workers and rural peasants are likely to become a permanent source of grievances (The Radicalisation of a New Chinese Working Class, 2009, pp. 551-565).

Global health

By 2040 health will be recognized as a fundamental global issue. The realization that health insurance will contribute to local, national and global stability will lead to increased international investment in this area to reduce inequalities and provide opportunities for education and training. These developments are unlikely to be rapid, but will be accelerated by high-impact events such as pandemics and mass migration.

Global average life expectancy is likely to increase, thanks to continued advances in the quality and coverage of medical services. Access to these services will remain unequal between the developed and the developing world, but also at the national level, between different socio-economic groups. The inequality of medical services will be amplified by genetic, cultural and behavioural vectors, the most important being the lack of medical materials and the socio-economic environment (Buzan, Wæver, de Wilde, 2011).

The dependence on the international market, the freedom of movement of people and the high level of legal and clandestine migration will reduce the possibilities of isolating the outbreak of epidemics and will ensure the channels through which viral pandemics can spread (e.g., the Covid-19 pandemic). Diseases

such as cholera, malaria, waterborne infections, tuberculosis and hepatitis will remain significant. The geographic extent of certain diseases will be altered by climatic variations, with regions that were not susceptible to such diseases, such as Dengue fever and Lyme disease, becoming increasingly affected. In developing regions, global health inequalities will persist due to their poor coordination and reactive posture. Many states will not have access to the global pharmaceutical industry, depending on counterfeit sources of drugs and vaccines. The level of HIV infection will continue to be significant in the developing world and in Russia, but preventive measures, the availability of antiretroviral drugs and the possible discovery of a vaccine may make this disease less of an international concern.

The diagnosis and treatment of genetic diseases will improve, with lifestyle choices becoming the main vector of poor health in the developed world. Treatment of chronic lifestyle diseases will increase in importance and become a priority.

The pharmaceutical industry will know a significant development, new solutions will appear through the application of advanced genetics and nanotechnology. Stem cell technology will lead to the growth of specific tissues and organs. Research in the field will remain controversial from an ethical perspective, but its application will prove useful, especially as mature cell reprogramming develops.

Embedding mobile communications and computers into human bodies could become a practice with important military applications, despite ethical and legal discussions.

Global Power Dynamics

The analysis of power relations over the analysed time horizon indicates a shift of the global centre of power from the Atlantic to Asia and the Pacific, as the multipolar distribution of power will move and the hegemonic dominance of the USA will diminish. These developments will increase pressure on the rules-based international system and generate opportunities for both cooperation and confrontation between great powers.

Changing distribution of global power

The distribution of elements of global power is complex³. For a long time, at the end of the 20th century, power was concentrated by two superpowers, but

³ British research has identified several complementary definitions of power, including those of Nye, Waltz, Mearsheimer, Buzan and Weaver. Essentially, power status can be defined as the amalgam of military strength, access to resources, size of the economy, educational opportunities, demographics, geo-political position and political stability, among others.

the fall of the Soviet Union gave birth to the current global hegemon: the USA. If the military power is concentrated in a few important states, the economic power is much more spread at the level of some states or global organizations, in reality the power is already multipolar.

The shift in power from the USA and Europe to Asia, along with climate change, global resource scarcity and population growth, will generate a period of instability in international relations and intense competition between the great powers. The USA will remain the dominant military power, but in political, economic and military terms it will become increasingly constrained and its role as global leader will diminish. It will be increasingly difficult for the USA and its allies to capitalize on the *soft elements* of their power as emerging powers grow in influence and confidence. The economic model of the West, along with their relative social openness, could remain an attractive influence for many individuals, but also for states. The rise in power of states such as China should not be taken for granted given the nature and magnitude of the problems they face, and their influence should not be overestimated.

If currently the USA, the European Union and Japan add up to 40% of the world's gross domestic product, in 2040 they will add up to 50% and will have sufficient military power and influence in the international system, without taking into account the growing influence of China, India, Brazil and other actors (Ullman, 2021). Changing the distribution of power will not be simple, linear, or applicable to all levels of power simultaneously, with many actors likely to seek to adapt. The realignment process will generate a period of repolarization, as the states will position themselves against the change of the strategic environment under the circumstances in which they will continue to fight for the fulfilment of their objectives through traditional mechanisms.

The process of global governance, which will bring stakeholders into dialogue on global issues, will likely continue to evolve, particularly on collective challenges such as climate change. The strength of the collective response will depend on the perception of national interests and will be influenced by the scope, scale and costs involved. The perception of equity is likely to become important. The global governance process will support moderating the effects of instability by facilitating political cooperation over confrontation. The development of effective global governance capable of achieving strong collective action is likely to generate opposition, less so in exceptional situations of international crisis.

These crisis-induced changes will likely become the norm and create the impression of a permanent global governance crisis.

International organizations such as the United Nations, the World Trade Organization, the G8, the G20, the World Bank and the International Monetary Fund will remain influential, especially in addressing global issues. The emergence of a global government is unlikely. Current powers will remain reluctant to share power, and rising powers will demand an appropriate level of recognition, particularly within the UN Security Council. Despite some concessions, without significant reform, less developed states will continue to perceive global organizations as unrepresentative of their interests and as placing more value on the service they provide.

Globalization will continue, both as an idea and as a process related to the transactions of capital, goods, services, labour, intellectual property, information and resources, conducted through physical and virtual networks. The influence of globalization will manifest itself everywhere, due to the economic success of states dependent on accessing and exploiting the opportunities of the global economy, but there will also be individuals or even political elites who will see this phenomenon as a threat to social interests and stability and who will plead for protectionist measures in some industries or sensitive sectors of society. If in the long run globalization is inevitable, it can be temporarily slowed down, stopped or reversed as a process.

Competition between communities and states

One of the most important features of the next 20 years will be the constant tension between growing interdependence and intensifying competition among individuals, communities, and states. This aspect will stimulate competition between the strategies by which these groups wish to exploit, resist or change. The difficulty of meeting global resource requirements will probably become a constant, generating states' orientation towards individual rather than multilateral solutions⁴.

Maintaining and expanding geopolitical influence will be considered by all powers, especially those with global or regional aspirations. Informal spheres of influence will coagulate especially around China, India, USA, Russia. Similarly, medium and small powers will unite in regional blocs, often based on trade and

⁴ Despite the benefits of globalization, bilateral agreements between resource producers and consumers are likely to become common, threatening global market fragmentation.

economic ties, with the intention of maximizing collective prosperity and influence, these tendencies, along with regionalization, being compatible with globalization. Spheres of influence and blocs are most likely to be created in geographic proximity, common security challenges, cultural ties, language, economic ties, political and religious ideologies, and possibly coercion.

The boundaries of spheres of influence will be fluid, reflecting the competition for influence. The intervention of a great power in another's area of interest will not create the risk of conflict, especially if they have the ability to use weapons of mass destruction or a considerable conventional force. An eventual confrontation between two great powers could only occur in geostrategic locations with significant resource potential or in areas where spheres of influence overlap or adjoin, such as parts of Africa, the Indian Ocean region, Asia, and the Arctic regions.

THE CHALLENGES FOR ACHIEVING/CONSOLIDATING REGIONAL AND GLOBAL SECURITY

The likelihood of a major conflict between states was not long ago perceived as unlikely, while instability, societal conflicts and terrorism repeatedly led to the emergence of crises. Now the sources of potential global conflict have increased and the forms of deployment have diversified.

The global system has become interdependent and interconnected and has given conflict, wherever it has arisen, a global dimension. Some states or non-state actors, such as terrorist groups, have gained global notoriety. Today, great power disagreements over borders, influence, and resources are possible, which could lead to confrontations, including limited wars, in which adversaries show deliberate restraint in the use of force. Western military forces could be engaged in coalition military actions against adversaries with significant military capabilities, at parity with them, or even at a slight disadvantage.

All these trends will probably continue, but on the horizon of the 2040s they will interfere with others, a change in the character of the conflict being expected. Powerful states like China will continue to evolve and develop military equipment that will rival that of Western powers and which they will export to partners and neighbours.

Even if prevention efforts continue, weapons of mass destruction are likely to proliferate and their use will increase. In the era of permanent challenges, adaptation and evolution, complex problems will not be solved by military power alone, a multinational approach is needed.

It is impossible to assess trends in future military confrontations without the contemporary military context, both global and national. Military power is and will remain an agent of politics, but once started, a conflict will have its own dynamics that can drive politics. Military power cannot be separated from the other instruments of power: diplomatic, economic and informational. Additional military power cannot be accounted for in the chaos of isolation and the complex strategic environment. These instruments of power, amplified by the growing power of information, form the "armour" of the state, ensure the rationales that combine *hard* and *soft power* in the pursuit of national interests, but can also destabilize if misused or adventurist.

The future security situation in the world will be characterized by reactions to global processes, by Russia's concerns to gain a more important role in the decision of international problems or by the increasingly strong assertion of Asian countries – mainly China – in world politics.

The *strategy* remains an application tool of the state, which aligns the objectives, concepts and resources to increase the success rate of the policy. It is effective when it anticipates and drives change. If in the last decade the benefits of regional cooperation have been measured especially in political terms by rebuilding mutual trust between the states in the region, the challenge of the future will consist in the identification and promotion of concrete projects that lead to the modernization and development of the region as a whole and of each state in part, so that the living standards of the population are improved.

The interrelated challenges represented by state reconstruction, conflict resolution, peacekeeping, border delimitation, democratization, security of energy resources, combating the widespread trafficking in people, drugs and weapons, as well as the possible proliferation of weapons of mass destruction, far exceed the resources of any single government or organization. Hence the need for a concerted effort on the part of international security organizations to accelerate the process of maturing democratic institutions and promoting a new culture of cooperation in certain regions and in the world. On the horizon of the 2040s, there will probably be more numerous, rapid and complex changes that will require forward-looking and *agile strategies*.

During the analysed period, defence and security will remain vital, both for the physical and the virtual domain. Defence is likely to become much more important in the face of population growth, climate change, resource scarcity and instability. These factors can be extended to the defence of access to physical necessities and

survival. Many of these needs will be international and linked to globalization, articulating the need for great powers operating globally and for alliances and partnerships to defend common interests. It must be understood that defence is no longer an activity that is carried out only by military forces, just as achieving security is not the exclusive domain of international security organizations.

CONCLUSIONS

The role of international security organizations in configuring the security environment will increase more and more. Organizations will not limit themselves to “defending” their own values, but must, to the same extent, face threats “far from home”. The management of these situations, through specific means, which do not lack the UN’s partnerships or special relations with different countries and power centres in potentially conflict areas, become important elements of the organizations’ strategy.

Cooperation is an important component of international security organizations, as it contributes to the consolidation of political dialogue and the development of regional projects. A series of political, economic, security and cultural problems can be much better and faster addressed and solved through joint and directed efforts. In this regard, the regions provide the right framework for the establishment of cooperation mechanisms, which contribute to ensuring a regional and international security climate and favour the improvement of the population’s life.

“Stronger collaboration, better security”, we call it that for a very good reason, arguing that “...although collaboration is the way, impact is the destination. Launching this concept is the beginning, not the end, of that path”. An African proverb says that “If you want to go fast, go alone. If you want to go far, let’s go together” (Dr. Tedros Adhanom Ghebreyesus, Director General of WHO, in Ullman, 2021, p. 46).

In the 2040s, hopefully, there will be compelling reasons to argue that the world will become more peaceful. Pressure on resources, climate change, population growth and changing distribution of power are likely to increase instability that may lead to armed conflict, but an all-out war between the great Western powers, between the liberal democracies, in which the full power of the industrial states is engaged, is not likely.

However, there will be possible disagreements among the great powers over borders, influence, and resources, which could lead to confrontations, including limited wars, in which adversaries show deliberate restraint in the use of force.

The involvement, in the last period of time, at the global level, of the international security organizations in solving some political-military crises, which have arisen at the global, zonal and regional level, has required a concerted effort on the part of the international community, materialized in considerable efforts, from the human, material and financial perspective, to limit the effects generated by these situations and to complete them with appropriate results, in terms of individual and collective security and stability. From this perspective, along with other instruments of an economic, diplomatic or informational nature, those of a military nature will develop their capabilities, materialized through the organization, planning and carrying out of multinational operations that will represent an option, even if at the last moment, used to solve this type of crisis.

If in the past decade the benefits of regional cooperation were measured especially in political terms by rebuilding mutual trust between the states in the region, the challenge of the present consists in identifying and promoting concrete projects that lead to strengthening the security of the regions as a whole and of each state in particular, so that the living standards of the population are defended.

The latest developments in the European space confirm the fact that the time has come to revive cooperation actions and to direct attention to the Black Sea region, an area of particular importance, due to its location on the oil and gas transport routes to Europe and near unstable areas from the Middle East and the Caucasus. Through these actions, the EU and NATO contribute to the efficiency of strategies to prevent and fight against new risks, dangers and threats to the region.

Romania manifests an active participation in regional cooperation initiatives, processes and structures, with a complex and extremely diverse issue, both from South-Eastern Europe, as well as from Eastern Europe, the Caucasus and Central Asia. Our country will also be interested in regions that are not in the immediate vicinity, from the perspective of developing transversal ties of cooperation.

In complementarity with the focus of the interest of the international community on a vital area of the continent and the globe, I believe that the foundations will be laid for a more active, more comprehensive, unitary and coherent strategy towards the Black Sea region, which will guarantee international cooperation in the region, integrated action, the achievement of regional crisis management capabilities, regional and global stability and security.

It is obvious that, as international, zonal, regional and global actors will become aware of the real importance of the Black Sea area, its strategic value will continue to grow.

The United Nations Charter gives the Security Council the power and responsibility to initiate collective action to maintain international peace and security. Most of these operations are established and implemented by the UN itself, with troops serving under the organization's operational command. In other cases where the direct involvement of the UN is not feasible, the Council authorizes the interventions of international security organizations, as the main institutions that watch over the stability of the regional and global space, including the Wider Black Sea Region, and that can capitalize through cooperation on the experience and the capabilities.

The North Atlantic Alliance, doubled by the European Union, will remain the international security organization that offers perhaps the most effective framework for consultations, dialogue and cooperation on security issues, and their potential can be exploited further, by strengthening the determining role in the security equation.

Through this analysis on the strategic trends of the international security environment, I have intended to highlight the need for conceptual cooperation or joint actions of security organizations in order to have a better world, with a developed security culture, in general, and to achieve/consolidate regional and global security, in particular.

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ROMANIA IN THE EUROPEAN COHESION CONTEXT

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This paper presents Romania’s strategic position on the main European security programmes reflected and accepted at EU level, as well as a brief assessment of EU officials towards Romania and the concrete actions through which Romania decided to align with EU’s security and defence standards. It discusses the main strategic objectives of Romania and the European Union, actions and measures to promote European cohesion in terms of security, but also other study elements, and research in the direction of national and international security.

Keywords: European security; cohesion; PESC; security policies; European cohesion;

INTRODUCTION

Strengthening Romania’s profile as a European Union partner in terms of achieving a European cohesion and security project is the main goal for our country. Currently, the courses of action in this regard are promoting European values and building an internal and external policy that respects the European Union’s Strategic Agenda.

Withal, regarding the European Union’s current challenges, Romania chooses to remain an active supporter also from the co-initiator perspective of the *EU Strategy for the Danube Region (EUSDR)* (Ministry of Foreign Affairs, 2022).

From Romania’s involvement in projects with common or security topics debated by the European Union and the support of the Union and its member states, to Romania’s current security strategies and the combat against cyber-attacks, while encouraging projects aimed at digitalisation, all these topics, and not only, will be presented for a more coherent overview of Romania’s position concerning the achievement of the European cohesion and security project.

ROMANIA’S POSITION TOWARDS EUROPEAN SECURITY STRATEGY

According to the position paper, signed on 23 March (2000), during the Government meeting, Romania “welcomes the decisions adopted in the *Common European Security and Defence Policy field*” (Mureşan, Pop, Bonciu, 2004, p. 51). Romania is actively involved in three main strategies to ensure European security:

- *ensuring stability and governance in the immediate neighbourhood (taking into account foreign political relations with the Republic of Moldova and Hungary, but also with other neighbours);*
- *establishing a desideratum regarding the promotion of international order based on an effective multilateralism;*
- *preparing a response to modern threats (cyber-attacks, data exchange, etc.) – through the Cyber Security cell.*

Romania also agrees to get involved in supporting states with an emerging internal policy, from the Balkans, but also from Afghanistan, and Africa, being part of the state foreign policy. In addition, our country actively creates valuable

and strategic external relations with important state partners, strongly involved in the European Security Strategy. To this end, it shall ensure compliance with the principles laid down by the Brussels Treaty on 17 March 1948. Romania is a CFSP member, being involved in peacekeeping projects, strengthening international security policies and developing democracy and the rule of law. These are also the European Union's main objectives when it comes to EU security. And Romania aligns with them, our country's position being a favourable one.

Concerning Romania's involvement in strengthening EU security, our country ensures the protection of citizens and their rights, and actively promotes the European Union's capital values: democracy, the rule of law and fundamental human rights through the policy developed at home and abroad. Also, in terms of nuclear, chemical and biological weapons, Romania has been a signatory to all documents supporting their non-proliferation from the outset.

In addition, Romania is part of international security organisations such as the UN, and NATO and is also part of several regional organisations, such as the Black Sea Economic Cooperation Organization (BSEC), the Central European Initiative (CEI), the Central European Free Trade Agreement (CEFTA), the South-East European Cooperation Process (SEEC), the Royaumont Process, the Southeast European Cooperative Initiative (SECI), the Stability Pact for South-Eastern Europe. Through all these partnerships, Romania actively supports the EU's values regarding the policy pursued and the security strategy and is involved in the development of new European security programmes

HOW DOES THE EUROPEAN UNION EVALUATE ROMANIA'S POSITION IN THE PROCESS TO BUILD EUROPEAN SECURITY?

“Romania has confirmed that it is on the right track in alignment with the CFSP”, as evidenced in a report from the European Commission (European Commission, 2003). Moreover, Romania has shown a particular interest in the implementation and integration of the ESDP system - the European Security and Defence Policy, so that the fulfilment of ESDP objectives has become a priority for our country from the very beginning.

According to European officials, even the current *Military Strategy of Romania* is in line with EU policies, which is a substantial advantage in crystallising a European security project, to which Romania not only adheres but also actively engages.

Military Strategy of Romania, at the moment, is defensive-active and it is based on four common concepts:

- *credible defensive capability;*
- *restructuring and modernisation;*
- *enhanced operational partnership;*
- *gradual integration* (Military Strategy of Romania, 2021, p. 30).

The entire Military Strategy is drafted and explained at length in the most comprehensive reference document in this respect: The White Paper of Defence. Romania's current Military Strategy, taking into account the possible risks and threats, consists of defence development, in particular, the achievement of the objectives set to complete the *“Armed Forces 2026 Modernization Program”*. Along with supporting NATO and European Union, Romania has built sustainable and strategic relations with neighbouring countries and a strategic partnership with the United States, which provides the optimal framework for strengthening relations between the two countries' armed forces in order to substantiate Romania's strategic position in the Black Sea (Ibid.).

Moreover, the current strategy was drafted based on the results of the Strategic Defence Analysis 2020 (SDA), and the Romanian Armed Forces Transformation Program until 2040. In recent years, Romania has focused its attention on the development of dual-use capabilities, beneficial both for military operations and in support of the civil authorities, given the major impact caused by the COVID-19 pandemic (Ibid.)

The military operating environment main characteristics, according to the Military Strategy of Romania, are:

- simultaneous increase of the precision of the armament systems and the firing range;
- extending the interconnection of force projection capabilities in all confrontational environments (land, naval, air, cyber, space) and at all levels of engagement (tactical, operational and strategic);
- intensifying the scale of actions in cyberspace and the level of complexity, significantly affecting both command and control systems and kinetic actions;
- generating specific capabilities to new environments of military operation (cyberspace and outer space);
- hybrid strategies and actions (Ibid., p. 9).

The main objective of national defence is focused precisely on respecting the rule of law and preserving a healthy democratic environment, fundamental values of the European Union. That is why Romania is considered one of the countries actively involved in the European security project, supporting it from all points of view.

CONTINUOUS RESEARCH AND INNOVATION IN EUROPEAN SECURITY

In November 2016, European Commission Vice President Federica Mogherini presented a security implementation plan. At the same time, various action plans in the defence field were discussed, relying on the importance of a European Defence Fund (EFF) for defence research and development capabilities. Romania is in line with these standards (Common Security and Defence Policy). Thus, through the programs carried out within the Centre for Defence and Security Strategic Studies/CDSSS/UNAp, it aims to become the main pole of scientific knowledge and expertise in the military and security field.

Main objectives of the Centre for Defence and Security Strategic Studies:

- *to provide scientifically based expertise for Romanian political-military institutions;*
- *to provide the theoretical foundation of the functions of the military component within the overall security and defence framework;*
- *to investigate changes in the evolution of security and defence environment influencing Romania's national interests;*
- *to explore the role of the military in the future operational environment;*
- *systematic study of the Romanian society phenomena influencing the military field;*
- *to develop cooperation with similar military and civilian research institutions, both national and international;*
- *to promote the security and strategic culture within the Romanian society;*
- *to support the strategic level training and education within the ROU NDU by integrating security and military theory research results in the curricula and teaching process. (<https://cssas.unap.ro/>).*

Thus, it is noticed, even from the CDSSS objectives management, that Romania is actively oriented toward building and supporting a project to strengthen security both in the internal and external environment, seeking to cooperate with institutions and groups at international level in this regard.

By proposing security policies that involve the development of cooperation with military research institutes in the country and abroad, Romania can ensure its entry into the largest circles of influence in the EU, thus having decision-making power, but also visibility and unlimited opportunities to promote their values and strategies.

ROMANIA'S ROLE IN THE COOPERATION BETWEEN THE EUROPEAN UNION AND NATO

The EU and NATO have formed a collaboration in 2015, being extremely advantageous for Europe in terms of measures and opportunities that this alliance has brought in the security domain. Since 2018, NATO and EU have signed a new declaration, setting out new ways to counteract possible threats to common safety and security.

According to the European Council, the main areas on which the collaboration between NATO and EU will focus are (The European Council):

- military mobility;
- cyber security;
- hybrid threats;
- combating terrorism;
- gender inequality;
- security (UE Cooperation).

In recent years, the Council has conducted extensive research on civilian missions, with the aim of improving and streamlining efforts to establish and maintain security.

Romania supports effective actions in the European Union internally and externally, by promoting major objectives within European policies and documents, continuing to promote these objectives aggregated at the European level through the *EU Strategic Agenda for 2019-2024*, a document setting out priority areas for the Union's work over the next five years (Ministry of Foreign Affairs):

- *protecting citizens and freedoms;*
- *developing a strong and vibrant economic base;*
- *building a climate-neutral, green, fair and social Europe;*
- *promoting European interests and values on the global stage (Priorities of Romania).*

Romania supports the domains approach aimed at ways to strengthen the European Union's resilience to crises. It also supports strengthening cooperation on health, measures that will lead to countering the economic and social effects of the pandemic and, last but not least, supports the strengthening of a high capacity of the EU to have common and effective responses in crisis situations. Romania supports and participates in the process of strengthening the internal market, economic growth and employment, paying particular attention to issues related to social affairs, climate change and digital transition (Ibid.).

Referring to negotiations for the aggregation of the EU's multiannual financial framework (MFF) for 2021-2027 and the EU Recovery Instrument (NextGenerationEU), Romania has consistently supported ensuring a generous allocations volume, capable of supporting the efforts to recover Europe's economy and the implementation of the Union's medium and long-term development objectives. Romania's objective was to promote the major role of the *Cohesion Policy* and the Common Agricultural Policy (CAP) from the European budget perspective (Ib.).

Also, a substantial factor for Romania as a member state is to maintain relations with the nearby countries, acting to sustain the Union's attention on the regions, supporting the Eastern Partnership (Ibid.). Romania also upholds European actions on strengthening the transatlantic partnership. A good relationship with the rest of the EU member states and neighbouring countries ensures a favourable path for Romania, with increased attention to the health and well-being of Romanian citizens, with the help of proposals for a greener Europe, attention to climate change and the member states citizen's living standards.

Regarding EU decisions on crisis management, Romania has promoted the creation of transit lanes, also called "*green lanes*", for a free flow of goods and services, ensuring the protection of Romanian seasonal workers in the member states, especially in the pandemic context, which generated difficulties among workers during their activities. It has also promoted the repatriation of European citizens and is constantly upgrading the adoption of several economic measures (Ibid.).

EUROPEAN SECURITY AND SAFETY

In 2016, in the context of the Bratislava summit, the leaders of the EU took a series of measures on European safety and security. These measures include building a plan to ensure this safety and security and attempts to consolidate the new cooperation between the EU and NATO. As regards the plan mentioned, the priorities included the need to *find answers to external crises and conflicts rapidly, in order not to allow these conflicts to disrupt attempts at safeness; to solidify the partner's capacity* and, one of the most essential objectives in carrying out this plan is, *to protect the EU and its citizens* (Ibid.).

In order to ensure that these objectives are met, the Union's leaders have put in place several measures to verify and enforce these new security movements and their proper functioning:

- enhancing cooperation between EU member states in the field of defence, a Coordinated Annual Review on Defence (CARD) being set up;
- establishing the Permanent Structured Cooperation (PESCO) aimed at enhancing cooperation between member states;
- establishing the Military Planning and Conduct Capability (MPCC) in order to improve crisis management decisions;
- setting up a set of EU response tools, including battlegroups (European Council, 2021).

The purpose of the coordinated annual defence review process (CARD) is to provide a more realistic overview of what is happening in the European Union, whether it is the amounts invested in equipment or other defence resources, or national research and investment. Through this process it is expected to provide a better image and transparency in terms of the EU's ability to defend itself, making it easier to identify deficits, the source of financial problems and bring better spending planning, finally, successful cooperation between member states on safety matters will result.

Concerning PESCO, it was established in 2017 after an attempt by the EU Council to find an effective solution for cooperation between all member states. All countries in the Union participate in this process, except Denmark and Malta.

Since the beginning of this cooperation, the number of projects that have been debated has reached 60, covering various areas, among which we can also find the training and development of capabilities or operational availability in the field of defence, whether we are talking about land, air or water operations. Over time,

the projects have been or will be adopted and implemented. Among these defence fields, in addition to those aimed at more or less “*traditional*” defence, the EU has begun to implement projects related to cyber defence, given the recent years and the development of technologies.

Among the tools for the European Union’s rapid response to numerous security challenges and threats are the European Union’s tactical combat groups. Their aim is to be able to respond more quickly and effectively to crisis situations or certain conflicts that may arise and concern the members of the Union. Maintaining these tactical groups is a common cost for EU members (Ibid.).

According to the European Council, the European Defence Fund (EDF) has a budget of around 8 billion Euros in 2021-2027, divided into:

- 2.7 billion Euros to fund defence research and collaborative work;
- 5.3 billion Euros for collaborative projects in attempts to supplement national contributions.

This fund is intended to improve interoperability between national armed forces (Ibid.).

SECURITY AND DIGITALISATION IN ROMANIA

Romania upholds EU proposals on digitalisation, which will save time and energy for both citizens and employees, facilitating the organisation and information storage in the digital environment. Also, Romania benefits from the elimination of roaming charges when travelling in the European Union. In the context of the pandemic in recent years, Romania has taken several measures in the digital field to facilitate activities. A good example would be the case of DESI indicators (Digital Economy and Society Index), which helped the economic recovery caused by COVID-19, Romania being advanced in terms of VHCN coverage (Very High Capacity Network), at the same time, ranking 15th in the European Union for the degree of readiness to use 5G networks (Digitalisation).

Since 2016, through European Union funds, the Romanian Ministry of Communications and Information Society has implemented a technical assistance project, which aims to help central authorities and ministries in developing and implementing digitalisation projects for services entailed in “*life events*” of citizens and businesses, e-health, eIDAS node (Electronic IDentification, Authentication and trust Services), digital ID. This project has allowed various ministries to sign contracts to create IT systems for the digital provision of public services. The project also aims to enable citizens to access various services in digital form (Ibid.).

Having the ability to store, edit and structure all necessary information in terms of documents, payments, secure photos of passwords and codes, or to provide information of any kind through social networks or via TV channels, these new media, designed to provide security, can become the ideal attack environment. Cyber attacks are an increasingly used tactic, and security methods are extremely important to prevent information theft, propaganda, etc.

The European Union has taken numerous steps to prevent or end cyber-attacks and threats:

- increasing cyber resilience;
- fighting cybercrime;
- stimulating cyber diplomacy;
- strengthening cyber defence;
- developing research and innovation;
- protecting critical infrastructure (Cyber security).

Given the way in which current events in recent years are presented, we can say that cyber-attacks will be increasingly used, and a well-developed strategy to combat these threats is necessary for each country. The proposals for digitalisation and security in the digital environment are a priority, and the new security measures proposed by the EU can only be beneficial for a good and safe life in Romania, both physically and digitally. In 2021, EU ministers decided that a key objective was to achieve strategic autonomy while maintaining an open economy. This means strengthening the capacity to take different autonomous choices in the field of cybersecurity, with the main aim being to strengthen the EU’s leading position in the digital field (Ib.).

CONCLUSIONS

The relationship between Romania and the European Union, at a diplomatic level, is extremely favourable to the development of fruitful projects in the military and strategic areas.

As long as the EU believes that Romania is involved and brings value to European security projects and strategies, our country will benefit. Therefore, concerns for a stable military and strategic environment are priorities on any list of Romania’s security plans.

Considering the number of EU and NATO cooperation projects on the European security level and defence capacity in crises, both from a diplomatic and military point of view, as well as in terms of new threats that have as source the new

technologies developed, Romania is a country that needs this type of development, especially on the digital side, so a good collaboration with the rest of the European Union and involvement in various projects proposed for security is beneficial for both the Union and for Romania.

Romania engages in every project planned and presented by the European Union, showing interest, as EU officials say, in any initiative to build a European security plan. Therefore, the relationship between the EU and Romania, on the military, strategic and defence and security level, is a beneficial one for both parties.

The EU sees Romania as trustworthy, and our state acts according to the European security policies presented and accepted at the European level.

Romania assists and is also assisted by neighbouring states in return and has built solid relations and partnerships with different regions, the aim being to develop and maintain a high standard of living in all respects. Due to the plans to raise the elections rate and joint decisions of the Union in crises, Romania benefits from a strong, stable and secure alliance.

Precisely due to our involvement, which did not come only from the military-strategic direction, Romania also held the Presidency of the Council of the European Union, in 2019, which represented for the Romanian state a great opportunity to affirm and promote national and European values throughout Unions.

The cooperation relationship between the EU and Romania presented only positive events for the development of both parties, through ideas, projects and support in the plans regarding the security, defence and well-being of the EU member states' citizens. All being said, due to Romania's history, since 2007, when it became an EU member, until now, the level of involvement in all projects, support and resources offered, partnerships with neighbouring countries and plans to consolidate a green Europe, with a better economy and permanently developed military strategies, Romania is an important state for the European Union.

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THE IMPACT OF THE CONFLICT IN UKRAINE ON THE DEVELOPMENT OF THE HIGHER UNIVERSITY MILITARY EDUCATION PROCESS – ADAPTING MARITIME OPERATIONAL ART TO THE DYNAMICS OF MODERN MILITARY ACTIONS –

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Observing the evolution of military actions in the Ukraine conflict, one feels the need to capitalise on the lessons identified as a result of the innovative ways of applying the principles of military art, in the conditions of real war. Thus, within this approach, I set out to identify how the evolution of the conflict in Ukraine influenced military art in general. In essence, this approach is a corollary of the results obtained as a personal contribution to the development of knowledge in the field of military sciences.

Analysing the existing situation, following evaluations of the potential national response capabilities in the event of an armed conflict in the vicinity of the Black Sea, I identified didactic ways to update the doctrinal contents. The didactic approach was based on the handiest research validation tool, the war game, by testing some tactical scenarios, experienced in the Russian-Ukrainian conflict.

From a didactic point of view, the result was useful for updating the analytical programs in the master’s degree programs, however, the benefit from this research comes from the action-structural field, regarding the ways of responding in the maritime environment with existing capabilities or identifying the capability requirements, emphasising the importance of military services and branches cooperation during the joint coastal defence operation.

Keywords: doctrines; concepts; maritime operational art; analytical programs; command master’s degree;

INTRODUCTION

In this paper, I set out to identify how the evolution of the conflict in Ukraine influenced military art in general, emphasising doctrinal adaptation and educational content in particular. In essence, this approach is a corollary of the results obtained as a contribution to the development of knowledge in the field of military sciences, looking at how to apply the principles of military art in relation to the evolution of the conflict in Ukraine.

As a professor, I followed the evolution of military actions from the conflict in Ukraine, capitalising on the usefulness of the lessons identified as a result of the innovative ways of applying the armed combat laws, in real war conditions.

Starting from this framework, I found the need to adapt doctrinal concepts to the dynamics of contemporary military actions. This aspect determined the updating of the analytical programs for the training of future military leaders in the inter-arms command master’s degree for naval forces. The updating of the educational contents was, however, a long-term process, based on the experience gained during the educational processes, mainly during the applied studies, exercises, and war games carried out within the military art disciplines in the “Carol I” National Defence University.

Following the mode of action of the military forces involved, I noticed the use of classic military tactics under the conditions of modern threats, by adapting them to the evolution of the characteristics of the theatre of operations. The military response solutions were structured on the three levels of military actions – strategic, operational, and tactical. These military options represented models of analysis in this endeavour.

Using these models, analysing the existing situation and the effects, I considered it appropriate to translate into hypothetical situations ways of action of some national capabilities in relation to the identified threats. Following methodologies for evaluating the potential of national response capabilities in the event of an armed conflict in the vicinity of the Black Sea, I have identified didactic ways of updating the doctrinal contents. The didactic approach was based on research methods adapted

to the field of military sciences, using the handiest research validation tool – the war game (Scipanov, Totir, 2022), by testing some tactical scenarios, experienced in the Russian-Ukrainian conflict.

The research results gained scientific value through the originality of the conclusions, structured according to the field of application. From a didactic point of view, the result was useful for updating analytical programs in the master's degree programs. During the educational process, I constantly intervened to refine the educational contents, the effect being the efficiency of the educational process in relation to the evolution of military art. From the point of view of military art, the result is useful for updating doctrinal concepts and validating some theories by adapting to the dynamics of the operational environment. With this, I consider that I have contributed to the adaptation of the maritime operational art to the dynamics of modern military actions.

The novelty of the research is in the action-structural field. I have identified new tactical and operational ways of responding with strategic-level effects, adapted to the maritime environment. I capitalised on the combat potential of existing naval capabilities or identified the needs of capabilities through which the naval component contributes to military actions, emphasising the importance of the cooperation of the military services during the joint coastal defence operation.

Capitalising on the results from applying maritime operational art in the educational process, I contributed to the development of knowledge in the field and the adaptation of military art to the evolution of military science in relation to the events in the proximity of the Euro-Atlantic border, this knowledge being translated into the skills of graduate students.

UPDATING THE EDUCATIONAL PROCESS TO THE EVOLUTION OF MILITARY ART

In this approach, I will start from the premise that the educational process in the “Carol I” National Defence University permanently ensures a complete and complex training of military specialists, by consolidating knowledge in the field of national security, capitalising on the existing potential within the types of forces from the military services.

In light of the events in Ukraine, there is a need to update the educational content, capitalising on the lessons learned and the military experience of our neighbours. The maritime domain has been at the attention of the Naval Forces Department of the Command and Staff Faculty of the “Carol I” National Defence

University since the beginning of the regional divergences, the Crimea annexation in 2014, and continued with the evolution of events in the vicinity of the Black Sea (Totir, Scipanov, 2022).

Based on scientific and legislative foundations, the teaching staff's approach was aimed at permanently updating the university curriculum, especially for the master's degree program, where the future leaders of the Naval Forces are trained. Moreover, following the observation of the evolution of the ongoing conflict, but also of the way the main actors involved reacted, a series of conclusions could be drawn which were illustrated in the results of research in the maritime security field.

From a didactic point of view, based on the profile of the graduate established by the main beneficiary (Defence Staff), new learning outcomes were established, in relation to the skills (ESDC, 2021) that we aim to obtain through the range of disciplines managed within the master's degree program.

Following the methodology required for using the principles and norms of military command at tactical inter-arms, operational/joint level and strategic level, in times of peace, crisis and war, we became aware of the need to reorganise the educational contents of the existing command master's degree program, by shifting to a new paradigm of the profile of the command master's graduate. Thus, according to the concept of modernisation of military education, we challenged the teachers to outline a new educational content, based on principles that are tailored to the new challenges of regional security, meeting the request of the main beneficiary, the Defence Staff, to train fighters in modern war conditions.

Starting from combat functions, specific to different operating environments, in relation to the types of threats, the purpose of the action, the specific tasks of each structure involved, on the national command and control/C2 relationship, the future master's graduate should be able to identify the means necessary to fulfil the assigned mission, by evaluating and comparing the planned effects with the obtained ones. Moreover, knowing the particularities of the types of forces assigned to an operation, the graduate should be able to apply national and allied procedures in operations in which the components and structure of the assembled forces are involved. Applying the principles of operational art in current and future operations, up to the management of strategic crisis response options, is a task of our students, as well as a concern of the teaching staff, as objectives of the teaching-learning process.

The competencies we aim to develop belong to the tactical, operational, and strategic levels, with an emphasis on the first two at an above-average level of performance and the introduction of the basic elements for the third one, the strategic level. Thus, the development of the following skills is aimed at:

- understanding the specific procedures of the operational field;
- applying the planning processes specific to some headquarters;
- integrating the planning procedures at tactical and operational levels;
- applying the specific procedures for the decision-making process;
- applying the fundamentals of military art in maritime operations;
- creatively applying lessons learned in the maritime operations planning process;
- developing the ability of master's degree students in applying maritime combat space management procedures;
- knowing and applying the targeting principles;
- applying the elements of maritime operational art;
- using critical thinking;
- applying leadership principles.

From the point of view of the educational content, using scientific tools adapted to the concerns of teachers, as well as to the needs of our students and the expectations of the Romanian Naval Forces, the teachers from the Naval Forces Department of the Command and Staff Faculty within the "Carol I" National Defence University developed the existing doctrinal framework in the field of littoral combat (Scipanov, Nistor, 2020), in enclosed and semi-enclosed seas (Nistor, Scipanov, 2021), in leadership (Cioranu, 2021, pp. 1-6), multidomain operations (Chiorcea, Cucinschi, 2022), military command (Chiorcea, Cioranu, 2021, pp. 125-135) and in other areas of interest.

Even though now we are in an extensive digitisation process aimed at modernising the IT infrastructure and introducing specialised programs for carrying out the teaching-learning-evaluation process specific to the national security field, the research using classic methods in the field of military sciences (Scipanov, 2022, pp. 1-100) continues, for the benefit of education and the improvement of the doctrinal contents of the beneficiaries. Thus, today we can list a series of research results in the field, mainly those obtained inside the melting pot of the Naval Forces Department, a structure within the university specialised in the maritime field.

ADAPTING THE MARITIME OPERATIONAL ART TO THE DYNAMICS OF MODERN MILITARY ACTIONS

Starting from the triptych on which the national defence strategy is based, means-ways-ends (Scipanov, 2020, pp. 68-87), different tactical and operational scenarios were debated and analysed, based on the principles of armed combat and in accordance with the general laws of war, as they were applied in the war in Ukraine.

Thus, the principles of war in the maritime environment were approached from two perspectives:

1. The naval assets required to accomplish an established mission or contribute to the conduct of an established mission, depending on the response option or desired purpose.
2. The Romanian Naval Forces contribution to the joint operation, depending on the purpose established by the common mission.

From the objectives point of view, the military response options were analysed and translated into the military actions in the maritime environment, for which the ways of implementation were identified based on the principles of maritime operational art.

Thus, it was necessary to introduce some naval capabilities that respond to the threats of the operational environment in the scenarios simulated in the war games. That meant introducing some modern technical means in the database of war games proposed for purchase or which were already used by allied fleets.

In this respect, we can mention the use of naval platforms, frigates, and corvettes with modern capabilities, naval and coastal missile systems of short and medium range, autonomous or unmanned vehicles, surface or submarine systems, which the Romanian Naval Forces would need to increase their contribution to maintaining regional security.

As a result of the lessons identified and learned from the Ukrainian conflict, an important aspect, resulting from the analysis of the contribution of the naval forces in the actions developed at the littoral, is identifying the land forces capabilities that could supplement or even replace the naval forces capabilities in order to limit the use of the sea.

In this context, the need to develop a new concept, multi-domain operation (Cucinschi, 2021, pp. 140-151) appeared which, in the conditions of hybrid warfare, realises the asymmetry in engaging an adversary with superior technological or numerical capabilities, offering advantages in defensive conditions.

In conclusion, the educational programs were permanently adapted to these situations, some predicted and tested before the start of the war, others being identified and validated during its gradual progression.

Results were obtained in the theoretical and practical fields, as follows:

In the theoretical field:

- doctrinal adaptation and development of maritime operational art-specific concepts;
- validation of some naval tactics under the conditions of the use of modern vectors that employ artificial intelligence, through war games and assisted simulation;
- development of maritime awareness and organisational leadership;
- actual identification of the Romanian Naval Forces' contribution to the littoral operation.

In the actional field:

- optimisation and adaptation of response procedures to multiple threats in the maritime theatre of operations;
- identification of employment rules in concrete situations;
- development of decision-making skills in specific situations;
- validation of scenarios based on real threats to maritime security;
- acquisition and application of operational planning principles.

It was possible to identify the role and place of the capabilities of the current Romanian Naval Forces in the military actions carried out in enclosed and semi-enclosed seas, especially the role of having a fleet that can restore and maintain maritime communication lines immediately after the end of the conflict. This aspect was sometimes lost sight of even by the decision-makers; however, with the action in Ukraine, the potential of the Romanian Naval Forces to ensure the safety of navigation was reaffirmed and requires a separate debate.

THE APPLICATION OF MARITIME OPERATIONAL ART RESULTS IN THE EDUCATIONAL PROCESS.

DOCTRINAL AND ACTIONAL-STRUCTURAL SOLUTIONS

Emerging from my personal experience and the results obtained following the application of the principles of maritime operational art, I further want to present some results of the analysis regarding the mode of action of a fleet in enclosed or semi-enclosed seas. Some didactic objectives were refined from the conceptual/doctrinal point of view, given the evolution of the war in Ukraine,

through which we recommended the achievement of new learning outcomes, in relation to the needs of the beneficiary in the maritime field, namely the Romanian Naval Forces. Thus, together with the group of professors' staff, and students from the inter-arms master's degree program, we applied the principles of operational art in simulated military actions in relation to the real threats in the Black Sea, which is characterised as a semi-closed sea (Nistor, Scipanov, 2021).

The conclusions drawn from the results of the war games and based on some action decisions observed as a result of the war in Ukraine allowed the validation of specific concepts for amphibious, riverine, joint, multi-domain, and hybrid actions, which were in the attention of the Naval Forces Department of the "Carol I" National Defence University.

From an actional point of view, the results obtained led us to the identification of necessary capabilities that respond to threats from different spectrums in the maritime environment or that contribute to countering these threats.

The necessary capabilities, intended for response options for different types of threats, resulted from the application of some principles of use in combat of the different types of forces, but also of a *modus operandi* identified in the war in Ukraine.

The identified capabilities are:

- coastal missiles;
- mine dams.

The actions identified are from the perspective of the joint actions, as follows:

- the combined action of naval and land forces on the coast;
- the use of tactical and operational drones;
- surveillance/recognition actions;
- real-time mutual information.

The actional-type conclusions were obtained as a result of applying maritime operational art, consisting of validating or adapting existing tactics to the capabilities of the Romanian Naval Forces or those in the process of being procured. The factors that influenced the action decision were:

- the action environment (surface, air, or submarine);
- the limiting use of sea with coastal support actions;
- naval platforms;
- the vectors/armament used;
- the surprise;
- the joint action;

- targeting;
- combined strikes from the sea and the littoral;
- efficiency/effectiveness assessment reports;
- estimated effects/observed effects.

Among the most effective contributions of the Romanian Naval Forces to the joint action, there are the measures to limit the use of the sea (Sea Denial), such as:

- achieving the recognised maritime operational pictures (RMP);
- providing real-time information;
- deterring by naval presence;
- managing maritime operational actions and enemy losses;
- laying mines; this action provides a number of estimated effects such as:
 - delaying;
 - channelling;
 - destroying/neutralising/eliminating from battle;
 - choosing other courses of action;
 - deploying additional mine-keeping forces and force protection.
- management of maritime operational actions and enemy losses.

At the end of this approach, structuring the results obtained following those presented in relation to the levels of military art (strategic, operational, tactical), some aspects relevant to the coastal action in the conditions of a semi-closed sea can be presented. In other words, the result of the analysis within this approach is also based on the lessons learned following the military actions carried out in the western proximity of the Black Sea. If we also emphasise the fact that these actions influenced the response of the Romanian Naval Forces to threats in the maritime environment, we find that the approach is gaining its fundamentals, according to the considerations revealed below:

❖ *strategic point of view:*

The role of submarines, maritime aviation, and obtaining real-time information can be emphasised. By applying the warfare principles specific to the submarine's uses in specific environments, surveillance, friendly forces information, and secrecy of action are the greatest advantages offered by this capability.

Aviation can provide a degree of airspace control that allows naval forces to provide a minimal degree of maritime space control, thus forcing the enemy to change its response options. In addition, at this level, the action of aviation in the maritime space provides tactical-operational advantages for the naval and land forces in coastal defence.

The information advantage allows the representation of the reality of the non-maritime operations area by creating the Recognised Maritime Picture/RMP and positive identification of naval targets.

❖ *operational point of view:*

The existence of submarines in the area of operations forces the enemy to pay more attention to this type of submarine threat and to deploy additional forces to search for, discover, and neutralise the threat. The means deployed are specialised ships (frigates and corvettes), anti-submarine aviation, submarines, and anti-submarine surveillance systems.

These results increase the role of land-based air forces, which can engage the adversary's operational naval groups during formation, crossing, and approaching the littoral. Moreover, maritime aviation represents the greatest threat not only to naval groups at sea or in ports, but also to port objectives and maritime communications.

The role of the land forces is amplified, as they can take up a series of essential tasks of the naval forces, under the conditions of duplicating some operational capabilities on the coast.

However, in the maritime field, the most important aspect at the operational level is the mines-laying action, which is the most accessible action of a force assembled to defend the coast and to limit the use of the sea by a numerically superior enemy. All types of naval, air and land forces with littoral combat capabilities must contribute to this complex operation, which requires a joint coordinated approach/execution.

❖ *tactical point of view:*

The role of non-homogeneous naval groups, designed to carry out complex missions with a wider range of specific tasks, is increasing.

Tactical advantages are provided to land forces in littoral defence through real-time information, providing time to reorganise the littoral defence disposition.

Delaying, channelling, and diminishing opposing forces by capitalising on the effects of sea-use limitation measures means transferring a weakened enemy to our littoral defending land forces. In these conditions, unfavourable areas for landing can be chosen, where the channelled enemy encounters problems during the coastal force projection.

CONCLUSIONS

Considering what has been presented, it can be concluded that the events in Ukraine and the military actions carried out in the conflict zone, especially those in the maritime environment and on the coast, have influenced the approach to some didactic aspects. Thus, the approach emphasises how these military actions have influenced the educational contents, the files of some subjects, and, implicitly, the analytical curriculum of the *Inter-Arms Master's Degree Program*.

It can be considered that the approach of the teaching staff from the Department of Naval Forces was useful in the direction of updating the subject matter in the field of military art, in general, and maritime operative art, in particular, a specific field for the inter-arms master's degree program for naval forces. As a result, during the teaching-learning process, there was a permanent intervention to refine and optimise the educational content, the main result being the adaptation of the educational process in relation to the evolution of military art.

From the military art perspective, the result was useful for updating some doctrinal concepts and validating certain theories, which, through the clever application of some principles of military actions, reaffirmed critical thinking as a decision-making tool for future military planners. I believe that, by carefully observing the way of action of the actors involved in the conflict in Ukraine, we were able to adapt some classic naval tactics to the dynamics of the operational environment, reaffirming the role of operational art in the higher military educational process. Through this, I consider that I have contributed to the adaptation of maritime operational art to the dynamics of modern military actions characterised by principles of joint action.

From the operational perspective, applying the principles from the range of maritime operational art allowed the identification of the most effective contributions of the Navy to the joint operation, under the conditions of its deployment on the coast. Moreover, the experience in the field allowed the identification of these contributions in relation to the characteristics of the Black Sea, as a semi-enclosed sea. The result obtained reaffirmed the dual role of research in the field, using tools from the field of military sciences, considering the fact that the contributions of naval capabilities to the joint operation, as well as the need for capabilities that make the military response in the maritime field more efficient were exactly identified.

At the end of this endeavour, I can conclude by pointing out the determining role of research for the benefit of higher military education, which, through the continuous observation of the events in Ukraine, has led to doctrinal, educational, and actional adaptation.

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WAR PSYCHOLOGY AND THE MILITARY MORAL DILEMMAS

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The article presents one of the most significant psychological aspects experienced by the military during their operations – ethics and morality.

Thus, it dives deeper into the idea of “war psychology”, to then analyse the biggest ethical and moral dilemmas of the military during battle.

Far from exhausting the subject, the article wants to draw attention to the fact that, in the end, the military is still human, and in the absence of adequate preparation for combat and adequate post-action psychological support at the end of the conflict, moral wounds can appear, which, most of the time, are as painful and devastating as the physical ones.

Keywords: war psychology; military; dilemma; morale; wound; conflict;

THE SIGNIFICANCE OF ETHICS AND MORALE IN WAR PSYCHOLOGY

Certainly, discussing the military ethical and moral dilemmas in wartime must begin by defining these notions. Thus, by *ethics*, we mean the set of norms in relation to which a human group regulates its behaviour to distinguish what is legitimate and acceptable in achieving goals (DEX, 2022). *Morality* is defined as being the set of beliefs, attitudes, habits, reflected and fixed in principles, norms, rules, determined historically and socially, which regulate the behaviour and relationships of individuals with each other, as well as between them and the collective and whose respect is based on conscience and public opinion (Ib.).

War psychology is a branch of military psychology, which studies the person, before the outbreak of war, during its development and after its completion (Dobre, 2020). The three phases are stated because people begin to think and behave differently before the outbreak of an armed conflict and will continue to adopt a particular way of being both during the war and for some time after it ends.

Both ethics and morality are specific to human society, from ancient times to the present, but they have undergone significant changes from one historical period to another and from one civilization to another, depending on certain contextual factors, such as: the power and leadership style of a certain leader, religion, political system, people’s access to resources, local customs, cultural aspects, the type of interpersonal relations between the inhabitants of a certain geographical space, the system of social organization, the dangers to which people from a certain period or region were subjected etc.

Thus, for example, what is totally immoral in one religion may be tolerated in another – for example, the consumption of alcohol is intolerable in the Islamic religion, while in the Christian religion it is accepted. Or, polygamy is accepted in the Muslim religion, while in the Christian religion it is intolerable. These differences between the ethics and morals of large human communities are just as well encountered today.

The phylogenetic approach to ethics and morality in military confrontations respects the same benchmarks as that of the entire human society. Thus, if, in the past, the conquest of a city, followed by its looting, devastation and destruction and the transformation of prisoners into slaves was absolutely normal, nowadays, through the adoption of international conventions and protocols, ratified by most

of the world's states (The Hague, 1907; Geneva, 1949 and others), things have changed significantly, not only from a legal point of view, but also from a moral and ethical point of view, with significant psychological consequences.

Contemporary military conflicts, including wars, respect, at least declaratively, a series of rules of international humanitarian law, which reflect the ethical and moral principles of human society of this historical time. Failure to comply with them attracts serious accusations of “*crimes against humanity*” or “*war crimes*” from the international community and a strong psycho-emotional reaction from society in general.

THE ETHICAL AND MORAL WOUNDS

It has been talked, in countless studies, about the *injuries and physical trauma* to which soldiers are subjected, fighting in different theatres of military operations. Thus, we refer to damage to organs, muscles or bones (following the shooting), loss of parts of the body (following contact with mines or explosions), paralysis (following wounds that cut the nerves), loss of senses – sight, hearing, kinaesthetic etc. (following contact with fire, very loud noises or toxic chemicals), damage to the skin and appearance (following exposure to burns), severe intoxication (generated by contact with chemical or radioactive substances), systemic diseases (due to contact with pathogenic germs) and even death.

Obviously, several scientific studies have also dealt with psychological injuries and trauma (Brock, Lettini, 2012). They bring together both psychiatric and, above all, psychological suffering, generated by the military's contact with extreme life situations, such as: being injured, being captured by the enemy, being taken prisoner, losing relatives, friends and comrades during armed confrontation, contact with extreme human suffering, generated by war (refugees, war destruction, lack of food and water etc.), war crime (robbery, ferocious revenge, betrayal, desertion etc.) and much more. Most of the time, these traumas are brought together under the syndrome of “*post-traumatic combat stress*”. If we do not intervene quickly and professionally, from a psychological point of view, many of the problems that arise can degenerate into mental illnesses, with serious and long-term consequences, not only on the (ex)military, but also on his family and even on society, in general (Jamieson et al., 2020). Some of these traumas are associated with painful and complex somatizations, which further complicates the diagnosis and the decision on the next treatment. The “*moral and ethical wounds*” of the military also contribute to this second category of psychological conditions. Although there is no established definition of this category of psychological injuries, we appreciate

that “*moral and ethical injuries*” are psychological conditions generated by marked and totally incompatible differences between the value system of the military and the dramatic reality of the battlefield. They are generated by the moral and ethical dilemmas (situations with two exits, both unfavourable), to which the military is subjected suddenly and very intensely, on the battlefield (Grace, 2016).

These ethical and moral dilemmas generate negative feelings of great intensity, which are very strongly imprinted in the subject's psychic system, disturbing it strongly, in some cases, even irreparably. The military, most often than not directly involved, from an operational point of view, in such situations, fails to adapt to the reality of the battlefield, because his personal values (most of them strongly imprinted in his being, from the time of peace) prevail and create an apocalyptic state of psychological discomfort that prevents him from developing any mechanism to reduce cognitive dissonance.

In what follows, we will address some of the most common ethical and moral dilemmas the military faces on the modern battlefield. For ease of expression, in what follows, although we will write “*moral dilemma*”, we will refer to the whole concept, as it was previously described.

ETHICAL AND MORAL DILEMMAS OF THE MILITARY IN THE THEATRE OF OPERATIONS

Although human society has evolved and many of the old customs of war are no longer found in the training of the military and in their behaviour on the battlefield, reality has shown that life and death situations in the theatre of military action, which can decide victory or defeat, produce tragic contexts, in which ethics and morality, be it legally justified or simply psychologically, are destroyed or at least significantly affected.

Next, we will analyse, from a predominantly psychological perspective, the most significant moral dilemmas of the military today, including those faced by the military in Ukraine, which, by the way, have also been used as case studies for this article.

The Dilemma of Killing Another Human

The dilemma places, on the one hand, the idea of not killing another person and, on the other hand, the idea of killing a man, even if he is declared an “*enemy*”. The dilemma is an extreme one indeed. If you do not kill the enemy, he can kill you or your comrades, you do not carry out a direct order, and you are subject to the opprobrium of your own citizens. If you kill him, you think that it is against nature, that maybe he also has a wife, a child, a desperate mother, waiting for him at home, and maybe, at the time of reference, he really did you no harm (Grossman, 2009).

Military confrontation presupposes, par excellence, the neutralization of enemy forces. If, in the past, this “*neutralization*” involved real massacres, nowadays, recent military confrontations have shown that an increasing emphasis has been placed on the “*surgical*” elimination of legitimate military targets. Moreover, the contact between the belligerents was significantly reduced, using modern kinetic strike systems – precision weapons, missiles, and drones. Obviously, only very modern armies have access to these means of combat. This fact is designed to minimize the “*moral dilemma*” to which the military is exposed.

By excellence, every person, during peacetime, is educated “*not to kill*”. Killing a human being, even by mistake (for example in a car accident) is most severely condemned, both by society and by law. The Church reinforces this value in the conscience of each person. In wartime, this “*supreme sin*” is transformed into a “*virtue*” if it refers to the enemy. Most people cannot suddenly reset their value system even in such dramatic situations. Many of the accounts of soldiers involved in military action (from the First World War to the present have confessed, post-factum, that they did not directly target the enemy, so as not to live with the feeling of guilt).

The psychological mechanisms to reduce the cognitive dissonance of the military, in such situations, involve strategies of dehumanizing the enemy, of highlighting the atrocities that the adversary has committed, of showing the fact that the military action is perfectly legitimate, of emphasizing the idea to save the people from a ferocious dictator, to liberate a territory that historically belongs to a certain party, to remove the oppression of the enemy on a certain population/ethnicity, to recover the goods and resources that rightfully belong to the country etc.

The analysis of the confrontations in the war in Ukraine allowed us to find that the weapons and tactics used by the aggressor aimed at the indiscriminate and total destruction of entire cities, and the killing of combatants and the civilian population located there. This created the conditions for deep moral wounds.

The Dilemma of Believing in the Fight’s Legitimacy

The dilemma places, on the one hand, the idea of serving your country, as a soldier, and, on the other hand, the idea of not causing suffering to other people. The dilemma is an extreme one this time as well. If you do not carry out the orders of the military commanders, you risk being tried by Court Martial, and if you carry them out, you risk violating your own values and moral principles, because you do not believe in the justice of the cause you are fighting for, or maybe because you have friends, relatives, and dear acquaintances in that country.

Relations between states involve, in certain circumstances, armed confrontation. It is an extreme form of foreign policy and even diplomacy. The purpose for which a military confrontation is triggered is extremely diverse: struggle for power, regional geo-political imbalances, support of a dissident faction in a state, competition for resources, personal goals of high-level leaders, redistribution of spheres of influence, imposing the interests of one state on another state, removal of a dictator, elimination of an explicit threat, assertion of a firm political will etc.

To reduce the moral dilemma, in such cases, recent military interventions needed, for the most part, an international legitimization (the UN, in most cases) to justify them. Thus, the military fought under the mandate and flag of the UN or other international/regional organizations, for a noble purpose.

The analysis of the confrontations in the war in Ukraine allowed us to ascertain the fact that each of the involved parties tried to “*legitimize*” the military action in the consciousness of own citizens as best as possible. Even under these conditions, interviews with the aggressor’s prisoners of war showed that many of them were not motivated enough to fight and did not even understand what was happening to them.

The Dilemma of Fulfilling Illegal Orders

The dilemma places, on the one hand, a series of moral and legal rules and principles for fighting (in accordance with international protocols and conventions) and, on the other hand, the idea of winning the fight by any means, be they illegal (atrocities of all kinds – war crimes, mutilations, killing of prisoners, rapes, starvation etc.). Sometimes, it is not even about winning the fight, but only about criminal and inhumane revenges or acts of gratuitous sadism, for one’s own pleasure (Kubany, 1994).

The dilemma is an extremely serious one. If you respect the rules and principles of armed combat, you risk losing the battle and even the war...honourably. If you resort to means of combat prohibited by international conventions, there is a possibility of winning some battles, but you are violating the values you believe in. To this aspect, it can be added the conformity to the group and the power of persuasion of an autocratic leader, who does not offer alternatives to get out of the situation.

The psychological mechanisms to reduce the cognitive dissonance of the military, in such contexts, involve arguments like: “*if you are not with us, it means you are with the enemy*”, “*you have to choose, between our team and theirs...*”, “*in war, anything is allowed*”, “*the end justifies the means*”, “*only cowards sneeze...*” etc.

Officially, the state cannot accept such acts of cruelty, committed by its own soldiers, but simply tolerating them represents a gesture with many meanings.

The analysis of the conflict in Ukraine allowed us to observe (on media channels) some hard-to-imagine atrocities against some of the captured soldiers (beatings, mutilations, killing in macabre ceremonies etc.). We wonder how many of those involved, perhaps as mere witnesses, faced the moral dilemma and how much they suffered because of it.

The Dilemma of Self-sacrifice during Battle

The dilemma places, on the one hand, the ultimate military honour (that of giving your life for the country, through a heroic gesture) and, on the other hand, the idea of escaping alive, at any cost.

The dilemma is an intense one. If you withdraw from the battle for fear of being killed (desertion, retreat without orders, surrender, abandoning the battle, abandoning weapons, betrayal etc.), it is very possible that that battle will be lost, and your unit comrades will be killed or captured by the enemy. The consequences of such an act are difficult to estimate in a real situation.

Although there are moral imperatives to justify saving one's life during combat – explained by reasons such as: the idea that any armed conflict is temporary, the love for one's family, the fact that you do not believe in the justice of the cause you are fighting for, fear, the instinct of self-preservation, the idea of a bright future after the war, the idea of supporting the military effort in other struggles as well etc., they pale before the orders given by the military commanders. After all, every military man knows that he can be killed in battle. Withdrawal is only possible by order, under certain, well-defined, circumstances.

Thus, the state discourages personal actions to save one's own life, to the detriment of the mission, and brings, through the military organizational culture, elements to reduce cognitive dissonance, such as: *"we will recover any military from the hands of the enemy"*, *"one for all and all for one"*, *"no one will be left behind"*, *"we take care of you more than you can take care of yourself"*, *"we are a team"*, *"traitors, defectors and cowards will pay for their deeds"*, *"we do not forget our heroes"*, *"heroes never die"* etc.

At the same time, it must be stated that the enemy will try, through well-targeted psychological aggression actions, to encourage as many soldiers from the opposing camp to leave the fight as possible.

Analysis of the conflict in Ukraine showed that many soldiers deserted, surrendered, and even betrayed, just to escape alive. Certainly, they will live many years with this moral wound.

The Dilemma of Protecting Civilians in War

The dilemma places, on the one hand, the idea of protecting civilian life in wartime and, on the other hand, the neutralization of civilians, especially when they can compromise a combat action or the lives of you and your comrades. The dilemma contains many aspects of a moral nature. Civilians (be they children, mature people, or old people) can be relatives, friends, or compatriots of the enemy, who can support his actions in one way or another (moral, through war production, economic, agricultural, scientific, social, political etc.), or simply refugees who do not want to get involved in the conflict in any way. Sometimes they may belong to neutral or even friendly countries in the military conflict zone.

In this complex context, the military should choose between protecting civilians, according to morals and international legislation in the field, and neutralizing them, according to the momentary interest of the mission they are carrying out. For example, what will a military man do on a secret mission in enemy territory, who has been exposed by a child from the opposing camp? What will a military man do when he sees a child with a gun pointed at him? Will he kill the child and save the mission or will he let him live and compromise his life, his comrades' life, and the mission as a whole? Recent conflicts have raised many such psycho-moral situations before the military. Sometimes, the circumstances were even more dramatic, because the enemy deliberately involved in the fight children, women, old people. Certainly, the decisions taken at that time produced significant moral injuries, against the background of the resolution of the dilemma situation.

The psychological mechanisms to reduce the cognitive dissonance of the military, in such situations, involve arguments like: *"the mission before everything"*, *"our lives are more important than theirs"*, *"we cannot compromise the mission"*, *"we appeal to self-defence clause"* etc.

The analysis of the conflict in Ukraine showed that such moral dilemmas were encountered here as well, which produced deep psychological wounds. Living the rest of your life with the burden of killing a child is not easy!

The Dilemma of Destroying Public Goods

The dilemma places, on the one hand, the idea of protecting cities from the destructive actions of war (especially historical monuments) and, on the other hand, the idea of destroying them, in the name of their *"liberation"*. Obviously, the destruction does not refer only to some armaments factory or some list of strategic targets, but considers, par excellence, the bombing of residential districts, schools, shops, theatres, critical infrastructure (water reserves, power plants, food warehouses, food factories etc.), so that the enemy leaves that territory

as quickly as possible, and it is easier to conquer. Demoralizing the population is also on the list.

The Second World War made full use of the destruction of civilian facilities as a combat tactic. Added to this was the moral discouragement of the civilian population, which was supporting the enemy's war effort through the indiscriminate bombing of localities. Thus, through massive bombing, scores of cities were completely razed, and millions of civilian casualties were unjustifiably thrown into extreme death and suffering. Although the international conventions that followed the second world conflagration prohibited such a fighting tactic, it continues to be found in recent conflicts to this day.

The emotional statements of the downed pilots, who saw the effects of their bombings on the ground, are a living testimony of the moral trauma they experienced.

The psychological mechanisms to reduce the cognitive dissonance of the military, in such situations, involve arguments like: *"the enemy is hiding among the civilians"*, *"there was an ammunition depot"*, *"terrorists are hiding in that neighbourhood"*, *"that power plant feed a weapons factory"*, *"make all those who support the enemy pay"* etc.

The analysis of the conflict in Ukraine demonstrated that, despite some international acts, which prohibit the destruction of cities, this battle tactic continues to be used by the invaders, on a large scale. We wonder, in this context, if it really causes moral injuries to those who put it into practice.

The Dilemma of Applying Inhumane Treatments to Prisoners

The dilemma places, on the one hand, the idea of respecting the legitimate rights of prisoners of war and, on the other hand, their physical and psychological torture, to extract from them secrets that can lead to the rescue of one's own troops or to the neutralization of the enemy, as a justified step in obtaining victory.

The situation of mistreatment of prisoners was present not only in the conflicts before 1945, but also in those that followed this year (Barela et.al., 2020).

The psychological mechanisms to reduce the cognitive dissonance of the military, in such situations, involve arguments like: *"everything for victory"*, *"their statements save ours"*, *"they must speak"*, *"we are the masters of our prisoners"*, *"because we give them a chance to live, they must speak"*, *"they must pay for what they did"*, *"everything is allowed in the interrogation, as long as information comes out"*, *"I am only doing my duty to the country"* etc.

The analysis of the war in Ukraine showed that such prohibited practices continue to occur. They cause serious moral injury with long-term effects to both

prisoners and those holding them in custody. Sometimes, some combatants cannot even hope for POW status, being summarily tried, charged with war crimes, and executed.

The Dilemma of Collateral Victims

The dilemma places, on the one hand, the idea of accomplishing the military mission without collateral casualties and, on the other hand, that of accomplishing the military mission with an agreed margin of collateral casualties.

Combat situations are extremely delicate, and sometimes it is almost impossible to accomplish the military mission without causing collateral casualties (usually innocent civilians who happen to be at the scene of the attack). The big moral question is *"What is the permissible limit of collateral casualties?"* Obviously, no military regulation will allow itself to stipulate such a limit, no matter how small. The official tolerance is zero, at least in theory.

To reduce the cognitive dissonance and moral injuries to which the military is subjected, there are explanations like: *"a regrettable error"*, *"combatants used human shields from civilians"*, *"combatants organized a command point right in an area residential"* etc.

The accidental or even deliberate killing of civilians clearly produces moral injuries, as the resolution of such a dilemma is extremely difficult (MacNair, 2005).

The analysis of the war in Ukraine highlighted that this dilemma was also present, and its effects certainly produced serious moral wounds.

The Dilemma of the Military Doctor during War

The dilemma places, on the one hand, the duty of a doctor, according to the Hippocratic oath (to save any human life) and, on the other hand, the idea of saving the life of an enemy/terrorist, wounded in battle.

This recently analysed (Levy, 2008) dilemma, has highlighted some professional, moral, and emotional contradictions that military doctors experience, when the problem of saving the life of an enemy arises, especially when medical resources are scarce and medical priorities are extremely large.

Sometimes, because an enemy was chosen for emergency surgery, instead of one's own soldier, it can lead to real moral wounds, especially if the soldier from one's own army dies (Rochon, 2015).

To reduce cognitive dissonance and moral injury, arguments like the following are used: *"The Hippocratic Oath is more important than anything"*, *"that is what God wanted"*, *"I just executed the order"*, *"I treat what I receive, in turn"*, *"I am not God"* etc. We have no data on the operation of this dilemma in the war in Ukraine.

The Dilemma of Battles with Civilians

The dilemma places, on the one hand, the idea that fighting should be fought only between legitimate combatants and, on the other hand, the idea that anyone can become an enemy if they take an action hostile to force.

The recent situations of military confrontations, including those in some Peace Keeping and Peace Enforcement missions, for the evacuation of dignitaries (diplomats, high-level leaders etc.) from conflict zones, have shown that the military has repeatedly been under the siege, the direct attack of some rebel groups or even of the civilian population, revolted for a certain reason. In such cases, perhaps the easiest way for the military to respond would have been to open fire on civilians, but such an approach would obviously have defied both the rules of military engagement and morals, as it would have produced many victims among the demonstrators. On the other hand, waiting for aid and the failure of negotiations can strengthen the positions of the rebels, who will not hesitate to attack when they consider that they have the tactical advantage (Levy, 2008). So, what has a military man to do in such a dilemma?

To reduce cognitive dissonance and prevent moral injuries, there are used phrases like: *“we are not criminals, we are soldiers”, “help will come”, “we will only use as much force as necessary”, “we are only defending ourselves”, “we did not cause the attack”, “they attacked, they will bear the consequences”, “why should we die”* etc.

The analysis of the conflict in Ukraine allowed observing the harsh formulas used by the occupying forces to discourage the demonstrations of the local population.

The Dilemma of Treason

The dilemma places, on the one hand, the idea of defending your country's cause, at all costs, and, on the other hand, that of betraying your country, for personal or other advantages.

This issue was treated extensively in *“Psychology of Betrayal”* (Dobre, 2020). Thus, it could be observed that the circumstances of betrayal and the types of betrayal, with their psychological implications, are very complex and numerous.

Betrayal of the country, without a doubt, remains treason, regardless of the motivation behind it, because it implies, in the event of an armed conflict, the loss of the battle, the killing of many countrymen and not only that. However, history has shown that betrayal can also have a positive connotation, if it saves lives, if it leads to peace faster, if it prevents possible criminal plans of some crazy leader (Ib.).

Each of the combatant camps encourages the betrayal of the opponent through all kinds of formulas, each more original than the other. Thus, to reduce cognitive

dissonance and prevent moral injuries, betrayal is supported by statements such as: *“make peace faster”, “we are the liberators”, “your leaders are only using you and do not care about your suffering”, “we give money and value”, “get rid of all problems, if you tell us about these secrets”, “we will take care of your family”* etc.

The analysis of the conflict in Ukraine allowed the identification of numerous cases of treason, followed by sound arrests. Catching traitors causes strong moral wounds to those who betrayed, regardless of the motivations that justified this act.

The Dilemma of Protecting Team Members Who Have Committed War Crimes

The dilemma places, on the one hand, the solidarity with those with whom you were in (sub)unit, on the battlefield – for better or for worse, regardless of the situation and, on the other hand, the idea of morality and legality.

War, surely, is the most miserable form of manifestation of humanity, even when it is conducted honourably, according to all the rules. But often, in practice, in war, it is almost impossible to follow the rules, especially when you see your comrades die and the enemy does not shy away from using treacherous means of combat. The conflicts after 1945 highlighted numerous abuses and even war crimes (Singer, 2004). Some of them were tried after the end of the conflict, even if they involved soldiers of own armed forces.

Witnessing and participating, against one's will, as a military officer, in atrocities ordered abusively by hyper-authoritarian leaders, illegally by virtue of the right to give orders, can produce extremely serious moral injuries, as shown above. But keeping secret about such illegal acts, possibly war crimes (killing of civilians, killing of prisoners, mistreatment of captured enemy soldiers, rapes, robberies etc.) can certainly aggravate the already existing moral wounds, with dramatic consequences for the person.

Although they try to *“bandage”* these moral wounds with statements like: *“we were and we are a team”, “what was, was”, “let us forget what we lived in Hell”, “who betrays will pay”, “we are all equally guilty”, “they did not cause us to do what we did”, “no regrets”* etc., such psychological traumas will not heal by themselves. The fact that some soldiers who have been subjected to such illegal orders will testify represents, for them, the real *“treatment of the moral wound”* (Shay, 1995). They will think that: *“they have a reconciled conscience”, “the guilty must pay”, “they need to regain their emotional peace”, “they need justice to be able to regain their human dignity”* etc.

Analysis of the war in Ukraine does not allow for the formulation of conclusions in this regard at this time, because the conflict has not yet ended, but, it seems, international courts have begun to investigate the war crimes committed.

The Prisoner's Dilemma

The dilemma places, on the one hand, the possibility of a better life in captivity and, on the other hand, the betrayal of comrades, to obtain some advantages and possibly a chance at life. As can be seen, it is a variation of the betrayal dilemma, but applied in a highly restrictive environment – that of detention.

Treason in captivity involves both uncovering military secrets (battle plans, special weapons, military actions, effectiveness etc.) and betraying fellow prisoners (discovering escape plans, humiliating superiors etc.).

To reduce the moral trauma, those in control of the prisoners tend to say the same things as in the case of treason, but sometimes offer some material advantages to the prisoners as a reward for the information presented (Dobre, 2020).

On the other hand, the soldiers in captivity tend to say that: *“this status is temporary”, “the international conventions regarding the rights of prisoners must be invoked”, “there will certainly be exchanges of prisoners”, “those at home will save”, “the war will finally end, and they will return home”, “traitors will pay dearly”, “preserving military honour is essential under such conditions”* etc.

The psychological trauma of the prisoner is, by its very nature, very great. If to this is added the one caused by the confrontation with the exposed moral dilemma, the emotional wound can worsen significantly.

The analysis of the war in Ukraine has allowed, until this moment, only the visualization of sporadic public statements by some prisoners of war, who, in most cases, stated that they *“regret what they have done”* and *“that they are fine treated”*.

The Dilemma of Saving a Single Person while Risking Others' Lives

The dilemma places, on the one hand, the idea of rescuing soldiers captured by the enemy, at any cost, and, on the other hand, the risk that for the uncertain rescue of a comrade many more soldiers will be lost in battle.

As a rule, special troops, thoroughly trained for such missions, participate in such rescue operations. But even in this context, no one can guarantee either the success of the mission or the lives of those participating in the mission.

So military commanders must make the decision to save one soldier's life, risking the lives of several people. Such a decision is always very difficult to make. It is a psychological act of maximum intensity, which requires both the cognitive and the emotional system.

This decision has a strong psycho-moral significance, both for the soldier in question (possibly captured by the enemy or wounded, or a catapulted pilot hiding

in hostile territory etc.), as well as for any other soldier who fights in that armed forces because he supplies a decisive emotion in case of war – hope. Hope gives each soldier additional resources to accomplish their mission, to escape, to survive another day if need be. Moreover, it is also hope that strengthens loyalty, morale, military solidarity and trust in commanders in case of war.

Military leaders who have to make such a decision mitigate their moral dilemma with statements like: *“anyone would have done the same”, “this is how we were trained”, “any military matters”, “I would go after him too”, “the forces sent on the mission are elite”, “every soldier assumes the ultimate sacrifice”, “it is in our power!”, “it is a code of military honour”* etc.

The analysis of the conflict in Ukraine did not reveal sufficient data to allow such an analysis. It is not known if any of the involved parties organized rescue missions for their own soldiers in enemy territory.

The Leader's Dilemma during War

The dilemma places, on the one hand, the duty of a military leader to fulfil his assigned mission and, on the other hand, the high risk of losing men in battle.

Making the military decision and giving the battle order is a military act of great responsibility. Every military commander knows that no matter how well he has prepared the mission, there is a possibility that some of his soldiers sent into battle will not return alive or will be injured, even seriously. The causes of such situations can be multiple and extremely complex: stupid accidents, engagement in battle, betrayal, erroneous reactions, enemy superiority, wrong tactics, the failure of equipment and armaments, the inability of local commanders to manage the situation etc.

The military leader, although focused on mission accomplishment, cannot ignore human losses either. Every soldier who dies, is wounded, or captured, diminishes his chances of accomplishing the mission, on the one hand, and produces a veritable hurricane at home, with massive political and media impact and disastrous consequences for his career, on the other hand (Maguen, 2009). At the same time, the military leader remains with the moral burden that several soldiers died, were maimed in battle, or captured by the enemy, under his command. He will thus have to provide explanations to their families and society in general. This stress, given by the responsibility of the act of command during armed confrontation, can cause serious moral injuries to some commanders, who cannot properly manage the exposed dilemma (Dobre, 2020).

In order to reduce cognitive dissonance and prevent the aggravation of moral wounds, there are used statements such as: *“the military operation was approved*

by my superiors”, “everyone was trained for combat, so the responsibility belongs to everyone, from this moment on”, “the leader does everything possible to support the military operation”, “death is part of any military plan”, “heroes will be honoured and bereaved families helped to overcome the moment” etc.

The analysis of the conflict in Ukraine showed that some military commanders suffered significant psycho-moral injuries because of the loss of subordinates in combat. Sometimes entire units were wiped out in battle. Casualties on both sides run into the hundreds of thousands, suggesting that the landmark dilemma is having dramatic effects among military leaders.

CONCLUSIONS

Far from solving the dilemmas and psycho-moral wounds of the military, this article intended to draw the reader’s attention to some less visible aspects of the life of this category of personnel, aspects defined multidimensionally: psychological, moral, legal, military, medical and not only.

Understanding these dilemmas will allow commanders and experts, on the one hand, and other militaries, on the other hand, to allocate additional resources to the training of soldiers in the event of armed conflict.

Initially treated as components of post-traumatic combat stress, the moral wounds produced by the above-mentioned dilemmas begin to differentiate more and more and make up a new category of psychological conditions, which require a much more comprehensive, dedicated and more attentive approach.

Thus, through this article, we join those who support a much more laborious psychological preparation of the military and society, in general, for the not-so-desirable situation of an armed conflict. Knowing moral dilemmas before they produce negative effects is the first rule of engagement for the military in any type of military action. Identifying moral wounds in time and “treating” them can constitute an important second step in the act of post-conflict psychological recovery.

So, the moral and ethical dilemmas of the military will continue to manifest themselves, but their scientific study could contribute significantly to reducing the negative effects they produce for the military and for society.

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THE IMPORTANCE OF THE ECONOMIC FIELD IN MODERN POLITICAL WARFARE. CASE STUDY: NATO EASTERN FLANK MEMBER STATES

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The aim of this paper is to present the importance that the economic field has in the concept of modern political warfare. Correlating the economic field with that of geopolitics and security has become a variable that NATO member states can no longer ignore.

Using the descriptive analysis method, we aim to show the importance that economic policies have in influencing the political and strategic regional landscape, and have chosen the Eastern Flank countries to do that. We plan to test this theory by studying three major areas in economic policies that we consider have impacted the security and defence landscape in recent years.

The first area is defence expenditure, the second one is fiscal policies and the third one is energy policies. Recent security events have fundamentally changed the European Union green energy policies and objectives. Some of them have been postponed, others replaced, therefore, we seek to analyse the way in which European states on the Eastern Flank mitigate through these rising issues, in terms of both the energy field and the correlation of energy policies with the other ones.

Keywords: capabilities; resource management; energy security; defence expenditures; economic policies;

INTRODUCTION

China's and Russia's activities in the last two decades, culminating with the Ukraine invasion and the Taiwan crisis, have demonstrated that, unlike Western civilisation, these two global powers have treated the political, military and economic domains as a whole, not separately, as the European countries and the United States have. Correlating these three fields has been analysed in specialised literature and described as a new concept of the defence spectrum, that of *modern political warfare* (Robinson et al, 2018). The importance of the economic field in applying security and defence policies remains a vital one. Economic instruments available to strengthen the security level are multiple and will be explained throughout this paper in three separate chapters. We aim therefore to observe if, for a category of states, we can state that in the end correlating economic and defence policies becomes a fundamental objective for their own overall national needs and goals. We have chosen for this analysis a group of states on the Eastern Flank, which are: Romania, Poland, Lithuania, Latvia, Estonia, Bulgaria, Hungary, Slovakia.

The invasion of Ukraine by the Russian Federation is just another impactful event on the European continent in the past three years. The pandemic that started in 2020 and surged in 2021, with all its effects, the increased inflation, as a result of both pandemic measures and energy policies at the European level, triggered a difficult economic situation for all European states. The group of states representing NATO's Eastern Flank are under extra pressure with the start of the Ukraine war and the new security threats looming over them. All these economic effects started during the pandemic represent a paradigm shift in the way European states are forced to manage their resources.

The pandemic and its economic effects, as well as the war in Ukraine have brought about a shift in resources management for European countries. Over time, specialised literature has determined the difference between soft and hard power as models for influence of other states. We consider that today these models intersect, the concept of political modern warfare demonstrating the importance of economic policies used for guaranteeing increased security.

In order to test the hypothesis of the current paper, according to which Eastern Flank member countries are forced to adjust their economic policies in accordance with their military policies in order to adapt with the modern political warfare we went ahead and described some of the main characteristics of this concept as follows:

- a. Non-state actors gain a major role in problems related to national and regional security.
- b. The informational resources gains a vital importance, perceptions being more relevant than concrete information.
- c. Economic policies become an important leverage instrument, especially for developed states.
- d. Modern political warfare exploits different minorities from religious to ethnical ones.
- e. Modern political warfare replaces traditional warfare in a sense that it accomplishes the objective of the latter with lesser costs (Ibid.).

In this paper, we will address the role of the modern political warfare as described at para c). The paper plans to follow three separate economic policies in key areas therefore we will present those three economic domains in the following.

The first area of study is that of military defence capabilities, which has become vital for the Eastern Flank countries who need to rethink its military objectives and strategies in correspondence with the new risk and threats represented by Russia's aggressive stunt against western democracies.

The second chapter will focus on how Europe has to change its financial strategies dealing with an economic crisis that has several points of inflexion, multiple causes and needs to be treated different from region to region.

Finally, we aim to look at the way European energy policy will change, as Europe needs to take measures and end partnership relations with Russia, which played an important part as a energy supplier to Europe, but whose values can no longer be shared, given the multiple theatres of war or combat in which Russia plays a direct or indirect role, in countries like Belarus, Armenia, Syria or Kazakhstan.

RESHAPING MILITARY RESOURCES IN EUROPE

The first chapter aims to focus on the military resources and the different alignment of military capabilities that will follow the Russian invasion in Ukraine. As it can be seen in *figure no. 1*, the defence and deterrence capacity for countries on the Eastern Flank had already started to be increased starting with March 2022. All three Baltic States would benefit from air power capabilities, increased number of allied troops present in the country as well as increased national support. Countries like Poland and Romania would also increase the presence of allied troops, while countries like Slovakia and Poland would benefit from air defence capabilities. Allied troops would also increase their presence in countries like Bulgaria and Hungary, while a permanent capability of air patrol and surveillance would operate on the Eastern Flank 24/7.

Following the NATO Summit in Madrid, starting with June 2022, the allied presence on the Eastern Flank would increase further. Compared to March, besides Poland and Slovakia, Romania would also benefit from an air defence capability, while in the group of Baltic States, Latvia would also be host to such a capability. Overall allied troops would increase in each of the countries from the Eastern Flank as well, while the 24/7 Patrol and Surveillance Capability on the Flank would be enhanced with the presence of other with the USAF Grumman RQ-4B Global Hawk (Gaston, 2022).

As it can be seen in *figure no. 1*, the presence of all NATO member states in the allied troops enhancing Defence and Deterrence Capacity on the Eastern Flank represents a demonstration of unity and support against the risk and threats represented by the Russian Federation. In full numbers the presence of Allied Troops following the Russian Invasion of Ukraine would mean around 22,000 troops under NATO command, over 100 combat aircraft on alert and over 120 ships at sea, including 3 carrier strike groups.

While this show of strength has meant an increase of Security for countries on the Eastern Flank it has also meant an increase in other resources like the logistics one, that have had to be adapted to the new conditions of hosting fellow member troops on national territory. An example of this effort can be that of the Romanian bases in Cincu and Mihail Kogălniceanu where lodging and other infrastructure assets had to be quickly developed in order to accommodate besides the already present US troops, the French troops arriving in Cincu, as well as the France, Belgian, Italian, British or Canadian troops arriving in the MK base.

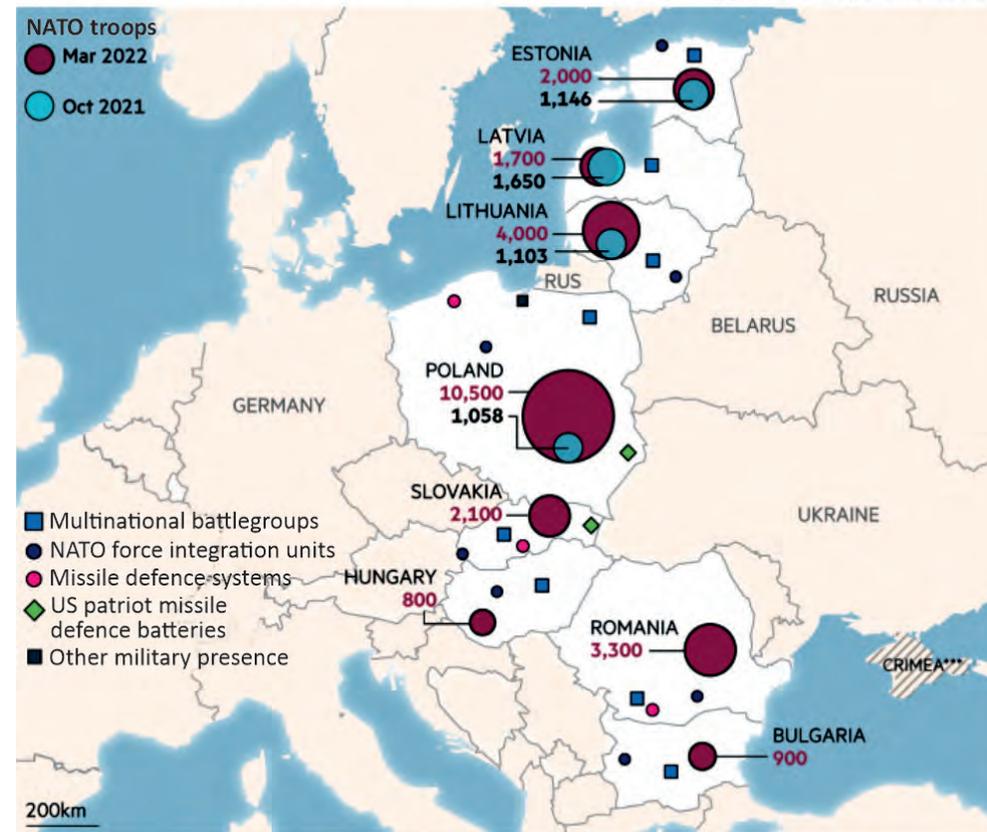
What should be taken into consideration is that the numbers presented in *figure no. 1* represent just an ongoing step in what countries like Poland and Romania hope to be a jump of an even greater military presence of allied troops on national host territories that would enhance these countries and overall, NATO's capacity to respond to any further risk and threats that might come from the East, especially from the Russian Federation.

The countries on the Eastern Flank have of course to adapt their national defence planning strategy in order to respond to the new reality that they face following February's invasion of Ukraine.

NATO scales up its eastern defences

Number of NATO troops* and key headquarters

40,000 troops under direct NATO control**
(4,000 troops Oct 2021)



* As of Mar 21 2022 ** Does not add up to country amounts because cyber, space and air/naval not included
*** Crimea is annexed by Russia but is not recognised by the international community
Source: NATO Cartography: Liz Faunce; Caitlin Gilbert

Figure no. 1: Increasing defence capabilities on the Eastern Flank following the War in Ukraine

To match up the military presence of allied troops on their territory and in order to be able to respond to the geopolitical reality of the new risks and threats on the Eastern Flank, the countries present here need to adapt their own military resources in order to better match the needed defence goals and objectives.

Trying to have an overview of the Eastern Flank of NATO, there are two areas of major interest that can represent a pivot in case of further military push from the East. For the Baltic States and Poland, that area of interest will be Baltic Sea and the Northern part of the Flank, an area where NATO has concentrated its efforts for several years. It is an area even Western European countries like Germany, Belgium, the Netherlands or France consider as a key element for European Defence and as *Figure no. 1* shows, a total number 20,000 allied troops are going to be present to defend this part of the Flank. That is to say, a number almost equal to the NATO responses present before the NATO Summit in Madrid on the entire Eastern Flank.

An area where NATO is starting to focus more its attention is that of the Black Sea Area. However in this area as we can see in *table no. 1*. Allied troops presence means just roughly 6,000 military personnel, while national troops represent 100,000 personnel, which is still less than the presence on the Northern part of the Flank that embodies 155,000 personnel.

Romania has therefore pushed in its agenda during the Madrid Summit for an increase in allied troops that would represent a security guarantee on the Black Sea. A reason for this demand is the fact that the Black Sea has become a vulnerable area as it can be seen in the war conducted by Russia in Ukraine, where the Serpent Island, a small island in the Black Sea has been the subject of many fights between the Russian and Ukrainian armies. The Montreux convention that enables Turkey to block military ships from passing the Bosphorus and entering the Black Sea creates another strategic reason for which the Black Sea and the countries residing it should have increased military capabilities in order to deter any potential attack.

NATO PRESENCE ON THE EASTERN FLANK		
	Allied Troops	National Troops
BALTIC SEA	20,000 troops	6,000 troops
BLACK SEA	155,000 troops	100,000 troops
Central EUROPE	2,000 troops	25,000 troops

Table no. 1: Allied/Host Nation Troops presence on the Eastern Flank

As mentioned earlier, the need for increased defence capacity in these countries has meant a sustained effort in managing resources, especially the financial resources. Therefore, the next chapter of this paper will try to answer how the European member states of the Eastern Flank cope financially with the need of increased security.

MANAGING FINANCIAL RESOURCES IN THE CONTEXT OF THE RUSSIAN INVASION ON UKRAINE

In terms of the economic fiscal field, the European continent faces a complicated equation when managing the allocation of its financial resources. The Covid-19 Pandemic had already caused economic turmoil, with many activities being affected, halted or postponed and with a lot of artificial economic aid given in order to keep businesses on the market an increased inflation has surfaced starting with the second part of 2021. For European countries, this economic pressure was doubled by an energy crisis, with energy prices increasing following the Gazprom reserves being reshaped in the fall and winter of 2021. These pressures triggered social backlash in many European countries and the incoming war in Ukraine only made things worse as the European Union and NATO were forced to enter in an economic war with Russia, a country that supplies oil and gas to many European countries.

While the European Union has seen economic growth even through the pandemic, the war on Ukraine brought a massive change in economic perspective. Disruptions in global security including energy flows, fuelling of different resources increased pressures in commodities prices and raised social uncertainties.

For the countries on the Eastern Flank pressures grow even more as these countries are the first in line to take a hit in all key aspects, due to their geographical proximity to Russia and Ukraine. Of course, central and western European countries are also affected as Germany, Hungary or Austria heavily rely on imported fossil fuels from Russia.

In *Figure no. 2*, we can see the difference from the economic growth in 2021, when due to the pandemic economy was artificially sustained and subsidized, the already distress from 2022, when the economy was starting to feel the effects from the inflation and the projection from 2023 when the war is assumed to contribute to even more of a negative impact that might send the European Union into a recession.

The projection for 2023 needs to be taken into consideration combined with further pressure for European governments in increasing their defence expenditures. Starting with 2014, NATO has asked European countries to increase their defence budget to 2% following the Crimean Invasion and therefore the threat that the Russian regime had become for the entire European Continent. While countries on the Eastern Flank were dedicated to this increase, many western European countries did not feel an urgent need to make this adjustment. The war on Ukraine that started in March has led all European countries to rethink their defence budgets, even though as presented earlier in this chapter, economic pressure from other areas of impact does not leave much room for rethinking defence expenditures. Nevertheless, countries on the Eastern Flank like Poland or Romania have already assumed an increase in their defence budget of 3, respectively 2.5 percent of their national GDPs, an increase from the already dedicated 2% budget.

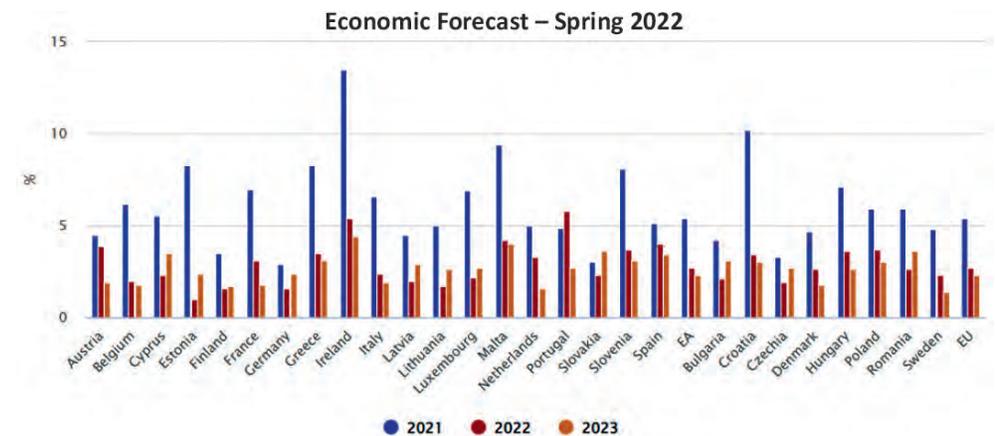


Figure no. 2: Economic Forecast following the Russian invasion on Ukraine

Latvia and Norway also have a desire to increase their defence budget, while Germany for the first time since the Second World War has approved a record defence budget of 100 billion Euros for 2022, and a projection to go above 2% of their GDP starting with 2023 (Mackenzie, 2022).

Two countries that are not yet members of NATO, but have taken a historic decision to join the alliance: Sweden and Finland have also decided to increase their defence budget to 2% of the GDP. It will be interesting to see what part Finland will play in strengthening the Eastern Flank of NATO. Interestingly, there is no announced

increase in defence budgets for countries like Hungary and Bulgaria, which are also part of the Eastern Flank.

The stock market (The Economist, 2022) has presented an overall increase in defence spending that has skyrocketed from January to March 2022, from an 100 to 140 index for European Defence and from an 100 to 120 for US Defence.

The economic impact of these policies still remains to be analyzed as even though countries on the Eastern Flank have assumed increased budgets for defence, the question that appears, under economic pressure, increased inflation and a perspective of recession will Poland's 3% and Romania's 2,5% in 2023 be more than the same percentage in 2022 or 2021 or because of the projected decrease in economic growth will these countries actually have a smaller defence budget? Should they increase even more due to Russia's political and military stance or should they try and balance their economic policies in such a manner that it serves both their security challenges and financial challenges as well?

It is our aim to study this trend even further on a larger time frame and be able to answer these questions in a future study.

During this chapter, we have mentioned the dependency that many European countries have from Russian fossil fuels. We consider that the management of energy resources that has increased pressure on EU countries is beyond this dependency and is related also to the green deal agenda.

For this reason, we aim to discuss the impact of energy policies inside the EU in the following chapter.

MANAGING ENERGY RESOURCES IN THE CONTEXT OF THE RUSSIAN INVASION ON UKRAINE

One of the biggest threats that Europe must deal with since the beginning of the war was in the energy security field that caused the acceleration of the transition to green energy alternatives with the purpose of ensuring energy security. But what exactly is energy security and why is it so important for European Union? More recent academic research has made an effort to broaden the definition of energy security to focus on the entire energy system, from the acquisition of primary energy resources to final energy consumption. It has been suggested that energy security includes more than just ensuring a reliable fuel supply; it also includes

ensuring that there is a reliable infrastructure in place to transport energy to the end user (Jones, 2017). Ensuring energy security, provides economic, social and military security since the threats that could occur from this sector are eliminated, creating a safe and stabile society oriented towards growth and prosperity.

After the war in Ukraine began on 24 February 2022 (Kirby, 2022), the situation regarding Europe's energy stability changed drastically. The measures taken by the European Commission regarding the supply provided by Russia, brought the states of the European Union to a very vulnerable point. The two big perspectives that result from looking at this situation would be either consider the need for energy an occasion to help fasten the shift to green energy supplies and fulfil the purpose of the European Green Deal (EGD), introduced by the European Commission in December 2019 and that has a significant set of policies that addresses climate change and aims to provide a "just and inclusive" transition. Even if EGD has several flaws, including a lack of a vision for a fair, post-carbon economy for Europe, insufficient resources for achieving stated goals, and few means for implementation. Considering that in order to make Europe's production systems carbon neutral, a wider range of "green" industrial policies would be necessary, policies that would simultaneously address environmental sustainability, structural reform, and the equity of economic results in Europe (Pianta, 2020). Of course, this transition will be requiring huge investments in research and technology with the advantage of not relying on other non-European states that could procure the raw material, therefore reducing vulnerability.

Also, the second perspective would be to continue relying on the fossil fuel and struggle with raising prices that converts into economic, social and military instability, letting the international context shift the priority list of the European Union, going from a powerful vision on the future on reaching neutrality on the CO2 emissions, to a co-dependent actor unable of escaping the Russian trap. Of course, the European Union would not have let that happen and had to come up with alternative solutions to the problems that occurred from the break between the European market and Russia, that was in a position of power from this point of view at least in the beginning if the war.

The effects of Russia's invasion of Ukraine are still being felt by the world's resource markets; these two nations are important producers of petroleum, food,

and fertilizer. Commodity prices have soared as a result of supply disruption, the unexpected application of economic penalties, trade restrictions, and policy interventions in reaction to the crisis. For these long-term problems to be met, governments must make investments now to create resilient economies and societies. Policymakers place a high focus on minimizing the most serious short-term harms to people, but failing to consider long-term goals, such as reducing the effects of climate change, can result in poor choices that exacerbate already precarious social and economic systems (Chatham House, 2022). This attitude regarding the truly important security aspects that affects us all, not only a region, proves a lack of credibility in what regards the gravity of the climate-change problem. Still, the European Union is making a difference in comparison with other states that are fully concentrated on the causes and effects of the war and abandon the idea of finding new ways to reduce the pollution, letting their agenda affected by the events that suddenly and radically can change the life of a nation.

By not considering the activity of the states that are not putting effort into decreasing the CO2 emissions with greenhouse effect, the European Union is mostly on its own in the fight towards climate change. The urge to strengthen the production of armament and equipment needed on the front is only one more reason to pollute near the EU border and not only for a war which raises threats also in other security sectors, not only regarding the environment. To the pressure of the war near the border of the European Union, is added the pressure of having an energy crisis that slows down any process of transition to alternative energy supplies by raising the costs and causing inflation at an international level.

In conclusion, regarding the energy security sector, the war in Ukraine has clearly had a major impact on the way the priorities in this field are shifted along with everything else that implies a crisis in this sector. In the context in which the European Union is making efforts in the sense that it has clearly traced the values and future goals in what regards the environmental measures but has no support from other states that play a major role on the climate changes, as China, India or even the United States, the priority list has shifted by underlining the importance of the other sectors of security, primarily becoming the social security sector as per the wave of Ukrainian refugees that the European Union hosts during and after

the war, but also the military sector that falls within the competence of NATO, even though the ten point of the European Green Deal are still followed by the states especially by those willing to increase the quality of the people's lives.

CONCLUSIONS

Testing the assumed hypothesis during the analysis done in this paper leads us to consider that member states on the Eastern Flank have managed to adapt to the modern political warfare with all the conceptual elements it brings to the table. Prioritizing military spending, understanding the need of correlating the defence and economic policies, postponing environmental decisions create the premises for countries that will follow the pattern of a mix of soft and hard power. Even with economic constraints due to the energy crisis and rising inflation, investing in defence remains a priority for these countries due to the risk and threats present in the region. Furthermore, these countries tend to increase their defence budget in times of economic crisis which represents a trademark for countries that have adapted to the model political warfare model. Other observations from our analysis are remarkable, beyond the pure testing of the hypothesis regarding the shift to this new conceptual model.

Neglecting the connection between the security, financial and political fields that all merge at some point has been a mistake that the western world should not make again. From dependency on fossil fuels from countries that do not share a democratic agenda, from depending on rare metals from countries that have a closed and non-democratic political regime, there are many options for lessons learned that both the EU and NATO should take into consideration. Continued presence on any geographical area where a member state of NATO or partner exists is another necessity. No member or partner state should be left alone, it should be helped to develop, strengthened and ready for deterrence over time.

Ultimately, we consider that regardless of how close they have adapted to the political modern warfare concept, membership for eastern European countries in alliances like NATO and EU are more relevant than ever and these institutions themselves should focus on the unity of the member states, create real strength in numbers, and build policies like those in the energy field for the future, while also maintaining an operational financial environment under the protection

of updated, well-adjusted security policies that are needed in the new reality that we live in. A divide has been created in recent years both externally in these alliances and internally inside the states. A shift of priorities should focus not just on a joint defence and economic effort but also on reducing division and increasing cooperation at internal and external level as a means of deterrence and sustainability against all current and modern risks.

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THE SOVIET BLACK SEA FLEET (1943) – ORGANISATION, DISPERSAL, COMMAND –

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In 1943, the Soviet fleet in the Black Sea was clearly superior to its opponents (Germans, Italians, Romanians, Bulgarians), but there were no major naval confrontations in this theatre of war. In most confrontations, starting in 1941, the Soviet naval forces suffered losses and were forced to retreat. The Romanian intelligence services had data on the organisation of the Soviet fleet, the dispersal, the commanders, the naval constructions and the ways of action. At the end of 1943, when the Red Army was on the offensive and had begun the landing in Crimea, the Romanian-German naval forces started an operation to supply the defenders, and later, in 1944, an evacuation of their own troops.

Despite the vulnerabilities, the Soviet fleet did not attack decisively, so the withdrawal by sea was relatively organised and saved more than 120,000 soldiers and civilians.

Keywords: Soviet fleet; Sea of Azov; intelligence service; Crimea; Second World War;

INTRODUCTION

The Soviet fleet in the Black Sea has always been a subject of major interest for Romania's military leadership. Firstly, because the proximity to the USSR did not mean the existence of friendly relations, and secondly, because Moscow's interests, embraced from the tsarist diplomacy, were aimed at controlling the mouths of the Danube and expanding towards the straits. This plan obviously affected the Romanian territory, for which both land and sea defence measures were taken.

In the mid-1930s, the Soviet military fleet in the Black Sea had a total displacement of 166,247 tons. These were grouped into 4 battleships, 7 cruisers, 38 destroyers, 22 submarines and 72 other ships (gunboats, minesweepers, training vessels, etc.) (Săvulescu, 1935, p. 64). At the same time, the vessel "Krasnâi-Kavkaz" – built in 1916 and launched under the name of "Admiral Lazarov" – was in full process of modernising its heavy armament: "the old 130 m/m pieces will be replaced by 4 or 5 gun mounts, with guns of 150 or 230 m/m axial" (Ibid., p. 65) alongside the ship "Voroshilov", which benefited from the "same upgrades" (Ibid.).

In the summer of 1940, Romania became one of the victims of the non-aggression treaty signed on 23 August 1939 between Germany and the USSR (known as the Ribbentrop-Molotov Pact), which stipulated the division of Europe from the North Sea to the Black Sea¹. After the territorial annexations, some of which were in favour of the USSR, the Special Intelligence Service (SIS) drew up a report on the number and types of Soviet ships, both those in the Black Sea and those on the Danube. According to the information acquired, the Soviet naval fleet had one battleship, one aircraft carrier, 4 cruisers (one heavy and 3 light), 3 flotilla leader ships, 7 destroyers, 40 submarines, 6 minesweepers and 30 fast torpedo boats (ANIC, file 45/1970, p. 37). The Danube flotilla of the USSR consisted of 6 monitors, a minesweeper, 10 fast ships, 8 fast sloops, 4 paddle tugs, a barracks workshop ship, two storage ships and 8 barges, one of which was an oil tanker (Ibid., p. 38). Further, the SIS constantly informed political-military decision-makers about Soviet naval power, leaders, capabilities, and intentions in the Black Sea. These aspects

English version by Iulia SINGER.

¹ For more details: Bold, Seftiuc (1998); Moşanu, Buga (2002); Pop (2017); Moorhouse (2019).

will be presented in detail in the following paragraphs, within a brief historical construction, based on the documentation and historiographic investigation of the relevant elements in terms of the presence of the Soviet fleet in the Black Sea.

THE SPECIAL INTELLIGENCE SERVICE IN THE GEOPOLITICAL AND MILITARY CONTEXT OF THE 1940S

The military situation in the second half of 1943 was unfavourable to the Axis powers, but this did not prevent the SIS from providing the Romanian state leadership with relevant materials about the enemy fleet in the Black Sea. In the reference period, the Soviet interest was channelled towards the (re)conquest of the Crimean peninsula, for which fierce battles took place on land and water.

In the early fall of 1943, the SIS found out the Soviets intended to land on the eastern coast of the Crimean peninsula. The operation meant three landing groups (one in Tuapse and two in Poti), supported by air and especially naval forces – the vessels *“Krasnâi-Kavkaz”*, *“Voroshilov”* along with a large number of armoured fast ships. These fast boats had been built *“in improvised construction sites in the last year in the ports of Tuapse, Ocemiri and Poti”* (ANIC, file 53/1943, pp. 91-92). 12 more torpedo fast ships *“of American origin, brought by Iranian railway”* (Ib.) were added to these; the American fast ships could travel 15 nautical miles (Mm)/hour and were had 3 45-mm guns and two heavy machine guns.

A few days later, on 28 September 1943, in a report with various pieces of information, it was mentioned that the cruiser *“Voroshilov”* hit a Soviet minefield, near Tuapse, being *“seriously damaged”* (Ibid., p. 98), the repairs being estimated at a minimum of two months. Also, the ships *“Neva”* and *“Volga”* were presented as bases for Soviet submarines operating in the Black Sea.

At the beginning of October 1943, SIS briefly presented the way Soviet naval forces were structured in the Black Sea. Thus, the cruisers were grouped into two units – the first with the *“Krasnâi-Kavkaz”* (flagship) and *“Krasnâi-Krim”* ships, and the second *“Molotov”* vessels, *“returned to service, after its stern was replaced with the one from the vessel “Kuibâshev”* (Ib., p. 115) and *“Voroshilov”*.

The 2nd Fast Boat Brigade was structured into two detachments of 8 fast boats each, on which Katiusha launchers with 4 projectiles had been mounted. Out of 4 submarine brigades in 1941, initially remained two, and then one, with 20 submarines in operation (Ibid.).

The dissolution of the Komintern² also affected the naming of some ships, so that, in the Black Sea, the ship *“Parijskaia Komuna”* was renamed *“Sevastopol”*. SIS also learned about the near completion of a destroyer – *“Ognevoi”* –, *“which is under construction and will be launched shortly”* (Ibid.). A few days later, in the port of Berdiansk, Romanian agents identified 27 warships (minesweepers and safety vessels), 5 coast guard vessels, a large oar vessel and 50-60 large boats.

Archive research revealed that, between 15 September and 9 October 1943, the Axis forces in the Black Sea caused significant losses to the Soviet fleet. These amounted to 3 destroyers, 3 transport vessels, 20 landing craft, 4 fast ships, 6 gunboats and over 100 other types of vessels (Pandea, Ardeleanu, 1995, p. 285). On 15 October 1943, another SIS report (ANIC, file 53/1943, p. 159) indicated the number and types of ships stationed in the ports of Ahtari (Sea of Azov) and Poti (Black Sea). 12 armoured fast ships (with 40 mm armour), two armoured patrol fast ships for and 10 large fast ships for landings were stationed in Ahtari. All were armed with two 76.2 mm calibre cannons and two heavy machine guns. Since the end of September, the liner *“Sevastopol”* was anchored in Poti, along with the cruisers *“Molotov”*, *“Voroshilov”*, *“Krasnâi-Kavkaz”* and *“Krasnâi-Krim”*.

The SIS drafted the most extensive material on the Soviet fleet on 18 October 1943. It divided the Soviet ships into three categories: heavy naval forces, light naval forces and auxiliary naval forces.

The heavy naval forces, with the *“Sevastopol”* as the flagship, were structured in two sections: Section I Fast Cruisers, which included the vessels *“Voroshilov”* and *“Molotov”* (built in 1940-1941) and Section II Cruisers which included the ships *“Krasnâi-Kavkaz”* (guard cruiser) and *“Krasnâi-Krim”* (built in 1913) – it was initially called *“Svetlana”*, then *“Profintern”* from 1925 and *“Krasnâi-Krim”* from 1939 – but it was *“improved and modernised”* (Ibid., p. 171).

The light naval forces, whose commanding vessel was the ship *“Harkov”* – sunk on 9 October 1943 together with *“Sposobnâi”* and *“Besposciadnâi”*, following a German air attack – were organised into 4 divisions, two of destroyers, one of gunboats and one of guard vessels. The first division of destroyers was composed of ships built between 1939 and 1941, which were armed, in addition to the classic

² The Komintern was officially dissolved, in May 1943, but it was not until September 1943 that instructions were sent to affiliated communist parties and agents regarding the flow of mail and the reorganization of information networks.

armament, with two *“torpedo launcher devices”* each (Ibid., p. 172). The ships that made up the division were of two types: “SS” – the ships *“Soobrazitelnâi”*, *“Sposobnâi”* (sunk) and *“Schelesnikov”* – and “B” – the ships *“Boikii”*, *“Bodrâi”* and *“Besposciadnâi”* (sunk). From the second division of destroyers, only the ship *“Nesamojnic”* was identified by SIS, considered as an *“old ship”* (Ibid.), but which had torpedo launchers. The Gunnery Division had 4 vessels under its command – *“Krasnâi-Adjaristan”*, *“Krasnâi-Kuban”*, *“Krasnaia-Abkhazia”* and *“Krasnaia-Moldavia”* – all being *“old vessels, rebuilt from 400 t vessels”*. (Ibid.). The Guard Division, led by Lieutenant-Commander Frose, probably had several boats, but only two could be identified: *“Sturm”* and *“Şkval”*.

The auxiliary naval forces had the largest deployment of ships. The first category included six vessels intended for military transport: *“Metalist”* (500 t.), *“Odeskii Gorsoviet”* (600 t.), *“Ordjonikidze”* (700 t.), *“Raicomvod”* (1,000 t.), *“Pestel”* (1,000 t.) and *“Kuban”* (3,000 t.). The second category was represented by the Mine-sweeper and Mine-laying Brigade, which was divided into several formations.

The fast mine-sweeper division consisted of 7 Vzrâvatel-type ships: *“Iakor”*, *“Stsit”*, *“Vzvrât”*, *“Paravan”*, *“Tral”*, *“Udarnik”* and *“Mina”* [which was under repair, because, on 29 June 1943, it was *“hit by a bomb from an airplane”* (Ibid., p. 173)]. The eighth vessel of this division – *“Zastitnik”* – had been sunk in July 1943, also following an air bombardment. Two other divisions – Low Speed Minesweepers – were composed of *“various small vessels and old ships”* (Ibid.).

The guard vessels were organised in 8 divisions and, for most of them, the report presented only the ports where they were stationed. Divisions I and III in Poti, Hopi and Ocemiri, Division IV in Ghelengic, Divisions VI and IX in the vicinity of the ports of Sochi and Sukhumi, Division X in Batumi, while the headquarters of Divisions VII and VIII were *“unknown”* (Ibid.).

There is a coast guard segment, but nothing is specified about it, as well as two divisions of *“cleaning vessels”* (Ibid.) – XII and XIII – *“consisting of fishermen vessels, boats, etc., for cleaning mines and security service”* (Ibid., f. 174). The last unit subordinated to the Minesweeper and Mine-laying Brigade was represented by the mine-sweeping ships *“Sâzram”* and *“Mina”*.

The Submarine Brigade had bases in Poti, Hopi and Ocemiri, was subordinated to the auxiliary naval fleet and had 25-30 submarines of the types *“Scea”*, *“S”*, *“L”*, *“AG”*, *“D”* and *“M”* (Ibid., p. 375).

Two fast boats brigades were identified with their main bases in Poti (the first) and Ghelengic (the second). During this period, two formations of motor boats were brought from Sorepta, near Stalingrad, to Tuapse, which had previously been part of the Volga flotilla.

The main base of the Soviet fleet was in the port of Poti (commander: Lieutenant General Kumanin³, deputy: Major General Şedilov), and the secondary bases were in Sochi (commander: Rear Admiral Frolov⁴) and Tuapse (commander: Rear Admiral Şukov).

In the following period, the Soviets attempted to land in Crimea to establish a bridgehead, in order to support a future large-scale attack. The landing took place South and Northeast of Kerchi, at the beginning of November 1943 and was carried out by the 318th Infantry Division and the 117th Navy Brigade. Despite a massive supply of Soviet troops by sea, the 6th Romanian Cavalry Division neutralised, until 7 December 1943, all the Soviet bridgeheads and isolated resistances. During the transports, the Soviet navy lost 10 gunboats, two fast ships, 44 landing craft, two barges and 7 other types of ships (Pandea, Ardeleanu, pp. 308-309).

In addition to the Soviet fleet, there was also a well-structured and extremely efficient intelligence service. According to the reconnaissance made by the SIS, the Intelligence Service of the Soviet Black Sea Fleet was organised in 8 sections, the headquarters were in Makapse, and the leadership was held by Colonel Mangaladze, assisted by Major Osovski, Major Jerşman and Corvette Captain Ivanov. The section of the military reconnaissance service, based in Makapse and Ghelengic, led by Major Jerşman, had the following missions: capturing prisoners to obtain military information, reconnoitring and setting likely places for landing, carrying out acts of sabotage (especially against communications) etc. The missions were usually carried out in military uniform, and the duration could not exceed 8-10 days.

The headquarters of the Intelligence Service Agency was in Makapse, but had centres in Sochi, Mazesta, Essery, Novyi Afon, Ghelengic, Sovhoz Dacnomis,

³ Mihail F. Kumanin (1895-1965) was promoted to Major General (1940), Lieutenant General (1943) and Colonel General (1952). He commanded the Naval Base at Poli (1941-1943), was assigned deputy commander of the Black Sea Fleet (February 1944), deputy commander of the Fleet Rear Service (June 1947) and deputy commander of the Rear Navy (1953).

⁴ Vice Admiral Aleksandr Frolov (1902-1952) entered the Red Army (1918), then transferred to the Red Fleet (1922); he was promoted Rear Admiral (1941) and Vice Admiral (1944). He commanded the Danube Flotilla (1941), then the submarine units of the Black Sea Fleet. After the Second World War, he was Chief of Staff of the Pacific Fleet.

Kabardinka and *“in the Soviet-occupied part of the city of Novorossiysk”* (ANIC, file 53/1943 , p. 41). The objectives were aimed at identifying the enemy units, their equipment and deployment, the state of mind of the population from the political point of view, as well as the economic situation, and *“its attitude towards the German and allied troops and the way of behaving in case the territory is occupied by the Soviet troops”* (Ibid.). The agency was composed of groups made up of different elements, such as: the spies group, the officers group, the female group etc. The section of the paratroopers and sabotage groups was headed by Captain Soldmaşenko and deployed in Makapse, Essery, Novyi Afon, Mazesta and Ghelengic. The staff of the section, divided into groups, dealt with *“carrying out acts of terrorism and sabotage in the deep rear of the enemy”* (Ibid., p. 42), being divided based on nationality (the Spanish group, the Basarabian group etc.).

As far as the data on the Intelligence Section of the Sea of Azov Fleet is concerned, only the commander – Lieutenant-Commander Barchotkin – and the cities where it was located – Jeisk and Ghelengic, had been identified. The intelligence section of the base in Novorosiisk was located in Ghelengic, under the command of Lieutenant-Colonel Silcenko, and dealt with front line reconnaissance along the coast.

The sixth section – coastal radio information – aimed to intercept the TFF devices of enemy agents located on Soviet territory, as well as those on enemy territory. At Makapse, Jeisk and Essery, gonio, Hughes and TFF devices were located, which also controlled their own public stations and the airing of enemy public stations.

Based on the information received from the other sections, the exploitation section, located at Makapse under the command of Lieutenant-Colonel Forfurin, drew up a daily information bulletin and, three times a month, wrote general bulletins on the enemy. Concerning the last section – personnel –, the SIS notes do not show any indication, except for the name of the commander – Lieutenant-Commander Bumaghin.

After a few days, the SIS came back with a report on the Intelligence Service of the Black Sea Fleet which, according to the document, *“also has the following structures under its command”* (Ibid., p. 49). The first structure presented was the independent battalion for special missions, located in Ghelengic and Kabardinka and organised in *“companies according to the missions”* (Ibid.).

The second unit identified was the *“Main School of the Intelligence Service Agency”* (Ib., p. 50), deployed at Novyi Afon (commander: Lieutenant-Major

Bondarenko) and Makapse (commander: Lieutenant Kreptişev). In these schools, future agents were taught the following courses:

- a. reconnaissance service – used to identify fortifications and military units, to determine the level of troops equipment and morale etc.;
- b. the behaviour of agents towards the population – to obtain information of a military, economic and political nature;
- c. sabotage – to handle explosives, means of ignition, to mine railways and bridges, to use explosives depending on the mission and the type of target to be destroyed;
- d. parachute landings.

The sabotage school – another structure – had its headquarters in Ghelengic and was commanded by Lieutenant-Commander Dowlenko. Within the school, emphasis was placed on acts of destruction, both for disorganizing enemy communications and for causing panic. The courses, mostly practical, included:

1. the study of mining material (with explosive charges of 75 gr., 100 gr., 200 gr. and 400 gr.);
2. the topographical instruction of the place where the future agent will operate, two regions being established, as a rule;
3. the use of explosives, infernal machines, causing destructions;
4. paratrooping.

Another school – Wireless Telegraphy – was located in Novyi Afon, Makapse and Essery *“for completing the training of agents destined to carry out, in particular, intelligence missions”* (Ibid.) .

The intelligence section had vessels for carrying out its own actions. Thus, in the first category, there were 3 sail and motor boats: *“Ciaika”* (displacement 15-17 t., speed 12 Mm/hour, weapons a 7.62 mm machine gun), *“Delfin”* (displacement 20-22 t., speed 10 Mm/hour, weapons one machine gun of 7.62 mm and another of 12.7 mm) and *“a new boat”* (Ibid., p. 174). The Navy Section of the Intelligence Service, led by Lieutenant-Commander Ieriomin, also had two submarine hunters (O-11 and O-66), a KM-type motor boat (No. 62), two armoured motor boats (81 and 82) and 25 rubber boats.

The intelligence sections were required to be come with a counter-intelligence section. The SIS briefed the state leadership with the organisation of this service as well, which was initially called the NKVD Special Section of the Black Sea Fleet.

After the dissolution of the Komintern, it was replaced by the Counter-Intelligence Section (KRO), headed by Lieutenants Alexeev and Budenko, together with Sub-Lieutenant Jefronovski (Ibid., p. 61). The missions assigned to the Counter-Intelligence Section follow two main directions: firstly, to neutralise the penetration of suspicious elements into the Intelligence Service (disloyal people, spies, deviationists etc.), and secondly, the supervision of own agents. As far as the latter is concerned, the Section's objectives were to continuously watch the agents (during training, in the unit, in their free time), preventing the spread of the data brought by them upon returning from enemy territory, and eliminating those who returned before completing their missions or brought false information. To carry out its specific missions, the Counterintelligence Section had ships and planes in different cities. At Ghelengic, the Section had a squadron of seaplanes MBN-2, submarine hunters C-62 and C-134, as well as the fast boat D-3. At the Sukhumi airport, there were 4 U-2 aircraft under its subordination, while the ports of Sukhumi and Djugba had two BK-type fast boats (C-72 and C-73), two sailing and motor boats and KM-type boats. Also, in exceptional cases, the Section could be used *“by fast ships and submarines belonging to the 2nd Fast Ships Brigade and vessels of the 2nd Submarine Brigade”* (Ibid., p. 62).

Interesting information was also provided about the leaders of the Soviet fleet in the Black Sea. On 8 September 1943, a report containing information *“concerning”* (Ibid., p. 98) the navy mentioned that Vice Admiral Vladimírski was in command of the Soviet fleet⁵, taking over from Admiral Oktiabrski⁶. Less than a week later, on 2 October 1943, the SIS came up with general data on the Soviet Fleet Command. Thus, it was stated that, at the Naval Commissariat, Admiral Oktiabrski had replaced Admiral Isakov⁷, who had been wounded. The injury, according to the information, *“is due to a leg wound suffered during a visit to the front made by Admiral Isakov together with Kaganovich”* (ANIC, file 53/1943, pp. 111-112), which, later, *“became infected, thus the leg had to be amputated”* (Ibid.). The command of the fleet

⁵ Vice Admiral Lev Vladimírski (1903-1973) was commander of the Black Sea Fleet (May 1943-May 1944), squadron commander in the Baltic Sea Fleet, inspector of naval forces (1947) and head of the Naval Directorate for Education (1952).

⁶ Admiral Filip Okiabrski (1899-1969) was commander of the Black Sea Fleet (March 1939-April 1943 and March 1944-November 1948), deputy commander of the Navy and commander of the Black Sea Naval Institute.

⁷ Admiral Ivan Isakov (1894-1967) was Chief of the General Staff of the Navy (1941-1943), Deputy Commander of the Navy (1947-1950) and Deputy Minister of the Navy (1950-1956). On 4 October 1942, he was wounded in a German air raid at Tuapse and had to have a leg amputated.

in the Black Sea was exercised, as already mentioned, by Vice Admiral Vladimírski, who had his command in the ports of Poti and Sukhumi, and the Chief of Staff was Rear Admiral Fomin or Fomenco. The command of the heavy squadron of the Black Sea fleet was held by Rear Admiral Basisty⁸, former Chief of Staff of the fleet, also based in Poti. At the head of the Submarine Brigade had been Commander Voronov, who *“not long ago fell on board a submarine ‹Maliutka›, sunk during a test taken by Soviet submarine hunting vessels”* (Ibid., p. 112). The fleet's light forces were commanded by Rear Admiral Smirnov, based in Batumi; the small vessels were under Captain Korneev, based at Chobi; the first cruiser unit was headed by the *“former commander of the flotilla leader ship ‹Tashkent›”* (Ibid.) – Rear Admiral Yaroşenko; the naval base at Ghelengic was commanded by Captain-Commander Holostiakov, and the fortified sector by Commander Borodenko.

Two weeks later, the SIS returned with new data on the leaders of the Red Fleet in the Black Sea. Vice Admiral L.A. Vladimírski was in command of the fleet, Rear Admiral Kulakov⁹, former Commissioner of the Division, was the head of the Political Section, Rear Admiral Fomin/Fomenco held the position of Chief of Staff, and Vice Admiral Basisty commanded the Black Sea squadron (Ibid., p. 171). The true reasons for Admiral Oktiabrski's replacement were revealed on 23 December 1943, when a memo stated that *“after being deposed in February 1943 for the failure of the Jujnaia-Ozereika landings, he was transferred to the Far East, where he commands the fleet on the Amur River”* (Ibid., p. 375). In his memoirs, Admiral Kuznetsov¹⁰, the commander of the Navy during the Second World War, confirmed the replacement of Admiral Oktiabrski due to the failure of landing at Jujnaia-Ozereika. But, surprisingly, less than a year later, in March 1944, Admiral Oktiabrski returned to the command of the Black Sea Fleet. It was the only case when a fleet commander returned to his position after being replaced.

⁸ Vice Admiral Nikolai Basisty (1898-1971) commanded the Light Squadron of the Black Sea Fleet (1941-1942), the Cruiser Squadron (1942-1943), was appointed Chief of Staff of the Black Sea Fleet (1942 and 1944-1948) and commander of the Fleet (1945 and 1948-1951).

⁹ Vice Admiral Nikolai Kulakov (1908-1976) was in charge of the Odessa and Sevastopol ports supply and defence (1941-1942). Rear Admiral (1942), was demoted to Captain First Class (January 1944) for the failure of the Kerchi-Eltingen operation (November 1943). He was the head of the higher political-military courses for the navy (March 1944) and the head of the Propaganda and Agitation Department of the Main Political Directorate (June 1944). Rear Admiral again (July 1944), head of the Military Council of the Northern Fleet (March 1945) and then Vice Admiral. Deputy Commander of the Navy for Political Affairs (1948) and Commander of the Leningrad Naval District (1960).

¹⁰ Marshal Nikolai Kuznetsov (1904-1974) was Commander of the Navy (1939-1947 and 1951-1956) and Minister of the Navy (1951-1953). He was promoted to the rank of Marshal of the Soviet Union on 31 May 1945.

Finally, the SIS documents also contain data on the morale and discipline of Soviet sailors. Considered “*very weak*” (Ibid., p. 376), especially when sailors were in ports, discipline was valued as follows: “*Drunkenness and scandals happen daily, and the severe measures taken to establish order do not yeald favourable results, even if the ultimate punishment is the execution of those who are found guilty*” (Ibid.).

CONCLUSIONS

The most drastic confrontation in the period analysed in this historical approach (autumn 1943-spring 1944) was the attempt to convince Adolf Hitler to approve the evacuation of Romanian-German troops from Crimea. This action materialised only on 6 April 1944, when the “*Adler*” operation was launched, for the gradual evacuation of Crimea. This action lasted intermittently until 13 May 1944. During this entire period, despite a clear superiority, the Soviet fleet in the Black Sea only intervened against the evacuations from Crimea only with small ships (fast boats, gunboats etc.) and submarines.

The surrender of Odessa without a fight by the Axis troops also meant abandoning the port of Sevastopol, but the evacuation by sea took place “*without the Soviet fleet decisively intervening in the Black Sea*” (Rotaru, Zodian, Moise, Oroian, 1998, p. 170). In conclusion, we can state that, despite a clear superiority, the Soviet naval forces in the Black Sea did not have the courage to face the Axis forces, either on the offensive or in retreat.

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KERCH-ELTIGEN OPERATION IN THE WAR DIARIES OF THE GERMAN NAVY

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Almost in parallel with the withdrawal of the Axis troops from the Taman area in the Caucasus, the Soviets prepared a bold landing action on the Kerch peninsula in Crimea. The landings, carried out in two areas, south and north of the city of Kerch, were aimed at supporting the offensive from the north of the Sea of Azov and capturing Crimea.

The present study focuses on the naval actions that took place predominantly in the area of the southern bridgehead, where the Axis naval forces were able to block the supply of enemy troops.

Keywords: Second World War; Germany; USSR; Black Sea; landing;

INTRODUCTION

In the summer of 1943, the strategic situation deteriorated rapidly for the Axis forces in the USSR. On 5 July, the great battle of Kursk began. The resounding failure there meant that the German troops had to withdraw all the way to the Dnieper line until October. The front stretched in the South to Melitopol, on the western side of the Sea of Azov. It meant that the Crimean Peninsula was threatened and the forces left in the Taman area (the 17th Army) were in danger of encirclement (Ruge, 1979, p. 110). Most of the units of the Army Group A, which had operated in the Caucasus, were pushed back through Rostov to the West, before the Soviets could re-conquer the city. Still, important forces of the 17th Army remained in what was called the “Kuban bridgehead”, the least piece of land in the Caucasus held by Axis troops. The frontline stretched from Temriuk, on the Sea of Azov, to Novorossiysk, on the Black Sea. The frontline was defeated by German and Romanian troops until their final evacuation, in the autumn of 1943 (Sichigea, 2017, p. 57).

The withdrawal and then encirclement of a new army, after the catastrophe of Stalingrad, must have caused negative feelings for the Germans and it is still criticized by modern military historians (Forczyk, 2018, p. 9). On the other hand, the options left for the Germans were limited. In January 1943, it was impossible for the 17th Army to withdraw to the north, via Rostov. The 1st Tank Army barely managed it. A naval evacuation, over the Kerch Strait, was also impractical, because the Axis naval forces were not amassed for such a difficult operation (Ib., p. 9). That is why it was decided for the 17th Army to remain in Taman area, as a rear guard for the withdrawal actions in the Caucasus, until it could be evacuated in Crimea.

Holding on in the Taman area, the so-called “Kuban bridgehead”, in German, “Gotenkopf” (Goth’s head) was also caused by Adolf Hitler’s wish to have a base for future offensive actions in the Caucasus, once the front would be stabilized in Southern Ukraine. It is clear he was still thinking of attacking the Soviet oilfields in the Caucasus, in 1943 (Ib., p. 25). There was also the argument that the Soviets would not dare to attack the Crimea as long as there were still Axis forces in their rear-guard, in the Taman area, threatening their supply lines. Supplying the 200,000 Germans and Romanians in the 17th Army was, however, a herculean task for the Axis Navy in the Black Sea.

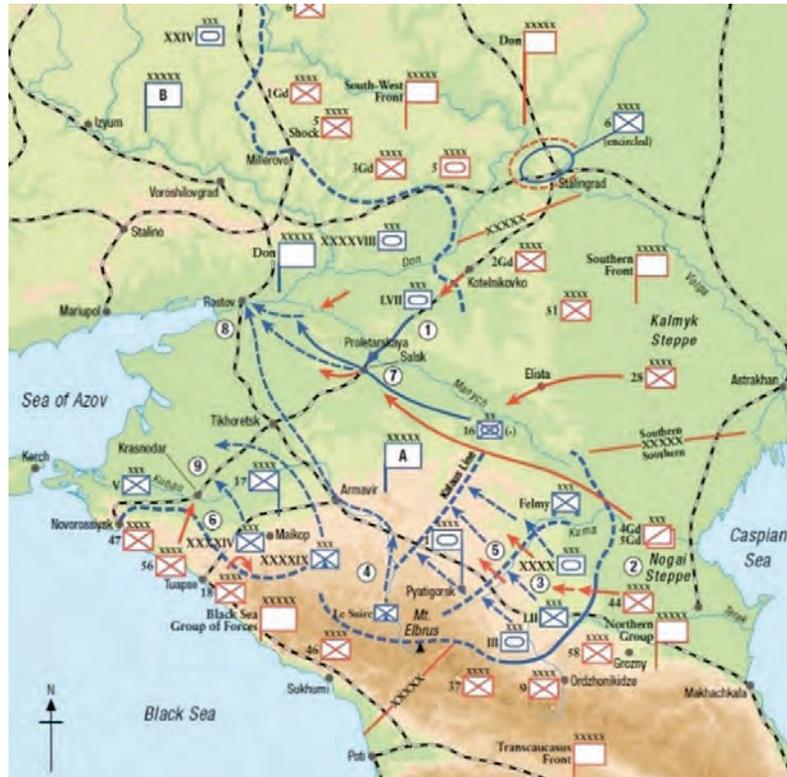


Figure no. 1: The Axis troops withdrawal from Taman area (Ib., p. 8).

THE ROLE OF THE ADMIRAL SCHWARZES MEER IN COORDINATING THE NAVAL ACTIONS

At the end of August 1943, the German High Command realized the futility of the "Gotenkopf" position. Therefore, they started to prepare the evacuation of the bridgehead in the Caucasus, Operation "Brunhild". As the units of the 17th Army made obvious preparations to withdraw, the Soviets were stepping up their aggressive pushes. The focal point became the landing operation at Novorossiysk (Sichigea, 2017, p. 62). On 15 September the Germans were pushed out of the city, but their withdrawal was executed in a coordinated manner. They had already received permission to abandon the Kuban bridgehead and cross into the Crimea. This operation, which lasted a month, was uncontested by the Soviets. There were only minor assaults. Most of the forces and equipment were saved: 240,000 soldiers, 16,000 wounded, 27,000 civilians, 21,000 vehicles and over 115,000 tons of supplies. The Germans also decided to withdraw their Azov flotilla for good – about 240 smaller vessels, with only two losses (Ib.).

Starting in September, the German General Staff planned the eventual evacuation of the Crimea, but political and military complications caused by a premature withdrawal from the peninsula, resulted in the plan being postponed. One consideration was the fact that leaving the area would not have led to a shorter front, because the area could be used as a staging ground to threaten the coasts of Romania and Bulgaria. In such a case, Germany would have needed to actually increase its commitment on the southern flank.

On 7 November the Chief of Army Group South, Field Marshal E. von Manstein, tried to persuade the political leadership to accept the evacuation of the Crimea and the redeployment of the 17th Army in Ukraine, where the Axis needed fresh reserves. Hitler was again adamant that the area must be kept, because an Axis debacle would make a negative impression on Turkey, Bulgaria and Romania (Frieser, 2007, p. 367). At the same time, the Soviets reached the Perekop Isthmus, thus isolating the Axis forces in the Crimea. Those units thus depended solely on naval supplies.

The task to supply the German and Romanian forces in the Crimea was passed to the *Admiral Schwarzes Meer (A.S.M.)*, the naval structure that the Germans had created back in 1941 to coordinate the naval forces in the Black Sea area. In the first part of the war in the East, the A.S.M., based in Romania, had to rely on the Romanian naval forces, because Germany had no warships in the area. The Naval Staff did not consider necessary to undergo the arduous task of transporting ships in the Black Sea. The sea access was also problematic. Moreover, the German Naval Staff hoped that its speedy land offensive would manage to occupy the coastal bases of the Soviet Union, in the Crimea and in the Caucasus. After the first year of the war, however, the German Navy was forced to accept the need to transfer some smaller warships for mining actions and torpedo attacks against the enemy's communication lines: motor torpedo boats, minesweepers, minelayers, landing craft and even some submarines.

Since the start of October 1943 the A.S.M. reported that the enemy, from his bases in Taman, was preparing a landing operation against the Crimea. There were several possible targets, with many points on the coast very vulnerable to such actions, such as the isthmus of Ak-Monay (War Diary of Admiral Black Sea, October 1943, p. 3). At that time the Germans expected the attack to come from the north, from the Sea of Azov against the north-east coast of Crimea.

On 5-6 October, it took place one of the most important actions in the Black Sea during the Second World War. Three Soviet destroyers, "Kharkov", "Besposhchadny" and "Sposobny", tried to harass the Axis convoys on the coast of the Crimea

and clashed with German M.T.Bs. After they were reacquired by the Axis air forces, they were subjected to waves of bomber attacks. The diving bombers managed to sink them all. After this catastrophe, Stalin prohibited any surface ship action without his consent (Rohwer, Hummelchen, 1992, p. 239).

The A.S.M. was pleased by the success of Operation "Brunhild", which saved most of the forces of the 17th Army and 1,500 guns, 18,000 vehicles and over 25,000 wagons and horse drawn carriages (War Diary of Admiral Black Sea, ib., p. 37). In the report to the superior echelons, it was pointed out that "along the transport missions, which were the focal point, we were focused also on securing our lines of communication on the coast against enemy surface ships attacks and against landings" (ib.). Their optimism seemed merited, especially since in the next day the A.S.M. managed to withdraw its 240 ships used in the Kuban operation "Wiking" with only a naval ferry barge and an assault craft (from the Army engineers) lost (Rohwer, Hummelchen, 1992, p. 240).

It did not mean the Germans did not anticipate a Soviet landing operation against the Crimea. The A.S.M. had expressed worries that the Feodosia Bay was vulnerable. It was the area where the Kerch Peninsula was at its narrowest. On the east side of the isthmus, there were hills near the beaches, but on the west side, there were areas favourable for a landing operation (War Diary of Admiral Black Sea, October, II, p. 1).

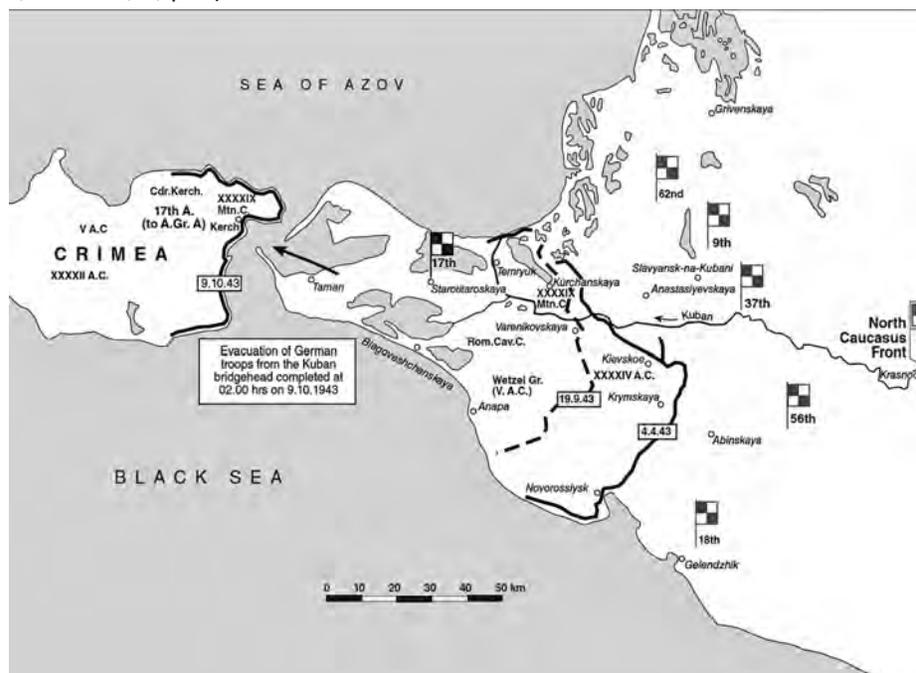


Figure no. 2: The stages of the Taman bridgehead evacuation (Frieser, 2017, p. 448).

For the forces withdrawn from the Kuban, the operational break did not last long. A part of those divisions was transferred to the north, to Ukraine. Those that stayed in the Crimea were isolated a few weeks later, landing in another encirclement. Worse, once the Soviets started to land at Kerch and Eltigen, those German units rushed into combat to annihilate the enemy bridgeheads (Galbraith, 2014, p. 46).

The first Soviet landings, albeit small, actually took place on 20 October, at Cape Chauda, in the eastern extremity of the Feodosia Bay. Those were clearly limited actions and the Germans were correct in treating them as such. Much more worryingly, the Soviets were amassing a huge number of small ships for further operations. The German air reconnaissance identified a large number of landing craft at Anapa and Gelenjik, which indicated an offensive operation at Kerch (War Diary of Admiral Black Sea, October, II, p. 31).

It is interesting to point out that the A.S.M. anticipated the eventual targets of the Soviet landings. On 30 October, it was reported to the 17th Army that the enemy would not seek to consolidate its position in the Bay of Feodosia and would commence new landings "in the narrowest part of the Kerch Peninsula, between Chuska and Yenikale" (War Diary of Admiral Black Sea, II, p. 51).

The representative of the Soviet General Staff in the Caucasus area, Marshal A. Vasilevski wanted to keep a small blocking force in the Taman. That would allow the Soviet fronts to focus their efforts on the north side, at the Perekop Isthmus, for the liberation of Crimea. It was eventually decided to follow both directions: while the Crimea would be attacked from the north, the Red Army would land forces at Kerch, to divert the Axis units there, with support from the Black Sea Fleet (Shirokorad, 2005, p. 478).

The Commander of the North-Caucasus Front, General I. Petrov, ordered, on 12 October 1943, to commence the preparation of the Kerch landing operation with forces from the 56th and the 18th armies. On 14 October the two task forces were readied:

"1). 1st and 2nd landing forces (56th Army) – the Azov Flotilla, with 2 patrol boats, 16 armoured gunboats, 7 minesweepers, 6 torpedo boats, 8 tugs and 5 barges. To reinforce the Black Sea Fleet, 12 barges, 7 patrol boats and 20 assault boats were added.

2) 3rd landing force (18th Army) with six detachments (12 patrol boats, 50 trawlers, 5 river trawlers, 15 other small boats, 15 motor boats, 20 boats and 3 armoured gunboats" (ib.).

On 31 October both task forces landed simultaneously their forces northeast of Kerch and in the village of Eltigen, to the south. Two days later, the A.S.M. did not seem too concerned with those events, probably still under the effect of the former

smaller landings, which were easily countered: *“We have received reports that on 1 November, at 03:00, a Russian regiment landed at Ianis-Takil in the Kerch Strait and at Eltigen. At 05:00, another landing took place at Lenikale. The enemy was met with powerful fire from our coastal batteries and had to withdraw behind a smoke cover. By the evening, the bridgehead was reduced to a strip of land 3 km long along the coast, although it could not be annihilated. The smaller force that landed at Ianis-Takil was eliminated. A second landing at Lenikale was countered. Our patrol boats could not observe what was taking place at the Eltigen bridgehead because they were in the Kerch Strait, where the threat was considered greater”* (War Diary of Admiral Black Sea, November 1943, p. 3).

On 2 November, the A.S.M. noted a further reduction in the Eltigen bridgehead, to approximately 1.5 km of coast, manned by just 1,500 enemy soldiers, with little change of receiving reinforcements. Still, the Soviet air superiority was tightening and it was a factor contributing to the slowness of the process of destruction of the enemy bridgehead (Ib., p. 7).

The same day the Naval Staff was informed of the Soviet landing operations and ordered intensified patrols along the Crimean coasts. The forces at the A.S.M.'s disposal were considered *“inadequate”*, but it was argued that they would be able to confuse the enemy and delay the transport of fresh troops from the Taman area (War Diary, Naval Staff Operations Division, November 1943, p. 38). The records of that day showed a certain anxiety at the higher levels of the German Navy. That was enforced by a flow of orders to the A.S.M.: to install new mine barrages, to ready urgent plans for patrols with the ships of the 3rd Minesweeper Flotilla. The A.S.M. was to add to its daily reports proposals for more aggressive actions with its operational forces. There was also the idea of reorganizing the whole German naval structure in the Black Sea *“under the pressure of current events”* (Ib.).

During the night of 2-3 November, there were the first clashes between the A.S.M. ships and the Soviet ones. The latter were trying to resupply the Kerch bridgehead. Unexpectedly, for the Germans, the *“stars”* were the naval ferry barges (*M.F.P. – Marinefahrprahme*), better armed than the light craft the Soviets had. An enemy landing ship was sunk and three others were set ablaze, including a small tug. The German captains reported that most of the fighting took place at close quarters, with machineguns and grenades. The Germans suffered low casualties (War Diary of Admiral Black Sea, November 1943, p. 9).

Even in this first phase of the operation it was clear that, for the Axis, the dangerous area was the northern bridgehead. The Eltigen bridgehead was under

constant bombardment and it was difficult to maintain for the Soviets. In the north, however, they not only managed to fortify their position, but even expanded the bridgehead and moved to the west. On 3 November, the A.S.M. estimated the number of Soviet troops in the northern bridgehead at over 3,000.



Figure no. 3: German naval ferry barges “M.F.P.” (Weapons and Warfare).

The Naval Staff ordered further measures to be taken, including the increase in the forces allocated to land units in the Crimea. The A.S.M. had to supply a few coastal batteries and infantry units from the coastal commandments to the 17th Army, along with its transport battalion in the area. As for the German ships, it was decided to challenge the Soviet naval presence in the Kerch Strait with all of the available forces. After a high-level meeting, where the Chief of the Naval Staff was present, the A.S.M. was ordered to commit its forces. The strategic importance of the Crimea was again stated:

“1) The enemy landings in the Kerch Peninsula could be decisive for our control over the Crimea. If our armed forces had to withdraw to the Feodosia Strait, the Russians would have better chances in their other offensive operations against the Crimea. The same goes for the coastal area. If we are not able to hold on in our positions in the Kerch area, we will be in danger of losing Crimea with the known consequences, especially considering our southern front and the encirclement of Crimea.

2) All services must make all the efforts to throw the Russians back into the sea from the Kerch Peninsula and to prevent further landings. As long as we have

seaworthy forces, they must be used. As for the number of naval ferry barges, torpedo boats and minesweepers, using just seven barges at this vital point is insufficient.

3) All attack opportunities to at least damage the Russian forces transported on water must be exploited.

4) All of the enemy reinforcements for the bridgehead as well as subsequent landings are being carried out on the sea. This is why there are always targets. The motor torpedo boats and the minesweepers and naval ferry barges will probably have the best chances to engage these targets during night and day actions using concentrated artillery fire. The enemy air force and its capabilities are known.

5) The operational command must direct our forces to the enemy. They will be sent, obviously, against enemy shipping, but, if need be, they will attack the enemy land forces in the bridgeheads. The attack plans will be coordinated with our air force.

6) We are sure that the gravity of the situation is known by our local forces and that no effort will be spared" (War Diary, Naval Staff, Operations Division 1943, pp. 59-60).

The A.S.M. reported that its forces were not enough and the crews were exhausted. The Germans had to cover the area from Feodosia to the south, to the northern entry into the Kerch Strait, which was about 140 km of coast and almost all of it was vulnerable to enemy attacks. More than that, the A.S.M. had to organize the garrisons in the harbours and manage the convoys to and from the Crimea along the coasts, with minelaying and minesweeping operations.

Despite the overstretch, at that moment the patrols began with the ships of the 3rd Minesweeper Flotilla, motor minesweepers of the "R" class, armed with two 20 mm or 37 mm cannons. The flotilla was able to disrupt, if not fully interrupt the sea supply of the northern bridgehead. During the night of 5 November, an enemy tug and two barges, each with 20 soldiers, were sunk. That time the German barges took some hits and suffered casualties.

The Commander of the 3rd Minesweeper Flotilla, Kapitanleutnant H. Klassmann, who proved an able tactical officer throughout the Kerch-Eltigen operation, even suggested a German landing behind the Soviet positions in the northern bridgehead, between Yenikale and Cape Fonar. The A.S.M. appreciated the suggestion and it was forwarded to the higher echelons, including the 17th Army Command. It was rejected however, on the basis of lack of troops. The naval officer at the Army HQ even noted: "Shame!" (War Diary, Admiral Black Sea, November 1943, p. 16).

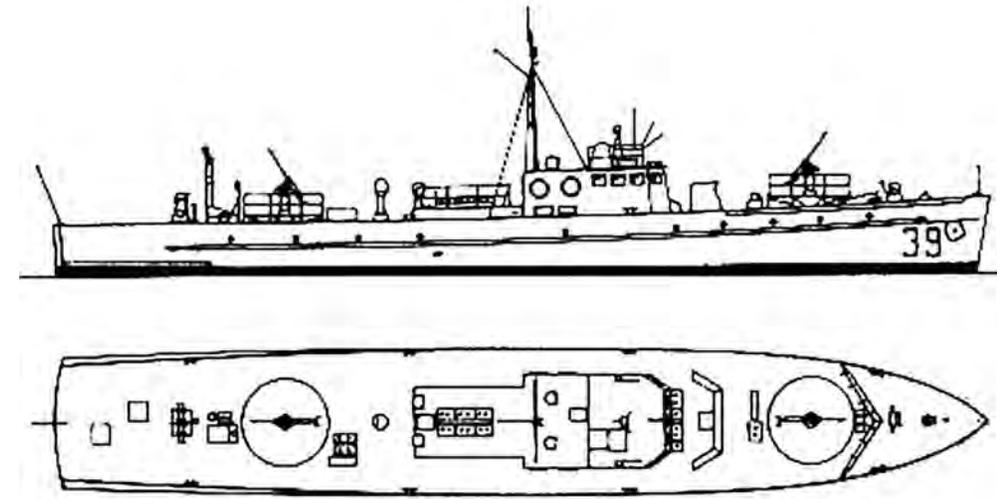


Figure no. 4: Motor minesweeper type "R" (Groner, 1983, p. 202).

At the same time, the Soviets started building searchlight and artillery positions on the Kossa Chuska strip, forcing the A.S.M. to adopt a more aggressive posture in its patrols. The German light craft (motor torpedo boats and minesweepers, barges etc.) were ordered to attack regardless of weather and sea conditions and even target land positions.

Naval clashes continued each day, and more intensively at night. One of the most important ones took place on the night of 7 November, when the motor minesweepers detected a towed convoy with about 25 ships. The German precise artillery fire prevented the landing and the Soviets withdrew. However, after some screens cleared, their transport ships attempted to land one by one through the German blockade. After several hours of naval engagements, three ships packed with troops were sent to the bottom, along with a motor torpedo boat (Ib., p. 27).

The German successes in the Kerch Strait were noticed by the Naval Staff in Berlin. For the first time since the start of the Eastern Campaign, the German Navy in the Black Sea had naval superiority over the Soviets, even if in just a small area as the strait. On 10 November, Admiral K. Donitz sent his congratulations to the naval commanders in the Black Sea, with a message to the A.S.M.:

"The successes of our naval forces fighting on the coasts of the Crimea had an important contribution on the positive outcome of our fight on land. I wish to express my appreciation for all of the forces involved, especially the 3rd Minesweeper Flotilla. The fight must be carried out with tenacity and determination" (Ib., p. 40).

The A.S.M. noted in its diary that day that the commendations were well deserved. The northern bridgehead was virtually blockaded and in the last few days German ships were able to harass all of the enemy's transport of troops and supplies. Those actions were pursued in the next days, since the Soviets were determined to run the blockade. Inevitably, casualties mounted on the German side as well. "R 204" was badly damaged on 10 November, and the ship had to be towed to Feodosia for repairs.

Still, the consequences of the successes of the last week were felt on 12 November. German ships reported that no enemy vessel was able to pass to Eltigen. As a result, German motor torpedo boats and motor minesweepers attacked enemy boats anchored near the shore: 3 smaller boats, 1 barge with ammo and another one with fuel and 2 armoured boats. The Soviet troops on the shore were also hit. The firing distance, of about 1 km, allowed for a good accuracy with machineguns, light artillery and even rockets (Ib., p. 47).

After a few relatively quiet days, the Soviets resumed their attempts at strengthening the Eltigen bridgehead during the night of 15-16 November, when 4 German motor minesweepers were attacked by a large number of armoured gunboats. The A.S.M. reported their number as 20, with air support. Nonetheless, such a concentration of naval forces seemed unlikely, especially since the Germans suffered damage on only one boat, "R 207" and reported eight enemy attempts to land.

The rest of November saw constant naval fights, as the Germans continued to strangle the Soviet supply traffic in the southern part of the Kerch Strait. The German blockade remained efficient and it forced the enemy to resort to air supply. The Soviet managed to hit a few German ships, especially in port, where they were most vulnerable.

At the beginning of December, the German army attacked the bridgehead, making constant gains. The Soviets were desperate to bring reinforcements and supplies, with heavy casualties (Ruge, 1979, p. 117). On 11 December, the whole area came under German control. The A.S.M. used 31 naval ferry barges, 6 motor minesweepers, 6 motor torpedo boats in a total of 355 sorties during the blockade. Among them, there were 11 barges lost, with other 16 damaged. The Germans also lost 1 motor torpedo boat and 4 minesweepers. While the losses due to naval engagements were relatively light, the Soviet airpower proved to be the biggest threat (Rohwer, Hummelchen, p. 244).

CONCLUSIONS

Soviet losses are still debated. Some authors suggest 150 small boats and other craft used for supply transport, damaged or sunk. Even if this number does seem exaggerated, it is clear that their losses were significant. In the case of larger ships, definitive losses number 12 patrol boats, 3 minesweepers and 3 armoured vessels (Ruge, 1979, p. 117).

The naval actions in the southern Kerch Strait area could be described as a full-fledged naval blockade, which lasted for a month. Using motor minesweepers and torpedo boats, armed with large calibre guns proved to be an ingenious solution and the winning one for the Axis. The absence of the large Soviet warship was surprising even for the German side. Most likely, due to political reasons, it was decided not to risk the destroyers and cruisers for fear of the German bombers. On the other hand, as the German commanders insisted, the Soviet air superiority was tightening, causing most of their casualties and that situation would only get worse in the next months.

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CONSIDERATIONS REGARDING THE EVACUATION OF THE ROMANIAN TROOPS PARTICIPATING IN THE BULGARIAN CAMPAIGN IN THE SUMMER OF 1913

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The purpose of this article is to highlight the aspects of the evacuation operations from Bulgaria, executed by the Romanian troops participating in the military campaign in the summer of 1913, a chapter of the national military history less researched. The article is based on the documents studied in the national archives.

In the summer of 1913, in the face of an unstable Bulgaria, Serbia and Greece decided to conclude a defensive alliance, a process completed on 19 May/1 June 1913, which aimed to establish their own interests in Macedonia against the Bulgarian ones. Moreover, to the tensions between the former Balkan allies were added the armed incidents near the outposts of the three armies that had the mission of preserving the conquered positions. In this context, Romania's position became a very important one, in relation to the obligations assumed by the treaties concluded at international level, which is why Romania had to make a decision regarding the participation in the ongoing war.

Keywords: Balkan Wars; Tsarist Empire; groups of forces, mobilization; Bulgaria;

A NATIONAL PRIORITY – THE PRESERVATION OF THE INTERNATIONAL STATUS QUO ESTABLISHED BY THE TREATIES

In the Romanian historiography, the two Balkan wars were investigated in terms of political, international relations, the role regarding Romania's participation and the military operations of the Romanian armed forces, but less in terms of the schedule of the evacuation of the Romanian troops that had been present on Bulgarian territory.

The moment of the Second Balkan War proved once again the importance of the opportunities offered by the international context, especially for small nations, like Romania. Moreover, it pointed out that, for the same kind of nations, a certain status, acquired with great sacrifices, could only be preserved by a dignified attitude, even if it also involved the use of force of arms. Bulgaria became a threat to all its neighbours. The policy of King Ferdinand of Saxe Coburg had succeeded in setting in motion the Balkan peoples, who felt threatened by the Bulgarian territorial claims. A possible change in the balance of forces in the Balkans would put the entire international community in difficulty. If Bulgaria had reached the Straits, it would have been able to gain a very important geopolitical and strategic position. The Tsarist Empire pursued its own interests at the mouth of the Danube and at the Black Sea. Germany did not accept, for political and economic reasons, the weakening of Turkish authority in the area. Thus, Romania, after conducting a diplomatic peace policy, decided, in agreement with the international community of which it was part as an ally and not only, to end the state of conflict that threatened the stability of the entire Eastern Europe. To the tensions between the former Balkan allies were added the armed incidents near the outposts of the three armies that had the mission to preserve the conquered positions.

In this context, Romania's position became a very important one. The Romanian political class, aware of the Austro-Hungarian contribution to the termination of the agreement between the three Balkan states and the support for the Bulgarian cause, had to make a decision on the participation in the war. As expected, the tension between the two great powers that disputed their spheres of influence in the Balkans, the Tsarist Empire and Austria-Hungary, led to the concentration

of troops near the borders of Romania. Thus, to the west, east and south of the borders of the Romanian state were concentrated troops that endangered its territorial existence.

ASPECTS REGARDING THE IMPLEMENTATION OF THE BULGARIAN CAMPAIGN PLAN OF 1913. MOBILIZATION, DEPLOYMENT OF GROUPS OF FORCES AND MILITARY ACTIONS

King Carol I signed High Decree No. 4751 of 20 June/3 July 1913, after the diplomatic missions in Athens and Belgrade informed Bucharest that both countries considered themselves at war with Bulgaria. The operation effectively started on the night of 22/23 June/2/3 July 1913 at 24:00 and it was carried out in good conditions until 27 June/10 July. For the conduct of military operations it was mobilized the Great General Headquarters, at the head of which was appointed Crown Prince Ferdinand, having as a basic element the General Staff, under the command of General Alexandru Averescu. This command structure operated from 23 June/6 July to 22 August/4 September 1913 (Giurcă, Georgescu, 2012, p. 92).

The 1901-1911 and the 1895-1900 contingents were brought under arms. The mobilization lasted eight days, ending on 28 June, which was a surprise for Bulgaria, which estimated that it would last about two weeks.

Five army corps with 15 divisions were mobilized, of which five reserve divisions, three reserve infantry brigades, two cavalry divisions and a brigade of auxiliary troops, the so-called "Călărăși". The combat force was 247 battalions, 180 batteries and 93 squadrons. The mobilized troops amounted to 460,000 soldiers, 10,600 officers, 150,000 horses.

The mobilization and transport activities started on the night of 22/23 June to 5/6 July 1913 at 24:00. On 23 June/6 July 1913, passenger trains were suspended, with the railways from that date dealing only with military transport. The troops and the combat assets were transported by more than 500 military trains, on foot or by ships on the Danube. The Bulgarians had foreseen that the mobilization of the Romanian armed forces would take 14 days and, as a result, Romanian troops would enter the Bulgarian territory on 20 July/2 August 1913. No armed forces had been able, until 1913, to accomplish the mobilization in such a short time and in such a coordinated manner as the Romanian armed forces. Thus, Romania held the record from this point of view, proving to the foreign country that it had a good material and moral training of mobilization in case of necessity. The speed at which the mobilization and concentration of the Romanian armed forces were carried out

determined the Bulgarian military command to take urgent measures to defend the capital and to withdraw the troops fighting against the Greek and Serbian troops.

The decision on Romania's entry into the war was taken on the evening of 26 June/9 July 1913. The French Minister in Bucharest, after consulting with his Russian counterpart, Nicolai Nicolaevich Schebeko, had a meeting with Titu Maiorescu, during which the Romanian Prime Minister told him that Romania was aiming to preserve the Balkan and European balance (Pohoată, 2010, p. 205).

Under those circumstances, on 17/30 June 1913, on the initiative of General Alexandru Averescu, Chief of the General Staff, "*the memorandum on guiding the operations of the Romanian armed forces in case it interferes in the Serbian-Bulgarian conflict*" was implemented (Apostol, Giurcă, Chiriac, Baltă, 2000, p. 35). Also known as "*Hypothesis 1 bis*", the memorandum represented the Romanian Armed Forces Operation Plan in the Second Balkan War (June-August 1913).

Therefore, the Operation Plan of the Romanian Armed Forces in the Second Balkan War provided for the development of operations "*on two directions: One main, directed toward the strategic centre of gravity of the Bulgarian forces, as they are arranged today; another secondary, directed toward the Rusciuc-Varna line. The first direction is indicated only by purely military considerations, the second by political considerations*" (ANIC, 1913, p. 2).

In order to achieve the strategic goal, in the **Operation Plan** of the Romanian Armed Forces, the combat actions were guided by the central idea of the plan: the two-way offensive. The main direction was aimed at the centre of the opposing forces and the capital city, helping to block the Bulgarian troops in both the Eastern and Western sectors. Moreover, the two-way manoeuvre, designed by the General Staff, ensured the possibility of working with the Serbian troops, the neighbour on the right flank of the main Romanian group. The distribution of forces followed the principle of concentration of forces and means, with the main group receiving the necessary resources to carry out their missions (Otu, 2007, p. 159).

Once the mobilization was decided, the General Staff, through its General Command, decided to form two groups of forces according to the objectives pursued. Therefore, a main group of operational forces was formed consisting of the 1st, 2nd, 3rd and 4th Army Corps as well as two cavalry divisions concentrated in Oltenia, and the 5th Operational Army Corps, in Dobrogea, consisting of the 9th and 10th Divisions as well as the 3rd Reserve Division, under the command of Division General Ioan Culcer, a reputed strategist and tactician. The forces of the 5th Army Corps were directed toward the southern border, the forces of the 9th Division were

concentrated in Cernavodă, the forces of the 10th Division in Medgidia and the 3rd Reserve Division in Murfatlar.

The 5th Army Corps received the order to act in Bulgarian territory to occupy the border line requested by the Romanian government in the framework of the Romanian-Bulgarian negotiations.

On 28 June/11 July 1913 the first Romanian troops began crossing the Danube. Silistra was the first city occupied by the 1st and 2nd Squadrons of the 5th Roșiori/ Cavalry Regiment mobilized in Tecuci and concentrated in Ostrov. As a result of the reconnaissance missions, it was found that the Silistra forts were deserted, only three Bulgarian infantry companies being reported in the city.

Silistra, a strategic point, became the base for the troops whose mission was to occupy the main cities located on the line of the future Romanian-Bulgarian border. One by one, Turtucaia, Dobrich (Bazargic) and Balchik were occupied and placed under the control of the Romanian forces, which were ordered to station there, in anticipation of future political decisions.

On 30 June/13 July 1913, the Turtucaia-Dobrich-Balchik line was completely controlled by the Romanian troops. Reconnaissance was carried out on the Rusciuc-Shumla-Varna line, which eventually led to the occupation of Varna on 2/15 July 1913 by a group of 9 members of the 6th Călărași Regiment stationed in Dobrich, an occupation that lasted until 3/16 July 1913. On the same day, the reconnaissance team of the 5th Roșiori Regiment that was stationing in Balchik arrived in Varna. Both reconnaissance troops withdrew to Dobrich and Balchik.

By the proclamation of General Ioan Culcer on the occasion of the occupation of Turtucaia on 1/14 July 1913, the local authorities and the Bulgarian population were informed that, from that date, they had the obligation to obey the Romanian laws and military commanders. All the inhabitants of the city had the obligation to hand over arms, to contribute to the needs of the armed forces through requisitions for which they received indemnities in accordance with the tariff established by the military authorities in compliance with the Law enforcement Regulation on requisitions. Any type of correspondence was stopped and local trade and agricultural works were monitored by the Romanian armed forces. The commander of the military region Turtucaia was appointed General Ioan Istrati, Commander of the 9th Infantry Division (Adevărul, 1931, p. 1).

Until the signing of the Peace of Bucharest on 28 July /10 August 1913, the 5th Army Corps remained in Southern Dobrogea or New Dobrogea, except for the occupation of Varna by a detachment of the 6th Călărași Regiment, which carried out

a reconnaissance mission without the intention of occupying the city. However, following the weak response from the Bulgarian troops stationed around the port, the Bulgarian authorities decided to hand over the city to the Romanian troops, which they left between 3/4 July and 15/16 July 1913, withdrawing to previous positions, namely on the line of the future Romanian-Bulgarian border.

EVACUATION OF ROMANIAN TROOPS PARTICIPATING IN THE 1913 BULGARIAN CAMPAIGN. ADMINISTRATIVE, MILITARY AND MEDICAL ASPECTS

On July 11/24, 1913, the Great General Headquarters of the Operational Armed Forces received from the Ministry of War the telegram no. 50, which informed it that the Bulgarian Government had yielded to the Romanian demands. King Carol I asked Serbian King Peter Karađorđević and Greek King Constantine I to conclude an armistice in the interest of peace. They agreed upon it on the condition that the Bulgarian government would have accepted the views of the two kingdoms. On that occasion, King Carol I advised the two sovereigns that the Allied armed forces should not advance too quickly toward Sofia because a threat to the capital would cause a catastrophe in Bulgaria and then the powers would have no one to negotiate with (AMNR, 1913, p. 152).

At the same time, the Ministry of War communique no. 50 of July 11/24 July 1913 stated that *“His Royal Majesty makes known to you that the order given to column heads and reconnaissance detachments is a measure required by political circumstances, it is a disposition for the moment. Thus, the positions we occupy ensure a favourable strategic situation. It remains understood, however, that stopping along the straits does not imply the rear troops stopping too, on the contrary, they must be brought closer in order to reduce the too great distance that exists today between the various elements of the army corps. His Majesty the King orders that this order should be communicated to the Army Corps and the Cavalry Divisions so that their commanders can know the political situation that dictates the measures taken for the present time”* (Ib.).

On the same day, the Ministry of Interior, through the telegram no. 4393/11/ 24 July 1913, sent to the Minister of War, Division General Constantin Hârjeu, an address that informed him that the President of the Council of Ministers decided to appoint a Civil Commissioner for the entire occupied territory – Southern Dobrogea – by delegating Barbu Păltineanu, deputy, who received the assignment. According to the provisions of international law during the occupation until the annexation

of those territories, the authority was exercised by the military power. Even under military authority there remained civil authorities, such as local authorities, as the state in its civil form had to be represented. In this capacity, Barbu Păltineanu was permanently collaborating with the Commander of the occupying Army, the head of the military authority. He had a team of government advisers consisting of D. Apostolu, G. Bădescu and Sebastian Teodorescu, deputies, being helped by G. Nicolau, Chief of Bureau within the Railway Directorate, C. Angelescu, Barbu B. Păltineanu, delegated by the Minister of Industry and Ion Constantinescu. The mission of Barbu Păltineanu was to study the future administrative and political organization of the territory designated to be part of Romania, in order to propose the project for adoption by the Parliament. In order to fulfil the mission, he was provided with five cars when he arrived in Silistra for the transport from Silistra to Dobrici, and with two cars to travel to the territory (Ib., p. 2).

On 18/31 July, the Romanian forces received notice of the conclusion of a 5-day truce, following the opening of the Bucharest Peace Conference on 17/30 July 1913. The first military action taken at the conference was to end hostilities and establish a demarcation line in front of outposts. On 23 July/5 August, the armistice was extended by 3 days. On 24 July/06 August 1913, the Ministry of War sent the telegram no. 311, by the High Order of the King of Romania, to the Great General Headquarters, informing that, from 25 July/7 August 1913, in view of the troops de-concentration, in order to facilitate as much as possible the subsequent transports, the 5th Reserve Division had to gradually put on leave the people who were part of the battalions in Dobrogea, starting with the oldest contingents, and, following the medical examination, with the weakest, and those with familiar difficulties.

The troops from Dobrogea, at the rear of the 5th Army Corps, enjoyed the same treatment. They were the artillery park, the ammunition columns and the subsistence columns. Thus, gradually, they decreased in number, without disorganizing the service. The transport of people to their mobilization residences was done by railway in groups of 100-250 people a day on each ordinary train, being forbidden the formation of special military trains for that purpose. Each group had to be under the command of an active officer, sergeant or non-commissioned officer, with the mission of maintaining discipline and order during transport. The units that sent people on leave announced the nearest railway station 24 hours earlier, showing the number of people leaving and the direction they were going.

For that purpose, the Railways provided the army corps with a maximum of three wagons per passenger train and five for freight trains. There was an exception

to the fast trains that could be supplemented by two train wagons. At the same time, the army corps were required to send exactly as many people as the capacity of transportation. The purpose of those leaves was to reduce the remaining troops awaiting new orders to half of those mobilized. The order was completed with the mention *“that for the Bucharest Fortress and the Focsani-Nămoloasa-Galați fortified region, orders will be given directly by the Ministry”* (Ib., n. p.).

By telegram no. 111 of 29 July/11 August 1913, the Great General Headquarters, by order of the Chief of Staff of the Operations Army, Alexandru Averescu, ordered the commands of the troops stationed in western Bulgaria that, in order to set the troops in motion, the marches must be carried out according to the indications contained in the movement tables that were to be received in time. The itineraries could not be changed, the number of days could not be changed and the stationing points as well as the length of the stages were not mandatory. The crossing points in the country were Turnu Măgurele and Zimnicea. At Turnu Măgurele crossed: the 1st Cavalry Division, the 1st and the 3rd Army Corps, the 1st Reserve Division and the 33rd Reserve Brigade. At Zimnicea crossed: the 2nd Cavalry Division, the 2nd and the 4th Army Corps and the 2nd Reserve Division. For the marches, the mobile warehouses had food supplies for 5 days. The subsistence of the troops on the right side of the Danube was ensured by the subsistence columns supplied from mobile warehouses and warehouses at the crossing points. On the right side of the Danube, subsistence was provided from the temporary warehouses installed by the Armed Forces Quartermaster Corps. The relocation of the mobile warehouses was coordinated following the instructions of the Quartermaster-General. All cholera patients and cholera suspects were left at the following points: Orhanie, Vrața, Lucoviț and Cervenibreg. On the eve of the departure, the doctors had the obligation to make a thorough sanitary inspection for the screening of the suspects and their evacuation to those points. During the march to the crossing point, doctors made an exact list of those who had cholera-specific symptoms. The sick and cholera suspects formed a detachment at the back of each unit, and at the crossing point they were handed over to the health service there to be subjected to the measures specifically ordered for that category. In order to facilitate marches, the commands could order the dispatch of some of the material they no longer needed during the march.

According to the High Decree No. 5141 of 30 July/12 August 1913, the general demobilization of the armed forces began on 31 July/13 August 1913. Regarding the occupation troops in Dobrogea, the General Staff transmitted telegram no. 2380 of 30 July/12 August 1913, by which the Great General Headquarters was informed

that those groups of forces consisted of the 33rd Tulcea Regiment with 3 battalions in Tulcea, the 34th Constanța Regiment with 3 battalions in Constanța, the 36th Vasile Lupu Regiment with 2 battalions in Cernavodă, the 39th Petru Rareș Regiment with 2 battalions in Silistra, the 35th Neagoe Basarab Regiment with 2 battalions in Dobrici and one battalion in Balchik, the 9th Hunters Battalion in Kurtbunar, the 40th Călugăreni Regiment with 2 battalions in Turtucaia, the 5th Roșiori Regiment with 2 squadrons in Dobrici and 2 squadrons in Kurtbunar (Ib.).

The remaining units that made up the 5th Army Corps, the 38th and 23rd Infantry Regiment, the 13th, 18th, 3rd and 20th Artillery Regiments and the 5th Howitzers Division entered their old garrisons. The divisions, ammunition columns, the Army Corps Artillery Park, the Division and Army Corps ambulances, the Mobile Hospital, the Mobile Warehouse and the logistics formations were fully demobilized. The divisional subsistence column had to keep the strictly necessary supplies for the occupying troops. The infantry regiments of the occupying corps kept, in addition to the contingents under arms, the first supplementary contingent, while all other troops and services remained in full strength.

In addition to the telegram no. 111 of 29 July/11 August 1913, Section I, Bureau B of the Great General Headquarters transmitted the Order of Operations no. 5 of 2/15 August 1913, which included the general tables of the troops movement from western Bulgaria and the instructions on their movement. It was forbidden to modify the established itineraries, the resting days and the number of marching days. The stationing points established along the routes and the length of the stages were not mandatory, but the rear divisions could not be stationed in the same localities where the ones at the front of the column were stationed. In each corps the divisions would be at a distance of one day. All necessary measures were taken to ensure that the crossing on bridges was made in a coordinated manner, maintaining the discipline. The troops were not brought to the bridges until the crossing, avoiding long stops in the vicinity of the bridges. The carriages were kept continuously on the right side of the bridge and only a row of carriages was allowed to travel along the road in one direction. A staff officer was assigned by the command to manage the entrance to the bridge. He had a detachment of mounted troops to execute the road police missions across a distance of at least 4 km from the bridge. The commanders chose one or two companies from each division and service to assist in the event of any stops during the movement in order to ensure a continued movement.

The movement of the army corps services was supervised by the corps commands in such a way that the crossing began immediately after the divisions other than those of the 2nd and the 4th corps that crossed one day after the crossing of the first division. With regard to the movement of mobile warehouses, the logistics troops were responsible for it, following the instructions of the Quartermaster-General to the Forces. The provisions for stationing, marching, railway transport and subsistence after crossing the Danube were mentioned in the movement and transport tables, designed for each division and army corps service, distributed to the commands on time. Apart from the provisions contained in the order of operations no. 111 of 29 July/11 August 1913, the troops' subsistence during the marches to the Danube was ensured on the basis of the special instructions given by the General-Quartermaster to the Forces.

As healthcare measures, the recommendations previously communicated remained valid, as well as the provisions already decided by the medical staff of the corps and divisional and corps ambulances. For the groups that were contaminated, a day of rest was decided on the eve of crossing over the Danube in order to make a very rigorous sanitary inspection and to choose the suspect people who were left at the sanitary observation points in Nicopolis (the Pioneer Barracks) and Șiștov (the Infantry Barracks).

Before leaving, the suspect and sick people were sent to Orhanie-Vrața-Lukoviț and Cervenibreg. From those points they were evacuated by rail to Nicopolis on 10/23 August 1913. Those from Orhanie and Lukoviț were transported, starting on 7/20 August 1913, by carriages to Vrața and Cervenibreg (Ib.).

The logistics troops began their withdrawal the day before the arrival of the column heads. Exception to this rule were the logistics troops from Vrața and Cervenibreg points, that remained stationed to guard the sick. They began their journey with them on 10/23 August 1913. In Orhanie, the 1st Army Corps left a company to guard and escort the sick to Vrața, and from there the company went with them to Nicopolis, where it re-entered the corps. The material and personnel of the railways followed the movement of the 1st Army Corps, withdrawing, until 10/23 August 1913, to Plevna and, on 11/24 August 1913, they left that locality and withdrew to Samovit (Ib.).

The corps carrying out marches on foot had to take from the warehouses T. Măgurele and Zimnicea the lime necessary for the disinfection. The logistics command had to supply not only the main warehouses but also the auxiliary ones with lime in sufficient quantities.

The troops re-entered their garrisons on foot. They carried out the marches in full freedom in terms of the length of the stages, respecting the travel routes, with the prohibition of stationing in localities for several days. Troops were allowed to camp on the route established on the condition that the guard was organized to prevent any contact between troops and inhabitants. Those who got infected during the marches were evacuated by ambulance carriages to the nearest hospitals in the area.

All the specific communications facilities were left undamaged, but the telegraph devices belonging to our armed forces, as well as the bridge material of the pioneers, were taken away. The bridges at Ghihen-Mahala were disbanded immediately after the crossing of the last elements of the 2nd Reserve Division.

On 4/17 August 1913, the 2nd Army Corps reported on the measures taken to execute the march for the evacuation of forces stationed in western Bulgaria under the general order to evacuate Bulgaria and return to the country.

According to the movement tables, the march to Vid was executed in two columns and from the Vid to Blagarene the entire army corps went in one column, then to Zimnicea in two columns. Known that all localities in Bulgaria were contaminated by cholera, no stop or stationing was executed. The 2nd Hunters Regiment, the 2nd Howitzers Division, the 3rd Pioneers Company, the 3rd Telegraph Section and the Wireless Telegraph Section went with the 4th Division to Zimnicea. The 10th Roşiori Regiment followed the 3rd Division to Zimnicea, were the last to cross the bridge over the Danube. The Biker Company went to Zimnicea having one platoon in the 4th Division, one platoon in the 3rd Division, one platoon in the Army Corps Services column. The services of the 4th and 3rd Division, except the divisional ambulances and the army corps services, respectively the Artillery Park, the Pioneer Park and the 2nd Remount Squadron, formed a single column. Those services, along with the subsistence column, followed up to Zimnicea the march of the 4th Division 4 on a half-day march. The regular marching of the column and the orderly and fast crossing of the bridge over the Danube was ensured by biker platoons and by staff officers. The divisions ensured that the bridge was crossed by 1 or 2 infantry companies located 4 km from the bridge (Ib.).

As sanitary measures, the march was carried out from 06:00 hours, and on very hot days a stop was made from 10:00 until 17:00 hours. After the march, during the morning rest, all unnecessary labour was forbidden. The troops marched with their rows flanked a few steps away or in flank, two people on each side of the road,

where it was allowed by its configuration. The soldiers were dressed according to the temperature of the day. When it was warm, they were allowed to open the uniform to their neck and chest. It was recommended hot food preferably sour soup, hot tea, boiled and acidified (vinegar) water, being totally forbidden to eat raw food. The troops were fed according to the instructions of the Quartermaster Service. The cans were filled before departure with tea, coffee or boiled and acidified water. The doctors inspected the soldiers when they left, the sick were evacuated according to orders received. For the proper management of the march, between 5/18 August and 10/23 August, the 2nd Army Headquarters stationed in Plevna.

On the evening of 3/16 August 1913, a representative of the Bulgarian railways, accompanied by a delegate of the Ministry of War, came to Plevna, where the Armed Forces General Headquarters was located. Together with General Alexandru Averescu, the Armed Forces Chief of Staff, they discussed the regulation of common rail traffic. On the same day, General Alexandru Averescu inspected the way the works of the Şiştov Bridge were executed. At that time, the bridge could ensure the troops crossing on foot, as the ramp and the pavement of the access road required at least two more days, so it was expected that on 7/20 August 1913, the 2nd Cavalry Division could cross it. At the same time, General Alexandru Averescu established the terms of the collaboration between the local authorities and the representatives of the armed forces (Ib.).

On 6/19 August 1913, General Alexandru Averescu telegraphed Prime Minister Titu Maiorescu about the discussion he had with the officer delegated from the Bulgarian General Staff about the withdrawal of the Romanian troops behind the demarcation line, as well as about the daily situation, position and movement of the armed forces columns. As a result of the completion of the specific evacuation activity of the patients left in observation at Orhanie, started on 7/20 August 1913, the town of Vraţa was abandoned on 10/23 August 1913.

According to the telegram no. 628 of 7/20 August 1913, sent by General Alexandru Averescu to the Minister of War, although King Carol I decided that the evacuation of Bulgaria should be carried out by 15/28 August 1913, the sanitary measures imposed against the spread of cholera among the Romanian armed forces questioned the observance of that date. In order to avoid the possible delay, he proposed to establish a special place on the left bank of the Danube where the sanitary barracks were to be installed for the sick, basically a sanitary corridor administered by the local authorities (Ib.).

On 9/22 August 1913, on the 48th day of mobilization, the operational armed forces reported continuing marches to re-enter the country. At that time, the 1st Cavalry Division crossed to the left of the Danube at Rahova-Becket by transshipment, except one division from the 9th Roșiori Regiment that crossed on the morning of 10/23 August 1913. The 24th Tecuci Regiment, the 10th Putna Regiment, the 11th Artillery Regiment, the Ambulance of the 6th Division, the 4th Telegraphy Company, the 6th Branch Squadron, one logistics battalion, the Mobile Hospital of the 3rd Army Corps, the 3rd Company of the 3rd Pontonier-Rivers Battalion, the 3rd Hunters Regiment of the 5th Division, the 5th Section Telegraphy of the Great Headquarters, the 5th Militia Battalion of the 3rd Army Corps, the 2nd Section Telegraphy, the 3rd Pioneer Battalion, the Horse Hospital, the Relay Squadron of the 7th Călărași Regiment, the 6th Plevn logistics company, the 4th Telegraphy Company of the Great General Headquarters and a Rural Gendarme Section crossed at Turnu Măgurele. The 4th subsistence column of the 3rd Army Corps, the 4th Pioneer Battalion, carts of supplies for the warehouse crossed at Zimnicea (Ib., p. 315).

On 13/26 August 1913, the operational armed forces continued the marches to evacuate Bulgaria, and the troops on the left of the Danube were either carrying out the de-concentration transports or were stopped in medical observation because of the epidemic. Thus, the troops that crossed through transshipment to the left of the Danube at Rahova-Bechet point were the 3rd territorial Company 3 of the Dolj Battalion, the Călărași Logistics Squadron, the central subsistence warehouse and all the requisitions carriages, thus all the sick being evacuated and installed on the lazarette in the Bechet port. The entire troops and services of the 1st Division and part of the services of the 1st Army Corps crossed at Nicopole-Turnu-Măgurele point. The services of the 4th Army Corps crossed at the Șiștov-Zimnicea point (Ib.).

On the right side of the Danube, on the Bulgarian territory, there remained in Nicopolis, waiting for crossing the great river, the 5th Hunters Regiment, two squadrons of the 4th Călărași Regiment and one division of the 14th Artillery Regiment. In the area of Șiștov there were troops of the 4th Army Corps waiting for the order to cross the Danube. The Zlatița Detachment was at Hadji-Musa. The 33rd Reserve Infantry Brigade was in Bulgăreni. On the same day, the 17th Infantry Regiment, 1st Division Headquarter and the 31st Infantry Regiment were boarded on barges for Turnu-Severin and Calafat (Ib.).

The troops stopped on the left of the Danube in medical observation, north of Turnu Măgurele, were the 3rd Călărași Regiment, in Drăgănești, the 6th Roșiori

Regiment, in Lița, the 7th Prahova Regiment, in Odaia, the 1st Dolj Regiment, the 2nd Vâlvea Regiment, the 26th Rovine Regiment, in Islaz, and the 3rd Division around Zimnicea (Ib.).

At the end of 13/26 August 1913, after carrying out the de-concentration transports on water, on foot or on the railway, in compliance with the sanitary requirements, the 1st Cavalry Division was in Bucharest, the 1st Cavalry Brigade Headquarters and the 2nd Roșiori Regiment at Segarcea station, and the 3rd Cavalry Brigade Headquarters and the 7th Roșiori Regiment were boarded in the train that left Segarcea for Iași, arriving on the evening of 14/27 August 1913. On the same day, the 8th Roșiori Regiment reached Botoșani by rail, while the Mounted Artillery Division and the ammunition columns reached Portărești station waiting for boarding. The 3rd Roșiori Regiment boarded at Portărești during the day of 13/26 August 1913 and arrived in Bârlad on 16/29 August 1913. The troops of the 2nd Cavalry Division arrived in their garrisons, except for the 3rd Călărași Regiment, stationed in Drăgănești, and the 10th Călărași Regiment, part of the Zlatița Detachment, stopped at Hadja-Musa, waiting for crossing the Danube on 14 August. The 1st Reserve Division executed the march for de-concentration from Bechet to Măceșul, where it was stopped by doctors for medical reasons. The 21st Reserve Infantry Brigade Headquarters and 2 battalions from Mehedinți Circle were transported on barges reaching Turnu-Măgurele toward the end of the day. The 2nd Reserve Division, with all its troops and services, was in the garrison (Ib.).

The troops and services of the 3rd Army Corps that were not part of any division stationed northeast of Turnu-Măgurele to be transported by rail to garrisons, except for the troops of the 3rd Pioneer Battalion and the 10th Infantry Brigade of the 5th Division, which were transported by barges to Brăila, while the 6th Roșiori Regiment was contaminated and complied with sanitary measures. The 5th Division Headquarters reached Buzău by rail, while the 3rd Hunters Regiment and the 9th Infantry Brigade were waiting northwest of Turnu Măgurele for boarding (Ib.). In the same location, the 7th Prahova Regiment was also stationed under medical observation because of the troops contaminated by cholera. The 5th Artillery Brigade, the 7th Artillery Regiment and the Divisional Ambulance were waiting for boarding in Slatina. The 19th Artillery Regiment, the Ammunition Division, the Relay Squadron and Remount Squadron of the 3rd Army Corps were on the march toward Ploiești. The 6th Division Headquarters embarked from Turnu-Măgurele and arrived in Focșani on the morning of 15/28 August 1913. The 7th Hunters Regiment, the 24th Infantry Regiment and the 12th Infantry Brigade arrived in Galați,

and the 11th Brigade and the 10th Infantry Brigade Headquarters arrived in Brăila, the 6th Artillery Brigade Headquarters and the 11th Artillery Regiment in Slatina, and the 16th Artillery Regiment was transported by train to Focșani, where the divisional ammunition column of the 6th Division also arrived. The ambulance of the 6th Division with the column of stretcher-bearers were in Turnu-Măgurele and the Relay Squadron in Slatina (Ib.).

The 1st Army Corps troops were following a predetermined route, so that the 1st Division was preparing to cross the Danube, the 2nd Division was carrying out the de-concentration marches, its headquarters arrived in Corabia, while the 26th Rovine Regiment and the 2nd Vâlcea Regiment were stopped at Islaz for medical observation, their troops being contaminated. The 4th Infantry Brigade and the 3rd Olt Regiment reached Plopi-Elizaveta on the direction Turnu-Măgurele-Slatina, the 19th Infantry Regiment, the 2nd Artillery Brigade Headquarters and the 9th Artillery Regiment reached Corabia. The Relay Squadron in Corabia and the Divisional Ammunition Column in Băneasa.

The services and troops of the 2nd Army Corps that were not part of any division were marching toward Bucharest. The 10th Roșiori Regiment was in Giurgiu waiting to board, the 2nd Remount Squadron was in Turnu-Măgurele, the 1st Divisional Ammunition Column of the Artillery Park was in Roșiorii de Vede from where it left for Pitești. The 6th Hunters Regiment and the 8th Infantry Brigade arrived with their barges at Oltenița, from where they marched to Bucharest. The 7th Infantry Brigade, which included the 5th and the 20th Infantry Regiments, entered the residential garrisons. The artillery and services of the 4th Division were marching toward Bucharest, on the evening of 13 August they arrived at Drăgănești, while the 3rd Division, whose troops were contaminated, was stopped at Zimnicea, held under medical observation (Ib., n.p.).

On 14/27 August 1913, all the troops of the 1st Cavalry Division were boarded and transported by rail to the garrisons of residence, except the 2nd Cavalry Brigade that was marching toward Bucharest, a point it reached on 17/30 August 1913. The 9th Roșiori Regiment from the brigade arrived in Turnu-Măgurele on 15/28 August 1913, from where it left for Bucharest, the march being planned in 3 or 4 stages, being expected to arrive in the capital on 18/31 or 19 August/1 September 1913. All units of the 2nd Cavalry Division reached garrisons, except the 10th Călărași Regiment that crossed to the left of the Danube at Zimnicea from where it boarded to Târgoviște, the 2nd Călărași Regiment was stopped at Drăgănești under medical observation. The 1st Reserve Division was marching toward Portărești-Segarcea,

the 2nd Călărași Regiment reached the garrison in Caracal, the 4th squadron of this regiment was at Portărești from where it left for Râmnicu-Vâlcea. The troops from Craiova garrison belonging to the 1st Reserve Division entered the city on 15/28 August 1913. The battalions from the Vâlcea Recruitment Circle embarked at Portărești and entered the garrison on 16/29 August 1913 and the battalions from the Olt Recruitment Circle embarked at Portărești and Segarcea and reached Slatina on 16/29 August 1913. The Pioneer Reserve Company and the Telegraphy Section boarded at Portărești on 16/29 August 1913 and entered Bucharest on 17/30 August 1913. The Divisional Ammunition Column embarked on 15/28 August 1913 at Portărești and Segarcea, arrived at Filiași on the night of 16/29 August 1913, from where it marched toward Târgu-Jiu. On 14/28 August 1913, one company from the Gorj Recruitment Circle, two platoons from the Dolj Recruitment Circle, two platoons from the Rovine Recruitment Circle, two companies from the 1st Hunters Regiment and two platoons from the 42nd Reserve Regiment were under medical observation at Segarcea, while the 2nd Reserve Division reached with all the troops in the garrisons of residence.

The troops and services of the 1st Army Corps crossed the Danube on 14/28 August 1913. The 1st Division was transported on the Danube, the 31st Infantry Regiment and the 17th Infantry Regiment, the 1st Hunters Regiment were on their way to Craiova, a city they entered on 15/28 August 1913, the rest of the troops arrived in Corabia. The 2nd Division Headquarters arrived in Craiova on the night of 14/27-15/28 August 1913. The 3rd Olt Regiment, the 14th Artillery Regiment and the Divisional Ammunition Column reached Slatina on 15/28 August 1913, together with the 19th Romanați Regiment. The 9th Artillery Regiment and the Relay Squadron reached Caracal on 15/28 August 1913. The Ambulance of the 2nd Division embarked and arrived in Craiova on 15/28 August 1913 (Ib.).

The services and troops of the 2nd Army Corps that were not part of any division marched to Bucharest, arriving on 15/28 August 1913. The 10th Roșiori Regiment arrived in Târgoviște by train on 15/28 August 1913. The 1st Divisional Ammunition Column of the Artillery Park reached Pitești on 15/28 August 1913. The 4th Division reported that the 7th Infantry Brigade entered the residential garrisons, the 8th Infantry Brigade, the 4th Artillery Brigade and the Division services entered Bucharest on 15/28 August 1913 (Ib.).

The troops and services of the 3rd Army Corps were stationed, on 14/27 August 1913, north of Turnu Măgurele, where they were waiting to be embarked on the railway, except the 3rd Pioneer Battalion that arrived in Brăila by the barge

on the Danube. The 5th Division Command arrived in Buzău on the same day, while the 3rd Hunters Regiment, the 9th Infantry Brigade embarked at Turnu Măgurele, with the destination Ploiești, where they arrived on 15/28 August 1913. The 2nd Battalion of the 7th Infantry Regiment was kept under medical observation, the 8th Buzău Regiment embarked in Braila to Buzău, where it arrived on 15/28 August 1913, and the 9th Infantry Regiment was marching from Brăila to Râmnicu Sărat, where it arrived on 16/29 August 1913. The 7th Artillery Regiment was stationed in Slatina, where it was waiting to embark, the 19th Artillery Regiment arrived at Băneasa, while the Divisional Ammunition Column was stopped under medical observation at Alexandria. The Relay Squadron and the Remount Squadron arrived at Băneasa. The 6th Division Headquarters reached Focșani on 15/28 August 1913, and the 10th Putna Regiment on 16/29 August. The 24th Tecuci Regiment reached the garrison on 16/29 August 1913, the 12th Cantemir Regiment reached Bârlad on 14/27 August 1913, the 16th Artillery Regiment reached Focșani on 16/29 August 1913, while the 11th Artillery Regiment and the Relay Squadron were waiting in Slatina and the Divisional Ambulance in Turnu Măgurele to embark toward the garrison. The 4th Army Corps was kept under medical observation north of Zimnicea (Ib.).

On 15/28 August 1913, the operational armed forces had evacuated almost completely the territory of Bulgaria, with the presence of two Romanian detachments being reported at Nicopolis and Șiștov. On that day, the 7th Division of the 4th Army Corps and the 33rd Reserve Infantry Brigade crossed the Danube at Șiștov-Zimnicea (Ib.).

At that time, there were kept, on the left bank of the Danube, under medical observation, in Segarcea, troops of the 1st Army Corps and the 1st Reserve Division, namely, one company and half of the 41st Infantry Reserve Regiment, two platoons from the 42nd Infantry Reserve Regiment, two platoons from the 43rd Infantry Reserve Regiment, in Corabia, two companies from the 1st Hunters Regiment, the 1st Dolj Infantry Regiment, north of Islaz, the 2nd Vâlcea Infantry Regiment and the 26th Rovine Infantry Regiment. Also under medical observation were kept troops of the 2nd Army Corps, such as the 3rd Infantry Division, north of Zimnicea, the 15th Artillery Regiment, north of Năsturel, the 6th Artillery Regiment and the Ambulance of the 3rd Division, south-east of Găuriciu, the 3rd Divisional Ammunition Column, north-west of Găujani. The 3rd Army Corps had under medical observation the troops of the 5th Roșiori Regiment, south of Segarcea din Vale, one battalion from the 7th Prahova Regiment, west of Odăi, and the Divisional Ammunition Column of the 5th Division, in Alexandria. The 4th Army Corps had the following troops stopped

for the sanitary inspection: The 7th Division, north of Zimnicea, the 8th Division, south of Bragadiru, and the services of the Corps, north of Bujoru-Petrișu. The 2nd Cavalry Division had the 3rd Călărași Regiment under observation in Drăgănești (Ib.).

On the evening of 15/28 August 1913, the 1st Cavalry Division was on its de-concentration march, the 1st Cavalry Brigade was on its way, by rail, to Mărăsești and Bârlad, the 2nd Cavalry Brigade was marching toward Bucharest and the 9th Roșiori Regiment reached Turnu Măgurele, while the Mounted Artillery Division reached Galați and its ammunition column was scheduled to reach on 16/29 August 1913. The 2nd Cavalry Division was with all its troops in the garrisons of residence. The 10th Călărași Regiment was marching to Giurgiu, from where it was going to embark on the railway to the garrison. The 3rd Călărași Regiment was under medical observation at Drăgănești, the 1st Reserve Division reached the Craiova garrison, the troops belonging to the recruitment circles Vâlcea, Gorj and Olt embarked on the railway in the stations Portărești, Segarcea toward the residential garrisons where they arrived on 16/29 August 1913 (Ib.).

As for the situation of the troops of the 1st Army Corps, , on 15 August 1913, its services were marching from Islaz to Corabia, except for the 1st Pioneer Battalion that embarked on barges for Oltenița from where it started marching to Bucharest. The Wireless Telegraphy and Projectors Section reached Bucharest while the Mountain Artillery Division was boarding the railway on its way to the capital. The Commander of the 1st Division reported that the 17th and the 31st Infantry Regiments arrived on 15/28 August in garrisons, the 1st Dolj Regiment was kept under medical observation in Corabia, the 18th Gorj Regiment and the 5th Artillery Regiment were on their way to Târgu Jiu, the 1st Artillery Regiment was marching toward Caracal with the destination Craiova, while the Divisional Ammunition Column was waiting in Corabia for the train to Târgu Jiu, with the destination Craiova, and the Relay Squadron arrived on march to Caracal. Regarding the situation of the 2nd Division, on 15/28 August 1913, all the troops were in the respective garrisons except the troops stopped for medical observation. The 9th Artillery Regiment reached Zănoaga, being scheduled to enter Craiova garrison on 16/29 August 1913 (Ib.).

The troops and services of the 2nd Army Corps that were not part of any division were, on the evening of 15/28 August 1913, stationed in their garrisons, while the 3rd Division was kept under medical observation. The 4th Division reported that all troops and services had reached garrisons (Ib.).

The troops and services of the 3rd Army Corps that were not part of any division were stationed north-west of Turnu Măgurele, where they were waiting for transportation by rail to the garrisons. Thus, the 5th Division Headquarters, the 3rd Hunters Regiment and the 9th Infantry Brigade were already boarded and transported by rail from Turnu-Măgurele to Ploiești and Buzău, while the 2nd Battalion of the 7th Infantry Regiment was kept under medical observation. The 7th Artillery Regiment was stationed in Slatina to embark. The 19th Artillery Regiment, the Relay Squadron and the 3rd Remount Squadron were taking a rest for one day near Bucharest. The Divisional Ammunition Column was kept under medical observation in Alexandria. The 6th Division Headquarters reached Focșani, the 10th Putna Regiment and the 24th Tecuci Regiment were marching from Brăila to Galați. The 11th Artillery Regiment boarded from Slatina for rail transport to Focșani, and the 16th Artillery Regiment was on the train to Focșani, a point reached on 16/29 August 1913, while the 6th Division Ambulance was waiting for boarding at Turnu-Măgurele and the Relay Squadron was waiting in Slatina (Ib.).

The 4th Army Corps was kept under medical observation and the 33rd Reserve Infantry Brigade crossed the Danube on the bridge from Șistov-Zimnicea with two regiments, the third regiment was waiting to cross the next day, namely 16/29 August 1913.

CONCLUSIONS.

ROMANIA – A REGIONAL STATUS-QUO POWER WITH INSUFFICIENT RESOURCES

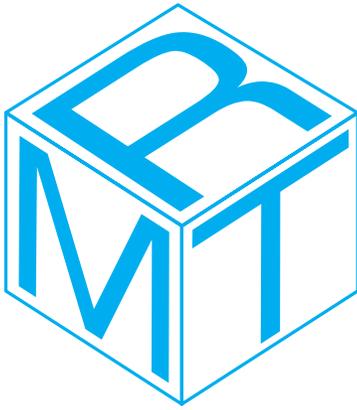
Romania quickly intervened in the conflict zone, in line with the commitment made to the great powers, to contribute to the restoration of peace in the Balkans. For Bulgaria, caught between two fronts, it was difficult to cope with the third front opened by Romania, given that, at the moment of the Romanian intervention, Bulgaria had stabilized the situation on the two fronts. The Romanian armed forces deployed the troops according to the established plan, respecting the political commitments assumed by Romania toward the international community.

I appreciate that the Romanian Armed Forces, modernized and equipped as a result of the efforts made in the years preceding the conflict, played a decisive role in the victory against Bulgaria, by opening a new front in the north, given that the Bulgarian troops, having fought in the First Balkan War, were concentrated in the south and east, thus contributing to the increase of Romania's prestige, whose strategic importance, in the context of the complicated situation in the Balkan Peninsula, was reconsidered.

However, the campaign in Bulgaria in 1913 highlighted the poor operational state of the armed forces, while at the same time there were great shortages in sanitary materials. With all the cholera epidemic protection measures taken as part of the evacuation operations, the number of troops infected was over 4,800. In terms of training, equipment and cohesion between the echelons, there were significant gaps.

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