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EDITOR'S NOTE

The 3rd edition of the journal, number 80, includes a collection of eight articles, written by both Romanian and foreign authors, followed by a review of a recently published book.

The journal is opened by the rubric *Security and Military Strategy*, with an article where Mr. Nicusor Cojan highlights certain UN initiatives and policies, designed to respond to challenges of the international environment, thus demonstrating the important role of general secretaries in the evolution and development of the organization. Further, Professor Florin Nistor, PhD, together with Associate Professor Engineer Lucian Valeriu Scipanov, PhD, sign a study that aims to achieve the correspondence between the characteristics of the Black Sea and the necessary capabilities for the manifestation of maritime power, through a proper feedback in case of joint military actions to contribute to supporting national interests at the maritime and riverine areas. The third article's author in this section, Robert Zsákai PhD, aims to set out the elements for assessing the risk and resilience of people in disaster situations, in order to understand weaknesses, with the recommendation that the assessment results be included in the measures for emergency planning.

Under the heading *NATO and EU: Policies, Strategies, Actions*, we have included a paper signed by Miklós Böröcz, who outlines the risks involved in critical infrastructure, as well as EU action in the field of critical infrastructure protection. The second article included in this section belongs to Mr. Lajos Szabó and Mrs. Zsuzsanna Balogh, PhD, and aims at showing some of the existing ways, tools, and techniques of protecting (critical) infrastructure elements that can be easily adapted in Hungary.

Next, within the rubric *The Terrorist Threat*, one may read an analysis of Mrs. Associate Professor Alba Iulia Catrinel Popescu, PhD, on how the attack orchestrated by Salafist fanatics in Al Qa'ida on the USA, on September 11, 2001, transformed and continues to transform society and global geopolitical dynamics.

In the *Information Society* section, we have included an article written by Professor Daniel Dumitru, PhD, and Mrs. Cristina Bodoni that highlights the role of diplomats in the cyber security environment and the link between hybrid warfare, digital diplomacy and humanitarian law.

In the rubric *Military History*, Mrs. Associate Professor Alba Iulia Catrinel Popescu, PhD, is advancing an analysis of the evolution of economic relations between Romania and the sub-Saharan states before the events of December 1989 and in the first two decades of the transition towards a market economy.



In the **Book Review** section, we would like to bring to the readers' attention a book by the Romanian Reserve Officers Association (AORR), which describes its activities and role in the current context, and coordinated by Brigadier General (rtr.) Vasile Băețelu, PhD, and Lieutenant Colonel (rtr.) Virgil Bălăceanu, PhD, and reviewed by our colleague, Colonel (r.) Researcher Crăișor-Constantin Ioniță, PhD.

Also, this edition includes the **Guide for authors**, a mandatory reading for those who want to disseminate the research results in *Strategic Impact*.

For those who read for the first time *Strategic Impact*, it is an open-access peer reviewed journal, edited by the Centre for Defence and Security Strategic Studies and published with the support of "Carol I" National Defence University Publishing House, and, according to the National Council for Titles, Diplomas and Certificates (CNATDCU), the publication is a prestigious scientific journal in the field of military sciences, information and public order.

Strategic Impact is being printed in Romanian language for twenty-one years and in English for sixteen years and approaches a complex thematic: political-military topicality; security and military strategy; NATO and EU policies, strategies and actions; geopolitics and geostrategies; information society and intelligence, military history. Readers may find in the pages of the publication analyses, syntheses and evaluations of strategic level, points of view which study the impact of national, regional and global actions dynamics.

Regarding international visibility – the primary objective of the journal – the recognition of the publication's scientific quality is confirmed by its indexing in the international databases CEEOL (Central and Eastern European Online Library, Germany), EBSCO (USA), ProQuest (USA) and, in addition, WorldCat and ROAD ISSN, but also its presence in virtual catalogues of libraries of prestigious institutions abroad, such as NATO and of universities with military profile in Bulgaria, Poland, Czech Republic, Hungary, Estonia etc.

Strategic Impact is printed in two distinct editions, both in Romanian and English language. The journal is distributed free of charge in main institutions in the field of security and defence, in the academia and abroad – in Europe, Asia and America.

In the end, we would like to encourage those interested to publish in our journal to prospect and evaluate thoroughly the dynamics of the security environment and, also, we invite the interested students, Master Students and Doctoral Candidates to submit articles for publication in the monthly supplement of the journal, *Strategic Colloquium*, available on the Internet at <http://cssas.unap.ro/ro/cs.htm>, indexed in the international database CEEOL, Google scholar and ROAD ISSN.

Editor-in-Chief, Colonel/Florian CÎRCIUMARU, PhD
Director of the Centre for Defence and Security Strategic Studies



UN' SECRETARIES-GENERAL INITIATIVES IN RESPONSE TO THE CHALLENGES OF THE INTERNATIONAL SECURITY ENVIRONMENT

*Nicușor COJAN**

Throughout its history, the United Nations (UN) has developed and tried to adapt in order to be able to respond to the challenges of the international security environment. Contemporary society is composed of a complex of economic, political, cultural, religious entities, etc., in a continuous evolution or transformation, which also generate ever new challenges to the very existence of human existence. Against this background, we have considered it useful to review some UN initiatives, key documents and policies, from the beginning until nowadays, in order to address as many of the challenges as possible in the international security environment, in an attempt to create a better world, demonstrating the important role of Secretaries-General in the evolution and development of the organization.

Keywords: *global challenges; security environment; UN initiatives; UN Secretary-General; 2030 Agenda.*

1. Challenges to Global Security

The beginning of the 21st century finds mankind in a state of severe crisis, global society is facing a number of new challenges, on whose resolution, scientists believe, future progress and even the survival will depend.

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Research is based on the assessments and considerations related to global challenges, also the analyses and reports of renowned researchers, analysts and specialists in the field of research centers or international institutes that try to sound an alarm signal to the critical situation in which we find ourselves as a civilization. The development of contemporary human society has not been done on a sustainable basis, the destruction of the natural environment, conflicts over resources, overpopulation, fierce human competition or exacerbated individualism, maintaining the arms race and modern slavery are all manifestations that do not belong to modern civilization.

The identification of global challenges is the result of ongoing research, and of studies such as “Delphi”¹, reports of the World Economic Forum (WEF) or the Organization for Economic Co-operation and Development (OECD), summits, conferences and interviews with experts from around the world. Thus, among the global challenges discussed in these forums and meetings, the most debated challenges included were: poverty, corruption, unemployment, economic globalization, migration, human rights, terrorism, armed conflict, climate change, environmental pollution, epidemics, and religious conflicts.

Living in an increasingly globalized society, we believe that analyzing these challenges in an intercorrelated way would be the most effective, because conducting a separate study, focusing exclusively on each challenge, may not always lead to the identification of all causes. Globally, the UN estimated that 15 security challenges² can be highlighted in this way:

1. achieving sustainable development for all involved, as we tackle global climate change;
2. ensuring clean water for all the world’s population, without conflicts occurring in the world;
3. balancing population growth with declining resources;
4. authoritarian regimes can make room for genuine democracy;
5. optimizing decision-making by integrating improved global forecast during an unprecedented accelerated change;
6. how global convergence of information and communication technologies for all can work;
7. encouraging ethical market economies to help reduce the gap between rich and poor;
8. reducing the threat of new diseases, their recurrence and immune

¹ A.N.: The Real-Time Delphi is a relatively new and effective method for collecting and synthesizing expert opinions. The original Delphi technique was developed by RAND Corporation in the late 1950s.

² The Millennium Project, *Global Futures Studies & research*, URL: <http://www.millennium-project.org/projects/challenges/>, accessed on 12.05.2021.



microorganisms;

9. how education can make humanity smarter, more informed and wiser enough to meet global challenges;

10. reducing ethnic conflicts, terrorism and the use of weapons of mass destruction through common values and new security strategies;

11. how the changing status of women can contribute to improving the human condition;

12. counteracting transnational organized crime networks so that they do not become stronger and more sophisticated global enterprises;

13. safely and efficiently meet growing energy demands;

14. accelerating scientific and technological discoveries;

15. ethical considerations to be incorporated into global decisions.

All of these global challenges take place in a complex interconnected system, with a seemingly unimportant event in a particular region of the globe causing instability in another remote area of the world.

From our standpoint, following the study of a significant number of bibliographic reference sources, the global challenges, with major impact, that we face and that the society will probably face in the future, we appreciate that they are the following: climate change; extreme poverty and inequality; economic and financial crises; food crisis; water shortage; energy security; migration; population growth and demographic change; urbanization; pandemics and infectious diseases.

Studies and analyzes of the various institutes, have identified many more challenges that can affect the future of humanity for which urgent UN solutions are needed.

In the first four decades of its existence during the Cold War, the blocking of some draft Security Council decisions by some Member States led to many dysfunctions in the organization's activity. Despite the ideological and power conflicts between the two political-military blocs³, which influenced the debates and negotiations in all organization's forums, UN has continued to play its role as a key international body in conflict prevention, international crisis management, but also promotion and defence of individual rights and freedoms.

The United Nations has managed to improve the lives of millions of people and prevent a series of crises in its 76 years of existence. It is worth mentioning the UN Charter on the Rights of the Child or the fight against diseases such as AIDS and malaria. The UN has also achieved notable successes in terms of the millennium goals. According to official data, the number of people suffering from

³ A.N.: In the Cold War, two groups of states clashed with very different ideologies and political systems. The USSR and its allies, the "Eastern Bloc" represented at the politico-military level by the Warsaw Pact and, respectively, the USA and its allies - the "Western Bloc", represented by NATO.



global hunger⁴ has been halved, and infant mortality has been reduced by 60% from 1990 to the present day, according to the report presented by UNICEF in 2020⁵. These are impressive achievements, all the more so as the UN has meanwhile set the goal of sustainable world development. This is only possible through a mixture of economic development, social progress and care for the environment.

As the former Secretary-General, Kofi Annan, said, the UN is not, a perfect organization but it is the best one we have. The necessity of the United Nations to reform both the basic principles and its own organizational structure derives from the radical change in the system of international relations.

Playing a very important role in the decision-making and representative mechanism of the organization, the nine secretaries-general so far have shared the critical attitude regarding the increased tendency of some states to bypass the UN, to avoid the involvement of this instrument of collective security in the concrete management of conflicts.

Concerns for the protection of human rights and victims of conflict are also part of the construction of the contemporary model of conflict resolution. A powerful tool is economic sanctions, with dramatic implications for any state trying to access global markets.

At the same time, encouraging of democratic governance in member countries can and must be a UN realistic and permanent mandate, especially since it exists clear support of most major contributors to the budget in this regard. The organization has the legitimacy and competence to contribute to the process of democratization on a global scale. The gradual elaboration of a relevant regulatory framework, as well as the assimilation and support of concrete action plans taken by Member States in various international forums, can crystallize a direction of reform, the possible key to other profound transformations.

However, the fate of the UN and, implicitly, of those mandated to lead the organization, is to express, defend and promote the building of a community of states and all the individuals that make them up globally.

The conceptual legitimacy of this desideratum is neither sufficiently supported by its level of institutionalization nor stronger in relation to that of the Member States, a vulnerability that can be overcome by the personality, competence, will and active involvement of the UN Secretary-General.

For example, the Secretary-General, with the agreement of the Security Council, shall bring to the attention of the General Assembly, at each session, all

⁴ ***, “We can end poverty”, UN, URL: <https://www.un.org/millenniumgoals/poverty.shtml>, accessed on 25.07.2021.

⁵ ***, “Levels and trends in child mortality” Report 2020, Estimates developed by the UN Inter-agency Group for Child Mortality Estimation. URL: <https://www.unicef.org/media/79371/file/UN-IGME-child-mortality-report-2020.pdf>, accessed on 25.07.2021



matters relating to the maintenance of international peace and security dealt with by the Security Council. Acts issued at the level of the General Assembly are resolutions and have the character of a recommendation for the member states without affecting their right to sovereignty⁶. Moreover, the Secretary General will act, in his capacity as the highest administrative official of the organization, at all meetings of the General Assembly, the Security Council, the Economic and Social Council and the Guardianship Council and may draw the attention of the Security Council on any issue which, in his opinion, could endanger the maintenance of international peace and security.

The UN also means projecting key values, such as universalism and individual diversity. Despite the inherent conceptual contradiction, the organization's dependence on the will of the Member States can also become a source of increasing the legitimacy of the UN, insofar as states will consent to and recognize the validity of global objectives achievable only through intergovernmental organizations. Thus, a democratic legitimacy distinct from the national one, but complementary to it, will be sustained and nurtured.

2. Initiatives of the Secretaries-General throughout UN's History

The UN's Secretary-General is a symbol of the ideals of the United Nations and a spokesperson for the interests of the world's peoples. The *UN Charter* defines him/her as "the highest-ranking official"⁷, who performs in this capacity "all other functions with which he is entrusted"⁸ by the Security Council, the General Assembly, the Economic and Social Council and the Board of Trustees. The Charter authorizes the Secretary-General to "notify the Security Council of any file which, in his opinion, could endanger the maintenance of international peace and security"⁹.

Despite all these general specifications that define the duties of the office, the Secretary-General has considerable room for maneuver. He/she must also defend the values and moral authority of the United Nations and militate in his peace speeches and actions, even at the risk of sometimes contradicting the Member States, on whose support it depends very much. The Secretary-General, together with the entire Secretariat, has the prerogative not to show loyalty or obedience to any state, but only to the United Nations, his/her decisions being taken regardless of his/her country of origin.

One of his main roles is to use his integrity and influence on the one hand,

⁶ According to art. 12 from *UN Charter*.

⁷ A.N.: According to art. 97-99 from *UN Charter*.

⁸ *Ibidem*.

⁹ *Ibidem*.



independence and impartiality on the other, to make his own efforts in public or in private in order to prevent the emergence, aggravation or spread of conflicts.¹⁰

We considered relevant the review of some of the most important initiatives and actions undertaken by the UN to respond to the challenges of the international security environment, which is constantly dynamic, but also the input of the secretaries-general to them, the way they identified ever new ways and solutions adapted to the new requirements as well as the way in which the projects were continued from one mandate to another.

Thus the first Secretary-General, Trygve Halvdan Lie, from Norway, was concerned, for the most part of his term (1946-1952), about the development of the Secretariat and the organization of the United Nations, headquartered in New York, in a competent structure. In addition, during this period a number of special organizations and humanitarian organizations were created, with the purpose of facilitating the reconstruction of territories destroyed during the war, especially at European level. A highlight of those years was the Universal Declaration of Human Rights, prepared by the UN Commission on Human Rights – a special body within the Economic and Social Council – and adopted unanimously on December 10, 1948, by the General Assembly. Due to the fact that the *power of law* was beginning to manifest itself, restricting the *right to power* as a result of the policies supported by the first UN Secretary-General, he becomes an awkward/uncomfortable person and various accusations are brought against him by some US senators related to the fact that it offered jobs in the organization to disloyal Americans.¹¹

Since 1953, when after Stalin's death, relations between the two blocs have moved towards a state of relative relaxation, and within the UN there has been a relaxation of working conditions. 1953 is also the year when the Swede Dag Hammarskjöld was elected UN Secretary-General (the second secretary), being considered to this day the most efficient Secretary-General the Organization has ever had¹². Dag Hammarskjöld was not only seen as a representative and administrative head of the United Nations. A man of initiative and vision, aware of the goals of the Organization, he skillfully used, in the years following his appointment, some niches in the UN's Charter to expand the Secretary-General's tasks and areas of activity.

¹⁰ *Ibidem*.

¹¹ ***, "Norwegian statesman and secretary-general of the United Nations", *Britannica*, URL: <https://www.britannica.com/biography/Trygve-Lie>, accessed on 13.05.2021.

¹² Dag Hammarskjöld (Sweden) – Former Foreign Minister, he led the UN between 1953 and 1961. A great diplomat who mediated the Suez Canal crisis (1956) and the crisis in Jordan (1958), died in September 1961 in a mysterious plane crash during UN intervention in Belgian Congo (now the Democratic Republic of Congo) after its DC-6 plane crashed near Ndola (Zambia). URL: <http://m.cotidianul.ro/mari-oameni-politici-disparuti-in-catastrofe-aeriene-112222/>, and URL: http://evz.ro/moartea-unui-fost-sef-al-onu-cine-ar-fi-vrut-sa-il-elimine-pe-dag-hammarskjold-942242.html?ref=newswire.ro_, accessed on 12.05.2021.



Based on the 1950 Uniting-for Peace resolution, the United Nations developed, in the mid-1950s, at the request of the new Secretary-General, a completely new and unforeseen instrument of the Charter: “peacekeeping missions”¹³. Unlike classical forms of conflict resolution by confounding, these operations were not based on the use of force, serving to stabilize the principle of renunciation of violence, by installing a “buffer zone” between the parties to the conflict, under the strict condition of three principles: consensus of the parties to the conflict, impartiality of UN forces and use by UN forces of force strictly for self-defence or for the implementation of the entrusted mandate¹⁴.

Thanks to the United Nations, after the path to independence of the colonies had been marked in a first phase of bloody (liberation) struggles, this process could be diverted, on an orderly and peaceful path. The decolonization process also had substantial effects at the level of the United Nations. The newly independent states joined the Organization, so that the number of its members was enriched only between 1955 and 1962, with 50 new states. By 1965, 118 states were already part of the United Nations, and the geographical distribution of members had also changed fundamentally¹⁵. The former colonies that joined the UN were all, almost without exception, developing countries. These “third world” countries now had a majority in the General Assembly.

As a natural effect, the expansion of the organization through the accession of these states also led to the establishment of the premises for a UN Secretary General from underdeveloped or developing countries, former colonies of the great empires, as was the case of Sithu U Thant in Burma or Kofi Annan from Ghana. The two appointments have made a significant contribution to broadening the range of proactive UN human rights measures and bridging development gaps between countries around the world.

Thus, elected UN Secretary General in 1961, Sithu U Thant becomes the coordinator of new policies that have been at the center of the UN’s attention, among which we distinguish Development Policy. Majority in the General Assembly, developing countries laid the foundations of UNCTAD (United Nations Congress on Trade and Development), the General Assembly proclaiming the “First Decade of Development”¹⁶. At the same time, in 1963, two amendments were made to the

¹³ ***, *United Nations Peacekeeping helps countries torn by conflict create conditions for lasting peace*. URL: <https://peacekeeping.un.org/en/what-is-peacekeeping> and URL: <https://peacekeeping.un.org/en/what-we-do>, accessed on 12.05.2021.

¹⁴ *Ibidem*.

¹⁵ United Nations, Member States, URL: <https://www.un.org/en/member-states/>, accessed on 12.05.2021.

¹⁶ ***, UN Documentation: Development, URL: <https://research.un.org/en/docs/dev/1960-1970> and [https://undocs.org/en/A/RES/1710%20\(XVI\)](https://undocs.org/en/A/RES/1710%20(XVI)), accessed on 13.05.2021.



UN' Charter, so that the number of non-permanent members of the Security Council increased from six to ten, and the number of members of the Economic and Social Council increased from 18 to 27 (in 1971, once again, at 54).

In the early 1960s, when international peace was threatened and a huge danger posed to humanity by the “Cuban Missile Crisis” (October 16-28, 1962), the United Nations reported one of their most important achievements.

At the height of the confrontation, when a Soviet flotilla consisting of submarines with nuclear payloads on board and surface ships was already on its way to Cuba, whose maritime territory had been declared a quarantine zone for Soviet ships by US' President J.F. Kennedy, UN' Secretary-General Sithu U Thant has managed to stop the escalation of the conflict through direct mediation between the two conflicting parties.

Since 1972, Kurt Waldheim, from Austria, has been at the helm of the organization. At the heart of the United Nations' activities were several issues in various fields. Right from the inauguration of the new Secretary-General, was hosted the first world conference on the environment in Stockholm in June 1972, attended by delegations from more than a hundred nations and four hundred governmental and non-governmental organizations¹⁷, issues of great depth have been raised, which have now proved to be fundamental challenges for stability and peace in the world: the accelerated degradation of the environment, population growth and depletion of natural resources.

In this regard, we mention the adoption by the Extraordinary UN General Assembly in 1974, of the “Declaration on the Establishment of a New World Economic Order”. It was supplemented by a “Charter of the Economic Rights and Obligations of States”, adopted as a resolution, in December 1974, by the General Assembly. Although he had a shady past of adherence to the Nazi movement in World War II¹⁸, his diplomatic career after the end of the world conflagration, but also the position of representative of a neutral state in the confrontation of the two power blocs during the Cold War helped to focus on UN direction of action.

With regard to peacekeeping, the Organization was in a deep crisis in the 1980s, as in the previous decade: the UN continued to be present in the Middle East and in Cyprus with a number of missions, but they could not prevent new military confrontations in both areas of conflict. UN have been unable to intervene effectively in resolving the subsequent conflicts in Nicaragua, Western Sahara, Cambodia and Afghanistan, and in resolving the growing war between Iran and Iraq. The main problem was, at this stage of international policy, that the proposals

¹⁷ Giancarlo Sturloni, *Intoxicated planet, many words, few deeds*, Seneca Publishing House, Bucharest, 2017, p. 23.

¹⁸ Jonathan Kandell, *Kurt Waldheim dies at 88; ex-UN chief hid Nazi past*, URL: <https://www.nytimes.com/2007/06/14/world/europe/14iht-waldheim.3.6141106.html>, accessed on 13.05.2021.



for a solution from the United Nations had not been heard¹⁹.

In this context, Pérez de Cuéllar, the fifth UN' Secretary-General, addressed the General Assembly in his 1983 annual report on a “process of decomposition of multilateralism and internationalism”²⁰, which severely undermines the activities of the United Nations.

During his tenure as UN Secretary-General, Pérez de Cuéllar took part in several peace negotiations, including those between Britain and Argentina, during the Falkland Islands War – 1982, those between Israel and Lebanon, in during the Lebanon War – 1982, and those between Afghanistan and the Soviet Union, during the Soviet Invasion in Afghanistan – 1988. During the Iran-Iraq War, 1980-1988, Secretary-General Javier Pérez de Cuéllar personally negotiated a ceasefire end of active hostilities in August 1988.

This peacekeeping crisis has widened into an existential UN crisis due to Reagan's US policy of withdrawing and refusing to pay dues in the mid-1980s. This policy was triggered by US dissatisfaction with the unfavourable series of voting sessions in the General Assembly and the resolutions adopted by the Security Council, in which the US was forced to exercise its *veto* power to prevent the application. sanctions on South Africa and southern Rhodesia, as well as to stifle criticism of Israel's policy toward neighbouring states and the Palestinians.

The 90's brought new turmoil and conflicts on the global stage, manifestations that are other milestones for the UN. The missions in the former Yugoslavia, in Croatia, Bosnia-Herzegovina, Congo or Somalia have profoundly marked the evolution of UN' policies, causing new adaptations, but also reproaches to the UN.

The development of the “second generation” of the “peacekeeping” doctrine of the early 1990s have been rather gradual in nature, with missions taking place in post-conflict situations, ie in rather peaceful and peaceful contexts and starting from the premise of the existence of prior peace agreements, respectively of a consensus between the conflicting parties. However, some peacekeeping missions after 1992 have come into conflict with the fundamental principles of the *Blue Helmets* concept²¹.

Newly installed as UN' Secretary-General, Boutros Boutros-Ghali, has repeatedly argued that peacekeeping troops do not receive tasks that do not meet the principles and requirements specific to the concept of peacekeeping. An

¹⁹ United Nations peacekeeping, URL: <https://peacekeeping.un.org/en/our-history>, accessed on 13.05.2021.

²⁰ Edward Newman, *The UN Secretary-General from the Cold War to the New Era*, URL: https://link.springer.com/chapter/10.1057%2F9780230504547_6.

²¹ Ion-Alexandru Groșeanu, *NATO-EU-OSCE-UN comparative study on crisis management*. (summary) Bucharest. URL: https://www.academia.edu/4657789/STUDIU_COMPARATIV_NATO-UE-OSCE-ONU_privind_managementul_crizelor_rezumat_, p. 9.



eloquent example in this regard was the successive extension of the UNPROFOR mandate, carried out under the pressure of events and the determination of major actors, a determination that was not found in the military logistics provided. Blue Helmets soldiers were taken hostage several times, reaching positions between the fronts, which were often not even known to be composed of combat forces, regular armies or so-called warlords. The failed missions in Somalia and the former Yugoslavia symbolize the beginning of the UN' *peacekeeping crisis*²².

In the reform measures implemented in the late 1990s, under the auspices of Boutros Boutros-Ghali, we distinguish the Secretariat's effort, as well as its subordinate departments, to adopt more drastic changes to align their competencies and capabilities with the challenges of that time²³.

The seventh UN Secretary-General, Kofi Annan, begins his term in challenging times, with the international arena marked by numerous interethnic disputes in several regions of the world, and global environmental issues. Immediately after his appointment as Secretary-General, Kofi Annan took a reorientation of the Secretariat's work, defining four main goals for the United Nations, as follows: development; security; human rights; reforming the organization – as a ubiquitous task²⁴. To these five areas, Kofi Annan subordinated to the various departments of the Secretariat and part of the special bodies and programs. In his report on reforms issued by the Heads of State and Government in 2000 at the UN' Summit, Kofi Annan identified three strategic objectives, which have since been an important point of reference in the reform debate, namely: Development Agenda (poverty release), Security Agenda (fear release) and Environmental Agenda (the future of ecology)²⁵.

In his United Nations' reform program, presented in July 1997, the Secretary-General Kofi Annan later generated the premises for a *peaceful revolution*. Under his leadership, the Millennium Summit allowed for collective commitments aimed at halving the level of poverty by 2015²⁶.

²² Sven Gareis, Johannes Varwick, "Die Vereinten Nationen. Aufgaben, Instrumente und Reformen; Bundeszentrale für politische Bildung Schriftenreihe Band 403", Bonn 2003 apud *Military Science Magazine*, no.1/2011, col. Ion Panait, "UN intervention in international conflicts", URL: [http://www.aos.ro/wp-content/anale/RSMVol11Nr1\(22\)Art.6.pdf](http://www.aos.ro/wp-content/anale/RSMVol11Nr1(22)Art.6.pdf)., accessed on 14.05.2021.

²³ ***, *UN Secretary General Boutros Boutros-Ghali and his contribution to Peacekeeping*, URL: ppjournal.wordpress.com/2016/02/23/un-secretary-general-boutros-boutros-ghali-and-his-contribution-to-peacekeeping/, accessed on 03.09.2021.

²⁴ ***, "*In Larger Freedom*", The Report of the UN Secretary-General for the Millennium+5 Summit. URL: <https://archive.globalpolicy.org/images/pdfs/briefing.pdf>, accessed on 03.09.2021

²⁵ Secretary General Kofi Annan's Reform Agenda - 1997 to 2006, URL: <https://www.globalpolicy.org/un-reform/32283-secretary-general-kofi-annans-reform-agenda-1997-to-2006.html>, accessed on 14.05.2021.

²⁶ United Nations Millennium Declaration, *Resolution adopted by the General Assembly*, p. 4, URL: <https://undocs.org/A/RES/55/2>, accessed on 14.05.2021.



In January 2007, Ban Ki-moon became UN Secretary-General, and was also elected for a second term, ending his term at the end of 2016. Ban Ki-moon faced a number of challenges, including Korean and Iranian nuclear threats, the Middle East and the humanitarian crisis in the Darfur region of Sudan. Being a skillful diplomat, (with experience gained in various positions in the MFA of South Korea), in April 2007, he managed to convince the Sudanese President, Omar al-Bashir, to allow peacekeepers to enter Sudan in order to resolve the interethnic conflict and resolve the humanitarian crisis. At the same time, in 2014, he managed, without much success, the international crisis caused by the forced annexation of Crimea by Russia.

Ban Ki-moon is responsible for major reforms in peacekeeping forces and UN' employment practices. He sought to strengthen UN peace efforts, including through the "The New Horizon" peacekeeping initiative.²⁷

He was the promoter of the *UN Women* initiative and launched the "Unite to End Violence Against Women"²⁸ campaign. During her tenure, the number of women in management positions in the organization increased by 40%²⁹. Other priorities include mobilizing world leaders to meet a set of new global challenges, including major changes in climate change and economic crises, pandemics and rising pressures generated by food, energy and water shortages. But perhaps the most daring and comprehensive project in the history of the UN is the "2030 Agenda for Sustainable Development" that the international community has agreed to pursue.

The new UN Secretary-General, in office since January 1st, 2017, Antonio Manuel de Oliveira Guterres, takes over the leadership of the United Nations in a not so easy period. For some time (about 6 years), two major powers, the United States and Russia, have been in conflict over the most acute crisis in the world since the beginning of the 21st Century – the situation in Syria. In addition, the international community is crushed by terrorism and is facing an unprecedented refugee crisis since World War II.

In his declaration, when he entered the race to become UN' Secretary-General, Guterres drew attention to the fact that the world is facing increasing inequality and an intensification of terrorism, organized crime, climate change and

²⁷ A.N.: On 17 July 2009, the Department for Peacekeeping Operations (DPKO) and the Department of Field Support (DFS) launched a document entitled "A New Partnership Agenda: The Charter for the United Nations New Horizon for Peacekeeping", *The New Horizon Initiative: Progress Report No.1*, October 2010, Department of Peacekeeping Operations and Department of Field Support, New York, URL: https://peacekeeping.un.org/sites/default/files/newhorizon_update01_0.pdf, accessed 14.05.2021.

²⁸ ***, "Ban Ki-moon", *The Elders*, URL: <https://www.theelders.org/profile/ban-ki-moon>, accessed on 14.05.2021.

²⁹ *Ibidem*.



the proliferation of weapons. He stressed that the UN “is in a unique position to unite the points to overcome these challenges”, but change and reform are needed³⁰. Without mentioning any particular conflict, the Portuguese diplomat called for a ceasefire on the “battlefields” to move on to negotiations aimed at “political solutions”. The new UN Secretary-General asked what the international community can do to help the millions of people living “caught up in wars that don’t seem to end.” “No one emerges victorious from these wars, they all lose”, lamented Guterres, who specifically denounced the impact on the civilian population. “Let’s make 2017 a year of peace”³¹, Antonio Guterres concluded on the first day of his term as Secretary-General.

Antonio Guterres is highly appreciated at the UN and has a reputation of a good speaker and a fierce advocate of human rights. He also repeatedly pressured strong countries to do more to help the vulnerable.

Since the beginning of his term in January 2017, UN Secretary-General António Guterres has made proposals to reform the United Nations. To improve the delivery of the organization mandate, the United Nations has made sweeping changes in development, management and peace and security³².

In the *development* area, the 2030 Agenda required bold changes to the UN development system for the emergence of a new generation of country teams, centered on a strategic UN Development Assistance Framework and led by an impartial, independent and empowered resident coordinator.

Regarding the *management* area, a new management paradigm for the Secretariat and a United Nations that empowers managers and staff, simplifies processes, increases transparency and improves on the delivery of UN mandates was necessary.

For the *peace and security* area, the overarching goals of the reform were to prioritize prevention and sustaining peace; enhance the effectiveness and coherence of peacekeeping operations and special political missions and move towards a single, integrated peace and security pillar.

“With the structural aspects of the reforms now well consolidated, it is imperative to keep the foot in the pedal to achieve the cultural change we need for greater collaboration across pillars and tangible results for people on the ground”³³, the UN

³⁰ Viorica Marin, *Ifonografie Antonio Guterres, noul șef al ONU*, 13.10.2016. URL: https://adevarul.ro/international/in-lume/antonio-guterres-noul-sef-ONU-1_57ffa4085ab6550cb88738a3/index.html, accessed on 03.09.2021.

³¹ ***, “Noul secretar general al ONU, António Guterres, și-a început mandatul cu un apel pentru pace”, *Agerpres*, 01.01.2017. URL: <https://www.agerpres.ro/externe/2017/01/01/noul-secretar-general-al-ONU-ant-nio-guterres-si-a-inceput-mandatul-cu-un-apel-pentru-pace-08-26-48>, accessed 03.09.2021.

³² ***, *United to Reform*, URL: <https://reform.un.org/>, accessed on 25.07.2021.

³³ *Ibidem*.



Secretary-General, António Guterres, declared.

In 2019, UN Secretary-General António Guterres announced the official launch of sweeping reforms to the United Nations which promise to focus on “people rather than progress, effectiveness and adaptability, and on equality, diversity and integrity”³⁴.

Regarding the reform program, his Excellency persevered and delivered “seven major changes:

- A system-wide strategic document to accelerate the alignment of the UN development system with the 2030 Agenda and serve as a method of accountability.

- A new generation of UN Country Teams (UNCTs), with the expertise to support the advancement of the SDGs, working together with local actors.

- A Resident Coordinator (RC) with greater authority to make final strategic development decisions as well as defining which agencies will lead responses to humanitarian crises.

- A strengthened Department of Economic and Social Affairs (DESA) through its inclusion in the Regional Coordination Mechanism (RCM).

- Improved strategic guidance, transparency and accountability by implementing the ECOSOC Operational Activities Segment (OAS) as an accountability system for the 2030 Agenda.

- A system-wide approach to partnerships, including the launch of six partnership-related work streams.

- A new Funding Compact between Member States and the UN development system that would enhance transparency of financial data.”³⁵

In the new pandemic context, on 19 March 2020, the Secretary-General declared that „We are facing a global health crisis unlike any other in the 75-year history of the United Nations — one that is spreading human suffering, infecting the global economy and upending people’s lives”³⁶.

He called for action in three critical areas: (i) tackling the health emergency, (ii) focus on the social impact and the economic response and recovery, and (iii) having a responsibility to “recover better”³⁷.

During the UN General Assembly plenary meeting held on 28-29 January 2021, in New York, USA, the Secretary-General explained how the *2030 Agenda* points

³⁴ Michael Nguyen, “Guterres’ UN reforms: necessary, modest, and progressing”, February, 2019, URL: <https://devpolicy.org/guterres-un-reforms-necessary-modest-and-progressing-20190226/>, accessed on 25.07.2021.

³⁵ *Ibidem*.

³⁶ ***, “Secretary-General virtual press encounter on COVID-19 CRISIS”, 19 March 2020. URL: <https://www.un.org/sg/en/content/sg/press-encounter/2020-03-19/secretary-general-virtual-press-encounter-covid-19-crisis>, accessed on 25.07.2021.

³⁷ *Ibidem*.



the way to a sustainable and inclusive recovery from COVID-19, how humans can “make peace with nature”, and a strategy for increasing women’s rights³⁸.

At the meeting, Antonio Guterres presented the *Ten Priorities for 2021*, as follows:

1. an effective response to the COVID-19 pandemic;
2. start an inclusive and sustainable economic recovery;
3. make peace with nature;
4. tackle poverty and inequality;
5. reverse the assault on human rights;
6. gender equality, the greatest human rights challenge;
7. heal geopolitical rifts;
8. reverse the erosion of the nuclear disarmament and non-proliferation regime;
9. seize the opportunities of digital technologies while protecting against their growing dangers;
10. launch a reset for the 21st century.

At the meeting at the beginning of the year, the Secretary-General recommended that the vaccine for the prevention of COVID-19 be available and accessible to all, and to distribute it as a priority to the most vulnerable population groups.

At the same time, the Secretary-General called on states to declare national climate emergencies; make nationally determined contributions (NDCs) to reducing emissions; phasing out fossil fuels; increasing support for adaptation; to help build the coalition for a carbon-neutral world – which means that every country, city, companies and financial institutions has a clear path to carbon neutrality by 2050.

With regard to combating poverty and inequality, the Secretary-General described a new social contract supported by digital education and technology.

On gender equality and respect for human rights, the Secretary-General stressed that women, girls, minorities and LGBTQ people face chronic discrimination and violence, and the COVID-19 pandemic has exacerbated the growing threat to human rights around the world.

Conclusions

Highlighting the activities and actions of the UN Secretaries-General during their terms of office leads us to the conclusion that their role has been and continues to be extremely important in achieving the purpose and objectives of the organization, in developing policies that address the challenges of global security.

³⁸ ***, “UN Secretary-General Presents 10 Priorities for 2021, 3 February 2021”, URL: <https://sdg.iisd.org/news/un-secretary-general-presents-10-priorities-for-2021/>, accessed on 26.07.2021.



The analysis demonstrates the impact that the qualities and the active involvement of the Secretary General in the measures taken at the UN level can have, both for the structural reform of the organization and for the fulfillment of its functional role.

The tasks facing the UN in the future are difficult and numerous. Beyond what state or non-state actors can stage, new crises or conflicts, the organization must channel its efforts to achieve the 17 global objectives and 169 targets on the *2030 Agenda*, a project for the future adopted in 2015 by the international community.

The large but also difficult project that aims to create a better world is the “maturity exam” that must now be passed by humanity so that the future of the planet does not become uncertain and man, from the subject of history, does not become its object.

The current UN Secretary-General’s mission is a difficult and challenging one. The achievement of the great goals of the *2030 Agenda* depends on its organizing capacity and diplomatic ability to mobilize world governments, NGOs and other bodies, through a global coalition and sustained effort.

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THE INFLUENCE OF BLACK SEA CHARACTERISTICS OVER JOINT OPERATIONS

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In this endeavour, it is proposed to identify some military characteristics of the Black Sea, in terms of narrow sea, that can influence the development of military action in a joint context. This will highlight the role and place of naval force in capitalizing on the optimal potential to support coastal actions carried out by the land force. The novelty of this approach is underlined by the fact that the research result is based on the cooperation of specialists from the Romanian Naval Forces with specialists from the Land Forces, following war games and the use of other research tools specific to the military science field. The originality lies precisely in the fact that the particular missions of the naval forces during the support of the land forces were identified by the authors through the experience gained in exercises carried out at the “Carol I” National Defence University. The final product will make that correspondence between the characteristics of the Black Sea and the necessary capabilities, intended to manifest maritime power, through an appropriate response in the case of joint military actions, which will contribute to supporting national interests at the maritime and riverine areas.

Keywords: *narrow sea; Black Sea; military characteristics; joint operations; naval forces; land forces.*

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Introduction

The purpose of this article is to identify those Black Sea characteristics that could influence the form and method of action, forces and means intended, methods and procedures of combat in military actions carried out in a multinational context, with planned national capabilities. In this endeavour, the contribution of naval capabilities to support the action of land forces structures (Corps, Divisions, Brigades) in the area of responsibility of the Romanian Naval Forces will be identified. Since the Romanian Naval Forces' priority is the maritime and riverine area, mainly the Black Sea and the Danube River, furthermore, this aspect is the central point of the analysis. Moreover, the aim of the paper is to identify key issues in the collaboration between land forces specialists (hereinafter the generic term land forces will be used) and Romanian Naval Forces, based on lessons learned, research results, war games, disseminated products, other relevant aspects as a result of the authors' experience, acquired in the field of maritime operational art. The starting point in this approach is our country's geographical position in relation to the most experienced opinions of specialists in the field, who have identified the most important characteristics of the enclosed seas. According to the author, this aspect forces military strategy specialists to identify those suitable response solutions, in relation to national interests in the Black Sea region. In the maritime field, it is appropriate that these decisions lead to the choice of the most effective measures and means of response. From this perspective, the expectation is to achieve that correspondence between the characteristics of the Black Sea and the necessary capabilities, intended to manifest maritime power, through an appropriate response in the case of joint military actions that contribute to supporting national interests at maritime and riverine area.

Generally, the geographical position of a riverine country, with a coastline in a narrow sea, allows or facilitates the expression of maritime power. From this stand point, a component of maritime power, such as geographical position, economic and political interests, which are usually considered advantages, may also diminish their importance if the geographical position is not one of interest, compared to the geographical context of the narrow sea. However, the advantages should not be minimized, even if one component of maritime power is not clearly exploited or highlighted, because the other components may compensate for this deficiency.

In order to see the connection between the manner of manifestation of maritime power, implicitly of naval power, with the mode of action of a fleet for the purpose of manifesting the national interest at maritime and riverine area, in this article, the following objectives have been established:

- presentation of the main characteristics of the narrow seas;
- identifying the characteristics of the Black Sea (as a narrow sea) in terms of



modern warfare;

- identifying the contribution of naval forces to the actions of the land forces structures support in the military actions near the coastline;
- the correspondence between the mode of action, the forces and means intended, the methods and procedures for combating the characteristics of military actions carried out in narrow seas.

As seen, the objectives of this approach are directly related to the military characteristics of the narrow seas, from a perspective of the characteristics of modern warfare. The analysis is based on the authors' experience in the field, as a result of the development of research in the field of modern operative art, the results of war games for combat scenarios in maritime and riverine environments, on the surface, in the air and underwater. This experience was gained through participation and contribution to activities carried out over the years, exercises, studies, analyses, round tables, or debates in seminars or discussions between specialists.

In terms of manifestation of naval power, if we briefly analyse the most famous military actions in history, we can see that narrow seas were the place of naval action in regional conflicts (local conflict) and less in major conflicts. In fact, the famous professor Milan Vego points out that the most common possible scenarios for narrow seas are:

- "limited war or regional conflict;
- a war restricted to a specific geographic area and fought either between a major and one or more minor power, or a war between two major powers to accomplish limited strategic objectives."¹ (by which one can understand a war restricted to a specific geographic area, a fight between a major and one or more minor powers, or a war between two major powers.)

In other words, it is acknowledged that in the future a narrow sea will be a secondary area of operations within a war theatre, where two major actors with regional interests will most often be involved.

It is also expected that smaller regional actors will form alliances, coalitions, against major regional actors. From this viewpoint, the aim is to identify those national capabilities and the mode of action depending on the characteristics of modern narrow sea warfare, which may respond to threats from the sea in the Black Sea region.

In the following, a critical analysis of the main characteristics of a narrow sea will be carried out, and, also, an analysis of the main military characteristics of the Black Sea will be performed, based on three research hypotheses, which will validate the research objectives.

¹ Milan N. Vego, *Naval Strategy and Operations in Narrow Seas*, US Naval War College, Newport, Rhode Island, Ed. Routledge, 2013, p. 11.



1. The Main Features of a Narrow Sea

From a military standpoint, the main features of a narrow sea can be highlighted according to specific criteria:

- by spatial criterion: space/action area reduction, due to the autonomy of platforms and range, but also the reduction of distances to military objectives;
- by actional criterion: increasing the action intensity, quick decision of the action outcome;
- by temporal criterion: short action times, due to the relatively short distances in relation to the operating speed of modern platforms;
- by informational criterion: real-time contribution and realization of Recognized Maritime Picture (RMP).

Given these criteria for the analysis of a narrow sea from a military point of view, it would be inferred that:

- the possibility of major confrontations is minimized, but low-intensity military action would not be ruled out: naval battles, blows, clashes;
- military actions are carried out under the auspices of peace operations, the promotion of diplomacy, etc.;
- military actions are directly influenced by the hydrography of the narrow sea, depths, salinity, currents, etc. (includes the type of platforms used).

Therefore, in the authors' opinion, these will be considered working hypotheses in the further research.

Also, following an analysis of the opinions of specialists in the field, it may be considered necessary to consider some scenarios that may take place in narrow seas. Possible scenarios for limited conflict at narrow sea include:

- "a limited war of intervention;
- a limited war between major powers evolving into entirely naval conflict;
- harassment of enemy and/or neutral shipping in international straits or narrows;
- a dispute over an economic exclusive zone EEZ;
- local conflict in a typical narrow sea fought between two or more minor powers while major powers remain strictly neutral,"² even though a major power may provide support to one or more of its partner interests.

In the aftermath, some preliminary conclusions can be drawn, which complements the corollary of the narrow sea characteristics:

- electronic and cyber warfare is facilitated;
- the use of mainly short and medium-range missiles is expected;
- actually, small naval groups deployment is expected to be assigned;
- limited objectives are targeted, and here we refer to certain characteristics of

² Milan N. Vego, *op.cit.*, p. 11.



an objective, such as:

- spatial-geographical objectives (maritime areas, ports, communication lines, islands, straits),
- destination of the objective (mainly economic, military), etc.,
- the importance of the objective (tactical, operational, or strategic level, etc.).

In view of the conclusions reached above, a brief analysis of the military characteristics of the Black Sea will be carried out.

2. The Main Military Characteristics of the Black Sea

Given the main narrow sea characteristics, supported by analysis criteria related rather to the military level that it will be considered working hypotheses, with the partial conclusions presented, an analysis of the main military characteristics of the Black Sea will be performed. The Black Sea is considered a narrow sea because the access between it and the Planetary Ocean is made through the Bosphorus and Dardanelles straits, but we must not neglect access through the Pan-European Corridor VII, Rijn-Main-Danube, or the Russian canals, with the limitations imposed by the minimum drafting.

Therefore, it will be developed the analysis according to the levels of military art: strategic, operational as well as tactical level.

2.1. Strategic level

The main issues that need to be taken into account by military decision-makers and that produce effects at the strategic level are presented below.

Firstly, combat actions can be carried out with intensity (*high intensity*³), simultaneously on the entire surface of the Black Sea. Sometimes, due to the autonomy of modern ships, the theatre of military actions can be extended to adjacent seas, such as the Mediterranean, Azov, or the Baltic Sea, including by involving coastal capabilities. The Black Sea was the scene of naval actions in regional conflicts (local conflict⁴) or in major conflicts, as a secondary theatre of operations.

Secondly, the air strikes are much more decisive than similar military actions carried out in history. Also, airpower can be much more decisive than naval power, consequently, airpower can be decisive in the war at sea. Decisive military actions will be characterized by the predominant use of high-precision weapons/missiles⁵, the foundation of the A2AD concept. Hence, from this perspective, it must be taken into consideration that the naval Task Groups (TGs) are very vulnerable to missiles strikes, and for this reason, aerial protection is needed.

³ *Ibidem*, p. 12.

⁴ *Ibidem*, p. 11.

⁵ *Ibidem*, p. 12.



On the other hand, the naval action has an operative-tactical role, but the decisive role that a naval battle may play in the evolution of the frontline is not excluded. Here, one example can be given: regaining control of the sea, while maintaining air superiority. At the strategic level, one of the main objectives of a participant in military action is the reopening of maritime communications and their protection. Here, modern Turkey, in a position of the successor of the Byzantine Empire, and later on of the Muslim Turkey, *held undisputed control of the Straits*⁶. Therefore, they have dominated trade in the Black Sea region, and are able to control the incursion into the Black Sea area. In this case, the Montreux Convention becomes a strategic negotiating tool, with all its implications.

Finally, the main military actions will take place near the coast, on land, and at the seaside. “One of the principal task of naval strategy in peacetime is to build or acquire a sufficient number of naval and bases to allow one’s forces to accomplish national and military strategic objectives in wartime”⁷, consequently, the possession of well-defended naval bases, connected to the communications network, with supply possibilities, is a strategic objective.

Therefore, in a preliminary conclusion, the Black Sea will remain a secondary area of operations. Hence the role of the navy for specific missions, less decisive at the strategic level, but important at the operational and tactical level.

2.2. Operational level

In the light of the foregoing, it can be stated that the geometry of the battlefield in narrow seas is different from the rest of the seas. If the main elements of the theatre of maritime operations are: “base of operations, physical objectives, decisive points, lines of operations, lines of communications”⁸, in the case of the narrow sea” these elements are spaced rather densely because of the much shorter distances involved”⁹, then, the role of the military planner is to identify the maximum effects that the actions of the naval forces can produce on the components of the maritime operation theatre, in relation to the actions of the other components of the joint level.

From a special point of view (*physical objectives*), if we refer to the maritime theatre component, a country may be situated in such a way as to control the whole or part of the sea, or is in a position at a certain distance from the straits or it holds the straits. In peacetime, the maritime space is controlled by diplomatic means, including by building alliances or coalitions between riparians or appropriate actors. During wartime, the straits are much more important. Maritime space control is, in this case, an operational level objective.

⁶ *Ibidem*, p. 17.

⁷ *Ibidem*, p. 61.

⁸ *Ibidem*, p. 75.

⁹ *Idem*.



In general terms, the concepts Sea Control and Sea Denial represent mainly the control of maritime communications (*lines of communications*). In narrow seas, because of the short distances, a blue water fleet contributes to obtaining the control of the sea, (including control of the air and land space adjacent to the coast) except for the submarine space, if a potential enemy owns a fleet of submarines. In this case, a fleet specially designed for anti-submarine combat, including underwater combat capabilities (submarines, UUVs, mines, underwater surveillance systems, etc.), is required. Therefore, conceptually, we consider the term Sea Control rather than the Command of the Sea more appropriate in the case of narrow sea.

Starting from the statement "The smallest navy can make sea control complicated for a major navy"¹⁰. From this point of view, it is very easy to have control of the sea in the high seas and very difficult, almost impossible in the narrow seas. And this is not due to the presence of a fleet of blue water, but to the presence of coastal defence systems, coastal missiles, and the system of mine dams, including engineering or the coast against landing arrangements.

In the case of decisive points, identified as a result of the application of the operative art during the planning of the operation, the theory describes that there are several operational phases between the phases of the conflict. In the authors' opinion, in narrow seas, these operational pauses can be unnecessary. This is because of the rhythm of the operation, which compacts the time of action. "The high intensity of naval action will result in a rapid change in a situation. Sudden shift from offense to defence or vice-versa"¹¹ Therefore, decisive points must be identified in the light of these changes in the situation. Thus, during the joint operation, the operational situation may undergo *radical and frequent changes*¹², this being as a consequence of the characteristic of the modern naval war, carried out by the air-naval component. But not to minimize the actions with characteristics of hybrid warfare, "hybrid warfare can be the sum of all actions regardless of their nature"¹³, which leads us to consider that at sea it acquires particular characteristics. But, it is mandatory to emphasize that the manoeuvrability of the air forces at sea is an advantage. Therefore, the decisive points must be identified according to these changes in the situation or advantages.

Also, an instrument that offers strategic-operational advantages is electronic warfare, more recently cyber warfare. The use of electronic warfare can make difficult or impossible the use of *sensors and guided weapons*¹⁴. Furthermore, the

¹⁰ Milan N. Vego, *op.cit.*, p. 111.

¹¹ *Ibidem*, p. 12.

¹² *Idem*.

¹³ Daniel Roman, Cristian-Octavian Stanciu, „The operational art in the context of range of threats specific to the contemporary Security environment”, *GlobState III, Web Conference*, 16-20 November 2020, Polish Armed Forces Doctrine & Training Centre Kazimierz Wielki University, p. 123.

¹⁴ Milan N. Vego, *op.cit.*, p. 12.



use of unmanned vehicles (UV) may be disturbed. But, it is compulsory to underline that the air force manoeuvrability is an advantage.

From all the characteristic aspects at the operational level, a conclusion can be drawn very precisely, namely, the two-way relationship between the actions of the naval and coastal forces and the actions of the coastal land forces, which in turn depend on the outcome of the air forces in the battle to maintain a minimum level of control of airspace, which is, in the authors' opinion, one of the most important conclusions of this paper approach.

2.3. Tactical level

Tactically, it can be stated that the high speed of modern ship and the ability to combine manoeuvre and firepower become an advantage that gives superiority, as well as surprise in the battlefield. Military actions take place mainly at night, especially at dusk (sunrise and sunset).

In the narrow seas, the deployment of coastal combat forces and maneuvering tactical forces can be more difficult.

On the surface, after each air attack, it is difficult to rejoin forces. The time available between two successive attacks is not enough to reorganize the combat disposal, nor to complete it.

In terms of tactical objectives, the ground-based air force is the most effective way to strike at marching naval Task Groups (TGs) or based in ports, including port facilities.

A partial conclusion can already be drawn, namely, the naval confrontation in narrow seas can be achieved by deploying a heterogeneous naval TG. Also, the mission, objectives, and duration of the action are defined by limited goals, well established in time and space.

Given the military characteristics of the Black Sea, the authors recall some actions that support the partial conclusions presented: the action of the naval group *Datoria* on Georgian ships, the hybrid action in Crimea, the actions around the Kerch Strait, seizures of ships and naval actions on the Donetsk coast, these being some of the most recent actions. If we analyse these actions, we will find that many of the military characteristics of the Black Sea have been taken into account by military planners, the success of the actions being a tangible proof.

3. Aspects of Land Forces Support in Coastal Military Actions

3.1. For the land forces support in the littoral actions

First of all, the land forces must take into account the fact that the Informational Preparation of the Battlefield (IPB) must be carried out on the entire surface of the Black Sea, the future actions being dependent on the information interest area.



Secondly, the naval forces' action to carry out the RMP is a support action of the land forces. The minefield is a No Go area in IPB of land forces.

Furthermore, in case of an amphibious operation, the naval component may permanently inform the land forces on all phases of the operation.

Also, the actions of the naval forces can cause the opponent to change the COA. For that, it can be mentioned the minelayer, artillery strikes, the use of naval strike missiles (NSM) from the coast, etc.

Regarding the fight against amphibious forces, the naval forces can contribute to rejecting, delaying, channelling, destroying enemy landing forces. Counter-landing is a specific coastal action that the naval forces can carry out both at sea and at the river's mouth.

In classic actions, the naval forces' capabilities represent a support capability on the flank of the land forces. Therefore, the Navy action always depends on coastal Army action.

All in all, the naval forces contribute to and are able to carry outland forces support in the littoral and coastal actions by:

- systematic actions (presence, deterrence, supervision)
- information support
- realization and updating of the RMP
- modelling the tactical field
- limiting enemy actions
- delaying, channelling
- causing losses
- require the enemy to choose another, more unfavourable COA, etc.

3.2. For the land forces support in the fluvial and riverine actions

Similar to the previous paragraph, on the riverine area, IPB is common to land forces and the naval forces components.

In defensive, the riverine zone is mainly the Slow Go zone. Minelaying of obligatory river crossing points, becomes the NO GO on river communications.

In the offensive, the land forces formed in the riverine landing forces, supported on the flank by the riverine or fluvial naval forces, serve as return detachment. Simultaneous counterattacks from several directions with tactical subunits represent a characteristic of a riverine operation.

In terms of command and control (C2), decentralized command and control of the forces represent another characteristic of the riverine operation.

Also, the action of the riverine forces represents the action to support the land forces on the coast and on the river communications:

- supporting the land forces in the bridgehead;
- ensuring dredging and marking of the corridors through the mine dams;



- mine laying and isolation of riverine areas;
- ensuring the transport of troops from the embarkation area to the disembarkation area;
- combat landing of the riverine forces;
- fire support of the riverine forces during landing and subsequent actions;
- ensuring the supply of the disembarked riverine forces;
- ensuring the withdrawal of the rejected landing forces in the bridgehead.

Conclusions

Based on the presented arguments, we are able to underpin the role and place of the Romanian Naval Forces, as the most visible national instrument of manifestation of naval power. The size of the task forces (TFs) or task groups (TGs) for narrow seas is not so large compared to a TFs for an open seas confrontation with much wider spaces. This justifies the focus on the actions of the naval forces bordering the Black Sea (Azov, Marmara, and the Mediterranean).

The naval confrontation in the Black Sea can be achieved by deploying a heterogeneous task group (TG heterogeneous). The defence against enemy maritime/riverine landing forces is solved by a joint effort, within the collective defence. Hence, the fact that operations in the narrow seas are clearly different from those carried out in the high seas. Thus, the structure of a naval group (TF/TG) in the narrow sea is different from a naval group operating in the high seas.

The decisive operation can aim at the destruction of the enemy landing force, the main effort being the Land Force! The narrow sea becomes integrated battlefield—the combat actions will take place simultaneously in the terrestrial, air, and maritime environment. For this reason, we cannot minimize the role of the components of the Army, (Land, Air, and Navy Forces). Under these circumstances, we consider that the dependence between the categories of forces acting at the seashore is much more accentuated, the air forces having an undeniable importance.

However, the most important aspect of the research highlights the dependence between the actions of the land, naval and air forces in military actions in the Black Sea region, considered a narrow sea. As authors, we emphasize as an aspect of novelty and originality, that the missions of the naval forces in support of the land force structures have been identified through personal experience and in many military exercises carried out within “Carol I” National Defence University.

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MONITORING AND PROCESSING THE CHALLENGES OF MENTAL STABILITY IN DISASTER SITUATIONS

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There are daily news regarding social and political events, natural and civilizational disasters. Disasters have an impact both on those living in the disaster-stricken area and on the various intervening personnel. Research results have broadened human knowledge of natural and civilizational disasters. Disaster protection has increasingly evolved into a system of regulated defence involving protection of society values. The tasks of military and disaster protection are similar; however causal differences can emerge. Disaster management is now a very complex process, which is not only the task of a national organization, but also the struggle of governments and societal organizations for a common goal. For intervening personnel, processing the psychological loads with specialists becomes increasingly necessary. The role of the authorities during emergencies is of key importance in the management and coordination of actions. The need for the supporting role of international and national humanitarian organizations is also strengthening. This paper aims at presenting the elements of risk evaluation and human resilience in disaster situations, in order to understand vulnerabilities, and evaluation results should be included in contingency planning.

Keywords: *disaster; crisis; mental assistance; PTSD; defence management.*

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Introduction

It is an unfortunate observation that disasters and crises have increasingly become a part of our lives. The general feature of such events is endangering human life and material goods, acting in a special way, thus special methods are needed to prevent them. Disasters, catastrophic events, and the need for protection against them, are a constant issue. The original meaning of the word *catastrophe* of Greek origin is a turning point, or an outcome, as it means a misfortune, and a state of crisis in our current usage. An important feature of natural disasters is that their occurrence cannot be predicted precisely or frequently, they usually happen rather unexpectedly, making response attempts more difficult.

Recently, Hungarian Act CXXVIII of 2011 on Disaster Protection and Amendments to Certain Related Acts (henceforward Cat. Act), is decisive for the concept of disaster. According to its Section 3 and Clause 5, *catastrophe* is a condition or situation suitable for declaring a state of emergency, or not reaching the declaration of such a situation, but clearly endangers human life, health, material goods and the natural environment of a population, in such a way or to such an extent that prevention or management exceeds the possibilities and capacities of the legal organizations and, thus requires the continuous and strictly coordinated cooperation of governmental bodies and the use of international assistance. Due to disaster protection, it has become necessary to establish a system of regulated protection and prevention. Due to the diversity of tasks, it has become necessary to renew the legal regulation and practice of disaster management since January 1, 2012, from the connection to European Union. The new Cat. Act comprehensively regulates the areas of activity and responsibilities. In order to have sufficient time to prepare for the effects of predictable emergencies, the new Disaster Protection Act introduces the period of disaster risk.

An emergency situation, defined in Article 53 of the Hungarian Constitution, may be triggered, in particular, by the following events (set out in Section 44 of the new Disaster Protection Act):

- elemental disasters, natural hazards,
- industrial accidents, threats of civilizational origin,
- other hazards, disasters.

During such a period, i.e. in case of emergency, the government, to the extent and in the area necessary for the prevention of the disaster, may introduce extraordinary regulations pursuant to Cat. Act 47-48. Also, according to Cat. Act §. 49-51. it may authorize organisations with special execution of the above mentioned extraordinary regulations. During the occurrence of disasters, it was proven that defence is not only the task of a special organization, but the cooperation of the national and local governments and non-governmental organizations is necessary



for its effectiveness.

Effective defence is depending internationally on the United Nations, the European Union, NATO as a military alliance. Additionally, locally in Hungary it is depending also on the cooperation of charities and churches. Creating and maintaining safety, developing protection against disasters is an interest to all people. The sub-areas of the different tasks and abilities of the different organisations are added together, they are such an insurance for the preparation, the reduction of the negative consequences during the defence, and the effective restoration and reconstruction. Disasters, and the need to protect against them, appear at every age. The defence management system, and the role of the authorities, is key to the management and coordination of assistance in case of an emergency, as it is their legal duty to take care of those involved.

1. Mental Effects of Disasters

The general feature of emergencies and disasters is large-scale destruction, which causes significant losses. They mostly happen unexpectedly, thus feelings of insecurity and vulnerability are even more expressed. Experiencing disasters directly or on the basis of indirect information can be a stressful and frustrating situation. An emergency is a special situation that directly affects both those involved and the intervening personnel, and also possibly threatens their life. Based on empirical evidence of the disaster-stricken areas, the accordingly prepared population suffers significantly smaller losses, as the explained correct behaviour, knowledge of the possibilities of self-rescue, and the ability to cooperate with the rescue forces can be crucial in case of emergency. Increasing number of literature and empirical research emphasizes the necessity of psychological preparation of both civilians and intervening personnel. With regard to the psychological phenomena that accompany disasters, it has been argued that panic is the natural mechanism that accompanies the emergency situation and acts even if we do not care about it. In some cases, a spontaneous act or statement will help the outcome of the execution, but in other cases, it can cause panic. Rapid overview, recognizing the situation, and possibly gaining previous experience can play a key role in preventing panic.

A variety of methods of psychosocial assistance allow for assistance tailored to individual and community needs. Psychosocial well-being can be considered our basic need, and if it overthrows, stabilization is needed. The processing of disasters and its psychological and social effects are different in every human being. Primary intervention professionals may need help processing what they see during an action, as well as the population experienced a disaster and waiting for help. In general, it is still not common to share our emotional, mental, or psychological problems with an outsider. This is often treated to be a sign of weakness as well



as an indication that an individual is unable to cope with the situation on her/his own. If the danger is predicted, there may be an excessive fear of the danger in the pre-disaster phase. During disasters, the family is a strong emotional bond, that helps to process fears, failures and injuries, reduces the weight of stressful situations and relieves tension¹. Fear is an essential emotional state for the body's defence, it motivates and encourages people to take action, and can trigger surviving reactions. An important feature of this stage is that people, even unconsciously, tend to behave as others do. Due to the unexpectedness of the triggering emergency event, fear can affect the individual as a shock, and their effect might build into the experience and personality of those involved. Additionally, the effects of disasters on individuals become visible and assessable only days, weeks, or months after the event². These effects may develop anxiety, phobias, or irrational beliefs. On the other hand, the experience of a successful fear coping can also create new, enduring skills and new adaptation techniques. Clear and simple communication is needed with a person in a crisis situation. The expression of open emotion, the use of the present, past and future happenings can relax the narrow focus, i.e. the state when the person who has experienced the loss can concentrate only on the actual problem. Transparency in crisis communication is required, but it is also desirable to treat certain information as classified data, where appropriate, in order to prevent further panic. Rescue workers can face the problem of empathy as a barrier. Realistic exploration, strong management, leadership, professional intervention, assignment of logistics for rescue, credible communication can have a decisive influence on the activity, speed and problem-solving skills of intervening personnel. Moreover, several case studies conclude, that help should be proactive, as people who have suffered a disaster should not be expected to seek help, as their current mental state does not allow them to behave actively³. Professionals who want to help in disaster or crisis situations must also have psychological knowledge that can help increase the person's sense of security. Human lives are also threatened in disaster-stricken areas. People can get injured, or worse, they can die. In addition, it cannot be overlooked that survivors are under significant psychological pressure, which can have serious early or late consequences that may have effects for the rest of their lives⁴. According to the psychological approach of the disasters, a disaster is a

¹ Albert-Farkas vLeveleki, *Szociológia*, Möbius Print, Nyíregyháza, 2001, p. 114.

² ***, *Segítségnyújtás katasztrófa és terrortámadás esetén – Belga Vöröskereszt kiadványa*, Eureste Handbook, Brüsszel, 2006.

³ ***, *Enhancing psychological support*, Internation of Red Cross: IFRC. Geneva, 2007.

⁴ Zsuzsanna Kaló, *A korai és késői pszichés jelenségek katasztrófák során, és a káros hatások elkerülésének lehetséges módjai*, MŰSZAKI KATONAI KÖZLÖNY, XXI.évf.12. sz. különszám, 2011, Budapest, NKE HHK MHTT, Műszaki Szakosztály, URL: <http://www.hhk.uni-nke.hu/downloads/kiadvanyok/mkk.uni-nke.hu/eloadasokpdf/3.csop/Kalo%20Zsuzsanna.pdf>, accessed on 25. 04.2014.



psychologically devastating event outside the range of normal human experiences, which can lead to abnormal behavioural reactions with certain symptoms⁵. In many cases, spiritually unprocessed experiences return to memory and can make everyday life difficult because of their depressing weight.

Mass panic is a specific form of community behaviour that greatly aggravates and even hinders escape and survival, and also makes the work of rescuers more difficult⁶. For example, right after the disaster of the Titanic cruise ship, the basic moral principle of giving priority to the rescue of women, children and the elderly are ruined soon. Men tried to find a place in lifeboats in women's clothing, others tried to get a life jacket threatening with a knife⁷. Common features of people in the stage of panic are loss of judgment and extreme emotional outbursts. Also, the loss of moral control and the disregard for community norms are common in such situations of panic. In other cases, for example in a traffic accident with many fatalities, depression, helplessness, guilt and anxiety about the failure can be observed, more likely in rescue personnel⁸.

At national defence and disaster management forces, it is more common that the members of the intervention staff can manage to overcome fear and other depressing feelings in many cases, but there are those whose mental stability does not return to its equilibrium position because their resources have been damaged as a result of various stress reactions. In their case, crisis intervention is necessary⁹. Crisis intervention is aimed at resolving a crisis situation with the intention of helping. Crises are characterized by anxiety and fear. Only few psychical diseases are known to have a psychiatric condition whose characteristics have not changed over the centuries. Depression is a universal problem that can be experienced by either the injured or the helpers even after disasters. Usually, depression is a transient condition that persists for a short time, provided the person settles his or her mental state and changes his or her way of thinking about himself or herself and the particular problem¹⁰. The diagnosis of the disease is based on an examination of the patient's mental state, and although medical solutions are improving, unfortunately, doctors are constantly looking for a truly effective way to cure depression. The

⁵ Judit Bolgár, György Szekeres, *Katasztrófa és kríziskommunikáció lélektani alapjai. Elektronikus jegyzet a Védelem Igazgatás szereplői számára*, Bp.: ZMNE, 2009, URL: <https://adoc.pub/katasztrofa-es-kriziskommunikacio-lelektani-alapjai.html>

⁶ Róbert, Zsákai, *A lelki segítségnyújtás jelentősége katasztrófák során*, URL: https://www.knbsz.gov.hu/hu/letoltes/szsz/2014_1_szam.pdf, accessed on 06.07.2021.

⁷ Iván Kémenczy, *Tömegkatasztrófák pszichológiai hatásai*, Zrínyi Katonai Kiadó, Budapest, 1980, pp. 31-32.

⁸ Barlai Róbert PhD, Kővágó György, *Válság-(katasztrófa) kommunikáció*, Petit Real Könyvkiadó, Budapest, 1996, p. 31.

⁹ Zelimir Pavlina, Zoran Komar, *Military Psychology*, vol. II, Zrínyi Publishing House, 2007.

¹⁰ Tim Lahaye, *Győzelem a depresszió felett*, Budapest, 1998, p. 243.



issue of mental assistance is a great opportunity, because if people's mental well-being deteriorates, the solution of problems, the management of a disaster, a crisis, and the elimination of its consequences are also endangered.

2. Hungarian and International Possibilities for Disaster Management

The continuously changing environment requires the individual, organisation, and group as units to adapt quickly and professionally. The infamous red mud catastrophe on October 4, 2010 was the biggest industrial disaster in Hungary's modern history. It also surpassed the devastation of natural disasters in terms of its fatalities and the human and material damage it caused. The disaster caused by the damage to the sludge reservoir of Hungarian Aluminium Factory MAL Zrt. damaged the population and material goods of the settlements, and also the natural environment in connection with water and soil pollution. Throughout the management of the events, the cooperation of the ministries, construction sector, national organisations and the participation of science were outstanding. The disaster mobilized a very significant social cohesion and helpful intention¹¹. It was clear that disaster management is also at the forefront of assistance in performing civil protection, industrial safety and fire protection tasks. In the red mud disaster, humanitarian organizations were in great need in addition to professional and national organisations, as they serve significant donations, money, services, psychological support, the provision of rentals, and the construction of new houses to help the disaster-stricken population. At the local, regional and national levels, disaster management forces must support population preparation and protection activities, as well as participate in the planning, organization and implementation of recovery tasks. Otherwise, when dealing with a crisis, aid organizations and military should cooperate to safely deliver aid supplies to the scene of the disaster. Civilian-military cooperation has an important role to play in utilizing civilian-military resources, supporting humanitarian missions, and ensuring the success of military operations¹². International and national organizations may aim to provide disaster relief at the request of the governments of endangered countries with the approval of the government of the assisting country, as Hungarian government did in 2021, at the request of the Croatian government after a serious earthquake near Petrinje.

In conclusion, the goal is to save human lives and material goods in all cases, but also to mobilize material supplies and humanitarian resources. Various non-

¹¹ Árpád Muhoray, Antal Papp, *A vörösiszap-katasztrófa elleni védekezés, a helyreállítás, újjáépítés tapasztalatai*, vol. II, Belügyi Szemle, 2013, pp. 84-85.

¹² József Padányi, *Polgári-katonai együttműködés a békefenntartó műveletek során*, ZMNE, Budapest, 2001, p. 6.



governmental organizations, associations and churches play an inclusive role for the people affected by disasters, provide assistance with practical measures, social and legal assistance. They also provide psychosocial and mental assistance to stakeholders, and, if necessary, they are referred to a psychologist or other professional¹³. Every organisation should help as they can do. For example, in the case of the already mentioned red mud disaster, a local radio was operated in the church of Devecser, which was part of the communication tools of informing the local population, and the church also played a huge role in the distribution of charitable donations. The tourist accommodation of the church in Kolontár, together with the military leading colleagues of RZs, provided a few hours of sleep possibility for intervention staff at night during the initial period of rescue management.

In order to understand psychic effects, we need to know what the accompanying phenomena that trigger a negative psychic effect in a disaster are. Every disaster is different, but by examining disaster events, some accompanying phenomena can be identified that should always be taken into account in these areas¹⁴. If the symptoms associated with anxiety appear within four weeks of the traumatic event and last for 2–28 days, we call it acute stress disorder¹⁵. That is why it is necessary for a team of psychiatrists, psychologists, pastors and family helpers to immediately help those in need in the areas affected by the disaster. Fear is a very important emotional state for the body's defence, as it makes it easy to avoid danger and can trigger instinctive, surviving reactions. Existential anxiety is a general human fear arising from the limitations and responsibilities of our existence. We are anxious because we recognize that life is not infinite, and also the inevitability of death¹⁶.

Churches are not political communities, but primarily spiritual, moral leaders. Experience shows that believers are generally more stable mentally, less prone to panic during emergencies, and can be involved in defence more easily. When a disaster occurs, believers often face the situation with more hope despite the difficulties. Based on research, people are also greatly influenced by the culture of a given country. Knowing and understanding the culture mean that everyone can and does have a role to play in creating and maintaining safety, including churches¹⁷. The Hungarian government is increasingly expanding the responsibilities that can be taken over by the churches and also providing support for them. Relevant Hungarian literature on the subject also supports the fact that in addition to their religious work,

¹³ Raquel E. Cohen, Pan American Health Organization: Mental health services in disasters: manual for humanitarian workers. PAHO, 2000, p. 223.

¹⁴ Júlia Hornyacsek, A települési védelmi képességek a katasztrófakihívások tükrében, Oktatási és Tanácsadó Tudományos Egyesület, Budapest, 2011, pp. 40-42.

¹⁵ Ronald J. Comer, A lélek betegségei, Osiris Kiadó, Budapest, 2000, p. 205.

¹⁶ Ronald J. Comer, A lélek betegségei, Pszichopatológia, Osiris Kiadó, Budapest, 2005, pp. 160.

¹⁷ István Bukovics, Gondolatok az egyházak szerepéről a katasztrófavédelemben, Wesley János Lelkészképző Főiskola kiadványa, Budapest, 2008, pp. 1-5.



churches also play a significant role in Hungary through their cultural, educational, social and health activities, and by strengthening national consciousness. Shared responsibility makes cooperation and common actions easier¹⁸. Throughout history, during greatest dangers, churches have always been there to lend a helping hand to people in need, no matter what disaster or difficulty they have suffered. The often more difficult part of the assistance is far from material. Personal attention, the power of the community, tactful and personal counselling, social care, are fundamental elements of church and religious activities.

Conclusions

Measuring risk and capacity is an important tool for understanding people's vulnerability to disaster, and their results should be incorporated into contingency planning. Disaster mitigation and reduction activities are a major challenge, requiring significant capacity at local level, but at the same time they should be part of a comprehensive strategy. Our recent lifestyle can unfortunately be a cause for constant fear, alongside the many good and modern possibilities. The emergence of epidemics, the constant fight against disasters, terrorism are all problems in our current times. Last year's pandemic, the fight against COVID-19 has made everyday life especially difficult and uncertain. Anxiety, fears, feelings of helplessness are becoming an increasing burden on us. Doctors, healthcare workers and soldiers working on the front lines have a great responsibility. It can already be observed that the intervening personnel, those helping on the front line against COVID-19, have an increasing role to play, and they can be affected by effects that have been observed, for example, during natural disasters, or in war zones. Recent scientific results show, that recognizing the disaster management aspects of mental assistance is becoming increasingly necessary.

The experience of recent years shows that crises and disasters have become an integral part of our lives, which we cannot often avoid, but can be mitigated with sufficient preparedness. It is enough to think of September 11, 2001, or to remember the floods and dangerous extreme weather events of recent years, or the Hungarian red mud disaster. A terrorist attack has awakened and rethought the European Community's defence system, and it has become necessary to rethink and set up defence at a global community level. It has become clear that disaster management is not simply a technical or legal issue, but a complex social issue where special cases and procedures have to be reckoned with, all of which have been confirmed by international events in recent years. People must not be left in a state of vulnerability and insecurity. The previously mentioned catastrophic and panic

¹⁸ Vilmos Fischl, A nemzetközi egyházi szervezetek szerepe az államközi valamint csoportok közötti konfliktusok és válságok kezelésében, Budapest, ZMNE Doktori (Phd) értekezés, 2006, pp. 56-58.



processes and inadequate communication can also be the causes and consequences of each other. Thus, more and more people are participating in the complex process of crisis management in addition to coordinating professional disaster management. If vulnerable communities are more aware of the risks and know the basic coping strategies, they can minimize both the number of deaths and material losses, and mental injuries. National companies may encourage the establishment of “Community Emergency Committees” responsible for the planning, management and coordination of response and preparedness activities.

Churches are also playing an increasingly important role in this matter, as religion can be a part of the lives of many people. Therefore, churches are well-suited to their organizational structure and mission, and play an important role in helping and assistance, including in disaster management. The expectation of the society is that the events that have happened should be conducted professionally, humanely and with sufficient empathy by the organisations dedicated to this. It can be said that in recent decades, churches have changed a lot, e.g. how they are living their faith or even in their structural structure, but their values have remained the same throughout, which is to protect the greatest value: human life. Military leaders can only be prepared for quick decisions in the past, considering only military factors, but nowadays, effective cooperation with civilian, governmental and non-governmental organisations are also important for leadership. After the consequences of disasters have been eliminated, an effective method of assistance to deal with current problems should always be adapted. It can also be effective to consider the possibilities of cooperation between different service areas in disaster management. Launching a detailed research program involving the churches, also based on the fact that fulfilling the role of disaster management is a national and social requirement, needs to be flexible to various natural and other changes, increased national governmental involvement and required technical developments.

Importantly, prevention always requires less expenditure than recovery and management after a disaster. Every opportunity should be taken to minimize the damage caused by forecasting each type of disaster, strengthen cooperation of different organizations to help, and train the population for disaster situations. The fight against the coronavirus is very similar to the battlefield medicine defined by military psychology: the desperate patients, the risky environment, and the fight with an invisible enemy are usually worse than a war. The emergence and global spread of the SARS-CoV2 virus in healthcare and other areas has shown how much society and economy can be burdened and how prepared they are for such problem-solving. We do not know exactly what the real enemy is, we feel a huge mental discomfort, possibilities of loss and danger. Extreme physical and mental exhaustion can be caused by a lot of bad news, which can lead to mental injuries. According to experts, more and more psychological problems are emerging from the population,



but also from helpers, defence force, ambulance and military members. Constant daily preparedness, fears of infection, experiencing the number of deaths, and feeling helplessness can cause emotional trauma that can lead to serious mental problems. It has been observed many times that confusion can develop into post-traumatic stress disorder (PTSD). Anxiety can progress to depression, but can also lead to rapid burnout, so they can easily become a victim from a psychological point of view. The term “second victim” stated by Albert Wu, a Professor at Johns Hopkins University in Baltimore. According to Wu’s scientific research, those at the forefront of helping against the epidemic should also pay attention to treating their emotions and mental health, as PTSD is an insidious syndrome that can last for more than a month and generate a re-experience of events. Hearing about deaths constantly reminds the sufferer of the negative event and helplessness. Watching a lot of negative emotions, crying, breaking up families comes with extreme stress. The unstoppable work of institutional workers, and their concerns that they could catch the infection at any time, or they can be a danger for their loved ones, places a great mental load on them. Also, soldiers participating in the hospital service must face similar problems, as there is no guarantee that they will stay healthy after the work they have done, and they have to go home to their families and loved ones carrying his burden. I am convinced that, in addition to the development of classical military capabilities, resilience is an area where planned and coordinated preparation is needed to guarantee the security of a country, and this is an area in which more human and material resources should be involved and developed. Important elements are preparation, resource storage and strategy development and practice before crises. In their absence, military force alone is unlikely to be sufficient to deal with crisis situations optimally. Psychological and emotional support is necessary to maintain the mental health of all workers and helping staff. Also, mental assistance represents a great support in these times, because if workers’ mental health deteriorates, the problem, disaster, crisis management and elimination of its consequences are endangered.

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CRITICAL INFRASTRUCTURE PROTECTION POLICY IN THE EU

*Miklós BÖRÖCZ**

It represents a possibility that some of the terrorist attacks will be directed against critical infrastructure in the future. An example in this regard is the attack on a water treatment plant in the U.S., where an intruder attempted to raise sodium hydroxide levels more than a hundredfold thus poisoning drinking water supplies. The importance of protection is also illustrated by the cyber-attack on Düsseldorf Hospital in December 2020, when an attack on critical infrastructure has led to a fatal incident in Europe for the first time. At the same time, critical infrastructure protection is further enhanced in the event of a possible hybrid warfare or war situation. Its importance in practice was also illustrated by the Russian-Ukrainian conflict in December 2015, when the BlackEnergy APT group caused a power outage in Ukraine affecting two hundred and twenty-five thousand people. This attack has shown what success an unconventional military element can achieve in the world of current levels of energy use. This study aims at presenting the risks that critical infrastructures involve, followed by the sectors with European critical infrastructures and their main characteristics, as well as some key European infrastructures.

Keywords: *critical infrastructure protection; vulnerability; hybrid warfare; non-linear strategy; threat; cyberattack.*

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Introduction

In the field of critical infrastructure protection, the United States of America recognized as a pioneer that no state, however powerful, could single-alone protect its own infrastructures, so it initiated international cooperation in this area.¹ US's idea was first taken up by NATO, who encouraged its Member States to take measures in order to protect their critical infrastructure through studies and impact assessments. The European Union then joined the initiative, and its actions will be summarized on the subject hereinafter.

Firstly, I think it is important to examine the international security environment that significantly changed, which is also strongly relevant for critical infrastructures. Important findings in this area have already been formulated in the study National Security and Critical Infrastructure Protection². Today, the concept that nation states and their citizens feel safe whether or not they can win a war with the help of their regular forces has changed. With the emergence of weapons of mass destruction, this approach has been overshadowed, as nuclear weapons, for example, affect the military power of both parties. Thus, the strategic approach gradually loses its importance, replaced by political instruments and economic interventions and sanctions. After The Second World War, welfare societies were established where the continuous availability of water, food, energy, transport and other supplies and services wakens security for countries and their citizens. At the same time, the vulnerability of infrastructures in sectors and thus their protection has been appreciated. Defence is now hampered by the serious spread of proliferation and the challenges posed by asymmetric warfare, which has evolved but is constantly evolving, and which continues to take advantage of technical innovations.

These new types of threats have thus transformed traditional security paradigms, since powerful military forces can no longer guarantee the social peace of states today.

At the same time, there have been changes in the military thinking of Russia, one of the most dangerous to NATO and the European Union.³ Its essential element is hybrid warfare (which is originally different from the definition of Chechen

¹ Toma Virgil, "Evoluția conceptului de infrastructură critică" [The evolution of the concept of critical infrastructure], in *Inspectoratul pentru Situații de Urgență al Județului Argeș*, URL: http://www.igsu.ro/documente/publicatii/articole_de_specialitate/Evolutia_conceptului_de_infrastructura_critica.pdf, accessed on 27.02.2021.

² Adriana Alexandru, Victor Vevera, Ella Magdalena Ciupercă, "National Security and Critical Infrastructure Protection", in *International Conference Knowledge-Based Organization*, vol. XXV, No 1/2019, DOI: 10.2478/kbo-2019-0001, pp. 8-13.

³ Krisztián Jójárt, "A hibrid hadviselés orosz elméletének változása az ukrajnai tapasztalatok tükrében" [The change of the Russian hybrid warfare's theory in the light of the Ukrainian experiences], in *Hadtudomány*, No. 1-2/2019, pp. 49-60.



warfare formulated by William J. Nemeth), in which Moscow implements irregular and conventional warfare as a state entity, as it does now in Ukraine. In his analysis⁴, the Director of the Carnegie Moscow Center further explained that hybrid war is a new era of opposition between Russia and the “West”, which can be interpreted, among other things, as an analogy to the Cold War. According to Aleksandr Bartos of the Russian Academy of Military Sciences, “hybrid wars are in fact transformed into a new type of international opposition and, in addition to strategic nuclear deterrence, they are an effective non-nuclear deterrent to Russia’s adversaries.”⁵ In his well-known analysis, he suggests that hybrid war will become the defining form of warfare of the future Bartos explained in another analysis that the “reunification” of Crimea and its participation in the Syrian civil war showed the success of the Russian non-linear strategy.⁶ He also explained that hybrid war is aided by a lack of legitimacy and international norms, which allow for covert operations involving terrorists, organized criminals, cybercriminals and private military companies.⁷

In Ukraine, between July 2014 and July 2018, several critical infrastructures (energy supply, transportation, drinking water supply, banking system, and financial markets) were attacked by hacker groups linked to Russia. In July 2014, Russian hacker groups CyberBerkut and GreenDragon entered the PrivatBank system unauthorized and disclosed confidential information (account details, phone numbers, etc.). On the 23rd of December, 2015 the APT 28 group after several months of preparatory work has disturbed the electricity system operators of Kyiv, Prykarpattia, and Chernivtsi with remote access. The attack left about two hundred and twenty-five thousand consumers without energy and heating for six hours. This was the first publicly documented successful cyberattack against an electrical network control system.⁸ A malware called BlackEnergy was also discovered in

⁴ Dmitri Trenin, “Avoiding U.S.- Russia Military Escalation During the Hybrid War”, in *Carnegie Moscow*, URL: <https://carnegie.ru/2018/01/25/avoiding-u.s.-russia-military-escalation-during-hybrid-war-pub-75277>, accessed on 17.04.2021.

⁵ Aleksandr Bartos, “Россия в эпоху гибридных войн” [Russia in the era of hybrid wars], in *Независимое*, URL: http://nvo.ng.ru/gpolit/2017-10-20/1_970_hybrid.html, accessed on 17.04.2021.

⁶ Aleksandr Bartos, “Гибридная война – переход от неудач к победе [Hybrid warfare – Transition from Failure to Victory]”, in *Независимое*, URL: https://nvo.ng.ru/realty/2018-06-01/1_998_hybrid.html, accessed on 17.04.2021.

⁷ Aleksandr Bartos, “Гибридная война – новый вызов национальной безопасности России”, [Hybrid war is a new challenge to Russia’s national security], in *Национальная Оборона*, URL: <http://www.nationaldefense.ru/includes/periodics/maintheme/2017/1016/154222573/detail.shtml>, accessed on 17.04.2021.

⁸ David E. Whitehead, Kevin Owens, Dennis Gammel, Jess Smith, “Ukraine Cyber-Induced Power Outage: Analysis and Practical Mitigation Strategies”, in *Power and Energy Automation Conference* Spokane, Washington, March 21–23, 2017, URL: https://na.eventscloud.com/file_uploads/aed4bc20e84d2839b83c18bcba7e2876_Owens1.pdf, accessed on 20.04.2021.



time, a month later at the network of Borispol International Airport, near Kiev, so their attack was unsuccessful. Researchers say previous attacks can be paralleled by smaller attempts made between November and December 2015, targeting Ukrainian mining and rail systems (with malware such as KillDisk and BlackEnergy). In 2017, the NotPetya extortion virus (which originally targeted Ukraine but affected business circles worldwide) affected several critical infrastructure sectors. The cyberattacks targeted the Ukrainian government, the energy sector (the Chernobyl Radiation Monitoring Station), the banking sector (the National Bank of Ukraine and ATMs nationwide), and the transport sector (the electronic payment system for the metro in Kiev). In July 2018, the Ukrainian Security Service managed to crack down on a sabotage operation against a Ukrainian drinking water supply. Due to the prominent role of infrastructure, if the attack had been successful, it would have caused serious water supply problems at national level.⁹

In summary, critical infrastructures are at the crossroads of attacks, not only in the future, but also in the present. The reason for this is that, on the one hand, the increase in living standards in welfare states has transformed people's sense of security, leading to a steady fading of current military doctrines. The states of the West (from which it deviates due to the US forces) now rely more on their political, intelligence and economic power to guarantee social security in their national strategy, which is also evident at the international level (e.g. Smart defence). On the other hand, NATO, and Russia, which currently poses the greatest threat to its member states, have also undergone a paradigm shift in their military strategy. Hybrid warfare, which has been tested and practiced, has brought success to Moscow not only in Syria, but also in Ukraine. Although Russia accuses the West of waging war on it, it was he who perfected the latest form of warfare, which can also be interpreted as an analogy to the "Cold War," so one should expect its protracted time. The main tools for these are cyber-attacks, which are explained in the next chapter. Its targets are critical infrastructures that, if successfully attacked, could cause disruptions in societies that could be prerequisites for a successful regular military operation. Fortunately, this risk has been recognized by the European Union and its Member States in good time and important steps have been taken to reduce these risks. The next section presents the sectors concerned and their main characteristics.

⁹ Andreas Marazis, Rober Kothe, "Russian Cyberwarfare Capabilities: Assessing the Threat for Ukraine's Critical Infrastructure", in *European Neighbourhood Council Analysis*, 2018, URL: <http://www.encouncil.org/wp-content/uploads/2018/09/Russian-Cyberwarfare-Capabilities-Assessing-the-Threat-for-Ukraines-Critical-Infrastructure.pdf>, pp. 4-6, accessed on 20.04.2021.



1. Sectors and Main Features of Critical Infrastructures

A sectoral and subsector list of European critical infrastructures is defined in Annex I of Council Directive 2008/114/EC on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection.

This means that the energy sector is split into subsectors that are electricity (infrastructures and installations for electricity generation and transmission in terms of electricity supply), oil (oil production, refining, processing, storage and fixed transport) and gas (gas production, refining, processing, storage and fixed transport).

The transport sector is divided into subsectors, meaning road (motorways, motorways, bridges, vehicles carrying dangerous substances, public transport vehicles, etc.), railway (railway tracks, railway stations, railway crossing points, railway trains, etc.), air (aircraft, air traffic control systems, airports, heliports, etc.), inland waterways, oceanic and short sea shipping and ports (coastlines, ports, ships, river sections, etc.). The sector can be used to move people and goods quickly and safely.

I also consider important to define the main characteristics of critical infrastructures. Thus, the first characteristic is interdependence, which shows how strong are the links between systems, meaning that one sector (and this is true for subsectors) is not operational without the other sector. Among them: “Some sectors of critical infrastructure depend mainly on the electricity and telecommunications systems and cyber risks. It can be said without exaggeration that the consequences of electricity outages affect all sectors”. Critical infrastructure interdependency can be grouped physically, information technologically (cyberly), geographically, and logically.¹⁰ Physical dependence arises where the normal functioning of the sector requires another sector. IT dependency is when the sector is managed by information technology. Geographical dependence is when sectoral elements are installed in geographical proximity to each other and thus interact in the event of a malfunction. Logical dependence is primarily found in relation to the human factor.¹¹

The following characteristic is the networking, which means interconnected critical infrastructures, a complex system whose sectoral elements interact continuously with each other.

¹⁰ S. M. Rinaldi, J. P. Peerenboom and T. K. Kelly, “Identifying, understanding, and analyzing critical infrastructure interdependencies”, in *IEEE Control Systems Magazine*, vol. 21, No. 6, 2001, pp. 11-25.

¹¹ Attila Horváth, “A létfontosságú rendszer elemek és a technológiai fejlődés új kockázatai II. rész, [New Risks of Critical Infrastructure and Technological Development. Part II.]”, in *Hadtudomány*, 2016, pp. 216-228 (electronic page number), URL: http://mhht.eu/hadtudomany/2016/2016_elektronikus/horvathattila22.pdf, accessed on 05.05.2021.



Interdependence and networking can be inferred directly from the domino principle, or domino effect, as a feature of critical infrastructures. This means that damage to a critical infrastructure sector can have an impact on the functioning of several sectors, which together can have a serious social, economic and thus political impact. One of the main examples of this was the power outages in Italy and Switzerland in 2003, which quickly reached Austria, Slovenia and France. Between 50 million and 60 million people were left with no electricity as a result of the event.

Each critical infrastructure sector is characterised by an operational specificity that can be applied individually to that sector.

Expansion and location are very important features of critical infrastructures. A poor placement may lead to disaster, as demonstrated by the installation of safety diesel generators to cool Fukushima reactors in non-flood-free areas, which has significantly helped to cause the disaster. We can also take the location of CERN, whose LHC accelerator (Large Hadron Collider) is very close to Geneva Airport, as an example.

IT, as the main feature of critical infrastructures, shows that all sectors operate almost fully automated using IT systems. Therefore, all necessary protective measures should be taken to ensure that no sector is successfully attacked in the territory of a Member State, as defined in the introduction.

In the following phase, I will present the key infrastructures for the EU based on sectors and key characteristics.

2. Priority European Critical Infrastructures

The list presents, in order of importance, a personal opinion, where it is important to note that the specification is not exhaustive, but merely as an example.¹² Infrastructures for high-voltage electricity networks (e.g. the totality of the networks of the UCPTE Member States referred to above, or the planned Baltic Ring and the Mediterranean electricity ring) and the interconnected sectors and subsectors, such as system controllers or other priority transformer stations.

The Pan-European gas supply network and its facilities can also be regarded as a European critical infrastructure of paramount importance, with its storage, transport and use elements vital for other sectors, as well as for EU Member States and EU citizens.

¹²Tünde Bonnyai, *A kritikus infrastruktúra védelem elemzése a lakosságfelkészítés tükrében, [Analysis of the critical infrastructure protection in the light of population training]*, in Ph.D. Dissertation, National University of Public Administration, Doctoral School of Military Engineering, 2014, URL: https://www.uni-nke.hu/document/uni-nke-hu/Bonnyai-Tunde_Doktori-ertekezes_2018.pdf, accessed on 05.02.2021.



EGNOS (European Geostationary Navigation Overlay Service) is also considered to be a European critical infrastructure for Galileo (European satellite navigation system) and Copernicus (the European Union Earth Observation Programme, which monitors our planet and its environment for the benefit of European citizens). On the basis of their objectives, the programmes are specifically designed for civilian purposes.

Eurocontrol (the European Organisation for the Safety of Air Transport) is a Pan-European civil-military intergovernmental organisation established in 1963 to maintain the safety of air traffic services. Eurocontrol and the European Union have concluded a cooperation agreement to implement the Single European Sky. This programme is, in my view, a priority European critical infrastructure.

CERN (European Particle Physics Laboratory) has built the largest scientific measuring equipment for the testing of elementary particles. It pursues the policy of an open society, its research results are public, it is free to visit except for the closed areas, it is free to record buildings everywhere.

The following is a look at the Community protection of the critical infrastructures described above (partially identified in Europe), which covers not only the legal framework but also the realisation of other institutional activities.

3. EU Measures for Critical Infrastructure Protection

A summary of the development history of Critical Infrastructure Protection in Europe is provided by the Handbook on the Protection of Vital Systems and Facilities.¹³ As a result of the terrorist act committed in Madrid, on 11 March 2004, the European Commission adopted a Communication on 20 October 2004, entitled *Protecting critical infrastructures in the fight against terrorism*. The Communication made proposals to avoid future terrorist attacks on critical infrastructure, which called for progress in three main areas (prevention, preparedness and response).

On 16 and 17 December 2004, the European Council adopted the European Programme for Critical Infrastructure Protection (EPCIP), presented by the Commission and approved the establishment by the Commission of the Critical Infrastructure Warning Information Network (CIWIN).

EPCIP is designed to ensure a uniform and adequate level of protection for critical infrastructures in the EU. EPCIP needs to be constantly reviewed because it must meet new needs and risks. To ensure these, one must comply with the following principles.

¹³ Balázs Bognár, Tünde Bonnyai, Katalin Görög, Lajos Katai-Urban, Gyula Vass, *Létfontosságú rendszerek és létesítmények védelme: kézikönyv a katasztrófavédelmi feladatok ellátására [The protection of the critical systems and infrastructures: manual for disaster management tasks]*, in Nemzeti Közszolgálati Egyetem, Katasztrófavédelmi Intézet, Budapest, 2015.



Subsidiarity, which means that critical infrastructure protection is primarily the responsibility of the Member States, would be focused on European Critical Infrastructures (ECI). It is complementary that the EPCIP framework complements existing measures.

Confidentiality, since critical infrastructure information is extremely important for their operation, makes it much easier to successfully attack them. This principle is also prominent when exchanging information relevant to the protection of critical infrastructures.

According to cooperation between actors, all actors involved in the protection of critical infrastructure (Member States, EU bodies, owners, operators, etc.) should cooperate in the development and implementation of EPCIP in terms of their tasks and responsibilities.

Proportionality principle, according to which defence strategies and measures must be proportionate to the current risk, since it is not realistic to expect all critical infrastructures to be prepared for all hazards, only those which present a real threat to them.

EPCIP consists of three defining workflows. The first is a national framework for the strategy and the development of horizontal measures, the second for the protection of ECIs and the third for helping Member States to protect critical infrastructures.

CIWIN is an emergency alert and security data transmission system that ensures the immediate protection of critical infrastructures and the exchange of best practices in relation to operational incidents. Its main objective is to find innovative and effective tools, methods and procedures in the field of critical infrastructure protection.

It is important to mention the European Reference Network project for the Protection of Critical Infrastructures (ERNICIP), which has been established as an implementation tool for critical infrastructure protection (in particular EPCIP).

On 17 November 2005, the Commission adopted its Green Book on a European programme for the protection of critical infrastructures.¹⁴ The Green Book offered three defence strategies in terms of prevention, preparedness and resilience already defined above; (a) against any threat, (b) protection against all threats, in particular terrorism, and (c) protection against terrorist threats. The Green Paper already contains the five principles (subsidiarity, complementarity, cooperation, confidentiality, proportionality), which are included in Directive 2008/114/EC (Nitra, 2017).

On 8 December 2008, the Council of the European Union adopted (with effect from 12 January 2009) Directive 2008/114/EC (hereinafter “the Directive”)

¹⁴ ***, *Green Paper on a European programme for critical infrastructure protection*, Commission of the European Communities, Brussels, 2005, p. 2, URL: <https://op.europa.eu/en/publication-detail/-/publication/4e3f9be0-ce1c-4f5c-9fdc-07bdd441fb88/language-en>, accessed on 05.02.2021.



on the identification and designation of European Critical Infrastructure and the assessment of the need to improve their protection. For ease of interpretation, a non-binding guideline has been issued for the application of the Council Directive on the identification and designation of European Critical Infrastructure and the assessment of the need to improve their protection (EUR 23665 EN, 2008). The guidelines help Member States to derive their data in more detail.

Under the Directive, the measures must be implemented by the Member States within two years of its publication (12 January 2011). A priority for them is to issue annual reports, which should identify the critical infrastructures in the Member States by sector, responsible for designating and identifying them. Every two years, they must submit a summary report covering the vulnerabilities in their area. In addition, Member States have an obligation to inform the Commission of the number of European Critical Infrastructures in their territory designated by sector and of the Member States concerned. The Directive focuses primarily on the energy sector and transport, so these sectoral criteria need to be prioritized. In addition to the sectoral criteria set out in the Directive, Member States are also required to assess critical infrastructure elements on the basis of horizontal criteria.

It notes that there are several infrastructures in the EU that would disrupt or destroy several Member States, and that common minimum rules need to be laid down to remedy them.

According to the definition in the Directive, each operator of critical infrastructure must draw up an operator security plan within one year of designation, which must be reviewed regularly thereafter. It also requires the use of a Security Liaison Officer for designated critical infrastructure and a risk assessment for European Critical Infrastructure located in the territory of the Member States.

The Directive applies to methods of generating and transmitting electricity and to parts of nuclear power plants used for the transmission of electricity, but not to explicit nuclear elements. They are determined by other regulators. In order to comply with the Directive, additional governmental tasks to be implemented by Member States have also been put in place to identify, designate and improve the protection of national critical infrastructures.

The European Council on 25-26 March 2010 adopted the EU Internal Security Strategy at its meeting on the field of critical infrastructure protection, the strategy paid particular attention to the risks posed by modern technologies.

The European Parliament and the Council have adopted Directive 2016/1148 on measures to ensure a uniformly high level of security of network and information systems throughout the Union (NISD). The Directive defines network and information systems as well as the Internet as essential assistance for the free movement of goods, services and persons across borders. The directive states that existing capabilities are not sufficient to guarantee a high level of security of network



and information systems in the Union, which requires a global approach. This should include minimum criteria for capacity building and planning, cooperation and exchange of information, and common security requirements for actors.

The following EU organizations provide assistance in critical infrastructure protection.

The EU set up¹⁵ the European Network and Information Security Agency (ENISA) in 2004 to ensure that the EU and its Member States are better prepared to detect, address and prevent information security challenges. The Agency provided practical advice to the EU institutions and to the public and private sectors in the Community in the field of information security. The Agency's remit, as mentioned above, was extended in December 2018 and will continue to operate as the European Network of Experts on EU Network and Information Security, under the name of the European Cyber Security Agency.¹⁶ By performing these tasks, it supports the IT protection of critical infrastructures.

On 1 December 2012, the European Agency for the Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA) became operational. The Tallinn-based agency manages the Visa Information System (VIS), the Schengen Information System (SIS II) and the European Fingerprint Identification System (Eurodac) for the security of the Schengen area.¹⁷

The EUROPOL European Cybercrime Center was set up in 2013¹⁸ to support effective law enforcement action against cybercrime in the EU. Since its inception, it has been involved in a number of high-profile cases, providing on-site assistance for hundreds of successful arrests, and has already scanned hundreds of thousands of files in the course of its analytical work. Each year, it prepares an IOCTA report¹⁹ that includes key findings on cybercrime for the period, as well as new threats.²⁰ Within the organization, the Focal Point Cyborg unit is responsible for tackling high-tech crimes that primarily threaten critical infrastructures in Europe. EC3's capabilities are also outstanding in the field of forensic informatics, and in its

¹⁵ ***, *Regulation (EC) No 460/2004*, European Parliament and the Council, Brussels, 2004, URL: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004R0460:EN:HTML>, accessed on 10.05.2021.

¹⁶ European Union Agency for Cybersecurity, *Homepage*, URL: <https://www.enisa.europa.eu/>, accessed on 19.02.2021.

¹⁷ European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice (eu-LISA), *Homepage*, URL: <https://eulisa.europa.eu/>, accessed on 16.02.2021.

¹⁸ EC3.

¹⁹ ***, *Internet Organised Crime Threat Assessment (IOCTA)*, Europol, Hague, 2020 URL: <https://www.europol.europa.eu/activities-services/main-reports/internet-organised-crime-threat-assessment-iocta-2020>, accessed on 10.05.2021.

²⁰ European Cybercrime Centre – EC3, *Homepage*, URL <https://www.europol.europa.eu/about-europol/european-cybercrime-centre-ec3>, accessed on 16.02.2021.



laboratory set up to support this activity, it also conducts its own IT research and development.

Also established in 2013, the European Council's Cybercrime Program Office (C-PROC) was set up to support the development of cybercrime and electronic evidence legislation in line with the rule of law, and to provide training for judges, prosecutors and law enforcement members. His other responsibilities include promoting cooperation in the field of justice, deepening public-private dialogue, and enhancing international cooperation on cyber security. Protecting children from online sexual violence is a priority for the program office.²¹

From a personal standpoint, it is important to briefly present the Trusted Introducer (TI) service, set up in 2000 and launched by the European CERT community. TI's most important service is to provide a reliable backbone network for event management organizations. Also worth mentioning is the Central European Cyber Security Platform (CECSP), a cyber-security cooperation platform between Hungary, Poland, Austria, the Czech Republic and Slovakia. Finally, it is necessary to get to know the activities of two non-profit organizations; one is the ENCS, established in 2012, to support secure European critical infrastructures, and the other is the European Cyber Security Organization (ECSO), set up in 2016 to represent industry before the European Commission on cyber security.²²

In the following, I will present the critical infrastructure protection in the Member States and the up-to-date and shortcomings of Community legislation.

4. Member State Critical Infrastructure Protection in Practice

I would like to present the implementation of critical infrastructure protection in the Member States with the measures introduced by Germany. I have chosen this Member State because Berlin is not only a leading power in the European Union, but also a pioneer in the field of Community legislation and harmonization. In addition, it has world-class telecommunications systems, which is also relevant for critical infrastructure, and is the most populous state in Europe.

Since 1990, the Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik – BSI) has been coordinating tasks in the field of critical infrastructure protection as an independent body.²³ Its activities are

²¹ Cybercrime Programme Office (C-PROC), *Homepage*, URL: <https://www.coe.int/en/web/cybercrime/cybercrime-office-c-proc->, accessed on 24.02.2021.

²² Zoltán Kovács, “Kibervédelem és biztonság”, [Cyber protection and security], in *Kibervédelem a bűnügyi tudományokban*, Ludovika Egyetemi Kiadó Nonprofit Kft. – Ludovika Press, Budapest, pp. 65-90.

²³ Federal Office for Information Security, Germany, *Homepage*, URL: https://www.bsi.bund.de/EN/Home/home_node.html accessed on 27.04.2021.



supported by the National Cyber-Abwehrzentrum (NCAZ), established in line with the 2011 strategy, whose main task is to establish operational-level cooperation between government agencies in the event of major IT incidents. In addition to its other important functions, it also carries out national management and analysis center activities. A number of other organizations also help protect critical infrastructure, such as the Federal Office for Civil Protection and Disaster Management (Bundesamt für Bevölkerungsschutz und Katastrophenhilfe – BBK). These include, but are not limited to cyber security, the National Cyber Security Council (Nationaler Cyber-Sicherheitsrat), the Federal Government Commissioner for Information Technology (Beauftragter der Bundesregierung für Informationstechnik), the Cyber Security Association (Allianz), Allianz Information Technology Situation Center (Nationales IT-Lagezentrum) and several CERTs (Event Management Centers) in Germany.²⁴ All this shows that the creation of a complex protection and organizational system in the field of critical infrastructure protection is one of the key issues in terms of effectiveness.

In addition to setting up a number of organizations and institutions, Germany has also taken significant steps in other areas, as it has created its Digital Strategy, which covers the period between 2015-2025. Mention should also be made of the Digital Agenda, which was in force for the period between 2014-2017. This was preceded by the National Critical Infrastructure Protection Strategy dated 2009²⁵ and the 2011 Cyber Security Strategy, which can be classified as first generation strategies, so their primary goal was to build online trust. This strategy has been replaced by the new Cyber Security Strategy of 2016, as a second-generation strategy, in which a holistic approach has already been taken, so that it covers all security sectors, especially critical infrastructures. In addition, the German constitution states that the state must guarantee security for and provide basic care to the population, which implies a critical role in critical infrastructure protection. These documents show that Germany is taking significant steps with regard to infrastructure protection, not only in its organizational system, but also in codification and in shaping its day-to-day security policy.

In 2001, Germany considered terrorism to be the most important risk in terms of critical infrastructure protection. Since then, various cyber threats have become priorities that can come from multiple directions. This risk has been exacerbated by the D21 initiative, which aims to encourage Germany's transformation from an

²⁴ Dóra Molnár, “Kiberbiztonság Németországban – pillanatkép a német digitális térről” [Cyber security in Germany – a snapshot of the German digital space], in *Nemzet és Biztonság*, 2018/1. szám, pp. 142–156.

²⁵ Federal Republic of Germany, Federal Ministry of the Interior, *National Strategy for Critical Infrastructure Protection (CIP Strategy)*, Berlin, 2009, URL: https://www.bmi.bund.de/SharedDocs/downloads/EN/publikationen/2009/kritis_englisch.pdf?__blob=publicationFile&v=1, accessed on 27.04.2021.



industrial society to an information society. In 2003, the country involved utilities in the protection of the area, which helped clarify the definition environment, and in addition to rethinking previous sectors, nine sectors were named (energy, health, state and administration, food, transport and transportation, finance and transport, IT and telecommunications, media and culture, water).²⁶ It is an important fact that ninety percent of critical infrastructures are privately owned, which is why the government, through the organizations named above, has an effective monitoring and intervention role in place, which must be maintained in the future. Building on the experience of the last ten years, Germany sees critical infrastructure protection as a cornerstone of its internal security. Measures have been implemented to support this and a number of pieces of legislation have entered into force. With the increasing use of information technology, the application of new innovative technologies, such as AI, raises huge expectations, but at the same time generates new dependencies that need to be minimized. International terrorism and the growing impact of climate change are also seen as a global challenge.²⁷

This chapter presents the complexity of the legislation and series of measures that Member States had to implement in addition to Community legislation and measures in order to achieve effective infrastructure protection. This part of the study justifies, in my view, the need for the EU to rethink its existing regulations in the field of critical infrastructure protection.

Conclusions

In this study, the risks to critical infrastructures were presented, followed by the sectors and their main characteristics, as well as a few key European critical infrastructures. Afterwards, it was illustrated the EU's action in the field of critical infrastructure protection, which also described Common procedures. Furthermore, we considered it important to present the measures taken by the Member States, most notably Germany, as the EU has left the majority of the regulation of critical infrastructure to the Member States. In conclusion, attacks on a number of critical infrastructures around the world have demonstrated the vulnerability of open societies. These societies view their security not in the success of regular warfare but in the smooth running of their daily lives. The European Union, and thus their

²⁶ Bundesministerium des Innern, *Schutz Kritischer Infrastrukturen – Risiko- und Krisenmanagement*, [Protection of critical infrastructures – Risk and Crisis Management], Berlin, 2011, p. 8, URL: https://www.bbk.bund.de/SharedDocs/Downloads/DE/Mediathek/Publikationen/KRITIS/bmi_schutz_kritis_risiko_und_krisenmanagement.pdf?__blob=publicationFile&v=8, accessed on 27.04.2021.

²⁷ Bundesministerium des Innern, *10 Jahre „KRITIS-Strategie*, [10 years, “KRITIS strategy], Berlin, 2020, p. 89, URL: https://www.bbk.bund.de/SharedDocs/Downloads/DE/Mediathek/Publikationen/PiB/PiB-21-zehn-jahre-kritis-strategie.pdf?__blob=publicationFile&v=7, accessed on 29.08.2021.



Member States, consider the key to their economic development to be secured in the future by moving from industrial societies to information societies. However, this direction has enhanced the effectiveness of critical infrastructure protection, whose sectors are indispensable in creating and maintaining the desired digital environment. Changing Russia's military doctrine, one of the biggest security challenges for the EU, and putting it into practice is a successful model that hybrid warfare in Ukraine has shown very clearly. Here, a number of attacks have hit critical infrastructure sectors that have not been adequately prepared for these actions, causing significant detriment to regular military operations. Hybrid warfare can otherwise be seen as an analogy to the Cold War and should be seen as a longer-term risk. As a result, the cyber dimension of critical infrastructures is becoming increasingly important for modern industrial/digital societies. This is why critical infrastructures need the most outstanding protection against IT attacks. The events in Ukraine have also shown the extent to which attacks on critical infrastructure can cause economic damage at the national level, so the regional impact of possible attacks on identified European critical infrastructures must be taken into account. In examining Community legislation and measures, I have come to the view that the EU should review its rules on critical infrastructure (e.g. sectoral allocation) and add new elements in the light of changed foreign policy dimensions and cyber threats. Member States can make progress in this area to varying degrees (depending on their economic strength), but the interdependence of critical infrastructures and the threat of the domino principle call for uniform, strong action in this area. Account should also be taken of the fact that the majority of owners/operators of critical infrastructures can be linked to private capital and, as security requires a significant financial outlay, optimization in the field of security is not allowed. For this reason, the bodies of the European Union and the authorities of the Member States must continue to play an effective monitoring and enforcement role in this area.

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PREVENTIVE MEASURES OF INFRASTRUCTURES

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The infrastructure elements are often recognized when their continuity stops, although their security is a topic that is often concerning only their cyber protection, not the physical one. There are many examples in the world where the prevention of infrastructure is taken seriously and handled properly. These recommendations and guidance could be easily adapted anywhere. The aim of this paper is to show some of the existing ways, tools, and techniques of protecting (critical) infrastructure elements that can be easily adapted in Hungary. Based on these foreign regulations the Hungarian legislative system could create a national one with the support of the decision makers.

Keywords: *security; defence; regulations; measure; prevention.*

Introduction

This special field of facilities protection is the application of security systems in the surrounding private and public areas, which ensures the prevention of different kind of incidents and extraordinary events effecting the facility, using mechanical, technical (electronic), as well as security guards and organizing methods.

The field of preventive defence is a vital part of organizing the zones of the facility protection. Its objective with respect to the facility is detecting, identifying, preventing the evolution of, or impeding the irregularities originating from environment risks that lead to extraordinary events. If all the above are unfeasible it will send an alert,

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react according to protocol, and decrease the effects of the consequences.

Preventive measures – similarly to other aspects of facility defence – can be broken down into more zones. Protecting defence ensures the integration of the area, as well as the safety and health of the people who work there. The data resulting from their work, the assets used for the activity remain intact along with the flow of the process itself of a given establishment, against human actions or environmental changes, at a degree which has been predetermined during risk assessment.

The level of protection shall be interpreted as the solutions based on the assessment and identification of risks, which are results that have been accurately calculated from the degree of the expected danger. As well as an action that threatens with an explosion, it is isolated from its surroundings, so the effects of even the most powerful detonation possible can be decreased to a level that is environmentally responsible.

As well as a barrier lowers the maximum velocity of an approaching vehicle to an adequate speed or stops a transport of a predetermined weight, size, and velocity or simply detects an object with predetermined weight, size, velocity, and direction at a given distance, then signals to the guards, that can be deployed in time with the numbers and equipment necessary to perform a task.

After threats have been received in the identifying and alerting zones, evacuation, if applicable, or the process of finding cover can be initiated, while additional troops can be deployed in the other areas¹. The process is the same when it is necessary to eliminate the possibility for an individual or individuals, to perform an unlawful act that effects the facility. In order to assure that the equipment applied indeed meets the above-mentioned criteria, standardized mechanical and electronic tools are needed, that are proven to be inspected with respect to predetermined parameters.

For the security forces and other organizational solutions, there must be some regulations, administrative measures agreed upon with the facility managements.

1. Proven Practices in Preventive Defence

In Hungary it is generally out of the ordinary to consider such measures in case of public and private facilities. The exceptions are overly conspicuous solely to the experts, for instance, the Kossuth Square in Budapest, where a system of multiple zones of security force is in use around the Parliament building, but this is a unique exception.

Unfortunately, there are no Hungarian standards, which would require the

¹ Prof. Dr. Lukács László, Dr. Balogh Zsuzsanna “Bombatámadás az USA nagykövetség ellen – Nairobi, 1998. augusztus 07.” Műszaki Katonai Közlöny, no.23/2013, vol. 2, URL: https://mkk.uni-nke.hu/document/mkk-uni-nke-hu/2013_2_13_Nairobi.pdf



design and installation of such systems. In the Acts that regulates building norms, a chapter on how to gain building permit does not exist². Since it is not required by law, nor is it regulated in any form of city planning, it does not demand investors and designers to comply or even pay any attention and take these issues into consideration. Therefore, these “flawed” designs of “unprotected” buildings are constructed one after another.

The experience is the same with architecture, accounting, security, lifestyle, and health recommendations – even though they are scientifically proven not to be harmful, in fact quite the opposite, there is no threat of sanctions to those responsible, when ignored.

In the following, already proven practices and tested, standardized solutions are presented as examples, applicable for facilities, events and venues when ensuring their preventive defence.

1.1. Administrative tools

The regulations here are such complex recommendations for construction and architecture that are applicable in any settlement of the world and contain a complete list of solutions for the threat at hand.

EN-14383 Prevention of crime – Urban planning and building design

These series of standards published in 2006 consist of several sections, out of which only the first one, dealing with technical terms and definitions, was translated to Hungarian, but not completely. This chapter of the European Standard represents the terminology part of a series for the “Prevention of crime by urban planning and building design”³.

There would have been other advantages besides being part of the fight against terrorism, but it has not been implemented for over 15 years, even though attacks other than ramming have occurred in Europe in recent years, against which only improvised concrete obstacles and planters were utilized. The fact is, this standard is not translated into Hungarian (only the preface is translated) and it is not in use.

² ***, 253/1997 (XII. 20) Korm. rendelet az országos településrendezési és építési követelményekről
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³ Magyar Szabványügyi Testület, MSZ EN 14383-1, 2006, Bűnmegelőzés, Településrendezés és épülettervezés, part 1, Szakkifejezések URL: http://www.mszt.hu/web/guest/webaruhaz?p_p_id=msztwebshop_WAR_MsztWApportlet&p_p_lifecycle=1&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_pos=1&p_p_col_count=2&msztwebshop_WAR_MsztWApportlet_ref=141837&msztwebshop_WAR_MsztWApportlet_javax.portlet.action=search



UFC 4-010-01 9 February 2012 Unified Facilities Criteria (UFC) DoD Minimum Antiterrorism Standards for Buildings⁴

This standard developed by the Department of Defense of the United States of America is mandatory, not only on US territory, in the design of every installation, in order to reduce their vulnerability in case of terrorist attacks (mainly conducted with explosives). It contains a detailed list of scaled minimal and higher security level regulations for new, old, owned, and leased buildings. It gives examples for residential, business, and social functions as well. Besides the basic functions of the area, it contains a useful set of solutions for any other perceived threat.

There are other guides and standards such as *Certification Standard Forced Entry And Ballistic Resistance Of Structural Systems⁵* or the *Guide to Active Vehicle Barrier (AVB) Specification and Selection Resources⁶*, but they are not the subject of this paper.

Though it is obvious that thorough, specific regulations containing a very serious amount of content, which increases people's safety, are necessary for constructing public buildings or other facilities suitable for housing large masses. The importance of the problem has been admitted all over the world; for example, in 2004 a publication was created as part of the strategy of National Security of Singapore, which describes the possibilities of the strengthening of buildings against terrorist attacks. Within this, in 2004 the city of Singapore has published a brochure⁷ titled *Guidelines for enhancing building security in Singapore*, then organized a conference to discuss its findings.

Australia did not waste much time, they issued the "Urban Design Guidelines for Perimeter Security in the National Capital", based on which at least the public areas and buildings of the capital city were designed⁸.

⁴ Department of Defense, Unified Facilities Criteria (UFC) DoD Minimum Antiterrorism Standards for Buildings, 2012, URL: https://www.wbdg.org/FFC/DOD/UFC/ARCHIVES/ufc_4_010_01_2012.pdf

⁵ Certification Standard Forced Entry And Ballistic Resistance Of Structural Systems, U.S. State Department, Washington D.C., 1993, URL: <https://www.shieldsecuritydoors.com/uploads/2/7/3/6/27366561/sd-std-01-01.pdf>

⁶ Cybersecurity and Infrastructure Security Agency, Guide to Active Vehicle Barrier (AVB) Specification and Selection Resources, 1995, URL: <https://www.cisa.gov/sites/default/files/publications/Guide-to-Active-Vehicle-Barrier-2014-508.pdf>

⁷ Guidelines for Enhancing Building Security in Singapore, Joint Operations Group - Ministry of Home Affairs, Singapore URL: https://www.bca.gov.sg/publications/BuildingSecurity/others/bldg_security_guide.pdf

⁸ *Urban Design Guidelines for Perimeter Security in the National Capital*, National Capital Authority, URL: <https://www.nca.gov.au/planning-heritage/strategic-planning/guidelines-development/guidelines-perimeter-security-national>



Figure no. 1: Design of Delivery/ Service Vehicle Access Control⁹

The commonalities of the mentioned recommendations and regulations are:

- a) The demarcation of roads from buildings using safe distances;
- b) These demarcations shall be done using dimensioned and built elements, street furniture;
- c) Application of level shifting and green areas;
- d) Breaking up the straightness of the road making it impossible to speed up;
- e) The protection of the ground level and entrances of the buildings against attacks carried out with vehicles;
- f) Creating safe escape routes and areas when designing the buildings;
- g) Use standardized equipment.

1.2. Mechanical obstacles

Sand or gravel

Sand and gravel have been applied in motorsports for decades to improve the safety of the run-off area. They are designed with precision in accordance with the vehicle's dimensions and velocity, while its purpose is decelerating, halting, or decreasing the force of the impact of the vehicle. It would not require much to create and establish such flower beds and grassy areas, that have such incompact ground that an oncoming vehicle would beach in it.

Tall, strong but unattractive concrete, metal or other obstacles that might not fit into the view are unnecessary. Creating parks and taking care of them continuously is adequate, for which the purpose is not only to nurture the plants, but also making sure the ground is loose enough to perform its task.

⁹ Joint Operations Group – Ministry of Home Affairs, *Guidelines for enhancing building security in Singapore*, p. 88.



Hidden ditches

In November 17, 2017, in Győr, while installing the Christmas tree of the city, a truck was accidentally driven over an area of the square beneath of which the pipes of the fountain were located and covered. This pipe system was designed to bear the weight of pedestrians and light vehicles – such as bicycles, strollers and wheelchairs – along with their passengers but it immediately collapsed under the weight of a truck, and it was only possible to rescue it with a special crane.

Utilizing such unwanted experiences, urban planners can take further steps in creating a more secure environment. Hidden ditches of this kind shall be placed underneath the pavement of the square, naturally after careful planning and testing, that are aesthetic, fully perform the role of a sidewalk and public space, but on the other hand are able to perform as road obstacles.

Obstacles slowing traffic flow

In Hungary, every municipality can install speed bumps however they wish. The fact that these bumps in the everyday life can cause serious accidents, if damaged by any degree or are invisible without proper street lighting, is known by every motorist or cyclist. The goal, namely decreasing the speed of vehicles, can be achieved by alternate methods. In several Western European small towns for instance, small bays are created on alternating sides of the road to decrease the free cross section, in which massive poles equipped with reflecting lights are placed. The vehicles are efficiently decelerated by this slalom since it forces the drivers manoeuvres constantly and pay attention to oncoming traffic. Now only planters with large trees are present, which unfortunately blocks a large portion of the view of the road, and the obstacles that may be behind it, such as a pedestrian attempting to cross the road or a road worker, they can only be noticed once the vehicle is aligned with them.

The slalom system mentioned above is safer in terms of traffic technology, and the pole placed in them may serve as obstacles as well if placed adequately.

Numerous firms possess built in or mobile equipment, technologies that are tested and comply with the standards, with which the temporary or permanent regulation or obstruction of traffic is possible. These are displayed at the annual Security & Counter Terror Expo in London, and other similar themed exhibitions in Europe by these companies and retailers.

Several solutions are available that are not installed with demonstrative deterrent intention but are totally integrated into the environment. They are disguised as curb, bench, trash container, lamp post or a bus stop and are fully capable of performing their original function. Besides their pleasant appearance, they are also high efficiency barriers, that protect the ones located behind them, even against the impact of a truck weighing several tons. These – so-called street furniture – are aesthetic and are available in a variety of materials and colours.



Figure no. 2: Planters¹⁰

Obviously, a planter that some cases exceed a meter in height, weighing up to a ton including the plants and soil, can seem like a safe barrier at first glance. Unfortunately, it only appears so, since if it does not possess adequate stability, was never tested for collisions, it can potentially increase the threat to its environment by capsizing or disintegrating. The displaced debris or moving, uncontrollably drifting large object can kill or injure anyone. The truly effective solution is the exclusive application of dimensioned, tested, and proven equipment that were made suitable for their task by inspected and compliant installation and construction.

The applied impact test standards basically work on the same basis – detailing the method and means of measuring the performance outcome for impact tested vehicle security barriers. IWA stands for ‘International Workshop Agreement’ and is overseen by the International Organization for Standardization (ISO). For example, the IWA 14.1¹¹ – has a larger number of vehicle categories than either PAS 68 or ASTM with a total of nine types of vehicles. The IWA 14-2¹²: 2013 provides guidance for the selection, installation and use of vehicle security barriers (VSBs) and describes the process of producing operational requirements (ORs). BSi¹³ PAS¹⁴ 68:2013 – It has become the UK’s standard and the security industry’s benchmark

¹⁰ Source: URL: <https://www.marshalls.co.uk/commercial/product/giove-planter#image-carousel-3>

¹¹ Frontier Pitts, IWA 141, URL: <http://www.frontierpitts.com/support-documentation/standards/iwa-141/>

¹² Frontier Pitts, IWA-142, URL: <http://www.frontierpitts.com/support-documentation/standards/iwa-142/>

¹³ Frontier Pitts, BSI-PAS-68, 2013, URL: <http://www.frontierpitts.com/support-documentation/standards/bsi-pas-682013/>

¹⁴ Frontier Pitts, CWA-16221 <http://www.frontierpitts.com/support-documentation/standards/cwa-16221/>



for HVM (Hostile Vehicle Mitigation) equipment and is the specification against which perimeter security equipment is tested as part of the ongoing research to prevent VBIED (Vehicle Born Improvised Explosive Device) attacks.

CWA 16221: 2010¹⁵ Vehicle security barriers. Performance requirements, test methods and guidance on application. A European CEN workshop agreement that combines the detail from BSI PAS 68¹⁶ and PAS 69¹⁷. It provides guidance on test methods for determining vehicle security barrier performance classification and also includes a series of informative annexes that advise on appropriate product selection, installation and use.

The ASTM F2656-07¹⁸, Standard Test Method for Vehicle Crash Testing of Perimeter Barriers rates barriers in twelve impact categories, with three predetermined impact velocities for each category and four potential penetration ratings for each impact rating.

2. Applicable Electrotechnical Equipment

The variety of the variability and mechanism of effectivity of this equipment is so large, that their applications will only be mentioned in a listed form.

Streetlights – that can disperse light, or reflectors equipped with motion sensors. Spaces entirely lit up, where CCTV¹⁹ is in operation in cases as well, are not popular amongst perpetrators. Motion sensor reflectors also create a strong “stop feeling” on individuals effected by the strong, blinding light.

Motion sensor systems – that can be placed anywhere around the protected facility, even in front of the fence or wall. Optimally, the elements and street furniture surrounding the protected facility can be equipped by such defence, e.g. the streetlights being triggered via motion sensors in case of any movement or the space is lit up by more intense light, it can have enough psychological effect on any individual not trying to stand out.

Cameras – Nowadays wide scoped monitoring of public spaces via cameras are totally accepted, which can be developed into a much more effective equipment, more than just a regular monitoring system using various software. These are

¹⁵ Edward Roberts, “What is PAS 68? The Definitive Guide to PAS 68”, *ATG Access*, URL: <https://www.atgaccess.com/news/guides/what-is-pas-68>

¹⁶ Frontier Pitts, PAS 68, URL: <https://www.frontierpitts.com/products/gates/hvm-gates/pas68-terra-swing/>

¹⁷ Frontier Pitts, PAS 69, URL: <https://www.frontierpitts.com/about-frontier-pitts/standards/bsi-pas-692013/>

¹⁸ ASTM International, Standard Test Method for Vehicle Crash Testing of Perimeter Barriers rates barriers, West Conshohocken, 2007, URL: <https://webstore.ansi.org/Standards/ASTM/ASTMF265607>

¹⁹ A.N.: closed-circuit television.



programs capable of monitoring abandoned objects, recognizing of faces and body types or even unique movements and walking styles. These can be utilized for the purpose of crime prevention or investigation at any given time, similar to certain Chinese police squads that have been equipped with glasses running on such systems.

As much as the regulations regarding protection of personal data the cameras monitoring public spaces is an obstacle, in terms of CCTV systems, the problem is manageable within the boundaries of personal data protection actions. It is enough to install the fence or wall one or two meters from the border above the private property, it can be monitored via cameras, assuming it is positioned correctly, with the placement of warning signs and pictograms according to regulations. In the same manner the entrance, be it pedestrian or vehicle, can be placed at such an angle that anyone attempting to enter is already within the borders of the property and, therefore, they can be monitored.

The electrical equipment within security engineering can be applied to install such camera systems that when paired with other sensors and supported by software are capable of detecting a vehicle on land, sea or air, exceeding a given dimension or speed or an individual arriving with suspicious items but also to give out alerts.

This way, in case of hazardous vehicles or personnel the local security forces can be alerted and evacuation can be attempted. Furthermore, the system can arm passive mechanical equipment, for instance in case of a vehicle, the hidden poles can be raised from the road surface and hence obstructing the possibility of reaching further or it can illuminate and blind any individual within a dangerous proximity.

Naturally, this also requires regulation and design the same as the the application of every single security engineering device.

3. Applicable Live Force

Within the area of preventive defence, a multi-level zone of guards is created with respect to its own zone.

The application of live force can be in an open, intimidating manner using uniforms that clearly display the weapons and enforcement equipment. With a similar demonstrative intention, guards in civilian attire can be deployed covering their aforementioned equipment. In a given case, if there is ever a need for it as seen by anyone entitled, the screening or quick reaction on-the-spot in each zone can be presented by guards that are hidden or placed in a conspirative manner.

The personnel of several armed forces, be it police, civilian, body- or security guards, can be present in the area simultaneously, either in cooperation or operating separately. That provides a large flexibility within the application of live forces.



Conclusion

There are many possible ways to improve the current situation. The first and most important step could be the creation of a strategic regulation or recommendation, which clarifies on what principle and for the handling of what risks it was created, to whom it is addressed, what are their responsibilities, and what recommendations or compulsory regulations are prescribed to manage them. The addressees could be national agencies, the owner/operator of the critical infrastructure, county or city councils, public institutions, and proprietors or management of businesses that conduct public service or has a specific area/capacity. The Directives only “wishes” the point is what the states are implemented. For example, in Hungary only the nuclear industry we have a Government Regulation from physical protection.

This would be followed by the second level, the addressees conducting standard creation and norm constitution, in which the preparation of detailed plans for private properties open for public use or public spaces bordered by private properties can be recommended or regulated. The sanction and inspection system could appear here as well, which would ensure that the strategic level decisions formulated materialize.

The third stage would be the documentation, planning, implementation, operation, and maintenance performed in terms of public spaces and private properties.

In summary, the easiest way to handle the problem is with administrative tools. Recommendations of any number and quality can be provided but until it is not mandatory to apply, design and fund they will be ignored, primarily for cost reduction purposes. It is time that, according to the listed standards in this study, steps are taken to create normative regulations in Hungary as well. The security awareness of people should be raised and leadership in decision making position should own these goals to reach.

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THE SHORT AND MEDIUM-TERM IMPACT OF AL QA'IDA ISLAMIST'S ATTACKS ON THE U.S.A., SINCE SEPTEMBER 11, 2001

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September 11, 2001, when Islamists affiliated with the terrorist organization Al Qaeda attacked iconic buildings in the United States, marked a turning point in recent human history. The impact of these attacks goes far beyond other contemporary events, which triggered major geopolitical processes, such as the 1956 Suez Crisis or the 1979 Islamic Revolution in Iran. If initially humanity was in a state of shock, seeing how the superpower of the moment seems paralyzed by the aggression of a little-known enemy, later, security measures and geopolitical dynamics overturned not only the life of the Earth's population until then, but also paradigms, strategic concepts, political behaviors. This article aims to analyze how the attack orchestrated by Salafist fanatics in Al Qaeda has transformed and continues to transform society and global geopolitical dynamics.

Keywords: *war on terrorism; The Twin Towers; World Trade Center New York; Operation Enduring Freedom; Al Qaeda; Islamism; Salafism.*

Nothing special was announced internationally on the morning of Tuesday, September 11, 2001, a working day like any other. No major international meetings had been announced, no conflicts had broken out, no natural disasters. Mankind followed, according to the time zone, the grounded schedule of the three of eight, 8 hours of work, 8 hours of relaxation and 8 hours of sleep. By 8:46 a.m., New York time, when the American Airlines Flight 11 collided with the 110-story North

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Tower of the World Trade Center building complex, which overlooked Manhattan Island and became a symbol of American economic success. A few minutes later, at 09:03, a second collision followed, of the United Airlines flight number 175, which hit the South Tower. From that moment on, the collapse of the Twin Towers had become a matter of time. Another half hour later, at 9:37 a.m., another American Airlines flight, number 77, struck the Pentagon building in Arlington, Virginia, near the federal capital, Washington DC., and another half hour later, at 10:03 a.m., the United Airlines Flight 93 crashed near Pennsylvania's Shanksville after passengers fought terrorists who hijacked the plane and crashed it either over the U.S. Capitol building, the seat of the American legislature, or over the White House, the seat of the U.S. presidency. In total, 2,977 people died in the attacks, most of them civilians, citizens of 90 states. Along with the victims, the 19 terrorists affiliated with the terrorist organization Al Qaeda, which in 1993 had another attempt to demolish the Towers and in 1997 had attacked the American embassies in the capitals of Kenya and Tanzania, had also died¹.

If, at first, many thought it was a terrible accident or a scene from a Hollywood action movie, the growing number of disasters showed that it was not about any unfortunate event or the imagination of a screenwriter, but about a very serious and real event. An event that took place under the eyes of a stunned humanity, who did not understand who the attackers were and, especially, how it is possible that the superpower of the moment was hit so systematically.

The shock felt by the entire globe on September 11, 2001 was followed by a series of "shock waves" that transformed society and the global geopolitical game, so that even two decades after the events the "ashes" of the Twin Towers did not completely "spread".

How far has the impact of Al Qaeda's attacks on the United States since September 11, 2001 been? And how does it reverberate two decades after the collapse of the World Trade Center Towers?

1. Very Short and Short Term Impact (1-5 Years)

At the general psychological level, the astonishment caused by the attacks, and especially by the collapse of the Twin Towers, was followed by a mixture of anxiety about what might follow, anger at the attackers, horror at the act of terror and compassion for victims and their families. With few exceptions, such as some Islamists who shouted for joy at the news that "the Great Satan" – as they call America – had been "pierced in the heart"².

¹ ***, "A Timeline of the U.S.-Led War on Terror", *History*, URL: <https://www.history.com/topics/21st-century/war-on-terror-timeline>, accessed on 11.09.2021.

² ***, "What ABC News Footage Shows of 9/11 Celebrations", *ABC News*, URL: <https://abcnews.com>.



The global media has devoted extensive news programs to terrorist attacks and their perpetrators. Within hours, Al Qaeda leader Osama bin Laden (1957-2011) became the world's main *non grata* personality. From Vanuatu to Newfoundland and from Lesotho to the Faroe Islands, every citizen of the planet learned about the Saudi fanatic who spread terror in the name of Allah. Practically from that moment, in the collective mind, terrorism has ceased to be a phenomenon more or less collateral to the Arab-Israeli conflict, becoming a very real and imminent global threat. The first global threat that humanity, in the midst of a globalizing march towards a presumed global governance, is facing.

Economically, the disaster caused by the collapse of the World Trade Center was followed by the closure for a week of the New York Stock Exchange (NYSE) and other U.S. stock exchanges and the collapse of stock market shares, especially of airline and insurance companies. Of course, those who, by virtue of a special inspiration, had sold shares before 08:46 won, while the vast majority of stockbrokers lost huge sums.³ The devastation in Manhattan has cost businesses and impressive funds to restore the area, which was completed only in November 2014, when the *One World Trade Center*, a complex of buildings built near collapsed towers, was inaugurated.

Politically, the Republican administration of President George W. Bush, which had until then faced fierce criticism from the Democratic opposition, has enjoyed a period of respite, with general attention focused on managing the crisis generated by the attacks. Moreover, in the days following the attacks, the American society, deeply ideologically divided between Democratic progressives and Republican conservatives, regained its cohesion lost after World War II. For the first time since the end of the war, group ideology and interests no longer mattered in America⁴.

And, also for the first time, this time in its history, America was attacked on its own national territory.

So, on a military level, one day after the events, on September 12, 2001, President Bush went public and declared war on those who staged the attacks, by saying, "The United States of America will use all our resources to conquer this enemy. We will gather the world. We will have patience. We will be focused and firm in our determination. This battle will last and be resolved, but we are not

go.com/US/video/abc-news-footage-shows-911-celebrations-35571201, accessed on 11.09.2021; ***, "Palestinians celebrate at Damascus Gate", *Youtube*, URL: <https://www.youtube.com/watch?v=UucjbGmJILk>, accessed on 11.09.2021.

³ Marc Davies, "How September 11 Affected The U.S. Stock Market", *Investopedia*, 11.09.2021, URL: <https://www.investopedia.com/financial-edge/0911/how-september-11-affected-the-u.s.-stock-market.aspx>, accessed on 11.09.2021.

⁴ Pa Timesherald, "The national unity following the 9/11 attacks vanished. Can we find it again?", *Daily Local News*, 10.09.2021, URL: <https://www.dailylocal.com/2021/09/10/the-national-unity-following-the-9-11-attacks-vanished-can-we-find-it-again-3/>, accessed on 11.09.2021.



wrong, we will win”⁵. And a few days later, on September 20, 2001, in a statement to Congress and the nation, the same American president declared *War on Terror*, saying that: “Our war on terrorism begins with Al Qaeda, but it does not end here. It will not end until every terrorist group with global coverage is found, stopped and defeated.”⁶ On September 25, 2001, Secretary of Defense Donald Rumsfeld announced the launch of *Operation Enduring Freedom*, whose main mission was to liquidate terrorist groups operating globally, and on October 7, 2001, the Taliban regime in Afghanistan was attacked with airstrikes by the combined American and British forces. Between September 19 and 20, 2001, Allied special forces reached Kandahar, and on December 7, 2001, the Taliban regime was defeated⁷. From that moment, the USA took over the military control of the Afghan state, remaining in the area for 20 years, until August 31, 2021.

Then, on January 29, 2002, in his State of the Union address to Congress, President Bush named Iraq, Iran, and North Korea as part of the *evil axis of the pariah states*⁸. On March 19, 2003, the United States and its allies attacked Iraq, which they quickly conquered, so that on May 1, 2003, President Bush announced his “mission fulfilled”. The events of December 17, 2010 - December 2012 followed, when the states of the Middle East and North Africa were destabilized by a wave of radical Islamist anarchy, orchestrated by the Global Islamist Network, which turned Libya, Yemen and Syria into theaters of civil war and Islamist terrorism has proliferated more intensely than ever in its history. Then came the moments of May 2, 2011, when Al Qaeda leader Osama bin Laden was killed by an American commando in his home in Abbottabad, Pakistan, and that of December 28, 2014, when the Obama administration declared war ended from Afghanistan, without withdrawing troops⁹.

The declared war on terrorism has reconfigured the strategic concept of the North Atlantic Alliance, which included terrorism among the asymmetric threats and, very importantly, offered a new legitimacy to NATO, faced until then with dilemmas and criticisms from political scientists, related to the role and meaning of maintaining the Alliance in the context of the end of the Cold War and the “end of

⁵ ***, “Remarks Following a Meeting with the National Security Team. September 12, 2001”, Sept. 11/Administration of George W. Bush, 2001, p. 1302, URL: <https://www.govinfo.gov/content/pkg/WCPD-2001-09-17/pdf/WCPD-2001-09-17-Pg1302.pdf>, accessed on 15.09.2021.

⁶ President George W. Bush, “Address to a Joint Session of Congress and the American People”, *United States Capitol*, Washington, D.C., 20.09.2001, URL: <https://georgewbush-whitehouse.archives.gov/news/releases/2001/09/20010920-8.html>, accessed on 15.09.2021.

⁷ ***, “A Timeline of the U.S.-Led War on Terror”, *op.cit.*

⁸ ***, “Text of President Bush’s 2002 State of the Union Address Jan. 29, 2002”, *The Washington Post*, URL: <https://www.washingtonpost.com/wp-srv/onpolitics/transcripts/sou012902.htm>, accessed on 11.09.2021.

⁹ ***, “A Timeline of the U.S.-Led War on Terror”, *op.cit.*



history” through the final victory of neoliberalism¹⁰.

Moreover, the war on terrorism has brought to the forefront of geostrategic and intelligence analysis the problems of the Middle East and the entire Islamic space, opened new research directions, determined the development of related disciplines and professional skills, dedicated to preventing and combating terrorism, psychology radicalization and de-radicalization, communication in the event of a crisis generated by a terrorist attack, societal resilience to asymmetric and hybrid threats. It has also led to the establishment of research centers, *think-tanks* and university departments, to the publication of a rich literature, to the development of profile sites, as well as to the emergence of specialists in the field and the interested public.

On October 26, 2001, the George W. Bush administration announced that the United States had instituted, for a limited period of four years, the “United States Patriot Act of Unification and Strengthening America, by providing the appropriate tools needed to intercept and obstruct terrorism”¹¹.

Born out of the urgent need to ensure internal security, the law has massively expanded the powers of law enforcement, violating constitutional rights, to the point where America had begun to be described as a police state, a *Big Brother*¹² interested in overseeing and manipulating both own nationals, as well as nationals of other states¹³.

The mentioned act, which authorized indefinite and unconditional detention¹⁴ and the search and registration without a warrant, consent or knowledge of any American citizen or non-US citizen suspected of organizing terrorist acts¹⁵ (the warrant could be obtained later), included three main provisions:

- extensive surveillance capabilities for law enforcement, including by monitoring domestic and international telephones¹⁶;
- facilitating inter-agency communication to enable federal agencies to make

¹⁰ N.A.: Allusion to the work of the American political scientist Francis Fukuyama, *The End of History and the Last Man* published initially in 1992, at The Free Publishing House, in New York.

¹¹ ***, *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot Act) Act Of 2001*, Public law 107-56, 26.10.2001; URL: <https://www.congress.gov/107/plaws/publ56/PLAW-107publ56.pdf>, accessed on 01.09.2021.

¹² N.A.: Allusion to the character of the book *1984*, published in 1949 by the British writer George Orwell.

¹³ David Cole, “Patriot Act’s Big Brother”, *The Nation*, 27.02.2003, URL: <https://www.thenation.com/article/archive/patriot-acts-big-brother/>, accessed on 01.09.2021.

¹⁴ ***, Public Law 107–56—OCT. 26, 2001, *op.cit.*, Title IV, Subtitle B, Sec. 412.

¹⁵ *Ibidem.*, Title II, Sec. 206, Sec. 213, Sec.215, Sec. 216, Sec.217; Susan Jo Keller, “Judge Rules Provisions in Patriot Act to Be Illegal”, *New York Times*, 27.09.2007, URL: <https://www.nytimes.com/2007/09/27/washington/27patriot.html?ref=us>, accessed on 01.09.2021.

¹⁶ ***, *PUBLIC LAW 107–56—OCT. 26, 2001, op.cit.*, Title II.



more efficient use of all available resources in counter-terrorism efforts¹⁷;

- increased sanctions for terrorist offenses and an extensive list of activities that would qualify for terrorism charges, including money laundering for the purpose of terrorist financing¹⁸.

The legal provisions of the *Patriot Act* remained in force, with minor changes, until 2020, when the House of Representatives refused a new extension¹⁹.

The mentioned law became a model to follow for other states concerned with counteracting the proliferation of the global Islamist network, so that, gradually, the anti-terrorism legislation was consolidated, becoming a normal surveillance of the population in public spaces, then telephone conversations through “national security warrants” which automatically included all contacts of the subject²⁰, and, finally, of the public and private online environment. Specialized structures for preventing and combating terrorism have been created and developed, inter-agency partnerships have been laid or expanded on the British COBR/COBRA (Cabinet Office Briefing Room)²¹ or international model, in the name of the common goal of countering of the global Islamist network, such as the NATO-Russia format²², or regional organizations that have dedicated specialized structures to the same goal, such as the Regional Anti-Terrorism Structure (RATS) based in Tashkent, Uzbekistan, within the Shanghai Cooperation Organization²³.

Also based on this law, new safety protocols were introduced when boarding aircraft or cruise ships, which were later taken over by all states of the world and maintained until now, an issue that led to the development of the border control equipment industry.

And, also in terms of security, the attacks of Islamists fully define the concepts of “strategic surprise” and “black swan”, often used in the specialized language.

¹⁷ *Ibidem.*, Title I.

¹⁸ *Ibidem.*, Title III.

¹⁹ Alex Abdo, Jenny Beth, “Op-Ed: Choosing between Big Brother and the Bill of Rights”, *Los Angeles Times*, 29.05.2015, URL: <https://www.latimes.com/opinion/op-ed/la-oe-0529-abdo-martin-nsa-20150529-story.html>, accessed on 01.09.2021.

²⁰ ***, “Controversă privind modul în care SRI ascultă telefoanele”, BBC Romanian, URL: https://www.bbc.co.uk/romanian/news/story/2006/03/printable/060301_sri_telefoane.shtml, accessed on 01.09.2021.

²¹ ***, *COBR (COBRA)*, Institute for Government, URL: <https://www.instituteforgovernment.org.uk/explainers/cobr-cobra>, accessed on 01.09.2021.

²² ***, *NATO-Russia practical cooperation*, North Atlantic Treaty Organization, December 2013, URL: https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2013_12/20131127_131201-MediaBackground-NRC_en.pdf, accessed on 01.09.2021.

²³ ***, *Information on Regional Anti-Terrorist Structure of Shanghai Cooperation Organization*, Shanghai Cooperation Organization, URL: <https://web.archive.org/web/20081211154326/http://www.sectco.org/fk-03.html>, accessed on 01.09.2021.



2. Medium Term Impact (10-20 Years)

The attacks of September 11, 2001 entered the world's consciousness as a historic moment of maximum tragedy, which proved that not even America, with its huge annual defence budget, can benefit from absolute security. An annual event dedicated to documentaries, monuments and memorials, including the *9/11 Memorial and National Museum* in New York City, the *Pentagon Memorial* in Arlington County and the *93rd National Flight Memorial* near Shanksville²⁴.

Economically, the U.S. military presence in Afghanistan has cost the U.S. budget about \$ 2.3 trillion. According to the U.S. Department of Defense, total military spending in Afghanistan (October 2001 to December 2020) was \$ 825 billion, with \$ 131.3 billion spent on reconstruction projects. To these expenses are added interest on debts used to finance the war, expenses for the care of veterans and expenses for Pakistan's operational bases²⁵. More than 50% of the funds were used to train and equip Afghan security forces, including the Afghan National Army and police forces, plus expenses for counterinsurgency operations and troop maintenance. In turn, NATO allies have spent significant sums on rebuilding and pacifying Afghanistan. For example, Britain and Germany, which had the largest number of troops in Afghanistan after the United States, spent about \$ 30 billion and \$ 19 billion, respectively, during the war²⁶. A report on reconstruction efforts in Afghanistan, addressed to the US Congress in October 2020, states that between May 2009 and December 31, 2019, approximately \$ 19 billion was lost through fraud, abuse or waste²⁷.

On a human level, the costs have been huge:

- “members of the American service killed in Afghanistan by April: 2,448;
- American contractors: 3,846;
- Afghan military and national police: 66,000;
- other members of the allied services, including from other NATO member states: 1,144 (of which 27 Romanian soldiers);
- Afghan civilians: 47,245;
- employees of humanitarian organizations: 444;

²⁴ ***, “17 ani de la atentatul asupra World Trade Center din New York. Aproape 3.000 de persoane au murit”, *Avântul Liber*, 11 September 2018, URL: <https://www.avantulliber.ro/2018/09/11/17-ani-de-la-atentatul-asupra-world-trade-center-din-new-york-aproape-3-000-de-persoane-au-murit/>, accessed on 16.09.2021.

²⁵ ***, “Afghanistan: What has the conflict cost the US and its allies?”, *BBC*, 03.09.2021, URL: <https://www.bbc.com/news/world-47391821>, accessed on 12.09.2021.

²⁶ *Ibidem*.

²⁷ ***, *SIGAR OVERSIGHT*, 30.10.2020, Quarterly Report to Congress, URL: <https://www.sigar.mil/pdf/quarterlyreports/2020-10-30qr-section2.pdf>, accessed on 12.09.2021.



- journalists: 72”²⁸.

To these costs in Afghanistan, are added those related to counter-terrorism operations, carried out by the USA in other 85 countries, including Pakistan, Iraq, Syria/ISIS, Yemen, Somalia. A report published in August-September 2021 by the Watson Institute International & Public Affairs states that “more than 929,000 people died in the wars after 9/11 as a result of direct war violence and the reverberating effects of the war; more than 387,000 civilians were killed in the fighting; 38 million people have been turned into war refugees or displaced; federal spending on the post-9/11 wars exceeded \$ 8 trillion; the wars were accompanied by violations of human rights and civil liberties, both in the United States and abroad”²⁹.

All this represents a huge financial effort, reflected on the U.S. internal financial mechanisms, which in 2019 reported a negative current account balance of -480.225 billion dollars and an external debt of 20275.951 billion dollars, the highest on the globe³⁰ (the European Union has the largest cumulative external debt of over \$ 29.270 billion, but this is not a state, but a supranational structure³¹).

History has shown that whenever a superpower overstated its military presence, it ended up in economic decline and then lost supremacy in the geopolitical game of the time. An inexorable evolution, masterfully argued by the British historian Paul Kennedy in his reference work, entitled “The Rise and Decline of the Great Powers: Economic Change and Military Conflict from 1500 to 2000”, published in 1987. According to Kennedy, America’s share of global power is declining rapidly and, “the American political system, very liberal, non-interventionist, will not be able to stop this fall. In addition, America will have to face the two great tests that test the longevity of a global hegemon:

1. in military/strategic terms, the ability to maintain a balance between subjective, defensive needs, and field capabilities;
2. in economic and technological terms, the capacity to maintain its competitiveness and flexibility in the face of possible global structural changes.

The second test will be the most important, especially since, similar to the empires before it, America is experiencing *imperial overstretch* - or, in other words, “the total sum of American global interests and obligations is, today, much greater

²⁸ *** , *Costs of War*, Watson Institute International & Public Affairs, Brown University, URL: <https://watson.brown.edu/costsofwar/figures/2021/WarDeathToll>, accessed on 12.09.2021.

²⁹ *Ibidem*.

³⁰ *** , “United States”, *CIA World Fact Book*, URL: <https://www.cia.gov/the-world-factbook/countries/united-states/#economy>, accessed on 12.09.2021.

³¹ *** , “European Union”, *CIA World Fact Book*, URL: <https://www.cia.gov/the-world-factbook/countries/european-union/>, accessed on 12.09.2021.



than the power of the country to defend them all at once”³²”³³. Kennedy also warned that the United States would be unlikely to be attacked on its national territory (a statement contradicted by the September 11, 2001 attacks). “But it is very likely that at some point their global interests will be attacked. Situation in which they will be forced to choose between intervention and withdrawal. When the attacks become more numerous, as it happened with the magnificent medieval Chinese Empire, the United States will begin to retreat, recognizing its own decline”³⁴. A well-known risk of American military overbidding at the Pentagon, which analysts have been drawing attention to since the 1980s, Kennedy said, adding that “it is not at all surprising that the biggest concerns about the discrepancy between America’s commitments and America’s real power are in military circles, for the simple reason that they will be the first to suffer if this strategic weakness would be exposed in the harsh test of war. Hence the Pentagon’s frequent warnings about the obligation to do global logistical juggling, shifting forces from one “hot spot” to another as problems arise”³⁵.

The global war on terrorism, following the attacks of September 11, 2001, no matter how much it served the military-industrial complex economically, through the enormous costs it imposed on the federal budget, generated great financial imbalances for the American economy. This was a fact amplified by the Obama administration’s progressive “Talibanism”, which further opened the U.S. market to competing imports of its own products and allowed the deindustrialization of large parts of the United States by relocating industrial facilities to China, Mexico or other states with cheap labor, favoring multinational companies at the expense of the federal budget. Administration responsible, even indirectly, for the strategic “adventure” of the “Arab Spring”, which opened new and new battlefields, stimulated the proliferation of radical Islamism and terrorism, throwing America into the spiral of military spending based on capital market loans. Thus began the decline of American economic power. A situation understood by the Trump administration, which ordered the partial or complete withdrawal of American troops from the many hotbeds of conflict related to the very damaging war on terrorism, while ordering the establishment of active measures against the structure that created all this terrorism, namely the Global Islamist Network³⁶.

³² Paul Kennedy, *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000*, Random House, 1987, URL: https://www.cia.gov/library/abbottabad-compound/04/04A70DD54F5CB55BED6BE3B351_E242EE_The_Rise_and_Fall_of_Great_Power_Paul_Kennedy.pdf, p. 515, accessed on 10.10.2020.

³³ Alba Iulia Catrinel Popescu, *Tratat de geopolitică, Volumul I – Geopolitica puterii maritime*, Top Form Publishing House, Bucharest, 2020, p. 267.

³⁴ *Ibidem*, p. 269.

³⁵ Paul Kennedy, *op.cit.*, p. 519.

³⁶ Information about this subject can be found in: Alba Iulia Catrinel Popescu, *Analize incomode*, Military Publishing, Bucharest, 2020, pp. 143-202.



The same decisions were taken by the Biden administration that ordered the withdrawal of U.S. troops from Afghanistan and the liquidation of one of the most important sources of financial drainage from the federal budget. A strategic retreat in the purest *real-political* style, which left China and Russia responsible for managing an ultra-conservative Islamist regime. A neo-medieval regime that, if it does not face a civil war unleashed by rebels loyal to former Afghan leaders gathered in the *National Resistance Front of Afghanistan* led by Ahmad Masoud³⁷, will turn Afghanistan into a Salafist emirate near Shiite Iran of the “soft belly” of Central Asia and East Turkestan (now China’s Xinjiang Province), a *safe haven* future for the mujahedeen of the Global Islamist Network and a sponsor of global narco-terrorism, a strategic retreat resulting from an applied geopolitical exercise aimed to stop the American economic decline induced by the War on Terror.

And last but not least, it is important to mention that the war on terror has unleashed an unprecedented wave of migration from the hegemonic wars of the twentieth century to the present, in which, as mentioned above, 38 million people have turned into war refugees, or were displaced. A massive cross-border migration, which has destabilized the target states through the multiple economic, demographic, political, public health, public safety and national security consequences it has generated. Migration in the service of the Global Islamist Network, which has spread its “families” to target countries, as well as organized crime structures, which have made huge profits from human trafficking, artifact trafficking and war capture, from arms trafficking, narcotics, counterfeit medicines, etc.

**Instead of Concluding:
What Are the Potential Geopolitical Developments
in the Short Term in the Context of the American Economic Decline?**

The economic downturn, and especially the relocation of American industrial facilities to other countries and the huge economic costs induced by the coronavirus pandemic, have led to a significant impoverishment of the American population and a decline in the share of the middle class in the structure of American society in parallel with the even heavier burden of the federal budget, forced to support millions of direct or collateral victims of the medical crisis. Economic imbalances responsible for the increase in the percentage of the radicalized population and the emergence of left-wing extremist political movements, such as *Antifa*, *Black Lives Matter*, *Occupy Wall Street* or the right, such as *Proud Boys*. The spread of radicalization among members of the middle class of the American society has

³⁷ ***, “He promised an „organized resistance” to Taliban rule. Now he wants U.S. help to lead the fight”, *CBS News*, 19.08.2021, URL: <https://www.cbsnews.com/news/afghanistan-news-taliban-resistance-amrullah-saleh-ahmad-massoud-panjshir/>, accessed on 12.09.2021.



deepened the ideological gap between the two parties that alternately govern the superpower of the moment, so that, internally, America faces great challenges related to maintaining national unity and the democratic framework provided by the Constitution –increasingly challenged by left-wing activists, on the grounds that it was conceived by former slave owners.

With these internal challenges, America is forced to reconsider its economic and military strategy. In this sense, there is the closure of the “small wars”, extremely budget-intensive and totally unprofitable in terms of international image, institutional influence and long-term strategic gains. Or, in other words, the replacement of the imperial strategy with a bourgeois, cost-effective strategy, i.e. economically efficient, flexible and innovative. Therefore, it is very possible to witness the creation of the Anglo-American maritime bloc, in the context of intensified geopolitical competition within the US-China-Russian trilateral, and a concentration of forces of this bloc in geopolitical areas considered of maximum geostrategic importance for both powers, such as Western Europe, the North-Southeast-European Corridor, India, Southeast Asia, the North Pacific.

Internationally, the growing geopolitical ambitions of France and Germany are likely to strain European and trilateral balances of the ruling powers of the international system, a matter that risks slipping the world order from the current uni-multipolarity to an unbalanced multipolarity, very dangerous for the *status-quo*.

India’s concerns about China’s emergence in the Indian Ocean and those of Japan, Taiwan, the South China Sea, Australia and New Zealand on China’s dominant behavior in the Pacific could also generate new military alliances (possibly even a NATO military alliance) to counterbalance the Chinese threat in the Indo-Pacific area.

On the other hand, the Russian-Chinese tactical binomial is unlikely (but not excluded) to turn into a continental bloc. It is more likely that Russia will seek to maintain its current role, independently, in the hegemonic Sino-American competition, aiming to obtain as many advantages as possible from each of the two competitors. Advantages that will aim at achieving its interests in the Black Sea region and the materialization of its European strategy, of maintaining the energy monopoly, in full resonance with Germany.

And in the Middle East, the Afghan challenge to Russia, Iran and China could end either through peace, if the Islamist network abandons the strategic plan to create the Global Caliphate with its capital in Jerusalem (unlikely), or through a massive destabilization of the area, by engaging Afghanistan in the power game of the Network-affiliated states (Turkey, Qatar, Pakistan, Palestinian Territories), a destabilization that could delay Chinese ambitions in Eurasia.

The above data clearly show that the attacks of Islamists in Al Qa’ida on the USA, from September 11, 2001, represented a major turning point in the geopolitical and social dynamics of the last period of humanity.



On the one hand, the short- and medium-term impact of this geopolitical event has affected huge masses of people, reconfigured the global geopolitical game, accelerated the transformation of the international system from unipolarity to uni-multipolarity, and there is a risk of an imbalance towards an unbalanced multipolarity, it has plundered the US \$ 8 trillion economy, creating major global economic imbalances, and created a geopolitical environment conducive to the emergence of China and Russia.

On the other hand, the event of September 11, 2001 resulted in a paradigm shift in the role and place of security culture in society, brought to the fore the need to develop societal resilience in the face of asymmetric aggression and, at the same time, the issues of Middle East and North Africa and the existence of the Global Islamist Network, has developed directions of analysis of the Islamic space, new concepts, but also new professional skills. The attacks also triggered a paradigm shift in terms of security measures for civil air and sea transport, the need for increased monitoring of public spaces, security of critical infrastructure. Thus, in short, this event led to a strengthening of law enforcement institutions globally, in response to the development of terrorism as a form of political interaction.

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EXTENSION OF INTERNATIONAL HUMANITARIAN LAW ORDER IN THE INFORMATION AREA THROUGH DIGITAL DIPLOMACY

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Hybrid threats cover the whole spectrum of fake news, cyber/information warfare. They periodically impose the multimedia agenda in all known spaces to man. If for the Earth's natural spaces, we have norms and customs respected internationally, the navigation in the digital space does not confer to the user the same protection given by a code of laws accepted worldwide, although we have a new set of instruments with shield role against dangers called cyber security. In order for this cyber security to be accepted by as many (non) state actors as possible, we need international norms, built by professionals with expertise and proactive thinking. The people with specific responsibilities for negotiating such rules are diplomats, in this case we have the digital diplomats. What is their purpose? What is the connection between hybrid warfare, digital diplomacy and humanitarian law? These are questions that we answer through this research. In the structure of the paper we used concepts from International Humanitarian Law (IHL) norms that can be adapted to cyber operations and hybrid threats. In the case of the use of aggressive cyber actions and cyber capabilities, the competence of current international law is the objective of the article for the emergence of the right to self-defence. Then, we look at aspects of military actions involving cyber-attacks, designed on the spectrum of the cyber operation, and these cyber actions will be examined applying principles established by existing laws.

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Argumentum

“Change is the law of life. And those who look only to the past or present are certain to miss the future”.

John F. Kennedy

Our study begins with this quote because it maintains its validity. It is more current than ever whereas it warns law enforcement about an uncertain future, in which individuals have entered a vortex of change produced by technological innovation, simply amoral. Here we really need new rules or the adaptation of the old ones to new requirements. Thus, the involvement of law enforcement in the reformulation of the national and international legislative code is permanent, they must be aware that law is not a system of abstract logic, it is the result of a negotiation between world’s legal and jurisdictional professionals.

This is a network of arrangements with deep historical roots and current new branches promoted in the hope that old practices that are proportionately integrated into current (inter) national security rules, especially national security. Regardless of the state of affairs, peace or war, in all natural spaces and artificial information, we need a competent diplomacy for using all possible tools to succeed in obtaining international norms useful for as many users of digital tools. These rules have become necessary in a world where the number of hybrid threats has grown exponentially because they cause vulnerability in security systems and the most powerful states, the risk of escalation increases proportionally, and can turn into cyber war at any time. This sector of activity has become one of the main security threats facing all types of (non) state actors, in which we have not yet accepted adequate and legitimate mechanisms in the management of new types of war through transferable rules in cyberspace.

Nowadays we face an anarchic yet functional world society, which does not eliminate conflict, it can act preventively in order to change the form of conflict, placing more emphasis on non-violent forms of coercive activity¹¹.

The aim of this study is to present digital diplomacy as a promoter of innovative approaches to war law. To achieve the objective of this study, we shall present some examples. These are given by underlining relevant articles of the Four

¹ A.J.R. Groom, André Barrinha and William C. Olson. *International Relations Then and Now Origins and Trends in Interpretation*. Second Edition. Routledge, Taylor & Francis Group, New York, USA, 2019, p. 117.



Geneva Conventions (Humanitarian Treaties) of 1949, Two Additional Protocols of 1977 and Protocol III of 2005, in the process of adapting to the requirements of the globalized information system.

The working hypothesis for this approach is a syllogism that starts from the premise that the horrors of war had led to diplomatic negotiations for the initiation of international rules that could come into operation in times of war. These conventions and protocols are currently an integral part of International Humanitarian Law (IHL). If negotiations belong to diplomats and diplomacy has entered the information age, then digital diplomacy can bring forward diplomatic negotiation in the IHL plan in order to have new rules adapted to the new requirements of the information space.

This research is empirical and exploratory. Being enunciated through a syllogism, the hypothesis introduces us to the transdisciplinary study, built on the principle of causality with the help of the inductive method².

The article contains three sections. In the first, *Digital Diplomacy and Cyber Diplomacy, Hybrid Threats and Information Warfare*, we have defined the main concepts related to diplomacy and security in the information age. In the second section, *Updating Traditional Warfare and Its Extension in Cyberspace*, we have included the terminology for cyber warfare and cyber incidents through factual examples of borderline situations that states may face and that have reinterpreted state security. In the third section, *Cyber hostile actions and politico-diplomatic responses*, limits for war and international humanitarian law, in which we have correlated the factors and concepts described with relevant aspects of the war-adapted IHL in the information age.

1. Digital Diplomacy and Cyber Diplomacy, Hybrid Threats and Information Warfare

Diplomacy has been gradually defined according to the context of the times, the environment and by the people who influenced the foreign policies of the states, and afterwards within the international organizations. One of the definitions that remains valid for almost two centuries belongs to Baron Ferdinand de Cussy. He defined diplomacy in 1846 as “all the knowledge and principles that are necessary to conduct well public affairs between states.”³ In 1975, Mircea Malița considered diplomacy a professional nucleus around which four distinct elements revolve⁴:

² Marcel T. Djuvara, *Metoda inductivă și rolul ei în științele explicative*, Noua Tipografie Profesională Dimitrie C. Ionescu, Bucharest, 1910, p. 6.

³ Ferdinand de Cussy, *Dictionnaire ou manuele-lexique du diplomate et du consul*, Tipographie de F. A. Brockhaus, Leipzig, 1846, p. 256.

⁴ Mircea Malița, *Diplomația. Școli și Instituții*, Didactică și Pedagogică Publishing, Second Edition, Bucharest, 1975, p. 44.



“history, international relations, conflict theory and international law”. In the 21st century, Corneliu Bjola and Markus Kornprobst consider that diplomacy is made up of four components⁵: “Institutionalized communication, double recognition, focus on the provision of public goods and productive capacity (e.g. global decision-making, relationships and rules)”. It has officially mastered the established tools of the information age, which has led to the connection of technical terms in the field of technology, information and communications with diplomacy. After many attempts to link diplomacy with the information space, to impose it on independent platforms, social networks and internet search engines, as well as a specific type of activity undertaken at a given time, digital and cybernetic are the two adjectives that remained representative of the diplomacy practiced in the 1920s. We often explain them as synonymous⁶. Sometimes, we can find in articles, manuals or official documents “different prefixes, the same meaning: cybernetic, digital, net, online, virtual, e-”⁷ alongside diplomacy.

In recent official documents of the European Union, cyber diplomacy appears more often than digital diplomacy. In “Revisiting the EU Cybersecurity Strategy: A Call for EU Cyber Diplomacy” published in February 2021, Annegret Bendiek and Matthias C. Kettemann do not mention digital diplomacy under no circumstances. They place cyber diplomacy in tandem with digital foreign policy as a form of style, so as not to repeat the terms. They highlight the role of diplomacy and propose an extended mandate for the European External Action Service (equivalent to the Foreign Ministry of the European Union) in building a normative code through negotiations for cyberspace and information and for which it must be empowered for this task of diplomacy cyber⁸. For Barrinha and Renard, cyber diplomacy is an “emerging international practice that seeks to build an international cyber society, linking the national interests of states with the dynamics of world society – the predominant realm in which cyberspace has evolved over the past four decades”⁹. It should be noted that even here, the term digital diplomacy never appears. Ilan Manor argues that digital diplomacy is “digitization of public diplomacy”¹⁰, and

⁵ Corneliu Bjola, Markus Kornprobst, *Understanding International Diplomacy Theory, Practice and Ethics*, Second Edition, Routledge, Abington, Oxon, UK, 2018, p. 238.

⁶ André Barrinha, Thomas Renard, “Cyber-diplomacy: the making of an international society in the digital age”, *Revue Global Affairs*, No. 3:4-5, pp. 353-364, 2017, URL: <https://doi.org/10.1080/23340460.2017.1414924>, accessed on 25.10.2021.

⁷ Jovan Kurbalija, *An introduction to internet governance*, Published by DiploFoundation, Geneva, Switzerland, 2016, p. 14.

⁸ Annegret Bendiek, Matthias C. Ketteman, *A revising the EU Cybersecurity Strategy: A call for EU Cyber Diplomacy*, SWP Comment, No. 16, 16 February 2021, p. 3, URL: https://www.swp-berlin.org/publications/products/comments/2021C16_EUCyberDiplomacy.pdf, accessed on 21.10.2021.

⁹ André Barrinha, Thomas Renard, *op. cit.* p. 353.

¹⁰ Ilan Manor, *The Digitalization of Public Diplomacy*, Palgrave Macmillan Publishers, Basingstoke,



Corneliu Bjola attributes the main role in “the use of social networks for diplomatic purposes”¹¹. For Brian Hocking and Jan Melissen, digital diplomacy is often equated with public diplomacy, but also includes:

- a) changing foreign policy agendas;
- b) cyber agendas for issues and negotiation scenarios;
- c) knowledge management in the issue of efficient data management;
- d) the provision of digitized consular services and crisis management¹².

From the above definitions an idea emerges: that diplomatic practice in the 21st century indicates that diplomacy has entered the information age, it is in an accelerated process of hybridization in the “virtual environment, generated by cyber infrastructures, including processed information content, stored or transmitted, as well as the actions performed by users in it”¹³.

Thus, in order to manage threats and risks, to exploit hybrid threats and cyber warfare, we have at our disposal coercive and non-coercive means (in the fields of diplomacy, security and defence) to choose between multiple approaches and meanings according to them, even if the new definitions of hybrid threats are not few.

We have an impressive number of definitions that involve generic terms of security, protection and safety, especially for those related to security threats in situations arising from the behaviour of (non) state and individual actors, and not to complicate the framework. For our national security, we have chosen the following working definition: in its broadest sense, national security is a situation of normalcy of a state, “a country in which every citizen lives in a safe environment and trusts that the institutions, which he supports, defends and protects”¹⁴. This definition introduces hybrid threats because they “encompass the mixture of coercive and subversive activities, conventional and unconventional methods (e.g. diplomatic, military, economic, technological) that can be used in a coordinated way by state or non-state actors. to achieve specific objectives, without exceeding the officially declared threshold of a state of war”¹⁵. Thus we have a reference to attack and armed conflict.

UK, 2019, *passim*.

¹¹ Corneliu Bjola, Markus Holmes, *Digital Diplomacy: Theory and Practice*, Routledge New Diplomacy Studies, Abington, UK, 2015, p. 4.

¹² Brian Hocking, Jan Melissen, *Diplomacy in the Digital Age*. Clingendael Report. Netherlands Institute of International Relations Clingendael, Netherlands, 2015, pp. 3-4.

¹³ ***, *Strategia de securitate cibernetică a României*, p. 4, URL: <https://www.enisa.europa.eu/topics/national-cyber-security-strategies/ncss-map/roncss.pdf>, accessed on 20.10.2021.

¹⁴ ***, *Strategia Națională de Apărare a Țării pentru perioada 2020-2024*. “Împreună, pentru o Românie sigură și prosperă într-o lume marcată de noi provocări”, Monitorul Oficial, 1st Part, No. 574, from 1 July 2020, p. 5.

¹⁵ ***, *Comunicare Comună către Parlamentul European, Consiliul European, Consiliu, Comitetul Economic și Social European și Comitetul Regiunilor din 5 decembrie 2018, Plan de acțiune împotriva dezinformării*, p. 2, URL: <https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52018JC0036&from=RO>, accessed on 04.06.2021.



An armed attack is one “committed by a person with a firearm or with objects, devices, substances or animals that may endanger the life, health or bodily integrity of people”¹⁶. In our case, the extended war in cyberspace, “an extension of a nation’s attack surface”¹⁷. In order to better understand the polemological practical meaning of this new field we have the following definition: with internet access, from mobile phone to smart refrigerator¹⁸; and, Henrotin defined information warfare as a set of information-driven actions and attacks that result in the destruction or incapacitation of enemy infrastructure, where automation of information collection has become fragmented due to the multitude of sensors used in automation of retaliation, especially through the use of “smart” mines capable of determining whether they should explode near a particular vehicle¹⁹. All these definitions introduce us to the real-virtual world of cyber warfare, the one that would transform all the other fields that are directly or indirectly assimilated to war, to polemology.

2. Updating the Traditional War and Extending It to Cyberspace

For practical purposes, in order to be able to highlight different situations in the information space, we need some distinctive elements that differentiate between hostile cyber operations that support military operations in theatres of operations and hybrid threats.

In this sense, we have the cyber-attacks in the ex-Soviet states which, through their mode of action, have set precedents in the field of (inter) national security. As a first example, the 2007 cyber-attacks on Estonia included botnet attacks by zombie computers. For three weeks, the hackers targeted the country’s digital infrastructure, regardless of the level of users, public or private. Distributed Denial of Service (DDOS)²⁰ attacks have caused the collapse of services of all kinds, starting with online banking, multimedia or e-government services, implemented using digital tools built on algorithms, which, in turn, were transformed into platforms that included artificial intelligence. The problems arose during a political dispute between the Russian state and Estonia, over the relocation of the Bronze Soldier monument on April 26; pro-Russian demonstrations had locally intensified, warnings were also received from the Kremlin, and the next day, for three weeks, the

¹⁶ ***, *Legea nr. 192 din 25 octombrie 2019 pentru modificarea și completarea unor acte normative din domeniul ordinii și siguranței publice*, Monitorul Oficial, No. 868, 28.10.2019, p. 14.

¹⁷ Jacob G. Oakley, *Waging Cyber War. Technical Challenges and Operational Constraints*, Apress Publications, New York, USA, 2019, p. 8.

¹⁸ *Ibidem*, p. 20.

¹⁹ Joseph Henrotin, *The Art of war in the network age. Back to the future*, John Wiley & Sons, Inc. Publications, New Jersey, USA; 2016, p. 5.1.

²⁰ Scott Augenbaum, *The Secret to Cybersecurity. A Simple Plan to Protect Your Family and Business from Cybercrime*, Forefront Books, New York, USA, 2019, kindle e-book, p. 34.



country was effectively blocked²¹. Then, Estonia was followed by a wave of similar cyber-attacks in other former Soviet states. They integrated and synchronized cyber activity with classic actions to defend automated systems and included unique measures, algorithms in virtual space, in physical space—drones or other types of military equipment with unmanned autonomous systems, as well as other cyber capabilities; economic and diplomatic pressure was no exception²². The result was an increase in strategic effects in Lithuania (June 2008) and Kyrgyzstan (January 2009)²³; The five-day Russian-Georgian war with integrative coordination, started with cyber-attacks launched by Russia on July 29, 2008²⁴ and intensified by military operations on 8 August 2008.

All these attacks could be compared with simple exercises compared to the Russian-Ukrainian War from 2014, following which the Russian Federation had annexed the Crimean Peninsula. This type of armed conflict has set a precedent in proving that international treaties, conventions and protocols on IHLs are outdated, that hybrid warfare incorporates different modes of warfare conducted through conventional strategies, tactics and means integrating irregular formations, terrorist acts and crimes, including violence and coercion, without distinguishing between civilians and combatants.

Russia is the first internationally recognized state to have resorted directly to the use of hybrid warfare, the spread of the conflict in Eastern Ukraine has only proved that Russia had all the means to implement its art, it could cover the whole the chain of cause and effect in the theatre of war or conflict operations with minimal material resources, no physical weapons and no loss of life, especially for the attacking party²⁵. “Hybrid warfare is a mirror of the world we live in, a reflection of the society that leads it; therefore, a hybrid society will engage in hybrid warfare”²⁶.

3. Hostile Cyber Actions and Political-Diplomatic Retaliation, Limits to War and International Humanitarian Law

In the contemporary international system, the main rule governing the use of force in international law is the Charter of the United Nations (UN). Its legal basis

²¹ Damien McGuinness, “How a cyber attack transformed Estonia”, *BBC*, 27.04.2017, URL: www.bbc.com/news/3965541, accessed on 03 June 2020.

²² David E. Sanger, *The Perfect Weapon: War, Sabotage, and Fear in the Cyber Age*, Crown Publishing Group, a division of Penguin Random House LLC, New York, USA, 2018, pp. xv-xvi.

²³ *Ibidem*.

²⁴ *Ibidem*.

²⁵ Brin Najžer, *The Hybrid Age: International Security in the Era of Hybrid Warfare*, I.B. Tauris Bloomsbury Publishing, London, 2020, p. 27.

²⁶ *Ibidem*.



is mentioned in Article 2, paragraph 4 of the UN Charter as follows: “All members shall refrain from the threat or use of force in their international relations, either against the territorial integrity or political independence of any other State or in any manner inconsistent with the objectives of the United Nations”²⁷.

The UN Charter also provides for the legitimate personal and collective self-defence of the State in Article 51: “Nothing in this Charter shall affect the inherent right of individual or collective defence in the event of an armed attack on a member of the United Nations until the Security Council has taken the necessary measures to maintain international peace and security. Measures taken by members not to exercise this right of self-defence shall be notified immediately to the Security Council and shall in no way affect the power and duty of the Security Council in this Charter to take such measures as it deems necessary to maintain or restore. This one. international peace and security”²⁸.

The main problem for our topic, which derives from this article of the Charter, is that the existing international norms are evasive, they cannot be applied effectively in the information space. Declarations of war, communiqués and diplomatic positions are put to the test in the conditions in which the parties involved in the hybrid war are no longer just the states, the primary subject of public international law.

We do not have legal criteria that can be applied to hybrid and hostile actions in cyberspace when they are carried out by the state directly or through a proxy and if these actions can be classified as an armed conflict between the state and its opponent. The hybridization of the war demonstrated in 2014 that the new military instruments can avoid the international norms signed by the 40 international conventions and protocols on IHL, the right to wage war, *jus ad bellum* or the rules to be observed during the war, *jus in bello*.

Jus ad bellum is a generic aspect in the legal analysis of cyber operations that can be performed by the armed forces. The activities carried out in cyberspace allow the state to carry out operations with lethal or harmful results in addition to those that do not use force but they can cause death, injury, material damage. Taken separately or as a whole, these types of actions can be considered armed attacks or the use of force in accordance with international law because the relevant states and Intergovernmental Organizations (OIGs) have included cybercrime in the legislative framework. This highlights a wide range of ways of breaking the law. Among them we find all kinds of attacks on private or public persons, operators and institutions. Some of the crimes are universally accepted, others are interpreted at the national

²⁷ ***, *CARTA NAȚIUNILOR UNITE**) din 26 iunie 1945, publicat în *Monitorul Oficial din 26 iunie 1945*, p. 2, URL: http://www.anr.gov.ro/docs/legislatie/internationala/Carta_Organizatiei_Natiunilor_Unite_ONU_.pdf, accessed on 03.06.2020.

²⁸ *Ibidem*, p. 10.



level. For universally defined cross-border cybercrime we find²⁹:

a) new type of crime, caused online (identity theft, financial or card payment data; theft and sale of corporate data, blackmail, etc.) on social networks, e-mail and the Internet;

b) conventional but reinterpreted crime, such as scams, social engineering; illegal trafficking of all kinds; money laundering, cyber harassment, incitement to hatred, etc.

The two types of crime are completed by those related to the protection of national security, where the definitions may be similar, but they are interpreted in terms of its citizens' nation, rights and obligations. More specifically, the heroes of one country can be enemies of another, regardless of the space in which they carry out their actions. Among these actions, at national legislative level, we have provisions in the Criminal Code of Romania, in the chapter Crimes against national security (art. 394-412)³⁰: high treason, treason by transmitting state secret information and aiding the enemy; actions against the constitutional order and hostile actions against the state, espionage, attacks, in particular, of the one who endangers national security; diversion, communication of false information, propaganda, complicity, concealment of information regarding possible betrayal or hostile act, organization of espionage networks, etc. The espionage activity is codified in the international system in The Hague Regulations (1899 and 1907), the Fourth Geneva Convention (1949) and in Additional Act I (1977) of the Geneva Conventions.

In this case, cyber espionage can produce effects proportional to the aims and targets of these types of actions. They can affect relevant states, organizations and individuals, from simple password-breaking of emails belonging to public figures to material damage in real life or actual loss of life³¹. "Criminality in cyberspace"³² (Cybercrime) has begun to be taken seriously at regional level through firm action. One of the first at European Union level is "Council Decision (CFSP) 2020/1127 of 30 July 2020 concerning restrictive measures against cyber-attacks threatening the Union or its Member States".

Extrapolating this idea, we have actions that can extend from the real environment to the virtual one, provoking rapid political-diplomatic, military, defence or attack reactions. Some may include all the possibilities for reaction in a state. This reaction represents the right of self-defence in the cyberspace of state

²⁹ David B. Skillicorn, *Cyberspace, Data Analytics, and Policing*, CRC Press, Boca Raton, Taylor & Francis Group, LLC, Boca Raton, Florida, 2021, pp. 15-16.

³⁰ ***, *Codul Penal al României*, published in Monitorul Oficial of României, 1st Part, No. 575, 25 June 2004, pp. 876-879.

³¹ Scott Augenbaum, *op. cit.*, p. 35

³² ***, *Convenția privind criminalitatea informatică din 23.11.2001* *) (*Convenția de la Budapesta - 2001*), publicată în: Monitorul Oficial, Partea I nr. 343 20.04.2004, p. 1.



entities against interference. The types of attacks diversified, the mercenaries entered the information space, being known as hackers and differing, metaphorically, by several colours, after, initially, they were classified into three categories: white hats; grey hats; black hats (white, grey or black hats), these colour codes progressively expressing the degree of legality of activities in cyberspace, from legal (white) to illegal (black). In the IHL, the mercenaries are provided in the Protocol of 1977, art. 47, as follows: “Mercenaries are people specially recruited in the country or abroad to fight in an armed conflict; they take part directly in hostilities in order to obtain a personal advantage and which is actually promised by or on behalf of the party to the conflict, a remuneration higher than that promised or paid to the contingents of regular armies, having a similar rank and function in the armed forces of this party; and they are not members of the military forces of a party to the conflict”³³. From time to time, we are informed by the media that various members of the diplomatic, consular or administrative bodies of some embassies are accused of espionage³⁴, we consider it appropriate to explain the generic term spy. In turn, it is assimilated with the intelligence activity in the information environment, that of cyber espionage. Their traditional status has been detailed in The Hague Conventions. This is explained in the articles 27-29 of Conventions II (1899) and IV (1907), in art. 29, 30 and 31 of Convention VI (1907), based on the identification of a person as a spy: “a belligerent state with the intention of communicating them to the opposing party”³⁵. The clandestineness, the false pretext, the intention to communicate the accumulated information to the enemy party are found in their actions carried out at the limit (i) of legality.

Spies, mercenaries, diversionists and saboteurs are just a click away, the current threats and armed (hybrid) conflicts fall under the spectre of theft, misinformation, false information or unauthorized access to another state’s network systems. Then, such actions can be protected according to The Hague Protocols. However, mercenaries and cyber espionage operations go beyond the provisions of legal acts and/or customs of international law, because they involve interference by

³³ ***, *Protocolul adițional I la convențiile de la Geneva 1949, adoptat la Geneva în 1977, cu privire la protecția victimelor de război în conflictele armate internaționale*, URL: <https://lege5.ro/Gratuit/he3daoij/protocolul-nr-1-1977-aditional-la-conventiile-de-la-geneva-din-12-august-1949-privind-protectia-victimelor-conflictelor-armate-internationale>, accessed on 03.06.2021.

³⁴ A.N.: One of the recent examples is a flagrant organized in March, in which an Italian Navy officer was involved while handed secret documents to the Russian military attaché. Source: *Italian officer ‘caught selling secrets to Russia’*, 31.03.2021, URL: https://www.bbc.com/news/world-europe-56588506?fbclid=IwAR3R2Whyuzk8rQaskWaBvUxdJv5rMIgj_BxQF2t419G5cGUATNw3jdbAjto, accessed on 21.10.2021.

³⁵ James Brown Scott, *The Hague conventions and declarations of 1899 and 1907, accompanied by tables of signatures, ratifications and adhesions of the various powers, and texts of reservations*, New York Oxford University Press American Branch, Toronto, Canada, 1915, p. 118.



state or non-state actors in the systems of another state and violate the principle of non-intervention in art. 2, paragraph 7 of the UN Charter. It prohibits states from interfering in the internal affairs of other states, and victim states can protest against these actions by reporting them to the UN Security Council, but in reality, this is not the case. Leon Panetta, former secretary of the US Department of Defense, affirms that: “We have seen first-hand how modern vehicles such as remote platforms and cyber systems have changed the way wars are conducted. They give our soldiers the ability to face the enemy and change the course of war, even if they are far away. On the right side of the cyberspace spectrum there is the use of force or armed attack in cyber operations. Pentagon officials expressly say cyber-attacks on US will be seen as a war action”³⁶. Extensive actions in cyberspace directly affect international norms that provide for the right to life. Recognized worldwide by accepting the points set out in the 1948 Universal Declaration of Human Rights and in accordance with article 51 of the UN Charter, within the scope of the Geneva Conventions and their Additional Protocols. In Additional Protocol I of Geneva Conventions we find rules that can adapt the information space because here we have non-international armed conflicts without technical specifications. In this area, actions in cyberspace can be integrated into this protocol through the wide range of physical damage or death/damage to the environment, only the new environment also involves the online environment, where the impact of cyber operations can have similar results to the effects produced in following traditional military actions.

The Tallinn Handbook on International Law Applicable to Cyber Warfare describes a similar situation for *jus ad bellum* for cyberspace, which shows that cyber infrastructures in their own countries are part of national infrastructure and that any attack on it is illegal³⁷, regardless of the level reached by this attack. However, not all cyber-attacks can be categorized as an armed attack that can activate self-defence structures. However, the effects of a cyber-armed attack may be equivalent to those that would result from an action qualifying as a traditional armed attack³⁸; therefore, armed cyber-attacks are based on cyber-attacks, from simple incursions into private/individual information systems to unique cyber actions to achieve national security objectives against other states that give states the right to self-defence provided they respect IHL, by default, the four Geneva Conventions signed in August 1949, and their two Additional Protocols signed in 1977. The advantage of these Conventions and their Additional Protocols is that, after signing, ratifying

³⁶ Jennifer, Wang, *The White House and Pentagon Deem Cyber-Attacks, An Act of War*, *Forbes*, URL: <http://www.forbes.com/sites/reuvencohen/2012/06/05/the-white-house-and-pentagon-deem-cyber-attacks-an-actof-war/>, accessed on 03.06.2021.

³⁷ Michael N. Schmitt, *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations*, Cambridge University Press, Cambridge, 2017, p. 15.

³⁸ *Ibidem*, p. 54.



and acceding to these rules, the Conventions were universally accepted. For example, Additional Protocol I has been accepted by 200 states³⁹ (UN has 193 state members). Becoming fundamental legal documents, the Geneva Conventions and their Additional Protocols govern armed conflicts between states, thus developing the IHL principles of armed conflict. IHL represents “the set of rules of international law, of customary or conventional origin, intended for the purpose of specifically regulating problems arising in situations of international and non-international armed conflict”⁴⁰, with two basic branches⁴¹:

- a) The law of armed conflict (the Law of War), and
- b) International Humanitarian Law (Humanitarian Law).

The 1977 Additional Protocols to the Geneva Conventions were imposed by the impact of innovations in weapons technologies and changes in the way wars are conducted, representing an adaptation of the conventions and the previous protocol to technological innovations and changes in the war of the twentieth century. The Second Additional Protocol is the first international document in which they are described without being named directly, the situations in which civilians involved in (inter)national conflicts and asymmetric combat structures can be found in which the area of applicability is specified, then we have clearly specified in Article 4 and acts of terrorism⁴².

The armed attack has many valences. According to art. 49 of Additional Protocol I, “the expression attacks means acts of violence against the adversary, whether these acts are offensive or defensive”⁴³. These involve violent actions taken at individual, group or (inter)national level to achieve specific objectives. The attack has two traditional forms in the field of polemology, the international armed attack and the national one, specifically in civil wars. They were joined by non-state actors, such as international organizations or other individual actors or organized in various entities with power and influence in the international arena.

In the case of international armed conflict between two or more states, the Geneva Conventions apply, in the armed conflict in the national space between a state and an organized armed group we have the possibility to monitor the extent to which the parties are respected and whether they respect civilians and goods; we also have the third joint article of the Geneva Convention⁴⁴. Regardless of how

³⁹ ***, *Geneva Conventions of 1949 and Additional Protocols, and their Commentaries, By State*, URL: <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/vwTreatiesByCountry.xsp>, accessed on 27.10.2021.

⁴⁰ Anatolie Bulgac, Sergiu Sîrbu, *Drept Internațional Umanitar (Ghid)*, Centrul Editorial-Poligrafic Medicina, Chișinău, 2019, p. 8.

⁴¹ Anatolie Bulgac, Sergiu Sîrbu, *op.cit.*, pp. 8-9.

⁴² ***, *Protocolul nr. 2/1977 adițional, op.cit.*, pp. 24-25.

⁴³ ***, *Protocolul nr. 1/1977 adițional, op.cit.*, p. 24.

⁴⁴ Anatolie Bulgac, Sergiu Sîrbu, *op.cit.* pp. 8-12.



armed conflict is characterized, methods of conflict must comply with the law of armed conflict⁴⁵.

Cyber actions are used as versatile tools in armed conflict, through which attacks can reach the level of armed attacks in *jus in bello*, which can cause disruptions between the land, sea, air and telecommunications forces with the related commands; to minimize trust in government and the state in general; to terrorize the civilian population and to come to the aid of traditional military campaigns. Such situations have challenged states to make important decisions. They have started to set up cyber divisions. For example, the terrorist attacks of September 11, 2001 in the USA produced many changes, among them the creation of the first cyber division within the Federal Bureau of Investigation⁴⁶.

The IHL offers the possibility of harmonizing laws on current issues posed by hostile actions in cyberspace because most countries in the world are signatories to The Hague Conventions and Regulations, the Geneva Conventions and their Additional Protocols. Actions in the virtual space are cross-border, undertaken globally in proportion to the level of IHL acceptance in all natural spaces. Thus, the three principles of the IHL can be extended, because: we need proportionality in the choice of means, methods and numbers in war; to discriminate between civilians and combatants, between civilian and military structures; in order to avoid human suffering and material destruction⁴⁷. These principles are assumed through humanity, impartiality, neutrality, independence, volunteering, unity and universality⁴⁸; all the more so since, in the information age, we need a system attesting the legitimacy of freedoms in cyberspace, paraphrasing John Stuart Mill, where the freedom of one state ends on the Internet, that is where the freedom of the other begins.

Conclusions

Throughout this article we delineated the definitions of work related to diplomacy, war, cyberspace and IHL. We highlighted theoretical concepts through real examples from natural and virtual spaces in order to emphasize the need to correlate the IHL with hostile attacks and actions conducted in the information space, as a right of war valid in all spaces known to man.

We have developed ideas through which we notice that diplomacy implemented by information media has come to the attention of public opinion with the help of public diplomacy, when established formulas of communication on social networks

⁴⁵ *Ibidem*.

⁴⁶ Nancy E. Marion, Jason Twede, *An Encyclopedia of Digital Crime*, ABC-CLIO, LLC Publishers, Santa Barbara, California, USA, 2020, p. XXIII.

⁴⁷ *Ibidem*, p. 59.

⁴⁸ *Ibidem*, pp. 15-16.



on the Internet are used. This aspect is often integrated into similar concepts, such as digital diplomacy and cyber diplomacy, but regardless of the preferred term, the complex purpose of diplomacy (negotiation, representation, denial; building, maintaining and strengthening relations between states) remains unchanged, maintaining its validity in any known space. Diplomacy has the fundamental mission of finding peaceful solutions to bi- or multilateral relations through treaties and conventions. They may include adaptations of existing or new variants, caused by the popularization of new technologies and the resizing of the approach to war, from the classical war to that in cyberspace.

The implementation of innovative systems specific to the diplomatic environment is not exceptional. The idea of using technological tools is not new either. The truly unique fact is the spiral acceptance of the set of successive transformations in the institutional and inter-ministerial environment of foreign affairs in all the states of the world; they began to bring new working techniques simultaneously. The complexity and volatility of the information environment are brought into congruence with the packages of international norms hardly accepted by international actors during the twentieth century and of diplomatic customs hundreds of years old and with thousands of years of armed conflict. Under these conditions, the war became informational and/or cyber. In the related space, the parties involved are no longer just state, private or individual actors. Here it is necessary to include new amendments in the IHL, which should be accepted by all stakeholders, state or non-state actors, private or individual; to include the legislation of tandem military practices: humans and robots, automated equipment and computerized military equipment.

The analysis of the cyber war transposed through the prism of the IHL, the Four Geneva Conventions and the Two Additional Protocols of these Conventions leads to the conclusion that the rules underlying the organization of military operations are adaptable to the cyber conflict. For this area as well as to negotiate new international normative acts, we need specialized people. But, reducing these aspects to generic terms, we already have them in the attributions of diplomats, they just have to adapt their skills to the requirements of the information age.

Therefore, the objective and hypothesis of this study are confirmed. Digital diplomacy can be a driver for innovative approaches to war law. Negotiations belong to diplomats, just as declarations of war and peace also belong to diplomacy. When diplomacy entered the information age, it also expanded its responsibilities proportionally, implicitly for the negotiations regarding the extension of the IHL for the situations produced in cyberspace. Thus, the power of material and human destruction is a click away. This fact is becoming a requirement to quickly adjust current IHL conventions to possible strategic paradigms regarding the preparation and conduct of military or hostile operations of individuals or states, all behind a computer monitor.



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THE EVOLUTION OF ECONOMIC RELATIONS BETWEEN ROMANIA AND THE SUB-SAHARAN STATES BEFORE DECEMBER 1989 AND IN THE FIRST TWO DECADES OF TRANSITION

*Alba-Iulia Catrinel POPESCU, PhD**

The decolonization of sub-Saharan Africa was an opportunity intelligently speculated by the communist regime in Bucharest. Unlike the other communist states, regimented to the ideological current imposed by Moscow, Romania promoted an independent foreign policy and sought to establish economic relations with all developing states, regardless of their political orientation. But the events of December 1989 radically changed Romania's policy towards sub-Saharan states. This article proposes an analysis of the way in which the economic relations between Romania and the sub-Saharan states evolved before the events of December 1989 and in the first two decades of the transition to a market economy.

Keywords: *Sub-Saharan Africa; G 77; EU-Africa Strategic Partnership; December 1989; Department for Middle East and Africa.*

For 21 years, between 1968 and 1989, Romania was one of the main economic partners of the sub-Saharan states. Sensing the opportunity offered by decolonization, the communist regime in Bucharest became the most vocal

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and visible partner of the new post-colonial states, regardless of their political orientation. However, Romania's economic relations with the sub-Saharan space were radically influenced by the political, geopolitical, social and ideological changes subsequent to the events of December 1989.

In the following pages we will review the main areas of economic cooperation between Romania and its sub-Saharan partners and how these economic relations evolved before and after the events of December 1989, in the first two decades of the transition to a market economy.

1. The Cold War Period

Sub-Saharan African states have faced major structural economic imbalances since independence, translated by the dualism generated by the coexistence of archaic *barter* economic practices with modern ones, as well as the fracture of the economic system due to minimal or absent correlations between sectors of national economies. These imbalances, associated with the underdevelopment following the years of colonialism, the inexperience of leaders and the stakes of geostrategic players active on the African continent have fully contributed to the current failure of African states' industrialization and, in some cases, even state bankruptcy.

Becoming a market for consumer goods and exporting raw materials, African countries have experienced trade deficits, which have deepened over time. To this state of affairs, the following have contributed:

- the economic imbalance generated by Western direct investments, which mainly targeted public services and the extractive sector;
- full repatriation of profits by investors;
- the unfavorable credit system granted by international financial institutions to African states, given the risk factors associated with these young democracies;
- the economic crises of the late 1970s and early 1980s, which reduced the interest of potential Western investors in African economies.

Although the Western credit system of the 1970s, somehow more flexible in terms of creditworthiness criteria, allowed the financing of development projects in the sub-Saharan states, in the 1980s, when the due date came, the beneficiaries of the loans were unable to pay and went into recession.

In this economic context, the "third world" states laid the foundations of the Group of 77 (G77), Romania being the only state in the Warsaw Pact¹

¹ N.A.: *The Treaty of Friendship, Cooperation and Mutual Assistance*, founded on May 14, 1955 in the Polish capital, was a military alliance of the countries of the Soviet Union (USSR) and the Eastern Bloc, directed against the Western Bloc led by the United States of America (US). It officially



that became a member of this forum (acquiring observer status in the Non-Alignment Movement), as a result of the political-diplomatic support granted, in the international institutions, to the national liberation movements and, later, to the developing states. As in the case of political-diplomatic relations, the period after 1968 can be considered the period of opening and flourishing of our country's economic relations with African states.

In this sense, since 1968, between Romania and the sub-Saharan states, economic and technical-scientific cooperation agreements, bilateral trade and payment agreements, protocols and economic cooperation contracts were signed, the development of which was analyzed annually, during the intergovernmental mixed commission meetings².

In 1973, the first visits took place at the highest level, of a Romanian government delegation in Senegal and Morocco³ and, after 1974, the trade relations with the African states acquired a special weight. Romania's economic presence in the sub-Saharan states has strengthened political and diplomatic relations and vice versa, being a relationship of mutual empowerment between the two categories of exchanges and bilateral relations. The motivation of our country's orientation towards the sales markets of the "third world" states was an extremely pragmatic and realistic one: these markets, which represented over three quarters of the world's population, although extremely sensitive in terms of sales costs, were less sensitive to quality and innovation, being able to offer cheap raw materials in return.

Romania has obtained advantageous ocean fishing licenses in the territorial waters of Mauritania and Namibia on the basis of which the fishing fleet and the related canning and fishery products industry have developed⁴. Romania has also received from sub-Saharan partners the right to exploit energy and mineral deposits, in exchange for investments in transport infrastructure, arms exports⁵

ceased to exist on July 1, 1991, in Prague. See: Petre Opreș, *România în Organizația Tratatului de la Varșovia (1955-1991)*, Militară Publishing, Bucharest, 2008.

² Gheorghe Zaman, George Georgescu, *A retrospective study on Romania's external trade in the past 100 year*, Munich Personal RePEc Archive, October 2018, p. 22, URL: https://mpra.ub.uni-muenchen.de/89707/1/MPRA_paper_89707.pdf, accessed on 10.07.2021.

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⁴ Nicolae Zărnescu, "Întreprinderea de Pescuit Oceanic – unicat al industriei alimentare din economia socialistă", *Linia Întâi*, 23.10.2013, URL: <http://linia1.ro/intreprinderea-de-pescuit-oceanic-unicat-al-industriei-alimentare-din-economia-socialista/>, accessed on 11.07.2021.

⁵ ***, "Peștii, armele și spionii. Ce legătură este între flota românească de pescuit, războaiele din Africa și căderea lui Ceaușescu", *ProTV*, 28.09.2014, URL: <http://stirileprotv.ro/emisiuni/2014/sezonul-2/pestii-armele-si-spionii-ce-legatura-este-intre-flota-romaneasca-de-pescuit-razboaiele-din-africa-si-caderea-lui-ceausescu.html>, accessed on 23.06.2021.



and cooperation in the field of education⁶. In order to maintain its presence on sub-Saharan markets and to exploit the mineral and energy resources offered by African partners, Romania has set up joint companies, such as *Carombois* and *Lorombois* in the Central African Republic, *Nirowi* in Nigeria, *Socaton – SAPM (Romagrimex)* in the Republic of Congo, *ZAIROM* in Zaire, *Besaminco* in Tanzania⁷ and *Simar*, created in partnership with economic agents in Mauritania⁸.

Enterprises such as Tractorul Braşov, Semănătoarea Bucureşti, Progresul Brăila, ARO Câmpulung, Dacia Piteşti, Romcim, Rompetrol, Arcom, Geomin, Uzinexportimport, Oltchim Râmnicu Vâlcea, Azomureş have become well known in the African space, Romanian products being appreciated by the beneficiaries so far. According to a study by Ambassador Marcel Dinu⁹, in Burundi, a Romanian geologist discovered one of the most important nickel deposits in the world, in Nigeria, Romanian specialists provided technical assistance to the *Nigerian National Petroleum Corporation* (NNPC) and in Angola, in 1985, Romanian specialists built oil depots in the city of Huambo, worth about 10 million US dollars¹⁰. To these were added other large-scale projects, completed by Romanian companies, such as:

- the Sudanese Parliament building in Khartoum¹¹ and other civil constructions in Nigeria, Ghana, Cameroon, etc.;
- oil and mining operations in Nigeria, Zambia, Kenya, Burundi, Senegal, Guinea;
- construction of road transport infrastructure in Nigeria, Ghana;

⁶ Ilarion Țiu, “Republica Africa Centrală, la picioarele lui Ceauşescu”, *Historia*, URL: <https://www.historia.ro/sectiune/general/articol/republica-afrika-centrala-la-picioarele-lui-ceausescu>, accessed on 23.06.2021.

⁷ ***, *Raport privind creanţele României la 31 iunie 2005, provenite din activitatea de export, cooperarea economică internaţională si alte acţiuni externe, derulate înainte de 31 decembrie 1989*, Ministry of Public Finance, 28.06.2006, URL: <http://www.cdep.ro/bperm/2006/F26954-creante.pdf>, accessed 23.06.2021.

⁸ ***, *ACORD din 24 septembrie 1987 între Guvernul Republicii Socialiste România şi Guvernul Republicii Islamice Mauritania privind cooperarea în domeniul pescuitului maritim şi activităţile conexe*, URL: http://legislatie.just.ro/Public/DetaliiDocumentAfis/22686?fbclid=IwAR2Hm6CD17AWVyBf3i3cQUgmp8WEWI7Mni9GXzcmUt8KRT08r_mJEpWz7QU, accessed on 10.07.2021.

⁹ Marcel Dinu, “Unele considerente referitoare la extinderea relaţiilor României cu statele din Africa, Asia, America Latină şi Orientul Mijlociu în a doua jumătate a secolului XX”, URL: <http://www.irsea.ro/Rela--355-ii-externe-secolul-XX/>, accessed on 23.11.2014.

¹⁰ ***, *Relaţii bilaterale Republica Angola, Direcţia Orientul Mijlociu şi Africa din Ministerul Afacerilor Externe*, URL: <http://www.mae.ro/bilateral-relations/1809#699>, accessed on 23.11.2014.

¹¹ ***, “Pe urma miliardelor pierdute ale României socialiste, investite în afară”, *Romania Military*, 26.04.2012, URL: <http://www.rumaniamilitary.ro/pe-urma-miliardelor-pierdute-ale-romaniei-socialiste-investite-in-afara>, accessed on 23.04.2017.



- construction of airport transport infrastructure in Mozambique, Senegal;
- development of agricultural crops in Mozambique, Central African Republic, Congo and Zaire – R.D. Congo;
- drinking water drilling in Zambia¹².

The memorialist of the first Romanian Pan-African expedition, the biologist Nicolae Coman, said that during the trip behind the wheel of the ARO SUV, manufactured in Câmpulung Muscel, the members of the expedition were surprised by Romania's notoriety in the states they traveled and by the impressive number of Africans who had developed either economic or educational ties with our country. Among the many surprising meetings with Romanians settled in Africa or with Africans educated in Romania, Coman recalled the meeting with the representatives of the *Sudan-Romania Friendship Association*, which had 10,000 members, or the meetings with locals in Burundi, graduates of the faculties of medicine, geology and construction in Romania, which at that time held governmental leadership positions¹³.

In the 1980s, in the context of the international isolation to which the communist regime in Bucharest was subjected, both by Westerners and by the "fraternal states" of the Soviet bloc, the African market became one of the favorite targets of Romanian foreign trade enterprises. Even if there were numerous damaging contracts, signed exclusively for ideological reasons, to help "fraternal countries", or for reasons related to the cult of personality of President Nicolae Ceaușescu (1918-1989), who wanted to demonstrate his status as a world political leader, on the whole, the trade balance was in favor of our country and the bilateral relations served the economic and political interests of Romania.

The main products imported by Romania from sub-Saharan African states were non-food raw materials (crude oil, bauxite and other non-ferrous ores, cotton, etc.), and the main Romanian products exported to sub-Saharan Africa were food, chemicals, plants, machinery, construction materials and so on¹⁴.

¹²***, *Tradiția relațiilor româno-africane, Direcția Orientul Mijlociu și Africa din cadrul Ministerului Afacerilor Externe*, Bucharest, 2009, p. 2.

¹³ Nicolae Coman, *De la Atlantic la Oceanul Indian. Însemnările unui biolog din prima expediție românească trans-africană (1970-1971)*, Dacia Publishing, Cluj Napoca, 1975, pp. 10-30.

¹⁴ Gheorghe Zaman, George Georgescu, *op.cit.*, p. 29.

**Table no. 1:** The volume of Romania's commercial transactions with African states (millions of lei in foreign currency, during that year)¹⁵

Angola	Year	1980	1985	1987	1989
	Export	82.7	117.6	27.5	64.7
	Import	203.7	1.8	-	-
Ivory Coast	Year	1970	1980	1985	1987
	Export	0.9	23.8	7.2	68.7
	Import	-	46.2	83.9	2.9
Ethiopia	Year	1970	1980	1987	1989
	Export	0.7	19.4	97.6	24.6
	Import	-	23.2	36.4	48.8
Ghana	Year	1970	1980	1985	1989
	Export	3.1	2.4	84.7	29.5
	Import	3.7	31.2	151.6	26.0
Guinea	Year	1970	1980	1985	1989
	Export	2.0	0	43.5	2.8
	Import	3.0	-	112.6	7.5
Nigeria	Year	1970	1980	1985	1989
	Export	16.3	1,399.5	1,384.5	729.6
	Import	-	160,9	-	1.2
Sudan	Year	1960	1970	1985	1989
	Export	9.5	24.7	1,028.6	107.6
	Import	4.81	13.6	391.1	9.6
Tanzania	Year	1970	1985	1987	1989
	Export	0.5	17.2	219.4	157.2
	Import	-	1.0	157.8	62.8
Zaire (current R.D.Congo)	Year	1980	1985	1987	1989
	Export	3.0	21.2	61.6	22.0
	Import	147.3	-	26.2	2.6

According to the data provided by the *Statistical Yearbook of Romania*¹⁶ (see Table no. 1), in 1985 the maximum level of commercial transactions between Romania and a series of sub-Saharan states was reached, very tender in terms of resources and size of the market, such as: Angola, Ghana, Guinea, Nigeria, Sudan, Tanzania, Zaire (now DR Congo). In the case of Ethiopia and the Ivory Coast, the maximum volume of bilateral trade transactions was reached in 1987.

Analyzing the dynamics of trade transactions with Nigeria and Sudan, we find that in 1980, Romania imported a volume of goods worth 1,399.5 million lei foreign currency from Nigeria, and in 1985, it imported a volume of goods worth 1,028.6 million lei currency from Sudan. In the 1970s and 1985s, the volume

¹⁵ ***, *Anuarul Statistic al României 1980-1989*, apud. Nicolae Melinescu, *Uriaşul care se trezeşte*, CA Publishing, Bucharest, Cluj Napoca, 2009, vol. 2, pp. 91-92.

¹⁶ *Ibidem*.



of Romanian imports from Nigeria was zero. The explanation for this massive increase in Romanian imports from the two African states is related to the Islamic Revolution in Iran, from 1979, which determined the reorientation of the regime from Bucharest to other sources of crude oil. In 1985, a putsch took place in Nigeria, overthrowing General Muhammadu Buhari and replacing General Ibrahim Babangida. The instability generated by the Nigerian political crisis was reflected in the volume of trade transactions.

Corroborating the dynamics of the diplomatic activity of the Bucharest regime in the mentioned space with the data illustrated in the table in Figure no. 1, the close link between the political and economic factor in the bilateral relations between Romania and the sub-Saharan states, the ascending route during the 1970s and the first half since the 1980s, as well as the orientation of the Romanian state towards those attractive African economies in terms of energy and mineral raw materials.

2. The Period Preceding Romania's Accession to the EU

The economic restructuring of Romania in the 1990s, through deindustrialization and the change of foreign policy priorities, put in the background the economic relations with the African states, all the more so as they, in their turn, went through intense periods of internal transformations, on the background of changing local geostrategic players. As a result, since 2014, only seven of the 28 Romanian embassies opened before 1989, to which the South African embassy was opened, opened on November 21, 1991, have been operating in the sub-Saharan area. The activity of these Romanian embassies in Nigeria, South Africa, Angola, Sudan, Senegal, Kenya, Ethiopia, Zimbabwe is completed on the consular line of 16 honorary consulates, open in states where there are Romanian citizens: Nigeria (4 consulates), Benin, Guinea, Guinea Bissau, Mali, Mauritania, Mozambique, Niger, Senegal, South Africa, Central African Republic, Ivory Coast, Republic of the Congo. However, the closure of 20 embassies affected both the Romanian capital of influence in the sub-Saharan space, and the economic and military relations¹⁷ developed with the sub-Saharan states. Due to diplomatic disengagement, important licenses were lost, such as ocean fishing or exploitation of energy and mineral deposits, Romanian products gradually disappeared from the sub-Saharan market – occupied by former competitors in eastern or western space, and Romania's claims in sub-Saharan Africa, worth billions of dollars (US) and convertible rubles, were either taken for granted by various companies, some with contact addresses via

¹⁷ A.N.: Information about the subject can be found in: Alba Iulia Catrinel Popescu, "Aspecte cu privire la evoluția relațiilor militare dintre România și statele subsahariene înainte și după evenimentele din decembrie 1989", *Buletinul Universității Naționale de Apărare „Carol I”*, vol. 4, nr. 2/2017, Universitatea Națională de Apărare „Carol I” Publishing House, pp. 17 - 26.



*offshores*¹⁸, or were deleted by government decisions.

According to a report issued by the Ministry of Public Finance, on June 30, 2005, the total volume of Romania's receivables, resulting from export activity and other external actions carried out before December 31, 1989, was \$ 2.2114 billion on the convertible currency ratio and 1050.8 million rubles transferable. Of these amounts, Sudan owed \$ 169.85 million and 881825 pounds, Mozambique \$ 165.3 million, Nigeria \$ 12.58 million¹⁹.

In 2007, the total volume of Romania's receivables had decreased by 1.427 billion dollars and 1.099 billion transferable rubles.

With a generosity worthy of the great world economies, the governments that ruled Romania in the first decade of the third millennium erased or diminished these debts through international treaties and agreements such as the Paris Club²⁰. For example, Mozambique, a country rich in strategic minerals, which owed Romania 135 million dollars and whose government was willing to pay through mining properties, did not cede any property to the Romanian state, and also remained with a diminished debt of only \$ 12.4 million²¹. Guinea, the sub-Saharan state that owns more than 33 percent of the world's bauxite reserves,²² owed \$ 20.67 million. By a government decision, the same authorities in Bucharest gave up over 90% of the debt, reducing it to two million dollars. And, in the case of the debt of 10.6 million dollars of the Central African Republic, a country rich in non-ferrous ores, they took the decision to remove it, by law, from the off-balance sheet records of public accounting. Five debtor countries – Sudan, the Republic of Congo, Nigeria, Somalia, Tanzania – accumulated debts of more than \$ 190 million, of which about \$ 170 million was the debt of Sudan alone, state rich in hydrocarbons and non-ferrous ores. At that time, the Romanian authorities had not started any negotiations for the recovery of these claims²³. Only R.D. Congo (Zaire), whose undersoil is rich

¹⁸ *** , “Pe urma miliardelor pierdute ale României socialiste, investite în afară”, *Romania Military*, *op. cit.*

¹⁹ *** , *Raport privind creanțele României la 31 iunie 2005, provenite din activitatea de export, cooperarea economică internațională și alte acțiuni externe, derulate înainte de 31 decembrie 1989*, *op.cit.*

²⁰ A.N.: The Paris Club is an informal group of official creditors whose role is to find coordinated and lasting solutions to the payment difficulties faced by debtor countries. See URL: <https://clubdeparis.org/>, accessed on 23.08.2021.

²¹ Daniel Ionașcu, “Aici sunt banii dumneavoastră. Miliarde de dolari, risipite de România prin investiții în alte țări”, *Libertatea*, 01.07.2018, URL: <https://www.libertatea.ro/stiri/aici-sunt-banii-dumneavoastra-miliarde-de-dolari-risipite-de-romania-prin-investitii-alte-tari-2312134>, accessed on 23.08.2021.

²² Alba Iulia Catrinel Popescu, *Jucătorul din umbră*, Militară Publishing, Bucharest, 2016, p. 60.

²³ *** , “Romania are de recuperat creanțe de 1.472 mld. dolari, din 15 state”, *Wall Street*, 12.03.2007, URL: <https://www.wall-street.ro/articol/Economie/26511/Romania-are-de-recuperat-creante-de-1-472-mld-dolari-din-15-state.html>, accessed on 23.08.2021.



in diamonds, cobalt, tantalum and other strategic and gold ores²⁴, had a regulated debt of \$ 595 million.

Even later, the amounts recognized by the debtor states were not fully recovered by the Romanian state. In 2019, the total volume of bad debts was \$ 716 million and 1.5 billion transferable rubles, of which \$ 241.3 million (33.70%) were outstanding debts to Sudan, Nigeria, the Central African Republic, Somalia, Tanzania and Libya²⁵.

The causes of the non-recovery of these debts by the Romanian state, as it results from the above mentioned report are “the major economic, financial and foreign exchange difficulties faced by some African countries, whose debts to Romania amount to 376.4 million US dollars (17% of total claims), qualified to receive assistance under the HIPC (high indebtedness poor countries, the poorest in the world): Sudan, Guinea, Central African Republic, Republic of the Congo, DR Congo, Mozambique, Somalia, Tanzania and “membership of debtor countries, already part of the HIPC program”, in the categories of “conflict-affected countries” and “post-conflict countries” to receive additional financial support from international bodies : R. Central African Republic, R. Congo, RD Congo, Somalia, Sudan²⁶.

3. The Period of the First Decade since Romania’s Accession to the EU

Romania’s accession to the European Union on January 1, 2007 and the adjustment of Romanian policies to the community ones, including the *EU-Africa Strategic Partnership*²⁷, marked an economic recovery of the Romanian state in the African space, even if much lower compared to the 1970s-1980.

Until the date of Romania’s accession to the EU, the legal framework of the Romanian-African trade was ensured by the treaties, agreements, protocols and agreements signed by the Romanian state, before 1989, with the African states. After our country became a member of the European Community, these documents have become obsolete, thus the process of updating them is currently underway.

²⁴ Alba Iulia Catrinel Popescu, *op.cit.*, pp. 90-107.

²⁵ ***, “Document: România are de încasat creanțe de 716 milioane dolari și 1,5 miliarde ruble transferabile”, *Mediafax*, 29.07.2019, URL: <https://www.mediafax.ro/economic/document-romania-are-de-incasat-creante-de-716-milioane-de-dolari-si-1-5-miliarde-de-ruble-transferabile-18252848>, accessed on 23.08.2021.

²⁶ ***, *Raport privind creanțele României la 31 iunie 2005, provenite din activitatea de export, cooperarea economică internațională și alte acțiuni externe, derulate înainte de 31 decembrie 1989, op.cit.*

²⁷ ***, *The Africa-EU Partnership*, URL: <http://www.africa-eu-partnership.org/en/about-us/what-partnership>, accessed on 29.10.2015.



According to the data provided by the Ministry of Foreign Affairs (MFA)²⁸, during the analyzed period, Romania exported to the sub-Saharan states chemical fertilizers, plastics, kerosene, Dacia Logan/Duster cars, tractors and spare parts, bearings, electrical and household appliances, car tires, articles of paper, cardboard, wood, glass, faience, fabrics and knitwear, construction materials (iron, steel, cast iron), wire, grain, table wine.

During the same period, Romanian imports from African countries focused mainly on raw materials: oil (Sudan), tropical wood, cocoa, precious stones, rubber, cotton, tea, coffee, fish and shellfish, spices, fruits, raw hides and skins of sheep, cattle, goats, manganese ore, bauxite (Guinea, Sierra Leone), iron (Republic of South Africa-RAS), coal (RAS).

3.1. Trade between Romania and Angola

Currently, the Romanian-Angolan economic relationship is regulated by the *Protocol of cooperation between the Romanian and Angolan foreign ministries*, signed in 2008²⁹.

According to the data provided by the Department for Middle East and Africa within the MFA, the Romanian exports to Angola were mainly made up of chemical fertilizers, electrical appliances, Dacia-Logan cars.

The graph in Figure no. 1 shows the oscillating evolution of trade between Romania and Angola, with a revival of exports during 2012 and 2013 and a significant decrease in 2015. It is interesting to note that Romanian imports from this African state are virtually equal to zero, given that Angola is one of the most bidding states in terms of production of hydrocarbons, precious metals, diamonds, rare metals, uranium, etc.

Unfortunately, after 2015 there are no official public reports of the Romanian Embassy in Angola on the dynamics of trade between the two states.

²⁸ N.A.: According to the MFA, in the case of the Republic of South Africa (R.S.A.) “Romania’s accession to the E.U. led to the renegotiation of the existing Trade, Development and Cooperation Agreement (T.D.C.A.) between the E.U. and R.S.A., by introducing Romania and Bulgaria as countries that will benefit from tariff facilities, etc. offered by this legal framework. Based on the Aquis Communautaire process, trade and economic cooperation agreements were repealed by mutual agreement, being replaced by the existing Trade Development and Cooperation Agreement between the E.U. and R.S.A. (Trade Development Cooperation Agreement-T.D.C.A.)”, in ***, *Relații bilaterale Republica Africa de Sud, Direcția Orientul Mijlociu și Africa*, Ministry of Foreign Affairs, URL: <http://www.mae.ro/bilateral-relations/1772#746>, accessed on 23.11.2014 and in ***, *Relații bilaterale, Ambasada României în Republica Africa de Sud*, URL: <https://pretoria.mae.ro/node/170>, accessed on 12.09.2021.

²⁹ ***, “Republica Angola”, URL: <https://www.mae.ro/bilateral-relations/1809>, accessed on 23.07.2021.

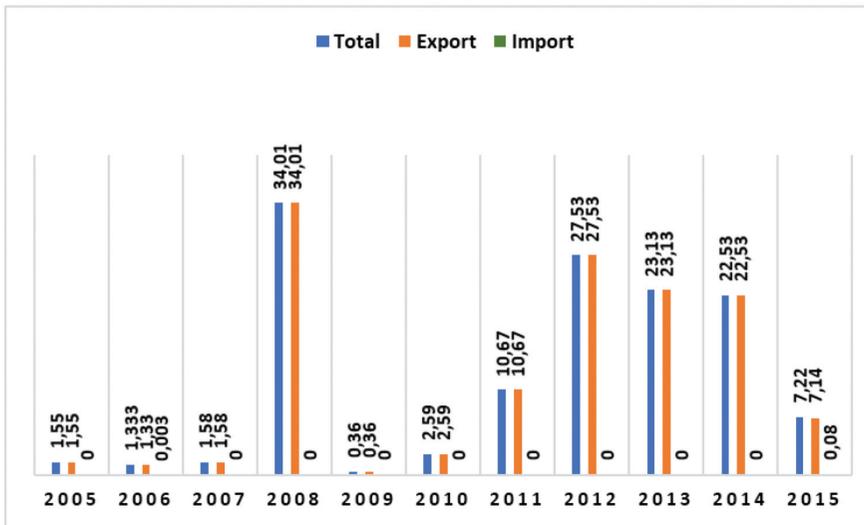


Figure no. 1: The dynamics of Romania - Angola trade in 2005-2015 (millions of dollars)³⁰

3.2. Trade between Romania and the Republic of South Africa

According to the M.F.A., until 1990, Romania did not maintain direct trade relations with South Africa, the trade transactions taking place through intermediaries from third countries.

In the early 1990s, a series of legal documents were concluded between the two states, such as: Trade Agreement (1990); Economic Cooperation Agreement (1993); Agreement on the avoidance of double taxation (1993); Agreement on the abolition of visas for diplomatic and service passports (1995); Cooperation agreement between the Chamber of Commerce and Industry of Romania and the Federation of Chambers of Commerce of the Republic of South Africa (1991); Memorandum on the Statute of the Joint Intergovernmental Commission for Economic and Technical Cooperation (1994)³¹.

The graph in Figure no. 2 presents the dynamics of trade between Romania and South Africa in the period 2006-2013. A first observation is related to the *growing trade surplus on the Romanian side*, the last four years of the reporting period registering a significant increase in exports. Another observation refers to the acceleration of Romanian exports starting with 2008, after Romania's accession to the EU and the adjustment of the Romanian foreign policy in accordance with the European one (the EU-Sub-Saharan Africa strategic partnership being a European political imperative).

³⁰ ***, *Relații economice*, Ambasada României în Republica Angola, URL: <https://luanda.mae.ro/node/168>, accessed on 23.07.2021.

³¹ ***, *Republica AFRICA de SUD*, Ministerul Afacerilor Externe, URL: <https://www.mae.ro/bilateral-relationships/1772>, accessed on 23.07.2021.

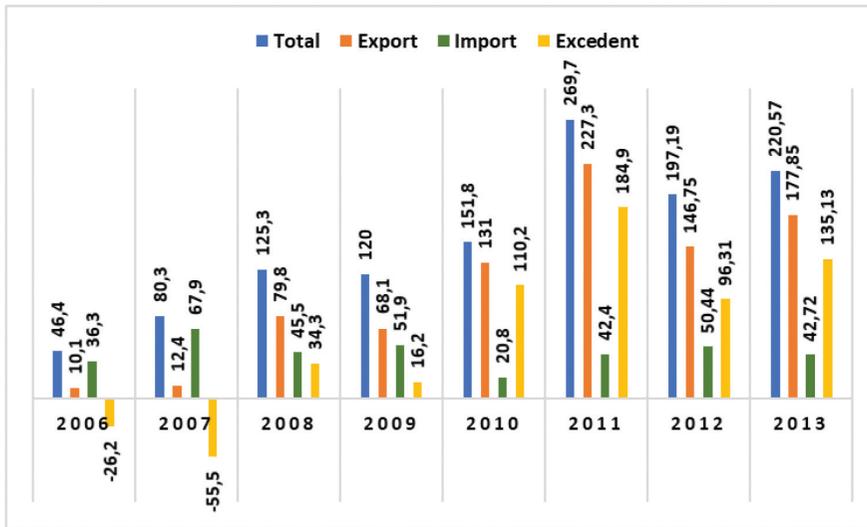


Figure no. 2: The dynamics of Romania - South Africa trade in 2006-2013 (millions of dollars)³²

According to M.F.A., Romanian exports to R.S.A. consisted of: “ships, cement, polyester fibers, chemicals and petrochemicals, plastics, glass products, gas tanks, transmission equipment, ceramics, metallurgy, urea, furniture, rubber, etc.” and, imports from R.S.A. targeted “iron, coal, wine, alcoholic beverages, textiles, industrial machinery, semi-finished gold products, wool, meat and fish, protein substances, pumps, paper, tobacco, asbestos, hides, chemicals, fruit juices, etc.”³³

In February 1996, the South African company *South African Breweries* (S.A.B.) took over the majority stake of \$ 18 million from the *S.C. Vulturul Buzău S.A.*, being the first major capital investment in a sub-Saharan country in Romania. Subsequently, South African shareholders invested another \$ 100 million by taking over the *Ursus* brewery in Cluj and Pitesti. At the level of 2013, the South African investments in our country exceeded the value of 500 million euros, in fields such as telecommunications (*NASPERS*), real estate (*NEPL*), car subassemblies (*METAIR*). Bilateral economic exchanges are stimulated by the annual visits of Romanian economic missions, as well as by the participation of economic agents from both states in the annual international fairs organized in Romania, such as the *Bucharest International Fair* (T.I.B.) and the *International Consumer Goods Fair* (T.I.B.C.O.), in South Africa, The Southern African International Trade Exhibition for Retail Products (S.A.I.T.E.X.) – The South African International Exhibition of Retail Goods and Africa Aerospace & Defense, where the Romanian participation

³² ***, *Relații bilaterale Republica Africa de Sud, Direcția Orientul Mijlociu și Africa*, Ministerul Afacerilor Externe, URL: <http://www.mae.ro/bilateral-relations/1772#746>, accessed on 23.11.2014.

³³ ***, *Relații bilaterale Republica Africa de Sud, op.cit.*

takes place at the national flag level. Unfortunately, after 2013 there are no official public reports of the Romanian Embassy in South Africa on the dynamics of trade between the two states³⁴.

3.3. Trade between Romania and Ethiopia

According to the M.F.A., bilateral trade between Romania and the Democratic Federal Republic of Ethiopia is governed by cooperation agreements, such as:

- Convention between Romania and R.F.D. Ethiopia for the avoidance of double taxation and the prevention of tax evasion with respect to taxes on income and on capital, which entered into force on 9 May 2009;
- The Cooperation Protocol between the Chamber of Commerce and Industry of Romania and the Chamber of Commerce and Sectoral Associations of Ethiopia (E.C.C.S.A.), which entered into force on April 25, 1995.

Romania's exports to Ethiopia were represented by "cereals, chemicals, plastics, wood, paper and cardboard, ceramics, glass and glassware, construction materials (cast iron, iron and steel), DACIA cars, products of aeronautical industry and the import industry consists of coffee, tea, spices, raw hides and skins of cattle, sheep and goats".

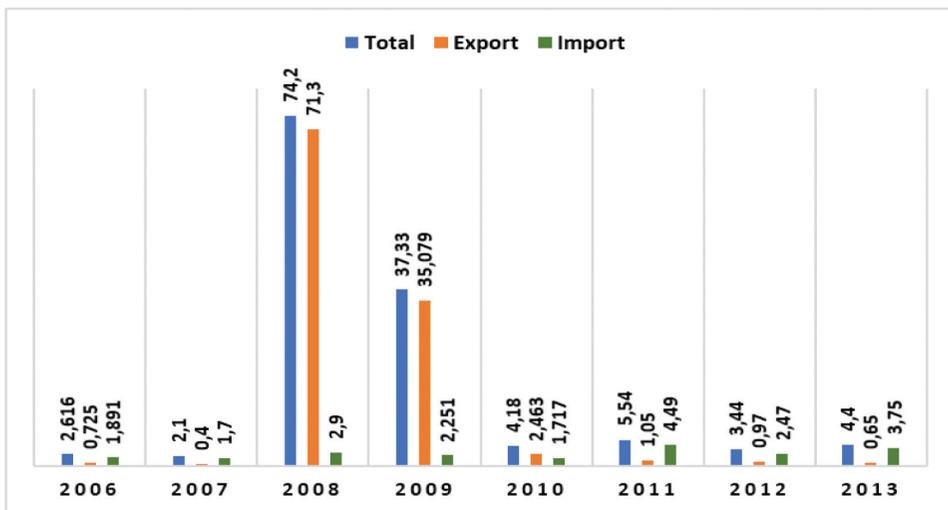


Figure no. 3: The dynamics of Romania - Ethiopia trade in 2006-2013 (millions of dollars)³⁵

³⁴ *Ibidem.*

³⁵ ***, *Relații bilaterale Republica Federală Democratică a Etiopiei, Direcția Orientul Mijlociu și Africa din Ministerul Afacerilor Externe*, URL: <http://www.mae.ro/bilateral-relations/1854#719>, accessed on 23.11.2014.



The increased values of Romanian exports during the years 2008 - 2009 in the chart in Figure no. 3 are largely related to the situation of Ethiopian agricultural production, affected by the prolonged drought and the depletion of national grain reserves. The food supply situation in Ethiopia has been exacerbated by the massive immigration from Somalia of the conflict- and drought-stricken population.

3.4. Trade between Romania and Sudan

According to the MFA, on May 31, 2007, the *Convention for the avoidance of double taxation between Romania and Sudan* was signed in Bucharest, and got in force in November 2009. In July 2008, in order to respond to European legislation, it was agreed that three important documents in the economic field should cease to be valid: the Economic and Technical Cooperation Agreement, the Trade Agreement and the Program Agreement for the Long-Term Development of Economic and Technical Cooperation and Trade³⁶. However, there are other normative acts in the economic field signed before 1989, which are still in force, such as: The Sanitary-Veterinary Convention between the Government of S.R. Romania and the Government of R.D. Sudan (signed in Khartoum on 28.08.1974) and the Agreement between the Government of S.R. Romania and the Government of R.D. Sudan on air services between and beyond their own territories (signed in Bucharest on 13.05.1978³⁷).

Romania exported to Sudan “food products, chemicals, pharmaceuticals and perfumery, plastic and rubber products, mineral oils, metallurgical products, cast iron products (oil drilling pipe), railway equipment, spare parts for internal combustion engines, wood and wood products, paper, cement, textiles”³⁸. The same source states that “the Republic of Sudan offers business opportunities mainly in the fields: oil, car construction, agriculture, light industry, electricity” and that, “negotiations are underway to conclude important contracts in the field of oil and to build a cement factories in Sudan”³⁹.

Between February 21-23, 2012, in Khartoum, the works of the *Romania - Sudan Economic Forum* took place, organized by the Sudanese Ministry of Petroleum, in coordination with the Romanian Embassy, attended by “representatives of 27 Romanian companies in the oil fields, electricity and construction, as well as Sudanese officials and businessmen.”⁴⁰ If we refer to the data included in the graph

³⁶ ***, *Cadru juridic bilateral*, Ambasada României în Republica Sudan, URL: <https://khartoum.mae.ro/node/170>, accessed on 23.07.2021.

³⁷ *Ibidem*.

³⁸ ***, *Relații bilaterale Republica Sudan, Direcția Orientul Mijlociu și Africa din Ministerul Afacerilor Externe*, URL: <http://www.mae.ro/bilateral-relations/1767#747>, accessed on 23.11.2014.

³⁹ *Ibidem*.

⁴⁰ ***, *Relații bilaterale – Scurt istoric*, Ambasada României în Republica Sudan, URL: <https://khartoum.mae.ro/node/221>, accessed on 12.09.2021.

in Figure no. 5, the Forum did not end in special results, in 2013 the economic relations suffered a contraction due to the imports from Sudan, although, in terms of Romanian exports on the Sudanese market, there was an increase of about 3 million dollars.

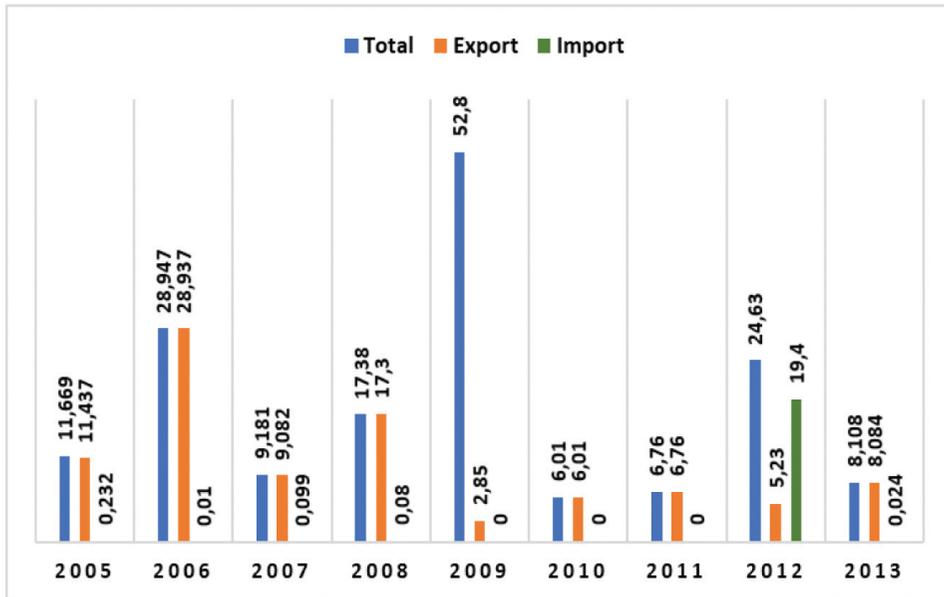


Figure no. 4: The dynamics of Romania - Sudan trade in 2005-2013 (millions of dollars)⁴¹

The graph in Figure no. 4 illustrates the dynamics of trade between Romania and Sudan in the period 2005-2013, where there is a significant increase in the volume of Romanian imports in 2012, most likely secondary to the diplomatic efforts mentioned above. Although Sudan is extremely tender in terms of energy and mineral resources, political instability and the international diplomatic isolation of the Khartoum regime are reflected in the low volume of economic exchanges that Romania has developed since 1989 with this African state. Unfortunately, after 2013 there are no official public reports of the Romanian Embassy in Sudan on the dynamics of trade between the two states.

3.5. Trade between Romania and other sub-Saharan states

Table no. 2 illustrates the volume of bilateral trade transactions between Romania and 17 sub-Saharan African states, at the level of 2013.

⁴¹ ***, *Relații bilaterale Republica Sudan, Direcția Orientul Mijlociu și Africa din Ministerul Afacerilor Externe*, URL: <http://www.mae.ro/bilateral-relations/1767#747>, accessed on 23.11.2014.



Table no. 2: The volume of bilateral trade transactions between Romania and sub-Saharan African states in 2013 (millions of dollars)⁴²

State	Total Volume	Export	Import
Burkina Faso	7.10	-	-
Cameroon	6.426	5.686	0.74
Ivory Coast	10.216	9.019	0.197
Gabon	10.44	10.42	0.02
Ghana	6.715	-	-
Guinea	26.13	1.11	25.02
Kenya	25.38	-	-
Madagascar	2.677	2.40	0.277
Mali	2.60	2.60	-
Mauritania	30.00	28.5	1.50
Mauritius	2.623	0.283	2.34
Mozambique	7.43	5.23	2.20
Nigeria	35.323	-	-
Senegal	12.869	12.862	0,007
Sierra Leone	25.809	0.932	24.977
Togo	166.943	166.943	-
Zambia	7.55	1.35	6.20

A first observation is related to the increased volume of these trade with West African states, compared to the states in other sub-Saharan development regions. The volume of Romanian exports to Togo is remarkable, a state with just over 7.5 million inhabitants⁴³, while the volume of only \$ 35.32 million of economic exchanges with Nigeria is insignificant, compared to the market of over 177 million of inhabitants and to the extremely bidding potential of the Nigerian economy. With the exception of countries such as Guinea, Kenya, Mauritania and Sierra Leone, where bilateral trade exceeds \$ 20 million, in other cases the volume of trade transactions is insignificant.

If we analyze the level of Romanian imports and corroborate these data with the nature of the main raw materials offered by the partner states, we can deduce the level and structure of the current industrial branches of the Romanian national economy. For example, the only more significant import activities were carried out in Guinea and Sierra Leone, countries rich in bauxite, a raw material used in the aluminum industry, still functional in our country. Otherwise, states bidding for copper, cobalt, zinc and iron ores, such as Zambia, or holders of important deposits of hydrocarbons, uranium, strategic ores, such as Nigeria, Mozambique,

⁴² A.N: Data presented on the Internet by M.F.A., Department for Middle East and Africa.

⁴³ ***, "TOGO", *CIA World Factbook*, URL: <https://www.cia.gov/library/publications/the-world-factbook/geos/to.html>, accessed on 29.10.2015.



Madagascar, Gabon are almost non-existent on the map of Romanian imports of materials, as a sign that domestic industries which may have been interested in such products no longer exist or are sourced from other sources. It should be mentioned that Romania's current economic relations with former trading partners such as Botswana, Burundi, Republic of Cape Verde, Central African Republic, Chad, Djibouti, R.D. Congo, Congo, Guinea Bissau, Equatorial Guinea, Seychelles, Somalia are also insignificant, some of these African states being, today, crushed by civil conflicts (Somalia, R.D. Congo, Burundi, Central African Republic).

Conclusions

The apogee of Romania's relations with the sub-Saharan states was reached during the 1980s, amid multiple bilateral political and economic partnerships, as well as the isolation of the Bucharest regime from both the Western bloc states and the communist bloc states. Under these conditions, the sub-Saharan states, like other poor states in Asia and Latin America, became the main economic partners of the communist Romania. Bilateral relations are not always economically advantageous for the Romanian state, given that, in some cases, they were deeply ideological and that they also served propaganda needs. However, during the mentioned period, Romania benefited from multiple economic advantages from the "third world" states-category that also includes the sub-Saharan states – expressed by low purchase prices of raw materials, advantageous licenses for exploitation of mineral deposits and energy or fishery resources.

At the end of the 1980s, Romania had accumulated debts of billions of dollars, which were largely lost in the years before our country's accession to the European Union. The loss of these claims was the result of a series of disastrous political decisions, which led to regional diplomatic disengagement and the cancellation of much of the debt accumulated by sub-Saharan states, although some of these debts could be recovered through concession and exploitation rights of some ore deposits or oil fields, or their repayment could be postponed until a later date when the debtor state could pay the debts.

In the same years preceding the accession of our country to the community structures, on the principle that "Romanian industry is a pile of scrap metal", there was deindustrialization and radical change of Romania's economic profile, from an industrializing country to a country for supplying services and raw materials and a market for imported products. Under these conditions, in the absence of the need for cheap African raw materials, Romania's economic and political-diplomatic presence in the sub-Saharan area diminished to extinction in many of the states once financed and politically supported in Bucharest. This political decision taken by the governments that led Romania in the analyzed period to the loss of markets, then of



receivables, of regional influence, of access to strategic ores and hydrocarbons and, finally, of the state power.

Romania's accession to the EU and the *EU-Africa Strategic Partnership* marked a return to the diplomatic presence and Romanian products on the sub-Saharan markets, but much below the level reached during the communist regime, when Romania held, for the first time in its history, the status of active geostrategic player in a space outside its own borders, in this case in sub-Saharan Africa.

It should be recalled that the current sub-Saharan market, which is growing in population and economy, is extremely attractive to industrial powers such as China, India, France, the Russian Federation, Australia, the USA, Israel or Japan, which have developed multi-level partnerships with sub-Saharan states, taking over both the directions of action used by the Romanian policy in the region, in the period preceding the events of 1989, as well as the markets owned by the Romanian companies. Economic attractiveness generated by the competition for the control of strategic ore sources, raw materials of current and future industrial revolutions, but also by a series of particularities of these markets, less sensitive to quality criteria, but very sensitive to price criteria, criteria to which China and India qualify without problems. Criteria that Romania would have qualified if, instead of destroying much of its industrial heritage, it chose to refurbish at least part of it.

Unfortunately, the diplomatic disengagement, the changing profile of the national economy, the global economic challenges following the medical crisis generated by the SARS-CoV-2 virus, as well as the instability in certain regions of the subcontinent, continue to maintain a low level of Romanian products in sub-Saharan markets. Situation unlikely to change in the near or medium future and which will lead to the total loss of influence gained with huge financial effort during the communist period, with the biological disappearance of generations of African intellectuals educated in Romanian schools and universities before December 31, 1989.

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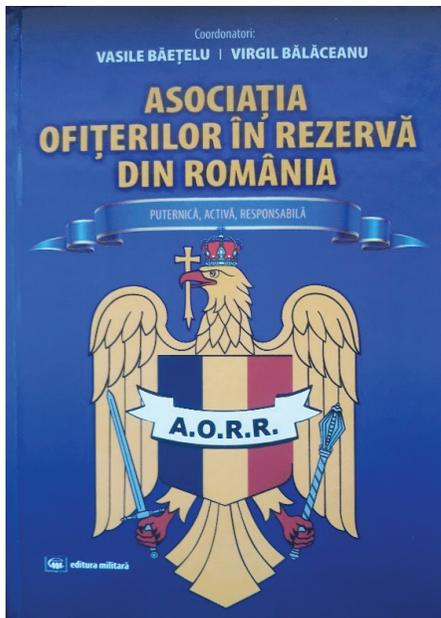


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ROMANIAN RESERVE OFFICERS ASSOCIATION – STRONG, ACTIVE, RESPONSIBLE

Coordinated by Vasile Băețelu
and Virgil Bălăceanu



One of the most recent books published by the Military Publishing House, “The Romanian Reserve Officers Association – strong, active, responsible”, describes the domestic and international activity of one of the most important national military associations for reservists in Romania, which has a special and unique status – founded for Romania’s accession into the Confederation Interallied of Reserve Officers (CIOR) for NATO member and partner states. As stated in the cited book, the Romanian Reserve Officers Association (AORR), as a CIOR permanent member since 2004, is the only military

associative structure that works with the Ministry of National Defence to develop Reserve Forces and train young volunteer reservists through courses, exercises and the practical activities organised by CIOR. As a result, it was necessary for such a particularly active association among the military community to have its own documentary book with an operational-scientific approach to the issue of the Romanian Armed Forces reserve, in the context of growing concern of the Member States resilience of the Alliance and the European Union facing all 360° risks and threats.

Both the coordinators of the book, respectively Brigadier General (rtr.) Vasile Băețelu and Lieutenant General (rtr.) Virgil Bălăceanu, and the authors of the main book chapters are members of the Board of Directors and AORR branches, having in-depth experience and full involvement in associative activities at domestic and international levels, as well as inside civil society. As a result, in addition to its historical-documentary character (historical landmarks or the Centenary



of the Romanian Great Union), the book also includes deep scientific analysis on the Romanian Armed Forces' Reserve, AORR policy in the field of military volunteering, mobilisation and volunteering, the need to achieve a national military mobility strategy and supporting the national defence industry. In the social domain, the book presents the concerns and actions undertaken by AORR in the Forum of associative structures framework, collaboration with convergent associative structures, involvement in solving reservists' social issues, protection of military reserve personnel's health and their promotion, and collaboration with the Ministry of National Defence, Parliamentary committees and public authorities to modernise the defence legislative framework. Internationally, the paper describes the active involvement of the association in CIOR and in bilateral international relations, as well as joint activities with German reservists. The paper also contains several annexes on the AORR 2025 Strategy, the AORR and CIOR's Constitution and By Law, the members of the Association and the main branches in Romanian counties.

In addition to the social aspects of support for reserve military personnel, which are regularly addressed by all associative structures established in the field of defence and security, the book highlights the two major strategic objectives of AORR – the development of Reserve Forces to support the active ones in defending the country against any aggressor and achieving resilience at national level, as well as participating in the education and training of reservists, including young volunteer reservists, through the training activities provided by CIOR. Regarding the development of national Reserve Forces to complement the active ones in the multidimensional operational space, the book comprises four chapters that present a brief analysis of the current state of the Romanian Armed Forces' reserve, and scientifically argue the need for a new vision and increased responsibility of decision on the formation of a strong, trained and effective Reserve Force in national and collective defence. The respective chapters also contain the open letter, sent by the AORR management to all national authorities with attributions in the field of defence, through which it presents the need of the Romanian Armed Forces to have a high-performance Reserve Force, systematically trained and synergistically integrated within active ones. A special role in these chapters belongs to the volunteer reservists and the complicated process of recruiting, selecting, training and retaining them in the military. Nor the approval of the amendments to Law no. 270/2015 on the Statute of the voluntary reservist did not contribute to the removal of all negative aspects and gaps of the normative provisions for attracting and incorporating young people among this operational reserve corp.

Another important aspect refers to the presentation of the Pilot Programme for pre-military training of young people in high schools and universities, being developed based on the provisions of Law no. 446/2006 on the preparation of the population for defence, with subsequent amendments and completions proposed by



the “Gemina” 4th Divisional HQ, in collaboration with Cluj-Napoca local authorities and educational institutions. We must not forget the aspect of military mobility, a requirement addressed to all Member States by NATO and the EU, for establishing unrestricted movement and transport of Allied forces throughout Europe, in the event of activation of Article 5 of the Washington Treaty or Article 42 (7) of the EU Treaty. In this context, AORR is presented as the promoter of a National Strategy for military mobility through inter-institutional civil-military cooperation.

In recent years, AORR has been the catalyst for the establishment of a Forum of associative structures in the field of defence and security, which currently includes 55 associations, clubs, federations, leagues and unions from the Defence, Public Order and National Security System (SAOPSN), signatories of the 2016 protocol. The book also presents the Partnership protocols concluded by AORR with various convergent associative structures in Romania, including civilian and military educational institutions, such as: “Carol I” National Defence University, “Ferdinand I” Military Technical Academy, the Professional Military League, the Association for Military Traditions, Military Section of the “Iustinian Teculescu” Transylvanian Association for Romanian Literature and Culture of the Romanian People (ASTRA), the Christian Cultural Association, “La noi, la români” Cultural Association, the Institutional Arbitration Association, General Union of Romanian Industrialists (UGIR), the Social Democratic Party and the National Liberal Party.

The 496-page volume contains a lot of data and information, which makes it not very easy to read, but at the same time, it constantly challenges the reader to pass through the mind filter the details presented and to synthesise the most interesting and current ones. However, once the reader is absorbed by the reading, the book can no longer be set aside, both the attached photographs and documents contributing to a better understanding, as well as the bibliography used by authors. Therefore, we recommend this book to all those who study the defence and security policy and to anyone interested in associative structures in the military field, the development of Reserve Forces complementary and in support of the active ones, the training of reservists at national level, as well as the internal and international activities carried out by AORR within CIOR.

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(Grazer and Fishman 2015, 12)

(Smith 2016, 315–16)

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(Thoreau 2016, 177–78)

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Reference list entries (in alphabetical order)

Keng, Shao-Hsun, Chun-Hung Lin, and Peter F. Orazem. 2017. "Expanding College Access in Taiwan, 1978–2014: Effects on Graduate Quality and Income Inequality." *Journal of Human Capital* 11, no. 1 (Spring): 1–34. <https://doi.org/10.1086/690235>.

LaSalle, Peter. 2017. "Conundrum: A Story about Reading." *New England Review* 38 (1): 95–109. Project MUSE.

In-text citation

(Keng, Lin, and Orazem 2017, 9–10)

(LaSalle 2017, 95)

WEBSITE CONTENT

Reference list entries (in alphabetical order)

Bouman, Katie. 2016. "How to Take a Picture of a Black Hole." Filmed November 2016 at TEDxBeaconStreet, Brookline, MA. Video, 12:51. https://www.ted.com/talks/katie_bouman_what_does_a_black_hole_look_like

Google. 2017. "Privacy Policy." Privacy & Terms. Last modified April 17, 2017. <https://www.google.com/policies/privacy/>

Yale University. n.d. "About Yale: Yale Facts." Accessed May 1, 2017. <https://www.yale.edu/about-yale/yale-facts>

Citare în text

(Bouman 2016)

(Google 2017)

(Yale University, n.d.)



NEWS OR MAGAZINE ARTICLES

Articles from newspapers or news sites, magazines, blogs, and like are cited similarly. In the reference list, it can be helpful to repeat the year with sources that are cited also by month and day. If you consulted the article online, include a URL or the name of the databases.

Reference list entries (in alphabetical order)

Manjoo, Farhad. 2017. "Snap Makes a Bet on the Cultural Supremacy of the Camera." *New York Times*, March 8, 2017. <https://www.nytimes.com/2017/03/08/technology/snap-makes-a-bet-on-the-cultural-supremacy-of-the-camera.html>

Mead, Rebecca. 2017. "The Prophet of Dystopia." *New Yorker*, April 17, 2017.

Pai, Tanya. 2017. "The Squishy, Sugary History of Peeps." *Vox*, April 11, 2017. <http://www.vox.com/culture/2017/4/11/15209084/peeps-easter>

In-text citation

(Manjoo 2017)

(Mead 2017, 43)

(Pai 2017)

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