

# **SECURITY FORUM 2023**

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MATEJ BEL UNIVERSITY, BANSKA BYSTRICA, SLOVAKIA

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# **SECURITY FORUM 2023**

16<sup>th</sup> Annual International Scientific Conference February 8<sup>th</sup>- 9<sup>th</sup>, 2023 at Matej Bel University in Banská Bystrica, Slovakia

**Conference Proceedings** 

Banská Bystrica, Slovakia 2023

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# INDIA'S POSITION IN THE SECURITY RELATIONS OF THE CHANGING WORLD ORDER<sup>1</sup>

## Radoslava Brhlíková<sup>2</sup>

#### **ABSTRACT**

India is currently the second most populous country in the world. It occupies one entire subcontinent. At the same time, it ranks among the oldest civilizations in the world. Despite this, it did not play a significant active role in world politics and security relations due to the strong domestic nationalism as well as the haughty attitude of the collective West towards the world – its former colonies – labelling it as the Orient, born in the form of Orientalism precisely on the basis of the ideas of the European colonizers, which led to an effort to engage in foreign policy independently of the prevailing antagonistic blocs. India acted more as a regional actor within its own subcontinent and this attitude also significantly affected its security. However, with changes in the world political system a reformulation of India's position comes as a possible active global security actor. This paper analyses India's foreign policy and assesses its possible position on the world stage. It is based on the assumption that India has ambitions to play a significant - if not decisive - role on the international stage.

Key words: India, world system, foreign policy, security, position of India, Orientalism

#### Introduction

The current state of international security and international relations confirms **H. Morgenthau's** bearded assertion (1985) that only the law and law of the stronger applies in international relations. This is not about friendship and cooperation, as idealists would have us believe, nor is it about equality and justice, protection of the weak, the universality of basic human rights and freedoms, and a global liberal order, as neoliberals want to convince us, trying to enforce all this by overthrowing "tyrants" (because they are the only ones responsible for conflicts and aggression in international relations), connecting markets and institutions, organizing colour revolutions (through which Western-style democracy is supposed to spread), believing that since democracies do not fight each other (Doyle, 2011), especially if they are connected by trade, investment and an agreed set of rules, it is therefore necessary to universalize and unify the multilateral and multipolar world system under a single banner of Western values. (Fukuyama, 1996, Mearsheimer, 2018). Neither morality nor *"universal moral principles"* apply here, on the contrary, they must be *"filtered through the specific* 

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*circumstances of time and place"* (Morgenthau, 1985, p. 7-8), only power is important; "both national and international politics are a struggle for power". (Morgenthau, 1985, p. 32)

Even the definition of security as an indivisible phenomenon that connects the security of one state with the security of others, while respecting the principle that no state strengthens its security at the expense of the security of others, and the principle of equal security for all states regardless of their size, military, economic or other potential, as assumed by the Copenhagen school, turns out to be an illusion. (Brhlíková, 2014, p. 48, Ivančík, 2022). Even the short period of unilateralism, when the United States of America remained the only decisive hegemon in international relations, did not change anything about this. On the contrary, it was the USA that negated the idealistic perception of international relations and international security and confirmed the validity of Morgenthau's thesis, since through its dominant position and power, strengthened by a sense of superiority and exceptionality, it tried – albeit with a weapon in hand through the boot of an American soldier - to dictate their rules, perception of the world and lifestyle in the belief that by spreading and applying the values of American culture they will achieve peace and prosperity in the world. Thus they began to wage endless wars and organize regime changes through colour revolutions in order to maintain this dominance, acquired after the fall of the Iron Curtain, and to weaken their competitors. And this is precisely what provokes a reaction in the form of an effort to balance this dominance out, to create a balance of power in the form of a multilateral system, up to the replacement of the current hegemon. Many states – actors in international relations – are waiting for their opportunity to assert themselves in relation to the USA, and not only by observing the international security situation, but also by their active actions, combining internal and foreign policy measures, they try to directly initiate a change in the international system (Kočnerová, 2011). This effort has accelerated in the last five years, and today we observe the rise of several challengers to the hegemonic position of the USA on the international scene. These challengers include states such as China, Russia, India or Brazil, which, according to Global Trends 2025 and Goldman Sachs, with the exception of India, do not share and do not recognize the Western, liberal values imposed on them by the hegemon. Global Trends 2025 study states on p. 49 that "... in 2025, the US will be in the position of one of the major actors in the world, although still dominant." The USA are labelled here as a "less dominant power". China started to catch up, if not even overtake them – as a possible future global superpower (Kočnerová, 2021), which of course the USA are trying to prevent, but the other countries of the so-called BRICS group are not lagging behind either, especially Russia and India.

Finally, in the context of the proxy conflict between the USA and Russia in Ukraine, we are observing what theorists and observers of international relations from F. Zakaria, through J. Mearsheimer, D. Hiro, A. W. McCoy, J. Nye, I. Wallerstein to S. Walt, N. Chomsky, A. A. Prokhanov, or A. Saich, V.

Volkonskij, as well as top politicians such as V. Putin and S. Lavrov, Wang I, Lula da Silva, R. Erdogan or N. Modi have been talking about for a long time and that is a fundamental change in the international system, moving away from unipolarity and the recognition of the superiority of the values of the Western civilization circle led by the USA, embodied in neoliberalism, respectively in progressive liberalism (Mearsheimer, 2018), to building a multipolar, asymmetric international security system, which, as Škvrnda states, it arises chaotically, incalculably, without a clear framework of agreements between the individual most important actors of international relations, accompanied by an increase in global and regional instability (Škvrnda, 2020, p. 42-44). Power began to shift to the east – to China and probably to India (Chomsky, 2019, p. 88).

The conflict in Ukraine finally sealed this shift, reducing the weight of the West, especially Europe, in the world. It made Russia orient to the East and South, and the South definitively separates itself from its colonial capitals (for example, the weakening of the position and influence of France in its former African colonies), perceiving problems in the world through the lens of its own interests. It is much more disturbed and unnerved by the conflict in the Middle East or in its immediate neighbourhood than by a conflict somewhere in Europe. The roles of global players in both the security and economic fields have been taken up by China as a global stabilizer and calming factor from the position of a permanent member of the UN Security Council (UNSC)<sup>3</sup>, and India, which has become an intermediary in the trade between the sanctioned Russia and the West, which has voluntarily given up cheap energy carriers in direct trade with Russia, in favour of the interests of the hegemon. It made India a global economic player in the oil trade and strengthened the South's efforts to replace dollar with national currencies.

#### India's position in international security relations

In the area of Western Europe in particular, India tends to be seen as a backward, poor economy. Here, Indians are seen as unattractive, inauthentic, irrational, barbaric, poor, and backward, unable to face problems on their own and therefore need to be helped (Izsófová, 2022, p. 173-174). But in fact, after declaring its independence from the United Kingdom Great Britain in 1947, India carried out considerable modernization, raised its own broad intellectual class, penetrated into space, maintained the basic pillars of democracy, including the competition of political parties, and it has never betrayed its core principles and

<sup>&</sup>lt;sup>3</sup> On February 23, 2023, China as a global actor presented a 12-point peace plan not only for solving the Russian-Ukrainian conflict, but also for dealing with all long-standing conflicts (Yemen, Syria, Israel-Palestine) and other possible conflicts in the future. This time again, the peace initiative did not come from the civilized and with the universality of rights imbued collective West, clanking weapons and dreaming of the final defeat and partition of Russia.

has not become the source of aggression against other states (Krno, 2014, 142-143). It is referred to and perceives itself as the largest democracy in the world.

In the 1990s, it began an era of economic opening and rapid growth. Its GDP grew 6.3 times between 1991 and 2021, from 14.6% of US GDP to 44.3% (Sachs, 2023, 14). According to the International Monetary Fund (IMF), India's economy had a nominal value of US\$3.469 trillion in 2022, making it the fifth largest economy by exchange rates and valued at US\$11.665 trillion, the third largest by purchasing power parity. However, it ranks 139<sup>th</sup> in the world in nominal GDP per capita (US\$2,466) and 127<sup>th</sup> in GDP per capita (US\$8,293) in purchasing power parity (World Economic Outlook Database, 2022). In terms of population, India is the second most populous country in the world after China. According to the UN's World Population Dashboard, India had a population of 1.4066 billion at the end of 2022, China's population was 1.4485 billion, which means that India is likely to reach the top position in 2023 (The Economists, 2022).

India is bordered by Pakistan in the west, China in the northwest and northeast, Nepal and Bhutan in the northeast, Bangladesh and Myanmar in the east, and the Maldives in the southwest and Sri Lanka in the south in the Indian Ocean. India also considers Afghanistan to be a bordering state. It maintains friendly relations with most of the countries of the international system, but the period after the declaration of independence was marked by constant conflicts with Pakistan and China over the territories of Kashmir and Arunachal Pradesh, which persist in greater or lesser intensity to this day (Izsófová, 105-109).

During the Cold War, it tried to maintain neutrality and played a key role in the Non-Aligned Movement, which balanced the dispute between the states of NATO and the Warsaw Pact. After the Sino-Indian War in 1962, it improved its relations with the Soviet Union, but this strained relations with the USA (Krno, 2014, Izsófová, 2022). The end of the Cold War meant for India intensification of economic, strategic and military cooperation with the USA, the EU, China, Pakistan, as well as with African and South American countries – especially with Brazil and Mexico. It promotes the Look East policy, in which it seeks to strengthen the partnership with the ASEAN countries, Japan and South Korea. Apart from continuing special relations with Russia, with which it has increased its trade balance several times over the past year (2022), India has extensive defence relations with Israel and France.

Although India possesses nuclear weapons, it is not a party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). In order to be able to trade and exchange information in the field of civilian use of nuclear energy, it signed a civil nuclear agreement with the USA in 2008, and subsequently with Russia, France, the UK and Canada. This led to India being granted an exception by the International Atomic Energy Agency and the Nuclear Suppliers Group, ending its restrictions in this area and making it de facto<sup>4</sup> the sixth nuclear-weapon state<sup>5</sup> (The Times of India, 2008, Izsófová, 2022, p. 107).

India is a founding member of the United Nations (UN), under which it has contributed to the success of many UN operations on four continents. It is also a founding member of the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO), where it consistently supports rules-based global trade governance, refuses to include any non-trade issues, and in order to protect its geo-economic interests, it strongly advocates for higher levels of protectionist policies. India is a member of many other international organizations such as the IMF, the Shanghai Cooperation Organization (SCO), the United Nations Conference on Trade and Development (UNCTAD), the United Nations High Commissioner for Refugees (UNHCR), Interpol or the International Court of Justice and many others. It supported and was a founding member of several of them, such as the aforementioned Non-Aligned Movement or the South Asian Association for Regional Cooperation (SAARC). In the maritime domain, it has diversified its interests by supporting the creation of the Indian Ocean Rim Association (IORA), which aims to strengthen regional cooperation and sustainable development within the region. India also participated in the creation of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Membership and support for the creation of international organizations is an integral part of India's foreign policy and the skill of its diplomacy.

One of the major victories of Indian diplomacy is the re-election of **Dalveer Bhandari** as a judge of the International Court of Justice in 2017, where there were 11 rounds of voting and India had a majority in the General Assembly, while the opposing candidate, the UK had a majority in the UN Security Council (UNSC)<sup>6</sup> (Puri, 2022). This victory only underlined the growing importance of India as an important player in the changing world order. Here, India very creatively used the role of effective diplomacy and tried to gain the support of not only powers but also small states, which under certain circumstances can completely change the direction of decisions in international institutions. At the same time, this form of diplomacy led to the fact that in 2021 India managed to obtain the position of a non-permanent member of the UNSC for a two-year term

<sup>&</sup>lt;sup>4</sup>The de jure status of countries with nuclear weapons is retained by five states: the USA, the UK, France, Russia, and China – these are the countries that tested nuclear weapons until January 1, 1967, i.e. before the signing of the NPT, and at the same time are its signatories.

<sup>&</sup>lt;sup>5</sup>The other countries are Pakistan and the Democratic People's Republic of Korea. These states, along with India, are not signatories to the NPT, although the Democratic People's Republic of Korea was until 2003. Israel is widely known to possess nuclear weapons, but does not publicly acknowledge ownership and maintains a policy of ambiguity on the matter.

<sup>&</sup>lt;sup>6</sup> Before the 12<sup>th</sup> round of voting, the UK withdrew its candidate Christopher Greenwood and for the first time has no representative at the International Court of Justice. (see: ICJ: Current Members, https://www.icj-cij.org/current-members)

for the eighth time, and from this position in October 2022 it hosted the members of the UNSC at an extraordinary meeting on issues of combating terrorism (Mirchandani, 2022). However, its ambition is to become a permanent member of the UNSC, which Beijing has opposed in the past, but to which other members are inclined<sup>7</sup>. This issue is likely to come to the fore when India overtakes China in terms of population and as a result begins to claim a seat on the UNSC.

India also participates in various other forums, many in the capacity of the presiding country, such as the G8+5 or the SCO, which it presides from September 2022 to September 2023, and where from this position it announced the transformation of India into a manufacturing centre and emphasized the importance of this organization in the revitalization of the economy and strengthening supply chains in the post-Covid era. At the same time, India uses its presidency to resolve security issues and disputes with Pakistan and China, as well as to establish closer relations with the states of the former Soviet Union in Central Asia (https://indiainsco.in/home).

From December 1, 2022 to November 30, 2023, it is also presiding the meetings of the G20 group, which is an opportunity for India to articulate its positions and ideas in a broad scope and thus influence the global scene, as the G20 brings together all the 5 permanent members of the UNSC, all member states of the G7 group, the North American Free Trade Agreement (NAFTA) and the BRICS group, of which India is also a part. In this context, **Modi**'s government has set ambitious goals, such as the inclusion of the African Union in the G20, but especially the shift of the group's activities beyond the economic framework in order to balance political and economic sanctions and conflicts and thus restore global supply chains disrupted by the conflict in Ukraine, as well as rising food and energy prices that lead to political instability in all economies. Within this, its task is to work, connect and mediate dialogue between highly polarized political regimes, characterized as democratic or authoritarian (National portal of India, 2023; Santhosh, 2022, VOGSS, 2023, Korybko, 2023a, b).

During this presidency, in support of its ambitions, for the first time in the history of its foreign policy, on January 12 and 13, 2023, India organized an online meeting of 120 so-called developing countries called the Voice of Global South Summit (VOGSS), the aim of which was to strengthen the voice of the global South. During it, Prime Minister **Modi** said that developing countries should have an equal say on the world stage, signalling that India wants to become a leader of the global South at a time of turbulent international relations, using other tools than the collective West (VOGSS, 2023, Korybko, 2023a, b). It is thus trying to create an apolitical and economically managed new non-aligned movement (Neo-NAM), the ambition of which should be to restore balance in international

<sup>&</sup>lt;sup>7</sup> For example, Russia has announced that it supports the membership of India and Brazil, but sees no reason why Germany and Japan should become permanent members. (see: "Russia Ready to Discuss Permanent UNSC Seats for India, Brazil, Says Envoy." TASS, July 4, 2022, https://tass.com/politics/1475209

relations. In this way, India tries to act as an example for other countries of the South, how to balance between the collective West led by the USA and the global South centred in BRICS and the SCO, of which it is a part. The goal offered by this dual approach is to strengthen the integration of developing states along with strengthening their strategic autonomy<sup>8</sup>.

India has also taken a leading role in such institutions as the IMF or summits of the Conference of the Parties to the WTO, where it represents the interests of developing and less developed countries, i.e. the so-called global South. At India's instigation, 2023 was declared the International Year of Millets by the Food and Agriculture Organization (FAO) and the UN General Assembly. In the field of sustainable energy production, India together with France initiated the International Solar Alliance (ISA), as India's first ever international and intergovernmental organization aimed at cooperation in the field of solar energy use. During the UN conference on climate change in Glasgow (CoP26) in 2012, it launched a global solar network project together with the UK, which was supported not only by the USA, but also by many developed and developing countries, especially in Africa (Ghosal, 2021). It also maintains relations with the EU, but considers it rather a weak partner and prefers more bilateral relations, also considering the Indian diaspora in Europe. As far as NATO is concerned, India's security relations with the USA and France operate at the bilateral level rather than through NATO.

However, various non-Western forums such as the RIC (Russia, India, China), BRICS (Brazil, Russia, India, China, South Africa) and BASIC (Brazil, South Africa, India, China) formations remain important to India. All three groups include China together with India, which allows India, despite not always easy relations with China (Kočnerová, 2021), to implicitly criticize the Western political leadership of the international system in various ways and at the same time cooperate with China. Finally, the establishment of the Shanghai-based BRICS Development Bank<sup>9</sup>, whose first president was the Indian banker **Kundapur Vaman Kamath**, was motivated precisely by the criticism of Western international financial institutions, especially the IMF and the World Bank, and it

<sup>&</sup>lt;sup>8</sup>On February 24 and 25, 2023, a meeting of finance ministers of the G20 countries was held in Bangalore, India, during which the USA and the rest of the G7 countries asked to label Russia as the culprit of the conflict in Ukraine. In this context, India has called for the word war not to be mentioned in any communiqué from the negotiations. The meeting ended without a final statement. India maintained a largely neutral stance during the negotiations and refused to blame Russia for the invasion, seeking a diplomatic solution. It significantly strengthened its purchases of Russian oil. China and India were also among the countries that abstained from voting on February 23, 2023, when the UN voted overwhelmingly in favour of demanding that Moscow withdraw its troops from Ukraine and stop the fighting. (see: Reuters:https://www.reuters.com/world/india/india-urges-focus-most-vulnerable-g20meeting-avoids-mention-war-2023-02-24/)

<sup>&</sup>lt;sup>9</sup> Today known under the name New Development Bank. (see: Home. New Development Bank. https://www.ndb.int/)

was India who came up with the proposal for its creation. All these activities can be seen as India's attempt to establish itself on the international scene as a global player, as a great power, as a balancer. Only in the last year – the so-called year of a new Cold War between Russia and the collective West – India's principled policy of neutrality led to its rapid rise as a global player and superpower, and as another pole disrupting the evolving system of bi-multipolarity between China and the USA.

In today's chaotic world, where China and the USA are driving the world towards bipolarity, with the USA wanting to remain the sole superpower, China wanting to be recognized as the other superpower, and Russia wanting to be treated as an equal again by the USA and China, while concerned about China's hegemonic aspirations, India faces the challenge of defining its unique foreign policy identity and shaping the contours of its engagement to balance national interests with moral values. Its foreign policy is based on the so-called five virtues (**Panch sheel**<sup>10</sup>): mutual respect for each other's territorial integrity and sovereignty, mutual non-aggression, mutual non-interference, equality, and mutual benefit and peaceful coexistence, and on the principle of **Vasudhaiva Kutumbakam**, which means the world is one family, which is based on the concept of **Sabka Saath** (all together), **Sabka Vikas** (development of all), **Sabka Vishwas** (all trust each other), that is, India sees the entire world community as one big global family whose members live in harmony, work and grow together and with each other, and they trust each other.

At the same time, it makes a pragmatic and realistic foreign policy based on the principle of balance of power and its own version of the "India First" policy, when it makes decisions for itself and is not subject to intimidation. Its selfconfidence in promoting its national interests, based on its specific civilizational, spiritual and cultural world, can be illustrated by the words of Indian Foreign Minister **S. Jaishankar**: *"It is better to engage with the world on the basis of who we are rather than try to please the world as a pale imitation of who they are. The idea that others define us and we need approval, is an era that we need to put behind us "<sup>11</sup> (Raisina Dialogue<sup>12</sup>, 2022). It means that India is confident about its identity and priorities and the world should deal with it on its terms, which was* 

<sup>&</sup>lt;sup>10</sup> These were formally defined in the Agreement on Trade between the Tibet Region of China and India of 29 April 1954.

<sup>&</sup>lt;sup>11</sup>See: Twitter: #Raisina2022 https://twitter.com/raisinadialogue/status/1519201619610841089?ref\_src=twsrc%5Etfw%7Ct wcamp%5Etweetembed%7Ctwterm%5E1519201619610841089%7Ctwgr%5E1abc2b2e880f 6e062a6c897debb356f70a256dea%7Ctwcon%5Es1\_&ref\_url=https%3A%2F%2Fsatyaagrah. com%2Findia%2Findia-news%2F1410-s-jaishankar-pointed-that-it-is-better-to-engage-theworld-on-the-basis-of-who-we-are

<sup>&</sup>lt;sup>12</sup> Raisina Dialogue is a multilateral conference held annually in New Delhi, India. It was held for the first time in 2016 and its content includes discussions at the highest level on geopolitics and geoeconomics. The conference is organized by the Observer Research Foundation in collaboration with the Ministry of External Affairs of India.

reflected, for example, in the fact that it was the only power to resist China's new Belt and Road initiative in 2014, as well as to cope militarily with China aggression and, on the other hand, was able to cooperate with the USA without having to enter into a formal alliance with them and involve the West in building domestic capacities. At the same time, it was able to maintain and use traditional, good ties with the Russian Federation.

### Conclusion

India is using its diplomacy to secure its status as a great power, stressing that it will not act and use power like some rising powers before it. It integrates into the existing international order, it does not try to destroy it; it wants to cooperate under the condition that it will be treated as an equal partner. It seeks to play a strong role in some prominent international organizations such as the UNSC, where it wants to become a permanent member with power of veto. It uses soft power (through Bollywood, Buddhism, yoga, Indian cuisine and music) to not only attract investments to the country and strengthen tourism, which is supposed to strengthen economic development, but it also projects itself as a power of its own kind (*sui generis*), different from the USA and China.

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# **RUSSIAN HYBRID THREATS IN THE NEAR AND FAR ABROAD – A CASE STUDY OF MOLDOVA AND ROMANIA**

# Jan Graf<sup>1</sup> - Martin Solik<sup>2</sup>

#### ABSTRACT

This interpretive case study focused on Russian hybrid threats in two countries that are historically and culturally quite close to each other. While Moldova is perceived by Russia as part of the territory where the Kremlin has long exercised its power interests, the situation is quite the opposite in the case of Romania. This Balkan state has followed its own foreign policy path after the collapse of the world and is currently firmly anchored in the Euro-Atlantic integration structures. For this reason, the Kremlin is failing to promote its power interests. It is Moldova that has a major problem with hybrid threats from Russia, as Russia asserts its influence through interference in Moldova's internal political issues, energy supplies and, last but not least, through the spread of disinformation.

Keywords: hybrid threats, Russia, russian, Romania, Moldova

#### Introduction

Russia's invasion of neighbouring Ukraine on 24 February 2022 reminded the European continent of how thin the line is between peace and war in Europe. This act of hostility, which is being referred to by Russian officials as a 'special military operation', has undoubtedly had an impact on the security situation of the entire continent, as European states have not experienced a similar crisis since the 1990s, when the former Yugoslavia desintigrated, resulting in a bloody civil war. However, it is not only this military conflict that would determine the security policy of European countries. It is also worth recalling the recent security crises that European statesmen have had to face. In 2014, there was the Russian annexation of the Ukrainian peninsula of Crimea. Most European countries reacted to this unprecedented act by the Russian Federation by imposing sanctions on Russia. This was followed by war in eastern Ukraine, where two separatist republics were established with Moscow's support. Another major crisis that shaped the perception of the security situation on the European continent was undoubtedly the migrant crisis, which peaked in the summer of 2015 and was linked to the influx of refugees from North Africa and also from Middle Eastern countries. The current Russian-Ukrainian war is thus a testament to the security instability of the entire region.

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Today's European security challenges also include the phenomenon of hybrid wars or hybrid threats, which have been discussed in particular in connection with Chinese and Russian operations in the world over the last 15 years. Regarding Russian influence operations, many authors have looked at Russian interference in the 2016 US presidential elections, in which Donald Trump won. Equally significant from this perspective is the Kremlin's interference in the electoral process in a number of European countries or Moscow's support for political parties in Europe that subsequently defend its interests. Last but not least, the large-scale disinformation campaigns and cyberattacks by the Kremlin, which also contribute to destabilising the security environment in Europe, should be mentioned.

Romania and Moldova partly share a common history, language and culture. Yet in the post-World War I period, the two countries took somewhat different paths. While Moldova, after a brief episode of independence, became one of the union republics of the then USSR, Romania retained its independence, and the creation of the Iron Curtain did not change this fact. As a result of the collapse of the then Eastern bloc, Moldova also eventually lived to declare its independence from the USSR in 1991. Despite the fact that both states are now independent, their foreign policy orientation and social situation are very different. This is one of the reasons why the authors of this text have chosen to focus their attention on Romania and Moldova.

Although the Romanian state apparatus, under the leadership of President Ilescu in the early 1990s, partly tried to orient its foreign policy towards Russia, after the change in executive positions in the second half of the 1990s, a strong pro-Western vector in Romanian foreign policy began to take shape, which resulted in the country gaining membership of the North Atlantic Treaty Organization in 2004 and also gaining a membership in the European Union in 2007. Today, Romania is a country whose foreign policy is firmly anchored in the Euro-Atlantic integration structures. It is therefore interesting to analyse how the Kremlin is trying to challenge this orientation through the creation of hybrid threats.

In this respect, Moldova's situation is quite different. The country has been plagued throughout its period since independence (1991) by an incoherent foreign policy which, in a way, allows the Kremlin to carry out its influence operations on Moldovan territory. A significant factor contributing to this situation is undoubtedly Moscow's permanent military presence in the Transnistrian region, where Russia can deploy several hundred of its troops. For these reasons, Moldova remains outside the European Union and the North Atlantic Alliance. Russia sees Moldova, unlike Romania, as a near abroad. In Moscow's foreign policy concepts, this refers to a state that was part of the former USSR. In these states, Russia reserves the possibility of interfering in its internal political affairs if necessary to advance Russian power interests. However, in the wake of Russia's military aggression against Ukraine, Chisinau asked EU leaders to grant it candidate status, which was eventually approved in June 2022. Nevertheless, Moldova remains extremely vulnerable to the hybrid threats created by the Kremlin, as this text will attempt to highlight. For the purposes of this study, the years 2020-2023 were deliberately chosen, as the war in Ukraine has resulted in significant shifts in relations between Russia and the West (represented in this case by Romania), as well as significant changes in the Moldovan government. These changes have subsequently tilted Moldova more towards the West than had been customary up to that point. The aim of this text is to compare how Moscow is creating hybrid threats in selected states in the 2020-2023 period, as well as how political leaders in both states are responding to these threats.

#### **Theoretical Framework**

As indicated in the very introduction of this study, hybrid threats have become a hot topic in the relatively recent past, attracting the attention of the media, political analysts and, not least, academics. This societal interest has been particularly sparked by events that have occurred over the past decade. Whether it is the rise of Chinese influence in the world and the related espionage activities of the Chinese government, or the rise of the Kremlin's influence in selected European countries and related activities. For example, Russia's interference in the UK's referendum on leaving the EU (Narayanan et al., 20 or the Kremlin's interference in the 2016 US presidential election (Persily,2017) are worth noting. There have also been publications on the financial links of radical right parties to Russia (Shekhotsov, 2017). Finally, in the context of Russian hybrid threats, authors have addressed the phenomenon of Russian disinformation campaigns (Helmus et al., 2018; Bennett and Livingston, 2018).

However, the most important milestone that stirred the debate on the rise of hybridity in international relations was Russia's annexation of Ukraine's Crimea in the spring of 2014. This act on Moscow's part is seen by the general public and also by many analysts as an illustration of the use of hybrid strategy to achieve political goals, see for example Rusnáková (2015), Wither (2017) and Lanoszka (2016). However, there is a second group of authors who argue that this military operation by Moscow cannot be viewed purely through the prism of hybridity (Kofman and Rojansky, 2015).

At this point, however, it should be added that the phenomenon of hybridity appears in international relations long before the annexation of this Ukrainian peninsula. A number of Anglo-Saxon security analysts have attempted to capture this complex phenomenon in recent years, see for example Walker (1988) or Nemeth (2002). The most prominent author in this regard is the American Frank Hoffman, who in his most famous book of 2007 predicted the nature of future conflicts, where, in addition to conventional forces, unconventional forces will be involved to a much greater extent. Hoffman thus addresses the state of war and defines hybrid warfare as "a range of different modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts, including indiscriminate violence, coercion, and criminal disorder. Actors in hybrid warfare include both states and various non-state actors' (Hoffman, 2007, p. 29). Thus, this definition implies that Hoffman places great emphasis in future conflicts on the use of unconventional forces that could become a decisive element in the armed conflict.

Following the experience of the Russian annexation of Ukrainian territory, analysts have begun to include hybrid threats in the security policies of European countries. However, it was not only national states that reacted to these developments, but also the EU and NATO. These efforts resulted in the adoption of the Joint framework on countering hybrid threats: A European Union response (European Commission, 2016). The text, among other things, states the need for joint action against Russian hybrid threats and that hybrid threats pose a threat to the functioning of European democratic states. The EU defines hybrid threats as "a mixture of coercive and subversive activity, using conventional and unconventional methods (i.e. diplomatic, military, economic and technological), coordinated by state or non-state actors to achieve specific objectives while remaining below the threshold of formally declared warfare" (European Commission, 2016). From this definition, it is quite evident that hybrid threats encompass a diverse range of activities, and therefore this can lead to inconsistency in shifting what a hybrid threat truly is and what is no longer a hybrid threat. In a similar vein, many academics have also criticised the concept, accusing it of being both overused and confusing the term 'hybrid warfare' with 'hybrid threat', see for example Monaghan (2019).

However, a number of analysts agree that there is a need to identify the areas in which the Kremlin creates hybrid threats to foreign states (Treverton et al., 2018; Clark 2020; Chivvis, 2017). The aforementioned author considers one of the most significant threats from Russia to be disinformation campaigns and cyber-attacks by Russia, which aim to undermine the authority of state institutions, the EU, NATO and, last but not least, to improve Russia's image before the outside world (Chivvis, 2017). The authors therefore focused on the most common pro-Russian narratives in the media environment of both states and how Moscow manages to influence public opinion in its favour through these narratives.

Another important tool Moscow uses in constructing hybrid threats is the supply of energy resources. As Ukraine's experience in the first decade of the 21st century shows, overdependence on fossil fuel supplies can lead Moscow to blackmail its trading partners in order to achieve its own political goals (Dupuy and Nusbaum, 2021). This can also be seen in the current situation, where the reduction of Russian gas supplies to much of Europe has led to a sharp increase in the price of this raw material on world markets.

Finally, the authors of this study focus on Moscow's political influence, which can manifest itself in many ways. These are either through the links of political parties and politicians to the Kremlin, which supports these political parties in exchange for defending Moscow's foreign policy moves, or through influencing electoral results in favour of Russia. Last but not least, the Kremlin may attempt a coup, as was the case in Montenegro in 2016 when the government there sought to join NATO. However, this attempt to overthrow the government was ultimately unsuccessful (Chivvis, 2017).

Although at first glance it might seem that Russia's current efforts in Ukraine, however, show that unconventional means are also being used in this conflict and therefore it makes sense to look into them, which is why the authors of this study chose Romania and Moldova as the object of their interest. While these two states share much in common, their vulnerability to Russian influence operations is incommensurable.

#### **Research design**

As the title of this study implies, it is a case study that is interpretive in nature (Lijphart, 1971). This type of case study is characterised by allowing the researcher relative freedom in interpreting its findings. The theory that the researcher deploys in this case serves as an imaginary guide that leads the researcher to formulate conclusions for a particular case.

The data collection for this study used snowball sampling, which involves contacting a person (gatekeeper) who knows the area well and who is able to recommend other contacts. A total of 8 interviews were conducted, which varied in length. The longest interview lasted 50 minutes, the shortest interview lasted 35 minutes. The interviews were carried out in Chisinau and Bucharest in April 2022. They therefore do not reflect current events that have occurred in the case of Moldova.

The form of the conducted interviews remained the same. The interviewees included representatives of the non-profit sector of the two selected states, diplomats, as well as academics working on Russian hybrid operations. At this point it is worth adding that due to the sensitivity of the obtained data , it was the wish of the respondents to remain anonymous. These were semi-structured interviews that began with a short monologue by the selected respondents. These interviews were conducted in English and then supplemented with relevant primary and secondary sources.

#### Russian political influence and disinformation campaigns in Moldova

Moldova, one of the poorest states in continental Europe, has had problems with Russian political influence since its independence in 1991. This is mainly due to the presence of several hundred Russian soldiers on Moldovan territory, specifically in Transnistria. One interviewee adds that the Kremlin, by having troops stationed on Moldovan territory, has quite strong leverage over any

Moldovan political leaders who might consider closer cooperation with the West (Interview No. 1 with a NGO worker in Chisinau). Perhaps this is also why the political representation of the state changes so frequently (Morar and Dembinska, 2019). The interviewees more or less agreed that the country has been going through a rather turbulent period in the last two years, with Igor Dodon, a proponent of the country's pro-Russian direction, being president in 2016-2019. "One of the reasons for the widespread corruption that plagues the country is Igor Dodon (Interview No. 2 with an academic worker in Chisinau). Another respondent adds that Dodon was the politician who openly defended Russian interests (...) In 2017 he even wanted to denounce the association agreement with the EU. However, with the current president, I believe that the country will soon become a member of the EU (Interview No. 4 with a Moldovan politician in Chisinau). Maia Sandu, the current Moldovan president, defeated Igor Dodon in the presidential elections held at the end of 2021. However, according to two interviewees, these elections were accompanied by strange circumstances. "There is speculation that Dodon was financially supported by Russia during the campaign, and knowing him as I do, I would believe it" (Interview No. 4 with a Moldovan politician in Chisinau). The respondent's words came true only a few months later. According to the findings of investigative journalists, Dodon received 300 thousand US dollars from Moscow. This financial "gift" was provided by 6 banks based in Russia and it is no coincidence that on the day Dodon received the money he was on a visit to Moscow where he met with important representatives of the Kremlin regime.

Another significant figure on the Moldovan political scene who does not hide his sympathies towards Moscow is Vadim Krasnoselsky, the current President of the Republic of Transnistria. One of the interviewees commented on his personality in the sense that in the current state of affairs it is not realistic for Krasnoselsky to make any statement against the war in Ukraine, as he is aware that Russia is his biggest ally (Interview No. 2 with an academic worker in Chisinau). Citizens of Transnistria are issued with Russian passports, and the Kremlin supplies Transnistria with important commodities, which is crucial for this de facto state. It lacks international recognition. The relationship between Russia and Transnistria can be understood as a client-patron relationship (Devyatkov et al., 2019).

The current Moldovan president, Maia Sandu, has made no secret of the fact that she would like to bring her country into the EU. In the context of Russian aggression in Ukraine, she has therefore asked EU leaders to grant Moldova candidate status. According to one interviewee, however, obtaining candidate status does not automatically lead to Moldova becoming an EU member state, as it does not meet all the criteria that are a prerequisite for admission to the organisation (Interview No. 3 with a member of diplomatic staff delegated by the EU member state in Chisinau).

At the moment, Moscow is trying to overthrow the pro-Western government and President Maia Sandu as part of its subversive political activities in order to prevent Moldova's possible accession to the EU and the country's further rapprochement with the West. To this end, demonstrations are being organised throughout the country, in which Moscow is indirectly involved by sending its citizens to the demonstrations. The citizens of Moldova are demonstrating because of the poor social situation, rising inflation and the bleak economic situation in the country. This pressure seems to be bearing fruit, as in February 2023, Prime Minister Natalia Gavrilita resigned after a series of protests (Cenusa, 2023b). All the protests are held in support of the Sor party, which has close ties to the Kremlin. Its founder, Ilan Sor, is currently in exile in Israel. However, it is suspected that he too is financially supported by Moscow (Cenusa, 2023b). The pressure that Moscow is able to create through its political connections is indeed enormous based on the information available.

Another pillar of Russian hybrid operations in Moldova is the dissemination of disinformation. On this issue, one interviewee noted that Moldova has had a long-standing problem with this phenomenon, which it has been unable to resolve, even though the government banned news broadcasts from Russian-language sources after the Russian invasion of Ukraine began (Interview No. 4 with a Moldovan politician in Chisinau). One possible explanation is that these laws do not apply to the territories of the autonomous republics, i.e. Transnistria and Gagauzia, which are predominantly populated by pro-Russian people.

In general terms, several narratives can be identified in the Moldovan media environment. According to one of the respondents, one narrative that emerges is the one highlighting the common Soviet history of Russians and Moldovans, while another narrative that appears frequently is the one about the possible annexation of Moldova to Romania (Interview No. 4 with a Moldovan politician Chisinau). He responded to this narrative by saying that it is absolute nonsense, as Romania maintains above-standard and friendly relations with Moldova due to its cultural and historical proximity (Interview No. 5 with an NGO worker in Bucharest). In these narratives, Russia tries to present itself as an alternative to the West, which is inherently bad because it does not respect traditional Christian values and is decadent. According to the respondent, the Moldovan media space does not lack accusations against Ukraine that Kiev is responsible for the conflict that Russia has provoked (Interview No. 1 with NGO worker in Chisinau).

Russian propaganda resonates quite well throughout Moldovan society, as shown by the results of recent public opinion polls. This research shows that almost 20% of respondents back the Kremlin in the conflict between Ukraine and Russia (Cenusa, 2023a). Moreover, more than a third of respondents believe that Crimea is a legitimate part of the Russian Federation. This also shows that the Kremlin maintains its influence through the media.

#### Russian political influence in Romania and disinformation campaigns

Unlike Moldova, Romania is in a much more advantageous position, which allows it to be much more assertive in its relations with Russia. According to one interviewee, this is mainly due to the historical circumstances that shape the relations between Russia and Romania also at present (Interview No. 5 with an NGO worker in Bucharest). Romania was considered a defeated state in the framework of the 2. World War and had to pay war reparations to the USSR in the amount of 300,000,000 USD, which was a huge amount of money for that time (Muschei, 2016) Romania was occupied by Soviet troops until 1958 and only emerged from the Soviet sphere of influence in the late 1980s. After the fall of Nicolae Ceaușescu's regime in 1989, Ion Iliescu, who could be described as an authoritarian, took power. However, his government was no more liberal than the previous one. Iliescu remained in power until 1996. Iliescu's foreign policy was until the collapse of the USSR in 1991. The proof of these words is the signing of the Russian-Romanian Treaty of Friendship between the two states, a thing unheard of in the Eastern Bloc. The USSR had never taken such a step until then (Tudoroiu, 2008).

Also after the collapse of the USSR, Iliescu gravitated towards Russia with his foreign policy. On the one hand, he tried to cooperate with Western European countries (Romania at that time imported oil from Western European countries), but on the other hand he was interested in developing trade relations with Russia (Tudoroiu, 2008). One of the interviewees commented on the geopolitical orientation at that time by saying that Iliescu was a pure pragmatist who also had strong personal ties in Russia (he studied together with Gorbachev during the USSR era) (Interview No. 6 with an academic worker in Bucharest). However, after a somewhat turbulent period at the turn of the millennium, Romania eventually chose a clear pro-Western direction in its foreign policy. This is evidenced by the fact that between 2004 and 2007 Romania became part of both the North Atlantic Alliance and the EU, with one respondent noting that the current situation in Ukraine clearly proves that Romania is moving in the right direction in its foreign policy. Support for the country's membership of the EU and NATO has grown even more after Russia invaded Ukraine. 'You see, Romanian civil society has never been in favour of Russia, given the historical circumstances. This feeling became even stronger after Russia invaded Ukraine" (Interview No. 7 with a NGO worker in Bucharest). According to one respondent, there are only 10 % of people in Romania who are behind Russia in the current conflict in Ukraine (Interview No. 7 with an NGO worker in Bucharest). The respondent's conclusions are also matched by opinion polls, where already in 2015 more than half of the Romanians interviewed perceived Russia as a security threat to Romania (Muschei, 2016). In his answer, one of the respondents reveals Romanian society's attitude towards Russia in the following words: "There are reasons why Russia is perceived very negatively in Romania. We have had very bad historical experiences with Moscow and therefore we have always been rather reticent about Russia's actions. The current situation shows that Russia is a security threat to Europe and it is our duty to help Ukraine' (Interview No. 6 with an academic worker in Bucharest). According to another interviewee, this assistance includes both financial and material aid to the country, as well as the supply of arms, which Bucharest initially rejected and has not yet publicly acknowledged this support to Ukraine (Interview No 8 with a member of diplomatic staff delegated by the EU member state in Bucharest).

Even on the Romanian political scene, it is currently impossible to find political parties or politicians who defend the interests of the Kremlin, although the Alliance for the Union of Romanians (AUR), which only entered the Romanian parliament in 2020, shares some ideological positions with the Kremlin. It is a strongly conservative party opposing different sexual orientations and defending traditional values (family, faith, etc.). In addition to these ideological underpinnings, the party is also linked to the Kremlin by the fact that some of its members openly oppose Romania's membership in NATO and the EU (Soare et al., 2023).

However, according to the respondents, the political party cannot be said to be openly cooperating with the Russian regime. While there are similarities of opinion between the Kremlin and this political party, leaders of this political party have strongly condemned Russian aggression against Ukraine (Interview No. 8 with member of diplomatic staff delegated by EU member state in Bucharest; Interview No. 6 with an academic worker in Bucharest). George Simion, the chairman of this party, himself let it be heard in 2020 that Russia has damaged Romanian interests many times in history (Soare et al., 2023). For this reason, too, it is clearly evident that Russian political influence is severely limited, even though the Kremlin often appeals to a common belief - Orthodoxy. With some exaggeration, one could therefore say that Romania forms a barrier to the development of further Kremlin activities in the Balkan Peninsula (Flanagan and Chindea, 2019).

As far as Russian disinformation is concerned, here too the Kremlin's influence is severely limited. One respondent believes that the vast majority of people simply do not believe information from Russia. This is currently compounded by the Russian invasion of Ukraine, which has revealed the Kremlin's true intentions (Interview No. 5 with an NGO worker in Bucharest). According to the same respondent, only the elderly believe this propaganda, who recall the USSR era with nostalgia (Interview No. 5 with an NGO worker in Bucharest). Although the space for the dissemination of Russian disinformation is very limited, there are attempts by the Kremlin to undermine the authority of the EU and NATO, as pointed out, for example, in its analysis of.

Although the impact of Russian propaganda on Romanian society is not very significant, there are also voices in the public space defending Moscow's actions towards Ukraine. Namely from Andrea Marga or Adrian Severin. Both of these men are former foreign ministers of the Romanian government who believe that Ukraine is responsible for the conflict (Soare et al., 2023). In addition to these narratives, according to one interviewee, the Romanian media also occasionally includes those that point to the EU's relative inability to solve complex problems. Another common narrative, according to one respondent, is the attempt to portray NATO as an aggressive organisation that raises security concerns in Europe (Interview No. 7 with an NGO worker in Bucharest). In addition to these narratives, there are others that point out, for example, the disadvantages of Romania's EU membership or that oppose globalism. It is these narratives that are adopted by the political representatives of George Simion's AUR party (Calistru and Burtan, 2021). However, as one respondent adds, after the Russian aggression against Ukraine, only a relatively small fraction of people believe these Russian narratives. Moreover, Russia tries to provoke anger at the incoming refugees from Ukraine, which it portrays as a potential security risk for Romania (Interview No. 5 with an NGO worker in Bucharest). Based on the information received, the Kremlin's ability to influence Romanian public opinion seems to be very limited.

# Moldova's energy dependence on Russia as a means to achieve the Kremlin's goals?

As regards Moldova's dependence on energy supplies, it should be noted that Moldova could not have done without Russian gas in any case, since before the Russian invasion of Ukraine it was almost 100% dependent on supplies of this raw material. One of the respondents also added his comment to this, saying that Moldova has long had the problem of being too dependent on Russian fossil fuel supplies, which makes Moldova a very vulnerable state, as Russia can use this to its advantage (Interview No. 1 with a NGO worker in Chisinau). After all, this became apparent in the spring of 2022, when Gazprom, which supplies gas to Moldova, threatened that if Chisinau did not pay its debts for gas supplies, gas would stop flowing through the pipelines from May 1. A similar situation was repeated in autumn 2022, when Gazprom started delivering only a third of the contracted gas supplies. In fact, the gas flows through the territory of the Republic of Transnistria, which complicates the whole situation to a large extent (Hedenskog, 2022). One respondent adds that the Romanian government had already offered assistance in solving the Moldovan energy crisis in the spring. According to this respondent, the Romanian government has offered to start supplying Moldova with its own gas to compensate for Russian gas supply shortages (Interview No. 5 with an NGO worker in Bucharest). The agreement between the two countries was reached in December 2022, when Romania committed to start providing its own gas in case of interruptions in Russian gas supplies (Sabadus, 2022). According to one interviewee, this pressure is Moscow's attempt to dissuade the current Moldovan government from rapprochement with the EU (Interview No. 4 with a Moldovan politician in

Chisinau). Despite this pressure, these hybrid attacks by Moscow have been unsuccessful. Given that Romania has been one of the least dependent countries in Europe on Russian fossil fuel supplies, it is essentially pointless to analyse Romania from this perspective. As can be seen from the text above, Romania has offered assistance to Moldova in this respect, which means that it has no problem with the supply of energy raw materials.

#### Conclusion

Although historically and culturally Romania and Moldova are quite similar, the study shows that Moldova is much more susceptible to Russian influence through the creation of hybrid threats because of the relatively recent USSR era and the fact that there is a Russian military contingent of several hundred troops on its territory, namely in Transnistria. This may also be the reason why the Kremlin is succeeding in advancing its power interests in Moldova, while the situation in Romania is quite the opposite. Romanian society is aware of the historical wrongs that Moscow has inflicted on them, and so they react warily to any attempt by Moscow to extend its influence in that country. Russia is not able to assert itself in the media space, nor is it able to assert its political influence in Romania. The fact that Romania is relatively independent of Russian energy imports makes it quite clear that Moscow currently lacks any effective leverage to get Romania to cooperate with it. Romania is firmly anchored in Euro-Atlantic integration structures, which is another reason why Moscow's hybrid operations in Romania do not work. The situation in Moldova is quite different. Chisinau is entirely dependent on Russian mineral imports, and the unstable political environment is exactly the ingredient the Kremlin needs to successfully create hybrid threats in Moldova. Although the current Moldovan government is trying to limit Russia's influence and bring the country closer to the EU, this is a relatively easy task, as the Kremlin has quite a few sympathisers in Moldova.

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# EU IN THE CONTEXT OF CONTEMPORARY EUROPEAN REGIONAL SECURITY

## Martin Horemuž<sup>1</sup>

#### **ABSTRACT**

The aim of the presented article is to describe and analyze the international-political significance of the European Union (EU) in the context of current European regional security. From this perspective, the article primarily reflects and approximates the geopolitical aspects and connections of ongoing political, military, economic, and sociocultural security threats and challenges in the European geographical area. The basic methodological basis of the presented text is theories and theoretical approaches from the field of international relations (neoliberalism, neorealism, geopolitics) and security studies as a subfield of international relations. The fundamental premise of the contribution is that the current shape and form of the EU's foreign and security policy faces unprecedented challenges as well as security threats of a military, but especially non-military nature, which has no parallel since the end of the Cold War: the war in Ukraine, the migration crisis, the energy, and raw materials crisis, climate change, the COVID-19 pandemic as well as a wide range of hybrid threats (spreading disinformation for the purpose of influencing public opinion, cyber-attacks, influencing and interfering with elections, support for extremist and Eurosceptic political forces).

Key words: European Union, regional security, security policy, power, European

#### **Introduction: Regional Aspects of International Relations and Politics**

Within the European continent, the European Union (EU) is primarily associated with the project of political and economic unification of Europe. In its institutional form, this is undoubtedly a historically successful story of the regional integration process, which has no parallel in the post-war history of international relations in its scope, but especially in its content. The essence of this success is, among other things, based on the fact that the EU is built "from below" and operates on the principle of the cohesion of its individual member states belonging to one geographical region. Other key factors positively affecting the EU integration project include a common historical past, and cultural heritage, but especially shared political values (democracy, rule of law, and human rights). Together with the closeness of interests and legitimate expectations of its individual members, the EU supports the belief that unification (political, and economic) neutralizes contradictions and increases international competitiveness.

The EU represents a normative and post-national actor, a subject of international law, which pursues its goals with the help of standard and legitimate

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foreign policy instruments. In the European regional space, the existence and activity of the EU as an international, regional political institution has a positive influence, or it directly creates a stable, legible, and predictable security (geo)political and economic environment. In the current context of world politics, the EU represents an acceptable and responsible political entity that is actively involved in key security and crisis areas, peace operations, ecological initiatives, and development aid. This dimension of the functioning of the EU is an integral pillar of its foreign policy activity, while in terms of goals and impacts it goes beyond the European regional framework, and significantly co-shapes the level of global politics.

The EU's global role in world politics is primarily based on the existence of a normative power. Within this category of power, the fundamental values on which the EU is based, or the activity of the EU aims to support the values derived from them. Of the listed values, it is especially necessary to mention the policy of good neighborhood and partnership, support of interregionalism and transregionalism, international development aid given to the poorest countries, peace and disarmament activities within international institutions focused on conflict prevention, and crisis management. In the economic and social field, the EU integration project represents an attractive model for (European) states located on the geographical periphery of the EU borders and at the same time in various stages of post-transformation and reform processes. Joining the EU offers the candidate countries the political perspective of being a solid part of one of the most advanced economic units in the world and participating in decision-making in important areas of regional and global politics. It also serves as a role model in international politics.<sup>2</sup> In the theory of international relations, such norm-making power is also referred to as soft power. In the theory of international relations, such norm-making power is also referred to as soft power. The concept of soft power represents a relatively new term and dimension of foreign policy in international relations, which is the result of the development of the global environment and the international political system over the past three decades. Soft power comes out, or in the foreign policy area, he works with the tools of public diplomacy, political, and economic attractiveness, in contrast to the traditional tools of coercion and the threat of force (Nye, 1990).

In the system of international relations as well as in the historical development of world politics, it is impossible to find an actor who does not reflect on such a key issue as security, from the level of strategic security concepts and doctrines to the dimension of military-political planning, security management and handling various crisis scenarios. The stated premise is based on the axiom that the decisive motivation as well as the behavior of any (rational)

<sup>&</sup>lt;sup>2</sup> An example is the integration of the African continent in the form of the so-called African Union, but also the Russian project of integration of the post-Soviet states in the form of the Eurasian Economic Union (EurAsEc), which, however, actually represents a tool for strengthening and dominating Russian geopolitical influence in the post-Soviet space.

actor in international relations is to ensure physical existence (survival), as well as to create prerequisites for its preservation in the form of minimizing external and internal security threats and risks. Although the given definition primarily applies to states, in a broader sense it is also applicable to other actors (subjects) of international relations. In the above sense of the word, it is therefore logical that the EU does not stand outside the processes taking place in the security area. On the contrary, the security agenda, which was in the shadow of economical and economic integration within the EU for a long time, began to gain bigger importance in the context of large-scale dynamic changes in the security environment and became a solid and integral part of it. At the same time, the current security agenda remains, as in the past, constructed on the basis of immediate stimuli from the field of political, security, economic, and social activity (in a broader sense, from any field important for the security of the state or community), but during its creation (agenda setting) at present more than ever before, language (narration, speech, and delivery), interpretation of events and media play a role. The increasing importance of security policy is also underlined by the so-called securitization. In the field of security science, securitization is perceived as a process in which a wider range of economic, social and cultural phenomena is primarily associated with security impacts. Currently, energy policy or environmental policy are included among such areas.

For the EU, the security policy and agenda became more urgent after Russia's annexation of Crimea and the outbreak of a military conflict in eastern Ukraine in 2014 (Donetsk and Luhansk People's Republics), which resulted in Russia's large-scale military aggression against Ukraine in February 2022. At the same time, the aforementioned development fundamentally shook the European regional security system, which was complexly formed after the end of the Cold War, and meant a new challenge for the EU's foreign and security policy. Even more acutely, however, the conflict in Ukraine opened up the question of the EU's geopolitical responsibility for the further development and overall direction of the European continent. The events in Ukraine, either in 2014 or later in 2022, also showed that the EU is not prepared, nor internally prepared for an open military and power confrontation, not to mention its own limits and limited tools and material-technical capacities. These remain dependent on the willingness and will of individual member states or NATO. Together with other crisis events taking place in the immediate vicinity of the EU, it is becoming clear that the EU is not enough only to actively support and spread liberal and democratic values, but that it will have to defend (advocate) these values in a more decisive way and enforce them by force. For the reason stated, it is therefore possible to assume that if the EU wants to remain an influential (recognized) actor and subject influencing European regional and global geopolitical processes in the future, it will inevitably have to, in addition to normative power (soft power as a positive form, or sanctions as its negative form) also have other power-political and militarysecurity tools at their disposal. However, this inevitably means implementing a policy that will represent a shift from neoliberal to more neorealistic (geopolitical) positions, as defined by international relations. This contribution is also based on the stated premise and theoretical-methodological assumptions.

#### The Security Environment in Europe and its Changes

The period of the Cold War after the Second World War meant for the European continent a fundamental transfer of power and geopolitical confrontation from the military to the political, ideological, as well as economic, and social dimensions (Štefanica, 2022). This confrontation took place with varying intensity in a strictly defined bloc and bipolar power arrangement (democratic versus non-democratic world, capitalist versus communist, or East versus West). The development of individual states was fundamentally determined by belonging to one of the blocs, the international political system (but especially in the communist bloc) and at the same time determined their geopolitical direction, security anchoring, but also their overall foreign-political orientation. A significant ideological confrontation and permanent rivalry between the superpowers: the USA and the Soviet Union, which aimed at undermining the geopolitical positions of the other party and thereby also weakening it (in the theory of international relations, the so-called zero-sum game) became characteristic of the existence of a bipolar international political system. The security agenda (area of security) has become dominant in the foreign policy of states. The formation of the regional (European) security order and system was influenced by the search for mutual coexistence of great powers and blocs, which strictly respected the principles of the post-war arrangement of the European continent based on the confirmation of spheres of interest and influence (the Soviet demand for the normalization of relations). The culmination of this process was represented by the system of contractual relations between the USSR and the USA in the 1970s in the area of arms limits and control, or reduction of strategic offensive weapons. For the European continent, the so-called Helsinki Final Act was signed on 1 August 1975 in Helsinki by 33 European countries, Canada, and the USA. The Helsinki Final Act contains a number of key commitments in the political-military, economic, and human rights fields, as well as ten basic principles that govern the mutual behavior of states, as well as the behavior of their citizens (human rights) (Leška, 1997).

The fall of the communist regimes in Central and Eastern Europe in 1989, the collapse of the Soviet Union as well as the complex transformation process associated with the democratization of the countries of Central and Eastern Europe (CEE) after 1991 created a new geopolitical, but especially security, reality in the European regional space (Ušiak, 2013). The period of the last decade of the 20th century is associated not only in Europe with the euphoria of victory (worldwide) and the promotion of democracy, economic liberalism and human rights as universal values (Fukuyama, 1992). The influence of these values

determined the transformation process in CEE countries in the 1990s. In parallel with the internal transformation process in post-communist states, the postconfrontation formation of a new form of European (transatlantic) architecture and security environment begins. In 1994, the CSCE was transformed into the Organization for Security and Cooperation in Europe, which currently represents one of the important pillars of pan-European security. The process of expanding NATO to include the CEE countries, which was met with strong Russian reservations from the beginning, was accompanied in 1997 by the signing of the Founding Act on mutual relations, cooperation, and security between NATO and Russia. This act created the NATO-Russia Permanent Joint Council, institutionally elevated to the NATO-Russia Permanent Council in 2002, which provided Moscow with an institutional framework for developing mutual relations, building and deepening trust, but also solving common problems. In the economic field, the main goal of the CEE states has become the integration into the common European economic and political space (Ušiak, 2013). Their application for EU membership expressed the will to become a full-fledged part of the developed democratic world and its structures, and at the same time to accept several political and economic obligations. The so-called Eastern enlargement of the EU (2004) confirmed the democratization of the vast European geographical space, including up to eight post-communist countries. The membership of these states contributed to the stabilization of the entire CEE region, and supported internal reforms aimed at democracy and economic liberalization, in order to strengthen the security of the whole of Europe. The process of enlargement and integration within the EU is also accompanied by deep changes in the internal status of nation-states referred to as "Europeanization". It consists not only in the creation of a predictable value, legal and civilizationalcultural space, but primarily refers to the process of transformations and orientation of the direction and nature of politics so that the political and economic dynamics of the EU become part of the organizational logic of national policies and their creation, including the security agenda (Adamcová, 2022).

### Strategic Goal of the EU: Regional Stability and a Secure Europe

The EU's contribution to shaping regional security and stability is unique in the history of the international political system. The European integration of the states participating in this process led to a more than 70-year period without military conflicts in post-war history. The current form of the EU within international relations confirms the thesis about the liberal-democratic and postnational concept of the EU (Waltz, 2010). The concept's basic premise is the common sharing of principles and standards and the acceptance of democracy, freedom, the rule of law, and respect for human rights as universal values. In postwar Europe, the concept of human rights began to be enforced more extensively. In the framework of social policy, we are talking about the Second-generation of human rights, which primarily refer to social and economic rights, through which the post-war European social model was built. The welfare state was based on a pragmatic level (preventing the policy of communism in democratic countries), but also on philosophical arguments. Jakub Švec presents several arguments for building a welfare state in post-war Europe, which are based on the philosophical arguments of the works of Ronald Dworkin and John Rawls: "Despite the existence of earlier socially oriented works, we consider John Rawls' arguments to have been accepted in the second half of the 20th century as a philosophical justification for the essence of building a welfare state" (Švec, 2020, p. 70). On the economic level, the EU confirms the principle that democratic and economically connected countries wage wars with each other only in exceptional cases. In international relations, these principles are justified in the theory of mutual dependence (interdependence), but especially in the "theory of democratic peace" (Doyle, 1997). In accordance with the aforementioned theories, there is not only economic interdependence between liberal and democratic states but also a willingness to cooperate with each other in the field of security. From the point of view of the EU, the area in question is the EU's common foreign and security policy (CFSP). The CFSP aims to protect the peace, strengthen regional and international security, develop and consolidate democracy, resolve conflicts, and promote international understanding. This is also why diplomacy and emphasis on compliance with international law and standards are among the basic tools of the CFSP. Trade, humanitarian aid, and development cooperation, in which it is traditionally a global leader, also play an important role in the EU's activities on the international scene.

A special part of the CFSP is represented by the Common Security and Defense Policy (CSDP), as it is called after the change approved in the Lisbon Treaty (valid since 2009). The creation of the European External Action Service in December 2010 significantly strengthened the role of the EU in the system of international relations. The European Security Strategy, which was first adopted in December 2003, became the strategic framework for the use of CSDP tools. This strategy was replaced in 2016 by: "*The Global strategy for the foreign and security policy of the European Union*". Part of the EU's Global Strategy is also the Concept of Strategic Autonomy, which points to the EU's ability to defend Europe militarily so that it does not rely too much on the USA, which is also the decisive force of NATO.<sup>3</sup> It is the participation of the majority of EU countries in NATO that largely, although not completely, determines its foreign and security policy. Unlike the USA, Europe does not yet have the hard power that would allow it to intervene in the regulation of problems that, from the point of view of

<sup>&</sup>lt;sup>3</sup>An example of the emphasis on the security agenda is the so-called approval by the EU Council in March 2022. The strategic compass represents the EU's ambitious action plan to strengthen the security and defense policy until 2030. The document is similar to NATO's strategic concept, while it is divided into 4 areas: crisis management, resilience, capability development, and partnership (Fiot, Cullman, 2022).

the EU, need it. His participation in such processes is still taking place within the framework of US and NATO actions.<sup>4</sup> EU-NATO cooperation focuses on issues of common interest. Relations between the two organizations were institutionalized on 16 December 2002 through the Berlin Plus agreement (European foreign..., 2023).<sup>5</sup>

The decisive and fundamental foreign-political, military-security, economic, and, in the broadest sense, geopolitical factor, which currently determines the direction of the security policy of the EU as well as NATO, is undoubtedly Russia's military aggression in Ukraine (Kollár, 2022). It definitively confirmed the indissolubility of fundamental structural changes in the current regional (European) as well as global security environment and put the EU in front of solving urgent security issues and problems. A direct consequence of Russia's aggressive actions is not only a complete questioning, but a direct effort to dismantle the European security system and architecture, formed after 1990 with the participation of Russia (Fiot, Cullman, 2022). The possible impacts of such developments represent one of the most serious challenges for the EU since the end of the Second World War. This is also why the EU must strive more intensively to create a European geopolitical identity, as well as accept responsibility for the further direction and security of the European continent (Marušiak, 2015). This will undoubtedly require better operational capability, greater autonomy, and defensive capability capacity. However, key in this whole process will be above all the international-political redefinition of the position and approach of the EU towards the adoption of the role of a decisive geopolitical regional actor, focusing more intensively on areas such as defense, security, projection of power (force) and protection of interests. It is these areas that represent the central categories of the (neo)realist paradigm of international relations.

## Conclusion

The most significant contribution of the EU to the promotion of regional peace and stability in Europe after the Second World War is considered to be the

<sup>&</sup>lt;sup>4</sup>Until 2011, there was a so-called Western European Union (WEU), which represented a military bloc of collective self-defense of Western European countries. It was established in 1948, i.e. rather than NATO. The significance and tasks of the WEU were gradually taken over by the EU. During its existence, the WEU did not have a significant political or military significance, since all member countries were part of NATO and the EU at the same time.

<sup>&</sup>lt;sup>5</sup>A first EU-NATO, signed at NATO's 2016 Warsaw Summit, focused on cooperation in seven strategic areas (hybrid threats, operational cooperation, cyber security, defense capabilities, industry and research, coordinated exercises, and capacity building). The second declaration (Brussels) from 2018 confirms the common interest of the EU and NATO to face a complex and uncertain security environment. The last - third declaration from January 2023 reflects, in addition to Russia's military aggression against Ukraine in February 2022, the accession of Sweden and Finland to NATO. (The third joint ...., 2023).

ongoing and open process of European integration and expansion of the EU to include CEE countries. Along with the expansion of new states, democracy, and economic prosperity also spread on the European continent. Through a unique set of tools, the EU has been contributing to a more stable and secure European space for more than three decades since the end of the Cold War. The attractive political, economic, and social model of the EU, together with the offer of a European perspective to the candidate countries, is one of the strongest sources of the socalled Soft power. At the same time, it is one of the effective responses to the growing tension and ever-expanding destabilization potential in the European geopolitical space and its immediate surroundings (post-Soviet states, North Africa, the Middle East), one of the many causes of which (migration, terrorism) is also Russia's uncooperative behavior and its (post)imperial power politics. The different starting assumptions and ideological sources in the foreign and security policy of the EU and Russia only further deepen this tension and destabilization. As a transnational and post-national community based on liberal-democratic principles, the EU is in strong contrast to the imperial and great-power politics of Moscow, in which small states have no place, or they are only an object of the politics of the powers. This is also why the EU must realize that the mere existence of soft power will not be sufficient to establish and guarantee security on the European continent, while security and its observance will inevitably be enforced by other powerful military instruments.

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# CONSTRUCTIVIST INVESTIGATION OF THE NORD STREAM 1 AND 2

# Margaréta de la Infanta<sup>1</sup>

#### ABSTRACT

The Nord Stream 2 is an offshore gas pipeline heading from Russia to Germany under the Baltic Sea, where several European companies cooperate or are co-owners. Central European countries are often presented in local and international media as detractors of Nord Stream 2 gas project. The main objective is to define a concept of Regional Energy Security Community/Complex and to sort out the Central European countries associated to those concepts. Since no research has scrutinized the attitude of these countries, the paper analyses: Why Regional Energy Security Community /Complex are created? What are the reasons Poland is strongly opposed to Nord Stream 2 ?, What is the main reason that most of Central European countries were neutrally favorable to the gas project? The Speeches of politicians from Central European with the securitisation of the Nord Stream 2. The research is articulated within a qualitative analysis.To take a fresh look within energy security investigation, as methods, a constructivist operational method for the process of securitization of the Nord Stream 2, comparative method, case study, network analysis and coding. A teqnique

of ATLAS.ti was used. Contrary to the presentation by the main detractor of the Nord Stream 2 - Poland and massmedia, other countries in Central Europe made part of the proponets of the project util 2021. The investigation identifies that majority of Central European countries formed within the Regional Energy Security Community. They were looking for ways of how to be connected to the project, demonstrating amity perception and cooperative interdependence. Poland belongs to Regional Energy Security Complex, percieving a mutual interdependence with Russia as a threat. Securitisation of the Nord Stream 2 by Poland in various areas did not affect on the energy security perception of other states in Central Europe until one important international event in 2022- a terrorist industrial act against Nord stream 1 and 2 pipelines. The research has demonstrated that Speech act theory represents an innovative way of using the theory created in linguistics, as a method of research in International Relations applied in energy security. Method of the Speech act can be also used by identification of the potentional state/actor who is behind the operation of Nord Stream 1 and 2 pipelines explosion. The authentic advocates of the Nord Stream 2 were identified as a result of this method. The hypothesis is analysed: Nord Stream 2 creates new Regional Energy Security Community in Central Europe which can be disrupted due to the extreme pressure from external actors on political elites of V4 and Germany. If the political pressure is not sufficient, total destruction of gas pipelines is arranged. Therefore, in the part 3 of the paper, various hypothesis of the responsibility for explosion are analysed, using Speech act, analysing the speeches of US politicians about the Nord Stream 2.

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**Key words:** Security Community, Regional Energy Security Complex, Energy Security, gas interdependence, energy dependence, Nord Stream 2, Nord Stream 1, pipeline explosion, terrorist act, U.S.intelligence services, new Cold War, V4, Vysegrad countries, Norway, Russia, USA, Speech act theory, ATLAS.ti, Seymour Hersh, Joe Biden, LNG



### Introduction

The European Union is officially considered as a security community, because the states in EU should share the same values and similar perception of the threats. But in reality, we observe that there is a different perception of threats by various states. For instance, migration of economic illegal migrants is considered as a threat by CEE.

In the actual investigation within energy sector, it was discovered that we cannot talk about Security Community within the whole Europe. In fact, some states in Central Europe belong to Energy Security Community and some to Energy Security Complex. The construction of Energy Security Community / Complex depends on different perception of the threat/energy dependency perception and securitisation/desecuritisation by various states in Europe.

Security is present in almost every sphere of our lives. Nowadays, we can talk about military, economic, social, and environmental. Energy Security until recently was not considered as a security question. Especially after several energy crises in 2006, 2008, 2009, 2014 and 2015 between the EU, Russia and the transit countries, which have contributed to the politicization and securitisation of the energy dilemma. Although Russia is perceived as a relatively stable supplier of energy resources to the EU, in some states of Europe, the need for diversification away from Russia was proclaimed arguing about the strong dependence of the EU on Russia. The project, supposed to be operational in 2020, was halted for several months due to the impositions of US sanctions. It was targeted by further sanctions and threatening letters from USA since the owners of the project, with support of some governments, continued its finalization. US sanctions led to a confrontation with the EU and most of the states in Europe. Therefore, controversial, politicized and securitized interpretation of mutual interdependence on gas makes the conflict indeed worse. Moreover, in 2022, there was an explosion on both Nord Stream 1 and Nord Stream 2, which will be analysed in part three of this paper, considering probable hypothesis of the responsibility for this terrorist act.

The focus of the research is to study Energy Security between Russia and Central Europe within the Regional Energy Security Complex and the Regional Energy Security Community. Moreover, the Speech act theory is used for analysis of the illocutionary speech acts of the policymakers for securitisation and desecuritisation of the Nord Stream 2 and in the thirth part, for the analysis of various possibilities of responsability for explosions of Nord Stream pipelines.

The Nord Stream project, especially its second line, which was destroyed by explosion, is exposed to different perceptions by various states in Europe and external actors. At the difference of energy balancing, this is perceived by various states within a specific perspective, not yet as something taking place objectively. Because of the importance of energy security for the states, comparable securitisation or desecuritisation speeches occur and, in this way, leading to the alighnment of certain states within a similar rhetoric. The investigation is important, because according to a theory of Regional Security Complex Theory (RSCT), Europe is composed of two centered RSCs: Russia and the EU. In this investigation, we can observe that in energy issues some states are reunifying the RSCs of Russia rather than the EU and prooves that the theory of RSCT is not static.

Taking into account the complexity of the gas pipeline as a phenomenon with a huge impact, the research is articulated within qualitative analysis. As a methodology, discourse analysis has been chosen. As means, a constructivist operational approach for the process of securitization is employed, Speech act, comparative method, case study and coding.

All of them are used for the analysis of in depth speeches of politicians, taking into account the macro-internationality. As a technique, computer assisted qualitative data analysis software – Atlas.ti was used for augmenting the transparency, efficiency and visual demonstration of contradictions of some politicians, compared to the simple reading of speeches. Network analysis within Atlas.ti supported the process of structured thinking.

The research sets several objectives, but in this presentation only two will be analysed due to space restrictions. The main objective is to define and develop a concept of Regional Energy Security Community and to sort out the countries belonging to Regional Energy Security Complex/Community in Central European area. It concerns the grammar of securitization that securitizing actors of the countries in CEE express. Selection of some illocutionary speech acts are included out of the whole research realised. Second objective is to use Speech act theory to analyse who could be responsible for the explosion of both gas pipelines of Nord Stream. We are taking into account the advantages/ disadvantages of explosion for the selected states, illocutionary speeches of the selected politicians before and after the explosion.

The approach of the analysis is led in terms of Regional Security Complex Theory elaborated by the **Copenhagen School** of International Relations. The speeches of policy leaders about Nord Stream 2 were scrutinized and based on the speeches, the countries were sorted out to Regional Energy Security Community or Complex. Copenhangen school does not place energy at its focus of research interest. Energy issue is included as a section of economic security sector in the Regional Security Complex Theory.

The point of view of RSCT is opposite to that of **Huntington**'s Clash of civilisations (1993). What is similar is the emphasis on the importance of a distinct middle level between a state and global system. Huntington emphasises the clash among large civilisations like Islam, West and Asia and emergence of conflict of culturally affiliated macro-units. On the contrary, RSCT stresses that security regions form subsystems in which security interactions are internal. States fear their neighbours and associate with other regional actors, borders between regions are mostly geographically circumscribed. Huntington's theory ends up with a struggle at the system level, placing United States at the centre. But from the point of view of most of other countries in world, the strategic context is not at the system level, but the regional level has a priority. Regions matter more in current period and cost of underestimating can be high (Buzan 2003:41). The approach of RSCT is bottom up and captures specificities of regions and then gather global picture from these elements.

Studies of "regional security" are led usually without any coherent theoretical setting. This is because there were only some basic notions about balance of power and interdependence taken from system level. The approach of RSCT is constructed around security. Therefore, it is up to us to map the security practises. RSC is our analytical term and is created according to our criteria. It is not defined according to criteria of practitioners. The evaluation is on securitisation practices of practitioners. RSCs are therefore very particular, functionally defined regions, which are mutually exclusive. They gravitate in world among insulator states ( for instance Ukraine) and global actors ( for instance USA, China, Russia).

### **1 Regional Energy Security Complex in Central Europe**

Regional Security Complex: RSC is our analytical term and therefore something adds up to RSC when it qualifies according to our criteria. It is very specific, functionally defined type of regions which may or may not coincide with more general understanding of region. It can have overlapping memberships. A concept as SECURITY COMPLEX is defined not by whether actors label themselves a complex, but by analysts interpretation of who is actually interconnected in terms of security interaction (Buzan et al. 1998, p.34). Security complex is a constellation of security concerns, Security complex is not defined by actors but by referent objects. Referent objects are more basic, relevant on security landscape (Buzan et al. 1998, p.43).

# 1.1 Poland

In Poland, a political storm was raised around the Nord Stream project. This country has received extensive media interest, which led to rethinking of national policy priorities as a result of pipeline. This situation can be associated with its historically difficult relationships with Germany and Russia, the countries where the companies constructing the pipeline are based. Also Poland's geographical location on the energy transit corridor is important because it is connecting Oriental Europe with Western Europe. Although the pipeline was supposed to connect two geographical units, it has led to new divisions among these neighbour countries.

The Polish voice is the most critical of all involved states. From Polish policy leaders, we can often read that dependence on Russia will a priori boost its influence over Europe. This argument was already explained in previous pages. Poland is mainly motivated by business interests. The aim of Poland is to become a hub for alternative gas supplies to Europe, especially liquefied natural gas (LNG). The import of cheaper Russian gas can make this business plan unrealistic. But investment in some alternative gas is needed, in order to avoid a monopolistic stranglehold over Europe's energy supplies. The question arises who will finance the alternative project led in parallel with NS2, which would be economically expensive?

USA as an external actor tries to influence the energy politics in Europe, because it has an excess of liquefied gas and another US aim is to undermine the state budget of Russia.

We will focus again our attention on securitization speeches of politicians, choosing some of the speeches out of the whole research realised. For instance, Polish Prime Minister, **Mateusz Morawiecki** has securiticized an issue for Poland and Ukraine of Nord Stream 2 construction with these words:

Two powerful countries, one of which is a world power, Russia, and the other, Germany, the fourth economy of the world, decided to build a gas pipeline. These are two powerful States and... it is not easy to prohibit them from doing something. We believe that it contradicts European rules. It is egoistic activity. We also believe that it contradicts security guarantees for this part of the world: for Ukraine and Poland. (Uawire.org, 2019b)

Prime Minister **Morawiecki** wanted to explain that it is impossible to stop two powerful countries in their decision and that Germany is supporting the pipeline only for its business purposes in order to sell the gas to other European countries. Moreover, Poland is worried whenever there is some close cooperation between Germany and Russia, which is due to historical experience of Poland.<sup>2</sup>

Because of Germany, the transition fees paid until now via Yamal-Europe pipeline leading from Russia, towards Poland and Germany, will be diminished. It is because transit flows of gas from Poland to Germany will be cut down. It is true that Nord Stream 2 is an additional benefit for Germany and other source of supply if alternative routes are disrupted. When Nord Stream 2 and Turkish Stream will become operational, Ukraine will loose of 205,9 bcm per year of transit capacity of Russian gas to Europe. With this capacity, Russia can reduce gas flows via Poland and Ukraine, which will undermine the negotiation ability of the mentioned countries with Gazprom. The EU intends to keep Ukraine a transit state. But who will pay for its transit pipelines, which need to be refurbished if Gazprom might not be interested? Is it egoistic to look for its own national interest? Referent object in speech of Morawiecky is EU and states of Poland and Ukraine. Prime Minister is securitizing a topic in his last sentence, because Poland is losing its negotiation capacity with Gazprom and possible transit fees paid in millions of EUR.

Moreover, geopolitically, Poland has a desire to become a leader state<sup>3</sup> of Intermarium - Three Seas Initiative<sup>4</sup> - idea supported by USA also. Aim of

<sup>&</sup>lt;sup>2</sup> Russia was a part of the Soviet Union. After the German-Soviet non-aggression pact, Poland was invaded by Nazi Germany on 1 September 1939 and by Soviet Union on 17 September. In October Germany and Soviet Union divided Poland and annexed the whole state. After the Axis attack on the Soviet Union in 1941, Poland was occupied entirely by Germany. Polish citizens suffered loss of human and material conditions. Institute of National Remembrance says about 5.82 million Polish citizens died as a result of the German occupation and about 150,000 died as a result of the Soviet occupation (Expatica, 2009).

<sup>&</sup>lt;sup>3</sup> Poland's idea, backed by USA, is to undermine both the fading German-dominated EU and ambitions of Russia. Poland stands to not just become a major geopolitical actor by bridging East and West as leader of the Intermarium. Pompeo demonstrated it clearly in the August visit in 2020 where he preferred to talk to Central European leaders, instead of German Anglela Merkel. It was a clear message for Merkel, where USA showed that US main partner in Europe is Poland. Poland however claims that although the name is TSI, the debate in Poland is around the idea if it is the old Intermarium idea of a Polish lead bloc in Central and Oriental Europe, while Poland is denying this role. The risk taken deliberately to please a domestic audience for whom such 'maritime' metaphors will invoke the image of Polish grandeur and regional leadership. Officially it is an initiative of several member states coming together to collaborate more intensely on matters of mutual interest.

<sup>&</sup>lt;sup>4</sup> The origins of the Intermarium and its geopolitical implication comes back to 1569, where the Union of Lublin (1569) forged a single confederation comprising of Poland and Lithuania. For Lithuania, this union secured their eastern frontier from Russia; whereas the small, but more modern Polish kingdom sought new lands, which included Ukraine, that Lithuania willingly agreed to. Nowadays, there is a parallel with the plan of Three seas, as the return back to the

Poland, instrumented by USA, is to stand between Germany and Russia in order to block interconnectivity between Germany and Russia due to historical fear. US aim is to block cooperation between Russia and Germany since cooperation of German technologies and Russian resources can easily eject USA as a global actor. Idea of Three Seas was supported directly by USA also on the meetings of the concerned countries and President **Donald Trump** in 2017.

The Prime Minister stressed also: "We need allies that will seriously raise the question [of the need to construct the gas pipeline]" (Uawire.org 2019b). Therefore, Poland is looking for allies in Europe – such as the Ukraine and outside Europe its main supporter is USA, which imposed sanctions on European companies, private persons involved in construction of Nord Stream 2 and threatens German ports also. He is making a direct call for a securitization in politics among the largest possible audience.

Polish prime minister Morawiecky, said in February before his trip to Berlin in 2018:

In case of Nord Stream 2 operation, Russian dependence on Ukraine will be declining. We can imagine then various military and political scenarios, and this is the thing I warn our allies against. This is the danger I talked to Mr. Tillerson about in Warsaw a few weeks ago. (Kajmowicz, 2018)

He clearly securitized the Nord Stream 2 in a military and political way, where the threat is Russian state. This would look like an explanation inspired by liberalism, which stipulates that more interdependence among states, the better relations there are, and the conflict cannot appear. But traditional IR theories were proved insufficient in order to explain the actual situation.<sup>5</sup> Therefore, the use of Speech Act theory explains better analysis in energy security, since Poland is using a large palette of securitization issues, transcending energy security from one security sector to another and presents lot of referent objects of possible threats. The interesting aspect is that Morawiecky is securitizing the diminishing dependence of Russian state on Ukraine. As an educated economist, he is playing on liberal notions and tries to put on his side the orthodox liberals from Western part of Europe.<sup>6</sup> The referent object of a possible threat is the whole continent of Europe.

war plans of the consolidation of Europe by Pilsudsky and Horthy, who had an idea to join the borders of Hungary and Poland, so Slovakia would cease to exist. Donald Trump invested to the project more than a billion dollars.

<sup>&</sup>lt;sup>5</sup> There were conflicts among Ukraine and Russia about gas dispute, even though interdependence of Ukraine on Russian gas was very high. Liberal theories suggest that more interdependence, less possibility of conflict or war among states.

<sup>&</sup>lt;sup>6</sup> Morawiecki was nominated in December 2017 as Prime Minister of Poland by the chief staff of the ruling Law and Justice conservative party.

At the Council of the Baltic Sea States at Reykjvavik, Polish Minister of Foreign Affairs (2015-18) stated **Witold Waszczykowski**: "The Nord Stream 2 project creates a major risk to the diversification of gas supply sources in the region" (uawire 2017). Polish foreign minister puts the project as political not economical. He wants to say that the project is created to have political influence within Europe. This is an example of securitization in politics.

He added that within regional energy security, solutions must be found which will be beneficial for everyone. As examples of such solutions, he mentioned the North-South Gas Corridor and the Baltic regional investment plan, which look for eliminating of dependence on Russian gas. The solution for him would be to look for another alternative projects or to construct different gas pipelines with other suppliers.

He also emphasized that he does not understand Germany's position, which regards Nord Stream 2 favorably. According to him, it is:

Obviously political, and wants to bypass Central Europe in order to blackmail it in future. Eventually the Russians will use the gas supply as a political weapon, which they don't even hide. They will blackmail our part of Europe. We cannot agree to this. (Uawire, 2017)

He is securitizing the area of Central Europa as a referent object, where Russia can use Nord Stream as a political weapon blackmailing this region. Securitisation is in political sector.

Polish Foreign Minister said that he is constantly consulting the problem with the Americans: "*The Americans understand our arguments and the significance of the problem*" (Uawire, 2017). This speech revelation proves that USA migh be acting in coordination with Poland, as US admited in case of Ukraine. It reveals also that Poland is subordinated to another Regional security complex – USA and promoting its ideas, which are in contradition with Vysegrad group states (de la Infanta, 2021).

Moreover, Poland is presenting Nord stream 2 as a Russian tool against NATO. Poland tries to present various referent objects which are threatened such as: (1) as EU (2) the Polish state (3) the Polish nation (4) the Central Europe region and (5) is also NATO in order to alarm USA and Ukraine (6). USA - according the RAND corporation plans (Dobbins 2019) financed by the US budget, will support anti-Russian tendencies in Ukraine, promote regime change in Belarus. The authors of the report point out that Washington can count on Warsaw's "hawks". In this document the strategy of promoting further sanctions and the boycotting of Russian raw materials is the best option to eliminate Russia. And Poland is fulfilling this role very good for USA's satisfaction. What is crucial is to make Poland a weapon to fight the import of Russian gas and exchange it for liquefied gas imported from the United States. The Government of Law and Justice is pursuing such a strategy. Also the idea to create anti-Russian tendencies

in western part of Ukraine have suceeded. On the other hand, the regime change under the Color Revolution flag in Belarus in 2020-21 did not suceed.

Poland as a main opponent has contributed to the fact, that Nord Stream 2 has a large geo-political consequences. Not only it was included among the topics of important basis within geopolitical discussions and topics during all working and officials visits by all state representatives. Nord Stream 2 project served as an excuse to launch more actively a geopolitical strategy against Russia in form of the Three seas initiative.

Poland therefore tried to look for other allies also within its neighbors in Europe and tried to renew old geopolitical project of Intermarium or Three Seas Initiative - TSI. This was successful and the first meeting was organized in 2016.

We can observe that the Polish position on Nord Stream 2 is the same as with Nord stream 1 project. Polish grammar of securitization is the most visible. Polish politicians are demonstrating what elements of a securitizing move in a speech act should be included. Securitization of Nord Stream 2 prevails in all areas, political, economic, and military. Even though Poland has more than 190 gas suppliers and the dependence on Russia is low, the speeches of politicians are very aggressive. If we analyze separate opinions and words to express the disagreement with Nord Stream 2, we will find all securitization items in speeches of the Polish politicians. Speeches which securitize a topic within military, politics and economy in amount of analyzed documents are similarly represented with more representation of political securitization. The idea is to present the project not as a business deal but as a political tool. (de la Infanta, 2021).

Poland openly admits that it is a political decision to stop Nord Stream 2, no matter of how low priced will Russian gas be and it was a political choice to buy more expensive LNG American gas. (de la Infanta, 2021)

To conclude, Polish grammar of securitization is the most visible, showing how securitization move in speech act should be. The polish position of Nord Stream is the most hostile when analyzing separate attitudes and words of polish political elites to express their dissatisfaction. The threat perception is high, despite a small energy dependence in Poland. Enmity in Poland is reflected in looking for other suppliers than Russia, to cut off the dependence on Russian gas completely, looking for allies against Russia in Europe and out of Europe, in securitisation of Russian gas dependency in all sectors, as well as of securitisation of Russia.

### **2** Regional Energy Security Community

The Regional Energy Security Community is formed by countries which perceive possitively the interdependence on supplying russian gas. They do not securitize russian gas, in contrast with the Regional Energy Security Complex. They might desecuritize the topic of the construction of North Stream 2, but on the other hand, since energy is a security issue, they use "antagonistic securitization". We begin providing a network analysis graph of amity in securitization speeches, presented by various states: Austria, Slovak Republic, Czech Republic, Hungary, France, Germany, and Russia.

Some of the countries perceive very strong amity towards the project of Nord Stream 2, while other countries, such as Slovakia and Czech Republic, are more neutral to this project, because of their close neighborhood to Poland. In this chapter we will evaluate countries of Central Europe: Slovakia, Czech Republic, Hungary and Austria. Russia's attitude towards Nord Stream 2 will be evaluated also, since the mentioned countries form Energy security community with Russia.

## 2.1 Slovakia

Central European countries do not share the same view as Poland, which can be seen in speeches by policymakers. Some of them depended on the gas supply from Russia more than 80%.

There are very few speeches by Slovak policymakers. Since Slovakia was until 2022 dependent on 100% gas supply from Russia, and does not have any access to sea, compared to Poland, LNG was not an economic option for Slovakia or for other countries in Central Europe, until the explosion of the Nord Stream pipelines.

At this time, the Prime Minister of Slovak Republic - **Rober Fico** has articulated his concerns during the working visit of Prime Minister of Ukraine Arsenij Jacenuk in Slovakia.

Several months it has been told within European Council, that it is necessary to help to Ukraine in order to keep her status of transit country. Suddenly, there was an announcement, that Gazprom has signed an agreement with gas companies from western EU countries about the possibility of building another line of Nord Stream. I will use an expressive expression - they make idiots from us. It is not possible to talk politically about the need to stabilize the situation for several months and years and then take a decision that puts not only Ukraine but, above all, Slovakia in an unenviable situation. These are gas transits in huge volumes through Ukraine and Slovakia, and if this transit is interrupted, Ukraine will lose billions and Slovakia hundreds of millions of euros. (Government office of Slovak Republic, 2015)

We can observe that Prime Minister of Slovakia tries to uphold the gas transit via Ukraine and therefore via Slovakia, because of transit money which can be lost. But he is diplomatic; knowing that Ukraine is totally against this project, since Jacenuk has pointed out that that the project is anti-Ukranian and anti-European. The Slovak prime minister does not express his opinion about Nord Stream 2, knowing that cheap gas will be necessary in the future in Europe. Securitization is mostly about Ukraine, but concerning her political and economic situation. We do not observe any remark of securitisation of new energy project. On the contrary, the interdependence on Russian gas is perceived positively by Slovak leader and he desires to keep the status quo- therefore to supply cheap Russian gas to Europe via Ukraine and Slovakia.

The new Prime Minister of Slovakia **Peter Pellegrini** stated at the signing ceremony of the supply of nuclear propellant agreement for Slovakia:

Slovakia is one of the most open economics in the world. Therefore, it is crucial and important for us to have well-balanced political relations with all countries. I want to declare very clearly, that Slovakia wants to have friendly relations based on mutual respect with Russia. These relations should be based on the confidence, pragmatic cooperation, in the way, how it should be for modern countries of 21. century. Russian Federation is one of the most important business partners with Slovakia out of the EU countries. We see a big potential in the future. Our cooperation is present not only in a commercial and energy sector, even though it is a key area. I would like to thank you, Prime Minister, for noting that the security of the Slovak Republic's energy will in no way be threatened in the future. This is good news for the people of Slovakia and for Slovak companies. I would like to thank you as the head of the Government for this clear-cut pragmatic position. Slovakia wants to continue to be a transit country for gas and oil, as it is nowadays. Transport will become another important pillar. Russia is a good partner in area of energy for Slovakia, and Slovakia wants also to be a good partner for Russia and fulfill its obligation. (Pellegrini, 2019)

Pellegrini declares that friendly relations are important. Especially as Russia is the third most important foreign business partner. He is pleased about the declaration of Russia and continuation of energy supply. For the Prime Minister, it is important to keep the status of Slovakia as a transit country and to carry on deliveries of Russian gas to Europe. He wanted to point out, that the desire of Slovakia is to transit the Russian gas. In 2019, it was not yet clear, how Slovakia can be connected to Nord Stream 2. Pellegrini might have been talking about the transit from east to west.

Moreover, there is no securitisation of Russia or Nord Stream as in Poland's case. It might have been due to the fact, that there was already some reflection of the possibility to deliver gas anyway via Slovakia to east and south thanks to connection with Nord Stream 2. On the contrary, Pellegrini expressed that Russia is a good partner in energy. The Slovak Republic represents therefore a totally different attitude about Nord Steam than Poland.

After the press conference, Pellegrini was faced with a direct question from a Russian journalist about the fact that last month he, along with President Trump,

spoke out against the Nord Stream 2 project and supported reverse-flow gas supplies to Ukraine. She stated also, the fact that Slovakia is earning money on reverse–flow to Ukraine. She wanted to know reasons of this declaration on which the audience received a diplomatic answer from Pellegrini:

The attitude of Slovakia to Nord stream 2 has its rational justification. Yes, initially this project had the capacity of changing existing gas supplies from Russia to Europe, and, of course, (we have stated this openly), this may have a significant impact on the infrastructure that goes through Slovakia. Based on this understanding, the Slovak Republic has adopted this position. (Pellegrini, 2019)

We can observe that Pellegrini is justifying logically his attitude about Nord Stream 2. He expresses the fair of discontinuation of Russian gas via Slovakia, if the project is finished.

On the other hand, we are looking for opportunities to use the existing Slovak infrastructure and include it in gas transit in case Nord Stream 2 becomes operational. Also, the Slovak Republic is looking for opportunities for our transit infrastructure to be included in gas supplies, which, in the future, will go through our territory as part of the Turk Stream. If Slovakia could find opportunities for cooperation in the first and the second case, it would alleviate any economic ramifications. Of course, it would not be good if our territory were left out from this supply system. You should realize that it has economic reasons for us. We must deal with this matter very seriously. Today, we listened to the positions of the ministers and the Prime Minister of the Russian Federation. (Pellegrini, 2019)

Prime Minister Pellegrini is looking for possibilities of Slovakia to be connected to these new projects of Nord Stream 2 and Turk Stream. He is not securitizing either of them. On the contrary, he shows Amity towards the transit of gas from Russia and also seeks opportunities, how to be connected to other new pipelines. His attitude towards Russia and Gazprom is amicable. Prime Minister Pellegrini even proposed to Gazprom the territory of Slovakia for its stock of gas. Towards new pipelines as Nord stream 2 and Turk stream he does not express any negative feeling, on the contrary he is pragmatically looking for paths, of how to be connected to these pipelines. We do not observe any securitisation of new pipelines and any securitisation move.

In September 2020, Secretary of Ministry of Foreign Affairs, **Martin Klus** proclaimed during the Slavkovsky formation S 3 (regional platform of Slovakia, Austria, and Cheque Republic) the fact:

Even though Slovakia, Cheque Republic and Austria differ in the question of the Nord Stream 2 project, we agree that beside the economical aspect of the gas pipeline from Russia, there is a strong geopolitical aspect. And we have to take this in consideration when making decision. Keeping the gas transit via Ukraine should be not only for Slovakia, but for the whole Europe an important economic and security guarantee. (MZV SR, 2022)

The attitude of new government members is not as amicable towards the Nord stream 2 project, but we do not observe securitization speech as in an example of Polish counterparts. We can observe antagonistic securitisation where referent object is considered the whole European Union, since Klus talked about geopolitical aspect of the project. This small change in a positon of a new government towards Nord Stream 2 does not place Slovakia to the Regional Energy Security Complex since there is no securitisation of the project as a dangerous one.

In july 2021, New Foreign Minister of Slovakia Ivan Korčok commented that:

Thanks to the Common Agreement between USA and Germany in case of the Nord Stream 2, the strategic aspect of the Ukraine was confirmed for security of Slovakia and the whole Europe. This agreement represents an important obligation and a political signal from United States and Germany by the renovation of transatlantic cooperation, which is within a security interest of Slovak Republic. (TASR, 2021)

Slovakia is accepting the agreement between Germany and USA. Korčok is expecting from USA and Germany their influence on Russia, to keep a Russian gas via Ukrainian territory, which is one of the key elements of the Agreement. For Slovakia it is convenient to have good relations with Moscow because Slovakia would buy the Russian gas anyway. At the difference with Poland, Slovakia does not have a possibility to build so easily LNG terminals due to the distance from the sea. For Slovakia, it is more advantageous to focus on the gas supply via pipeline. But considering the geopolitical situation where Russia is focusing now on the Asian market concerning gas export, Slovakia is preparing LNG terminal inside the country on Danube near the favourite and densely populated area Ružinov. LNG for gas as an alternative is planned over Danube in Slovakia, Rumania and Austria. (Jenčová, 2021)

Perception of positive interdependence of gas by Slovak policymakers derives also from history, since there were no problems with supply in the past on the Russian side. Slovakia did not share any threat perception to be dependent on 100% on Russian gas as it is in case of Poland which is dependent on less than 60%. Although Slovakia participated in a signature of the letter signed by nine Prime Ministers in 2016, the situation has changed since then. In the letter, they expressed their worries about the change of transit flow of Russian gas by avoiding Ukraine, which is against the priority of Slovakia in the area of securing energy security. (de la Infanta:2021)

Also, what is important to understand is the fact that Europe can not maintain economically the actual situation and avoid buying cheap Russian gas preferring other more expensive options such as LNG from U.S or Norway. Within several years, Europe will return to buy a cheap Russian gas which will be delivered from Germany from Nord Stream 2 if operational and repeared, and will come to Slovakia via Moravia – Czech Republic and will continue towards Austria or Ukraine. Slovakia will become an intersection of supplies from western and southern pipelines. Through Slovakia, gas supply will flow to Ukraine, which is a new situation as it was until now.<sup>7</sup> Thanks to this, Slovakia will gain other transit fees on Russian gas, this time coming from west part. It will be equally economically advantageous as with unique flow east to west, which is maintained. This advantage was quickly understood also by Czech Republic and Hungary and we can see it reflected in the speeches of policymakers. Amity pattern relates to connection of Nord Stream 2, possibly of Turk Stream, offer of further undeground stocking for Gazprom's gas.

# 2.2 Austria

Austria was a participating country in Nord Stream 2 with OMV. During the visit of Pompeo – US Minister of Foreign Affairs in august 2020, the Prime Minister of Austria showed to Pompeo a card of Austria, reminding him that Austria is a neutral country.

Austria and Italy were the first countries to rebel against the US attempt to influence Europe's supply of energy from Russia. Austrian Vice-Chancellor **Heinz Christian Strache** called for an end to Moscow's sanctions. Due to sanctions on Russia, which were also adopted by Brussels under pressure from Washington, EU member states are starting to boycott sanctions against Russia. *"That needs to be stopped"*, Strache explains in the Viennese daily Oesterreich, adding that *"sanctions on Russia have caused damage to the Austrian economy"* (Sudecký, 2018).

"It is an extreme time for sanctions to be lifted and security and economic relations with Moscow to return to normal" From 2014, when the sanctions were imposed, until 2016, Russia lost 25 billion of Euro, but Europe lost up to 100 billion Euros (Sudecký, 2018). This statement came for the first time from a top leader of an EU country, which were followed also by Italian polititians.

<sup>&</sup>lt;sup>7</sup> The Exception of Russian gas flow from Slovakia to Ukraine was in 2015, where Slovakia enabled reverse flow to Ukraine, which was a success and saved Ukraine in winter.

Austria is presenting its opinion which is against sanctions. This is a sign that a country demonstrates amity perception of Russia. As we can see later, leaders of Austria are strongly criticizing US sanctions against European companies involved in a project and demonstrate strong support of project, like Germany. Austrian politicians are most concerned about the fate of the semi-stateowned company OMV, which is cooperating with Russia's Gazprom on the North Stream 2 project.

### Strache warned:

Sanctions had forced Russia to cooperate more with China. The trade and sanction wars that are currently underway are an unfair means of competition, which pushes rivals out of the market. (Sudecký, 2018)

Austria is strongly criticizing santions against European companies, because in the future this practice from the US can block future projects in energy between Russia and European companies. This became a reality and the situation led to the fact that Russia is for the moment choosing its partners from Asia instead of Europe due to the explosion of the Nord Stream pipelines in september 2022.

**Sebastian Kurz** – Austrian Prime Minister, expressed his opinion about Nord Stream 2 at the Press Conference with President of OMV<sup>8</sup> Rainer Seele. Sebastian Kurz declared: "We can complete this project. This is the case that two routes are better than one, and three are better than two" (Proquest, 2019). Kurz was defending the importance of diversifying the routes of the European gas market. Amity can be percieved clearly towards the project in his speech presentation.

### 2.3 Russia

The Nord Stream 2 project differs from Nord Stream 1, since in this project, we can observe the intents of an external actor to influence the construction with the aim to block it completely. For Russia, the project of Nord Stream 2 is one of its main disputes against USA. As Russia is dependent to a large extent on its gas exports, the aim of the external actor, which is USA is to maximize pressure on Russia's income from gas exports, having consequences on national and defense budget (Dobbins, 2019, p. 62). Like with Nord Stream 1, the key speakers for Nord Stream 2 is President Putin and Medvedev. Since the population of Russia is not politicised and securitised with the project, the main audience is European. Russian leaders use the same type of reasoning as Germany and Austria, accentuating the commercial benefits of the Nord Stream 2. They often mention

<sup>&</sup>lt;sup>8</sup> The OMV Austria and other five European energy companies are involved in Nord Stream 2 project of offshore gas pipelines linking Russia and Germany through Baltic Sea.

also supply security for Europe due to its diminishing reserves. Therefore, the majority of speeches are from press conferences or working visits in other European states.

The "*antagonistic securitisation*" is used by Russian leaders, accentuating the enhancement of Europe's energy security in a situation where European production will decrease. Nord Stream 2 is promoted also as a project, which will enhance the onshore infrastructure to transport gas from the pipelines across Europe. This will lead to inter-country connections and reverse flows.

Desecuritisation is visible mainly in environmental discussion, where it is argued that thanks to the monitoring of the Baltic Sea pipeline, Nord Stream 2 is fulfilling high standards of environmental protection, especially promoted by Energy Minister Novak.

President **Putin** has reassured that the Nord Stream 2 is a commercial project, accentuating that government is not involved in the project. He proclaimed the same statement as does Angela Merkel about commercial project. Moreover, the idea of only a commercial project was presented ten years ago about Nord stream 1 by Medvedev.

The desecuritisation and depolitisation is direct. The states within Regional Energy Security Community do not depreciate the issue from security and political area to the level of economic and environmental. Rather, the topic is referred as the element of security, but not as a threat. It is presented as something that boosts energy security. For this situation, the author invented the term "antagonistic securitisation", which can be visible in the speeches of Russian politicians.

**Zavalny** as chairman of the State Duma Committee on Energy commented on the Austrian position about the statement made by Austrian Foreign Minister Alexander Schallenberg, about rejecting Washington's extraterritorial sanctions against the Nord Stream 2:

I would call this position the position of common sense. Europe depends on energy supplies, it is clear that Europe needs gas, only Russia can offer the necessary volumes of gas at affordable prices. It is clear that both Europe and Russia will benefit. (Tellerreport, 2020)

This is an example of the "antagonistic securitisation", accentuating the enhancement of Europe's energy security. Moreover, economic aspects of the projects are promoted. He continues by pointing out about external actor:

The United States does not like this alignment, because they want to dominate both politics and the economy [...] And it is clear that European countries, such as Austria and Germany, which pursue a more independent policy, talk about this. And other countries that are more dependent (the Baltic countries, Poland) either take a negative, aggressive position with respect to Russia, or a neutral position. It's all visible, everything is clear - goals, objectives. (Tellerreport, 2020)

Zavalny expressed his opinion on the statement by Austrian Foreign Minister **Alexander Schallenberg** that Vienna rejects Washington's extraterritorial sanctions against the Nord Stream 2 gas pipeline project. He presented the same position about the Austrian statement, which means also depolitisation. Common sense is the only idea which leads to the construction of this project. He explained it in a clear and simple way. Zavalny uncovered the interests of USA behind its acting.

We can observe the merging of two RSC - Regional security complexes, where Germany and Austria were a part of EU-Europe RSC as a great power and Russia represents a separate RSC also as a great power. Applying it in energy security within Regional Energy Security Complex/Community, Germany, Austria and Russia - are merging within energy security more quickly also thanks to US actions where Amity is reinforced mutually. They represent the most stable actors of Regional Energy Security Community. (de la Infanta:2021)

Important to the analysis is to include the reaction about the criticism of the project by the external actor – USA, a crucial part of the theory of Speech act, which says that a securitisation act is based also on the reliance on its own resources, trying to govern its actions by its own priorities (Buzan et al., 1998). The reaction from Russian leaders follows after the declaration of US President Trump:

I think it's very sad when Germany makes a massive oil and gas deal with Russia, where you're supposed to be guarding against Russia and Germany goes out and pays billions and billions of dollars a year to Russia. We are protecting Germany, we are protecting France, we are protecting all of these countries and then numerous of the countries go out and make a pipeline deal with Russia where they are paying billions of dollars into the coffers of Russia (Kajmowicz, 2020).

The Press Secretary for the President of Russia referred to this "as egregious example of unscrupulous competition motivated by forcing European buyers to purchase more expensive LNG" (Kajmowicz, 2020).

The press secretary had the same opinion as the German population in polls and some politicians from Regional Energy Security Community, that USA is forcing Europeans to buy more expensive LNG from USA. **Peskov** did not agree with Trump's comments on the political aspects of the pipeline. He stressed that Nord Stream 2 is a purely commercial project that corresponds to the interests of suppliers of natural gas and the buyers of natural gas in Western Europe" (Kajmowicz, 2020). The position of USA, which is justified by theory about emphasising the actions of its own priorities, is strengthening the countries in the Energy Community to a more reactive position, as was demonstrated in the speeches of Russia, Germany and Austria.

To sum up, the Russian attitude and the way of how Russian politicians endeavor to dispute politicisation and securitisation of Nord Stream 2 is done in the same way as Austria and Germany, although Russia is more diplomatic in its speeches. Usually, the speeches of Russian politicians are articulated in economic terms, using the same words. In speeches are only a few desecuritisation declarations because as explained, the topic is handled within security area. For this situation, the notion of antagonistic securitization is used, invented by the author. Since 2020, the countries in Regional Energy Security Community have had to face the involvement of an external actor - USA in case of Nord Stream 2. Therefore theoretically, the overlay of external actor is validated and analyzed at least within some of the actors. In many speeches, a leader of one country from Energy Community is supporting the reasoning of the other country from Energy community. An interesting part of the conclusion is that compared to Nord Stream 1, the case of Nord Stream 2 differs curiously. The external actor with its overuse of sanctions targeting European companies involved in the project, provokes the rapprochement even closer of the countries within the Regional Energy Security Community. However, the one can notice that for Austria, Russia and Germany, due to their direct involvement of its companies or the future prospect of becoming the main gas hub for Russian gas in Europe, the speeches are profit driven and therefore can be one-sided. The speeches of Russian politicians can be analysed also within the context of the hypothesis one, analysed in the section three of this paper. The hypothesis suggests that Russia was involved to the sabotage of its own pipeline. From the speeches of Russian politicians, we can observe a strong motivation to export its gas to Europe, which was considered as the best buyer comparing to other clients.

# 2.4 Czech Republic

Czech Republic is not securitizing the project of Nord Stream 2 and therefore is within Regional Energy Security Community. There are only declarations of some of the politicians about disagreement with the project, without further explication of the reasons of disagreement. Moreover, the project of Nord Stream 2 is beneficial to the country, since it will be connected via the new Eugal gas pipeline to Nord Stream 2. Strong support of the project and of supply of Russian gas is presented by the President of Czech Republic.

The Prime Minister **Bohuslav Sobotka** received the Vice-President of the European Commission in 2015, Maroš Šefčovič, at the Straka Academy. The

topic of the meeting was the Energy Union project, which will be a priority of the topics promoted by Czech Presidency within the Visegrad Group<sup>9</sup>

I am glad that Prague is one of the first stops on Vice-President of European Commission Šefčovič's journey through Europe. In the Energy Union project, the Czech priority is to complete the internal energy market. At the same time, the Czech government will continue to insist on its own creation of the energy mix, including the core. In the further development of the Energy Union, the Czech Republic will strive for balanced adherence to the three European goals - security, price sustainability and environmental protection. (Government Office of Czech Republic, 2015)

In this speech, we do not observe any securitization of the project. Contrary, price sustainability and environmental protection is important for the Czech Republic, therefore we can deduce that he is in favour of the Nord Stream 2, since the cprices after the completion of the project will be reduced for gas. Moreover, LNG is criticized by experts for being unecological due to the way, of using chemicals for its production. Side effects of using liquid gas for cooking or heating are unknown yet.

Czech President **Miloš Zeman** is presenting the point of view of the whole republic: "I am glad that the Czech Republic has its own stance [on the issue] and protects its own interests" (Russia Today International, 2017). During an official visit to Russia, the Czech leader explained that the decision to support the Nord Stream-2 project was taken on the basis of recommendations by the Czech Industry and Trade Ministry. Cooperative Interdependence is considered as positive and the President presents this point of view for the whole Czech Republic. For the President and Ministry, the supply of cheap gas is important.

He pronounced the words about "*protection of its own interests*", since in July this year, there was the visit of US President Trump in Warsaw, putting pressure on leaders in the CEE during the Summit of the "Three Seas Initiative", where the Czech Republic was present also. The aim of US President was promoting US liquefied natural gas exports in front of dozens of leaders from Central and Oriental Europe, a region strongly reliant on supply of Russian gas (Gotev, 2017).

Two years later at the Zofia forum, the President mentioned about the topic of National interest to the Czech Republic is that according to his analysis, the project of Nord Stream 2 is economically favorable for Czech Republic.

<sup>&</sup>lt;sup>9</sup> V4 is a cultural and political alliance of four countries of Central Europe (the Czech Republic, Hungary, Poland and Slovakia), all of which are members of the EU and of NATO, to advance co-operation in military, cultural, economic and energy matters with one another.

According to Czech President Zeman, who expressed his point of view on Žofínske Forum on the subject of Czech Republic National interest, the project of Nord Stream 2 is economically advantageous for the Czech Republic.

"I have let to make an analysis of the Nord Stream 2 gas pipeline and made sure that it was economically advantageous for the Czech Republic" (CTK, 2019). He added that this construction is allegedly already 80% completed. The President then continues with criticism of USA.

I see no reason at all why the 'big brother' overseas should comment on whether or not the pipeline should serve its purpose. Germany and Russia have agreed on the project and the others have nothing to talk about. (CTK, 2019)

Mutual interdependence is seen as positive by the President. He expressed criticism towards USA who has no right to talk to other states' businesses. Then he is reasoning with economic terms. The Czech Republic does not possess energy raw materials and must import gas:

We have two options - either to import liquefied natural gas from overseas, or to import it from the other side of the globe in non-liquefied form. The problem is that the liquefied one is at least 30 percent more expensive than the nonliquefied one. The price difference is too big to be overlooked. (CTK, 2019)

Zeman has expressed the pragmatic point of view about US LNG and about other suppliers, which are too distant compared to Russia. He is maintaining the same position, as several years ago and supports Germany and Russia in doing its business. In this way, he is strongly desecuritizing the issue, because the project is seen as purely economic with no risks for the security of Europe, as it is presented by USA. In this way, Zeman wanted to uncover the real interest of USA to sell its gas in Europe. He demonstrated Amity towards the project and that security interdependence is seen as cooperative, the supply of cheap gas is a priority. Moreover, he criticized "*big brother*" meaning USA for meddling in the internal affairs of Germany and Russia.

The meeting between the President of the Republic Miloš Zeman and the US Secretary of State **Mike Pompeo** at Prague Castle took place in a friendly atmosphere in august 2020. Zeman repeated his point of view, which he maintains (the support of Nord Stream 2 project), even though USA was lobbying for its LNG gas. As for Russia and China, the President of the Republic emphasized at the meeting that "his policy is pragmatic in the direction of economic diplomacy, not the interests of others" (Zeman 2020). In this way, he diplomatically answered, that the Czech Republic will not buy US liquefied gas or will not cancel other ongoing projects with Russia in nuclear power plants, since the President and his country will not be subordinated to interests of others. In the official letter President Zeman answered the questions asked by the author about the working

visit between U.S. Foreign Affairs Minister and President Zeman. He stated that he recognized

in the construction of the Nord Stream 2 in the long run, a huge economic potential for Czech Republic because it would be possible, after its finalisation to transport gas for lower price than it would have been in a case of U.S. liquefied gas. On the contrary, the American government, within an economic diplomacy tries to ensure a market for its production, therefore USA is against the construction of the Nord Stream 2. It is predictable, that similar positons were supported by U.S. Minister of foreign affairs during his working visits in Czech Republic and other Central European states. (Zeman, 2020)

He presented a view that it is important to look on economic advantages and be pragmatic. Zeman also expressed his opinion about Poland and its attitude towards Russia. Zeman said that he "*understood Poland's bitterness because the pipeline would go outside its territory along the Baltic Sea, losing transit fees*"

Holík, a member of committee from SPD political party expressed his opinion about power games played within the region of Central Europe:

Czech Republic is a sovereign state and therefore it is important to push its own opinion. Not by what we're peeking at from the outside. I am an older year and I remember the Warsaw Pact and the CMEA, when we were in some subordination. In 1989, the slogans on Wenceslas Square read: We are not like them. But we are making the same policy now. We are in subordination again. (Sputnik news, 2020)

He also said that diplomacy should seek a common path, not a path to hostility. And he recalled the case of ricin, which he considers a fake. "We fired agents for nothing. We changed the name of the streets and the like" (Sputnik news, 2020).

Holík is criticizing the fact that external actors try to influence the position of Czech Republic, which is not favorable for the country, since they push Czech Republic to be presented as an enemy to Russia. Russia was a traditional supplier of gas and just because an external actor is considering it enemy, it does not mean that other countries should behave in this way. He stated that since Czech Republic has been in subordination within the EU and NATO, it has to listen to orders from these centers and act in favor of these institutions, even though he considers that there is a game played from the US side.

Gas from Nord Stream 2 is also to be used by the Czech Republic. Country might be connected to the undersea gas pipeline via the new Eugal gas pipeline. Although Prague initially criticized the plans to expand the Nord Stream gas pipeline, it then abandoned critics. In December 2015 the government decided on a proposal from the Minister of Industry **Jan Mládek** not to join the member states' letter against Nord Stream. We did not find any securitisation of speeches among politicians at the beginning of the decision to construct the project.

Policymakers were worried especially about the possibility to maintain the transit via Ukraine due to transit fees for Czechia. Even though, their attittude was neutral towards the project. But, when they negotiated the conection via new Eugal to Nord Stream 2, the attitude towards Nord Stream is even positive. Altghough the President Zeman was in favor of the project since its beginning. Interdependence on Russia in energy issues was seen positively all the time. The transit character of the country can be reinforced thanks to the Nord Stream 2 if operational in the future, since gas will flow to other countries in Europe from Czechia. Amity is presented within a strong criticism of US mendling to European business deals, critics of EU and NATO orders and comparing of US LNG prices with prices for Russian gas. Hence, the Czech Republic belongs to group of countries belonging to the Regional Energy Security Community. (de la Infanta, 2021)

# 2.5 Hungary

Hungary was not securitising Nord Stream 2, since it was not clear about possibilities to be connected to it. Nowadays, it has very favorable opinion about it, since Hungary will benefit also on transit of gas towards the south of Europe. Although the EU has ordeded to Bulgaria not to allow the construction of South Stream, which has also damaged Hungary. Hungary is favorable towards diversification of deliveries, which is understood here in the sense of diversification of new pipelines, contrary to Polish opinion, who strictly understand under diversification only of those who supply gas.

We can evaluate the transcript of the speech of **Prime Minister Orban** at the press conference following the meeting with President Putin of Russia.

Hungary tries to keep the ties with Russia transparent. We would like to thank to Mr. Putin for modifying the previous agreements on gas deliveries and that we will make new agreements about gas deliveries after 2020/21. Today we started talks about gas deliveries for the period after 2020-21. Unfortunately, despite all our efforts, trade has diminished at about 600 billion dollars lost. As we state, you cannot solve economic problems with political means. This will cause harm to all of us. We hope to see better relations between the EU and RF in the near future. It is very difficult to talk if we do not have a constructive dialogue with the main powers of world.

We would not want to risk losing ties with Russian Federation.

About gas delivery: we cannot avoid to be consistent and to stick on gas delivery via Ukraine. We are for diversification of deliveries. But the EU has blocked our efforts; currently we are interested in bringing back our efforts on the agenda. We have lines toward the north, if our economy demands, we will buy gas via North Stream. Hungary has a possibility to receive gas via Nord Stream2 through Slovakia and Austria. Also we can receive gas via the Turks stream. (Ruptly, 2017)

Prime Minister Orban is content to make a deal with Russia and modified his gas agreements. This is evidence that the interdependence is cooperative. His aim is to continue deliveries from Russia. He is criticizing the attitude which forces all states of the EU to pursue policy of sanctions towards Russia, which is already one of the main powers of the world. His aim is to continue to cooperate and have a connection with Russia. Orban is sticking on a continuation of gas deliveries via Ukraine. On the other hand, he is criticizing the EU, which stopped Hungary's effort to diversify in accepting the South Stream. He is not against construction of Nord Stream 2, which he expressed with the desire to buy from North Stream if there is a demand. He is positive also about the Turk stream. In his speech, there is no securitisation move towards gas deliveries from Russia. On contrary, he discussed with Putin the possibility of building new projects of gas, where Hungary can be also directly connected.

This was confirmed later by president Putin: "North Stream is about diversification. We talked about other projects. Russia can deliver gas via Hungary. It is possible to finance. It will create 10 000 high qualified jobs in Hungary" (Ruptly, 2017).

Orban expressed at press conference in 2019, his enthusiasm about connection to Russian gas via a new pipeline: "*Turk Stream is a preference (for us), the sooner we can join the better*" (Szabo, 2019).

**Bertalan Havasi, the Deputy State Secretary** heading the Press Office of the Prime Minister, informed that the two leaders Prime Minister Orban and President of Russia Vladimir Putin reviewed the status of international energy projects and their impact on Europe. Special attention was paid to the Turk Stream, which is also highly important for Hungary (MTI, 2018).

Hungary is interested in joining the energy projects with Russian gas even when there is a strong pressure from EU and USA to destroy all business conections with Russia. Interdependence on gas is seen positively. We can observe strong amity towards Russia, since they talked about Nord Stream and Turk Stream and other future projects of connection, since Hungary is regretting the non-implementation of the South Stream project. Amity is presented in searching of new connection with other projects beside the Nord Stream 2, such as Turk Stream, the criticism of EU for blocking the South Stream and general policy of sanctions against Russia. Hungary signed at the beginning of 2022, a long term contract to receive 3,5 billion bcm a year of gas from Russia via Turk Stream and further 1 bcm via a pipeline from Austria. Later just before the explosion of the Nord Stream pipelines, Hungary signed a new agreement with Russia in August 2022 about the 5,8 million cubic meters of gas a day to Hungary on top of the contract quantity already in force (Politico,2022) The gas is sent to Hungary via Serbia.

# **3** Hypothesis about explosion of the Nord Stream 1 and 2

In the end of February 2022, there was an explosion of the Nord Stream 1 and Nord Stream 2. Nord Stream 2 is the name of the second, newer pipeline, which was meant to greatly expand the capacity of the original Nord Stream, but was never operational. Both were disabled by sabotage. The research questions are: Who would benefit the most of the explosion of Nord Streams pipelines? Which countries loose the most out of the destruction of the pipelines? Is there a link between the speeches of politicians of selected countries and the destruction of pipelines?



Figure 1: pipeline explosion (ASHKENAZ, 2022)

# 3.1 Sabotage of own pipeline?

Most of western media accused Russia of its own pipeline sabotage right after the attack and without the plausible motives. These pipelines were critical infrastructure for Europe's energy markets. Although the opposition against the gas pipeline has been established long time ago in USA, giving them a motive to destroy, no western media was thinking about possible motives of USA and suppressed the history of US desire to destroy the pipeline. Most of the press and US politicians used the Western official line. For instance, the Washington Post wrote: "European Leaders Blame Russian "sabotage" After Nord Stream Explosion and that "only Russia had the motivation, the submersible equipment and the capability," citing only EU officials who had no evidence of Russian involvement (KELLY, BIRNBAUM & ILIUSHINA, 2022).

Other media pointing the finger towards Russia were Bloomberg, Vox, and Associated Press without any speculations about US involvement to the explosion (GREENE, 2022). The problem is that US media did not find any plausible motive for Russia sabotage. Instead, US media direct attention away from the obvious and try to find Russian motive, even though they acknowledge that there was no such a motive for Russia. For instance, the New Your Times wrote:

It is unclear why Moscow would seek to damage installations that cost Gazprom billions of dollars to build and maintain. The leaks are expected to delay any possibility of receiving revenue from fuel going through the pipes. (REED, 2022)

Secretary of Russian Security Council Nikolay Patrushev said for Russian newspapers Argumenty i Fakty. He said that exclusion of Russia from the investigation led to confusion (США унижают Германию, 2023).

I emphasize that any accusations that are not supported by the results of an impartial trial cannot be credible. Therefore, Moscow insists on conducting an objective investigation with the participation of Russia and other interested states... We still do not know for certain who exactly is the author and perpetrator of the explosions at Nord Stream. Russia was never included in the investigation of this unprecedented terrorist act.

Without it, the voicing of one-sided subjective versions of the terrorist attack does not explain anything, (США унижают Германию, 2023)

In most of the western media was promoted the hypothesis, that Russia is responsible for the attack of its pipeline, eliminating the idea that USA could have done it, until the report of Seymour Hersh as Nikolay Patrushev said:

The theme of the non-involvement of the United States and England in the terrorist act is obviously being promoted based on the audience's lack of ability to think logically, including the method of denial. (США унижают Германию, 2023)

Using a logical thinking, Russian state received every day millions of EUR for gas supply to Europe- the best client of Russia concerning on time payment and higher prices than Asia. It does not make any sense that Russia would destroy its own pipeline, destroying also relations with its European partners, who participated on the construction of the pipeline. Moreover, Russia insists on the objective investigation about the Nord Stream explosions, with the participation of Russia.

### 3.2 Why USA had the biggest interest on destruction of the both pipelines?

Second hypothesis concerns the idea that behind the explosion of Nord stream pipelines stands USA. This hypothesis is more compelling regarding US behaviour towards Nord Stream 2 and the speeches of US politicians during several years before explosion. For instance, the U.S. Department of State described in 2019 that

The United States Government strongly supports diversification of energy supplies because options help diminish the role of geopolitics in energy markets, reduce consumer prices, and enhance a country's energy security. For instance, it has been estimated that the availability of U.S. LNG saved European consumers \$8 billion by enabling them to negotiate lower prices with existing suppliers.... The United States' intention is to stop construction of Nord Stream 2. The U.S. position opposing Nord Stream 2 has been consistent across multiple administrations, as part of a longstanding practice to promote energy security through diversification of energy supplies by country of origin, path of delivery, and fuel types, including renewables. (U.S. Department of State, 2019)

The reality in Europe nowadays does not reflect any of the above mentioned comments made by U.S. government, since the negotiation position of Europe drastically diminished after the destruction of the Nord stream pipelines. The prices increased dramatically and Europe's energy security is threatened. Therefore the governments promoted the savings on energy for everybody by diminishing the heating temperature in winter. In Southern Europe would not be allowed to cool down the high temperature in public buildings, hotels and infrastructure of transports under 27 Celsius, heating in winter would be limited to 19 Celsius.

Concerning the attacks on pipeline, some U.S. personalities present their ideas about the U.S. involvement in explosion. For instance, one of the hosts of Bloomberg was a **university economist from Colombia University Jeffrey Sachs.** He said that he "would bet that the attack was a US action, perhaps US and Poland"(Nord stream attacks, 2022). Sachs cited radar evidence that US helicopters, based in Gdansk in Poland, had been hovering within area of the

explosion just before the attack. Although Western intelligence claim that Russian ships were observed in the area during this same timeframe, though it does add for US responsibility. Sachs also talked about propaganda system in which we are operating:

I know it runs counter to our narrative, you're not allowed to say these things in the West, but the fact of the matter is, all over the world when I talk to people, they think the US did it.... Even reporters on our papers that are involved tell me, "Of course [the US is responsible]," but it doesn't show up in our media. (Nord stream attacks, 2022)

Sachs also cited the threatening statements of **US president Biden** (Feb. 7, 2022) and Blinken as evidence:

If Russia invades — that means tanks or troops crossing the border of Ukraine, again — then there will be no longer a Nord Stream 2, We will bring an end to it. (DAILY MAIL, 2022)

This statement is quite big evidence that USA can be behind the explosion, because the president Biden was not able to keep the secret operation prepared by CIA secret, even if he was asked to keep it secret.

**Olaf Scholz**, a Chancellor of Germany and present at the press conference when Joe Biden was menacing with ending of the Nord stream 2, was only listening in disbelief without any reactions. And when a journalist asked him what is he thinking about such a plan of USA to finish with Nord Stream 2, he only answered: "We do everything together. There is nothing that we do not do together without United States, so just remember, we do everything together. "(MC GOVERN, 2023, min 9)

**Seymour Hersh** said in his interview for Berliner Zeitung that the Secretary of Foreign Relations **Victoria Nuland**, who was very active in a coup in Maidan in 2014, expressed something similar as Biden, several weeks ago.

Joe Biden as a newly elected president made opposition to the pipeline one of his top administration priorities. Also Secretary of State Anthony Blinken, during his confirmation hearings in 2021 told to Congress that he was "determined to do whatever I can to prevent Nord stream 2 from being completed. "Several months later, the State Department replicated that "any entity involved in the Nord Stream 2 pipeline risks US sanctions and should immediately abandon work on the pipeline" (GREENE, 2022).

If we observe the speeches of the previous president **Donal Trump**, they are in alignment with the official foreign policy of USA, although Trump did not

have such aggressive speech towards Russia as Biden does. For instance, during the NATO summit president Trump called, Nord Stream 2 a mistake saying that Germany buying Russian gas made it its 'captive' But after the poll made about Trumps comments in Germany, 84 percent of respondents labelled his comments as "completely absurd." The poll showed 92 percent were even more cynical, saying that they suspected that Trump's motive for making the comments was primarily to promote the sale of US liquefied gas in Europe and Germany. It is a reality in 2023 and Germany is buying massively US LNG. (RT, 2018)

Germany on the other hand, considered the Nord stream 2 an important for German economy and even German politicians made an effort to maintain their own opinion about gas pipeline. USA tried to present Nord stream 2 as a political weapon, presenting themselves as a reliable supplier of gas, destroying an image of Russia

A prediction of the situation which would be prepared by USA and was realised in 2022, was pronounced in a diplomatic way by **Andrey Konoplyanik** (Vygon consulting, 2017), **a representative of LLC Gazprom export** in his report of American LNG on the analysis of evolution of European gas legislation.

Its further changes discussed today could be dictated by the desire of the US administration to artificially increase the competitiveness of its gas on the European market. Through the creation of additional barriers for Russian gas on the EU market, gas prices for end consumers will grow, which will increase the attractiveness of this market for US LNG suppliers

We have to take into account the statement that energy industry will face a global oversupply of natural gas for the years to come and U.S. LNG capacities were under construction in 2017. That meant the expected increase of existing export capacities by at least 34% by 2022 whereas global gas demand growth so far remained behind expectations. Therefore, LNG liquefaction operators and suppliers need to find sales markets for their surplus LNG volumes in order to amortize their investments made. This was arranged thanks to explosion of Nord streams gas pipelines, since the demand of LNG to Europe has augmented by 60% in 2022 to make up for declining pipeline shipments from Russia. On the other hand, in Asia, LNG earned a reputation as an expensive and unreliable fuel source, due to supply disruptions. In Emerging Asia's LNG demand fell of 15 %. (IEEFA, 2023)

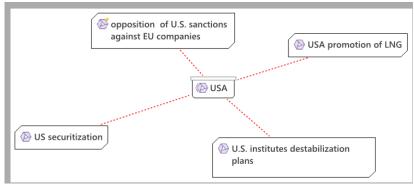
In this case, even massive marketing campaign did not help to US exporters to sell its LNG gas to lucrative European market before 2022. On the other hand, the destruction of Nord Stream pipelines in 2022 helped to US exporters of LNG.

The opposition to the Nord Stream was a centrepiece, as observed thanks to the position and speeches of all US presidents. The long term goal, as known to lot of politicians in USA and Germany, has been to keep Russia isolated and disconnected to Europe, keeping disconnection between Germany and Russia, keeping countries in Europe tied to US markets (GREENE, 2022). Since the signature of the common project of the pipeline between Germany and Russia, the entire system in USA started to work to scuttle it. It can be observed also in a 2019 Pentagon funded study from Rand Corporation of how best to exploit "Russia's economic, political and military vulnerabilities and anxieties" included a recommendation to "Reduce [Russian] Natural Gas Exports and Hinder Pipeline Expansions. The study accentuated that ,,the most attractive US. policy options to extend Russia, with the greatest benefits, highest like hood of success and least risk are in the economic domain, featuring a combination of boosting U.S. energy production and multilateral sanctions." (DOBBINS, 2019) On the other hand, geopolitical measures to exasperate Russia with malicious attacks and ideological measures to undermine the regimes stability carry significant risks. Military options are also evaluated, considering that only a few are likely to extend Russia. Concerning a Nord Stream, a "first step would involve stopping Nord Stream 2," and that natural gas "from the United States and Australia could provide a substitute (DOBBINS, 2019).

The Rand report is based also on the National Defence Strategy of 2018, which recognised that USA was locked in a great-power competition with Russia. The key finding is that Russia's weakness subsists in its economy which is small and highly dependent on energy exports. And that the Russian leadership's greatest anxiety stems from the stability and durability of the regime (DOBBINS, 2019).

That is why USA focused on sanctions against all companies working on Nord Stream 2 and sanctions against Russia to destroy it economically, firstly. This is visible in the resolution passed in 2019, after the Rand Corporation published its recommendations, and the **US House of Representatives** expressed their opposition to the construction of the Nord Stream 2 pipeline. **According to the resolution "Nord Stream 2 is a drastic step backwards for Europe's energy security and the interests of the USA."** Congress called on European governments to reject the project and the US President to "use all available means for supporting European energy security through diversification and reducing dependence on Russia. Congress also called US sanctions on Nord Stream 2 in accordance with available legislation to sanction opponents of the USA. The text also noted that "Russia controls nearly 40 percent of gas supplies to Europe", that "11 European states import at least 75 percent of their gas needs from Russia" and that "Nord Stream 2 will increase Russian influence over the European market". (EU parliament condemns Nord Stream 2 construction, 2018)

The RAND study also recommended "providing more US military equipment and advice" to Ukraine in order to "lead Russia to increase its direct involvement in the conflict and the price it pays for it," even though it acknowledged that "Russia might respond by mounting a new offensive and seizing more Ukrainian territory". (DOBBINS, 2019) As a consequence, US energy and military aims (creating the conflict between Ukraine and Russia) were accomplished, including the export of US LNG to Europe. Sergei Lavrov prophetically stated in his speech in 2014 about Russia and Colour Revolutions, that "trying to isolate Russia is a recipe for failure. It breeds terrorism, threatens new sources of proliferation, can create a new kind of Cold War, and threatens the global economy". (CORDESMAN, 2014) As we can observe 8 years later, it turns to be a reality.



**Figure2.** Author's own research in Atlas.ti about speeches of politicians concerning the Nord Stream 2 within the Network analysis

Another post which leads to the fact that USA might be implicated to the explosion is the tweet from a Polish member of the European Parliament, **Radek Sikorski**<sup>10</sup>, a **member of Bilderberg group Steering Committee**, before he was a Polish Minister of Defence, fellow of American Enterprise Institute. Sikorski tweeted a picture of the methane leak on the ocean, saying: "as we say in Polish, a small thing, but so much joy". He added later: "Thank you, USA" with the same picture. Sikorski expressed the following:

Nord Stream's only logic was for Putin to be able to blackmail or wage war on Eastern Europe with impunity..... Now \$20 billion of scrap metal lies at the bottom of the sea, another cost to Russia of its criminal decision to invade Ukraine. Someone...did a special maintenance operation. (GREENE, 2022)

<sup>&</sup>lt;sup>10</sup> His wife is Anne Applebaum, who has been a key media figure advancing the pro-NATO narrative in the West, she is on the board of the National Endowment for Democracy – U.S. funded organisation for change and destabilisation projects- driving force behind the coup in Ukraine in 2014 to install pro-western government, and funded by NED - Kyiv Independent - Ukrainian media shaping coverage for current war for Western audiences propaganda. (GREENE 2022)



*Figure3*. Expression of gratitude to USA by Sikorski on Twitter, with the picture of methane leaking the Nord Stream pipeline

After these tweets obtained attention from those who suspected US involvement in explosion, Sikorski deleted them. Someone so well connected as Sikorski found it appropriate to publicly thank the US for the attack of pipelines.

Short after the attack on pipelines of Nord Stream, a common project of Russian and some European companies, the Russian ambassador Vassily Nebenzia to the United Nations declared to Security Council in September 2022:

US has much to gain from the damage to the Nord Stream pipeline.[...] A main question was whether the United States could gain from the destruction of the pipeline. The answer is undoubtedly [...] American liquefied natural gas suppliers should be celebrating the manifold increase in LNG supplies to Europe. (Gardner, 2022)

**Sergei Kupriyanov, a Gazprom spokesperson,** told the Council of United Nations meeting that "800 million cubic meters of natural gas had escaped. The volume of escaped gas was equivalent to three months' supply for Denmark." (GARDNER, 2022) Kupriyanov also said that: "a mine destroyer discovered at the Nord Stream 1 offshore gas pipeline in 2015 belonged to NATO. A SeaFox - NATO device, was retrieved from a depth of around 40 metres and made safe". (REUTERS, 2022) In fact, Nord Stream reported in 2015 that a "munitions object" had been cleared by the Swedish armed forces, without giving more detail on the object.

**Pulitzer Prize and other journalism prizes winning journalist Seymour Hersh**<sup>11</sup> announced on his web page Substack in February 2023 after many days

<sup>&</sup>lt;sup>11</sup> Seymour Myron ,, Sy "Hersh Born on April 8, 1937, is an American investigative journalist and political writer. He reported on chemical and biological weapons programs in the United States and received recognition in 1969 for exposing the My Lai *massacre* 

of investigations and citing source who had a "direct knowledge of the operational planning." (Hersh, 2023b) *that US Navy is behind Nord Stream 1 and 2 explosion that wrecked three out of four pipelines. Hersh claimed that Navy conducted the operation under the cover of NATO maritime exercise- Baltops 22.* Hersh suggested that Biden ordered the explosions to stop Russian President Vladimir Putin from "weaponiz[ing] natural gas for his political and territorial ambitions," as Germany — and the rest of Europe — relied heavily on Russia for natural gas.

American president Joe Biden stopped to have a confidence to Germany, and he decided to cut Berlin from Russian gas, **because he was afraid that Berlin could stop to support sanctions against Moscow.** Hersh also expressed that Biden allowed US special services to classify the operation in a way that justified not informing the US Congress about it beforehand (RT, 2023b).

**State secretary Anthony Blinken** on the press conference a few days after the explosion said:

It's a tremendous opportunity to once and for all remove the dependence on Russian energy and thus to take away from Vladimir Putin the weaponization of energy as a means of advancing his imperial designs. .... The U.S. would do everything it possibly can to alleviate the "consequences" of the sabotage as Europe is currently embroiled in an energy crisis. (MCEVOY, 2022)

In fact, Blinked had in his mind, that Russia cannot pressure on Western Europe, to stop to support USA in a conflict in Ukraine. Before, USA was afraid that the Western Europe would get out of the game. "As a reason of this decision, I consider that the war campaign did not go well for the Western Europe, and they were afraid of the coming winter. Nord stream 2 was stopped by Germany, but it was not because of the international sanctions. USA was afraid that Germany will step out of sanctions due to the cold winter." (Hersh o výbuchoch plynovodov.., 2023)

Hersh described in detailed how the operation was organised and that the explosion was done by Norway three months after the installation by USA. White House spokesperson Watson calls his report "false and complete fiction. CIA spokesperson Thorp wrote an email that "This claim is completely and utterly false." (DOORNBOS, 2023)

Hersh depicted the Executive Office Building which is connected with the White house by an underground tunnel and that at the top of the building is the room for the secret group of independent experts, called the Council of president's advisers for intelligence services. At the meeting, they figured what they would

and its secrecy during the Vietnam War, for which he received the Pulitzer Prize for International Intelligence in 1970. In the seventies, Hersh covered the Watergate scandal for The New York Times, and in 2004 he reported on the torture and abuse of prisoners by the U.S. military in Abu Ghraib, Iraq, for The New Yorker.

do, if Russia starts military operation in Ukraine. This was three months before the operation started, on 25 of December 2021.

He also portrayed that highly-trained U.S. Navy divers placed remotelycontrolled explosives on the pipelines under the cover of the "widely-publicized" joint NATO maritime exercises in June 2022, called "BALTOPS 22. Already in December 2021, a series of top-secret meetings began. They included the Joint Chiefs of Staff, the CIA, and the State and Treasury Departments. "What became clear to participants," according to his source, "is that [national security adviser Jake] **Sullivan** intended for the group to come up with a plan for the destruction of the two Nord Stream pipelines — and that he was delivering on the desires of the President." (Hersh, 2023b) Biden's decision to sabotage the pipelines came after more than nine months of highly secret back-and-forth debate inside Washington's national security community about how to best achieve that goal, according to Hersh. "For much of that time, the issue was not whether to do the mission, but how to get it done with no overt clue as to who was responsible." (Hersh, 2023b)

There was an interview organised with **Seymour Hersh** by Berliner Zeitung, where he answered some questions:

USA has a team specializing in naval mines, which is a very important area. Mine specialists are people with an important military specialization; They make sure that things that happen to get in the way of the US underwater are blown up. And, of course, among those things that have stood in the way of the US could be the underwater pipeline of one particular country. All in all, these people important to us do not always do things nicely, but there is a rule that these people always follow: working in complete secrecy.

It was clear to the group gathered in the White House that they had the opportunity to blow up the pipeline. There is a C-4 explosive that has a unique destructive power, especially when used in large quantities. It can also be used under water, for which only special sonar devices are needed. With them, this explosive can be moved and detonated under water at a distance. Sonars simply send and receive signals at very low frequencies. The use of these explosives was also an option, and the White House was informed of this possibility. This can only be deduced from the fact that 2-3 weeks later, Deputy Foreign Minister Victoria Nuland said: 'We can do it'. I think she said that on 20 January. And then President Biden said the same thing on 7 February at a joint press conference with the German Chancellor. (Scheidler, 2023)

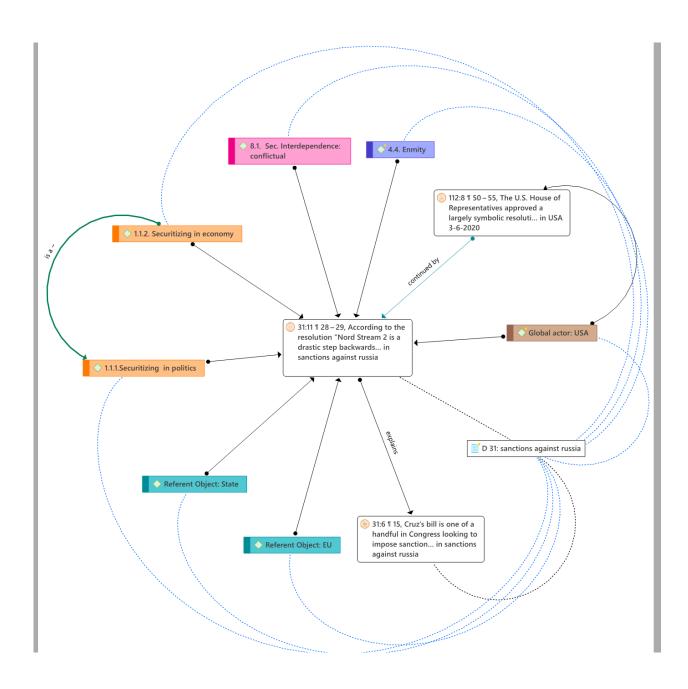
Hersh describes later the role of Norway in this terrorist act:

Norway is a large maritime country that is home to sailors. It is also a country that has energy reserves at the bottom of the sea. And here is the main thing: the Norwegians clearly intend to increase their energy supply to Germany

and the whole of Western Europe. And the Norwegians, by the way, did so after the bombing of the pipeline: they increased their energy exports. Why should Norwegians not cooperate with the US – for economic reasons? In addition, there is considerable hostility towards Russia in Norway.

**Hersh** uttered that operation team thought that the attack on pipeline is a triumph in the president's hands. But at the background of the event, military operation in Ukraine by Russia, explosion end of the operation, people who were organising this operation, did not like that and that is a reason, why they started to cooperate with Seymour Hersh - an investigative journalist. These are people who were at the top of the security services. They were against the project, because they considered it to be a preposterous act. Short after the attack on pipeline, when they did, what was said, they contacted Hersh. A reason was an anger, which was felt by many of them towards the operation. Moreover, people in pipeline industry know this story. "Short after I started to work on facts, I realised that somebody in pipeline and construction companies know about it all... Now we are selling the LNG with extreme margin profits and we are earning lot of money". (Hersh o výbuchoch plynovodov.., 2023)

Another personality who used to work as a director for CIA is Ray Mc Govern. **Ray Mc Govern, former CIA**, testified in Security Council of United Nations in support of Seymour Hersh about Nord Stream 1 and Nord Stream 2 bombarding of gas pipeline by United States. He exposed several real cases where USA was misleading, for instance the speech of Colin Powel about the chemical weapons in Iraq, accusation of Sadam Hussain which was false (MC GOVERN, 2023) and (INTEL- DROP 2023).



**Figure 4.** Author's own research about the external involvement of the global actor to influence the other states to act in a way, global actor has advantages from it.

Some politicians from Russia expressed their opinions about Hersh's investigation and about believe of the responsibility for explosion of the Nord Stream pipelines. For instance, **Russian Foreign Ministry spokeswoman Maria Zakharova** said in response to Hersh's report that Moscow has "repeatedly expressed" its belief that the US and NATO were involved in the explosions. (DOORNBOS, 2023)

**Russian minister of Foreign Affairs-Sergei Lavrov** accused the West about the attack of Nord Stream pipelines. He declared during the Summit of G20 in Delhi in India, that Russia *"will not allow to West to explode another time the*  *pipelines*". He added also that Moscow will not count on West as to be partners in energy. Moscow accused the west to be responsible of the explosion of pipelines Nord Stream just after the explosion in September 2022. Western countries rejected the accusation and they required an international investigation (SCHüRPF, 2023).

Russian deduction might not be far from reality, taking into account the US personalities who openly declare after having talked to some whistle-blowers that were helping with the operation of the gas pipeline explosion. Moreover, it is highly suspicious that Russian experts were not allowed to be a part of international investigations about explosion.

**Lavrov** announced the total reorientation of Russia's energy politics concentrating towards Asian countries at the conference in Nai Dillí:

We would not anymore rely on any partners in the West. We would not allow them to blow the pipelines again, by the way, we asked for investigation and immediately this demand on investigation was denied...Everything which is happening now is to reduce Europe to subordinate player for the USA, to undercut European competitive edge, and of course to ruin economic links between Russia and EU. This is very obvious. So, if this choice of them, which fits in the narrative, what is going on is existential from their point of view and their ability to dominate, then everything fits on the place. The energy policy of the Russia will be oriented towards reliable and credible partners – India, China. (Russia's Sergey Lavrov.., 2023)

Russia laid to the U.N. Security Council a draft resolution in February 2023 which if adopted, would ask U.N. **Secretary-General António Guterres** to establish an international, independent investigation into the attack and who was responsible. Despite the denials by US representatives, what is apparent from the speeches analysis of US politicians during last 5 years and RAND recommendations to US government, USA had the biggest motivation, the means and opportunity to organise this secret operation in order to finally put an end to the energy infrastructure connecting Germany with Russia.

Russia was not successful finally with its resolution for an investigation into the explosions at the Nord Stream 1 and 2 pipelines in the United Nations Security Council. In a vote of the most powerful UN body on Monday (27 March 2023), only China and Brazil voted with Moscow, the twelve other countries abstained. Adoption requires at least nine "yes" votes – without a veto by one of the five permanent members. The decision would have called on **UN Secretary-General António Guterres** to launch an independent international investigation into the alleged act of sabotage. Some Council members abstained from voting (Schürpf, 2023).

# **3.3** Explosion of the Nord stream pipelines organised a group of Ukrainians financed by a Ukrainian oligarch

Third hypothesis of USA and EU, which came out right after the Hersh report, is a conception that behind the explosion of the Nord Stream pipelines stands an unknown group. According to the investigation of studio ARD capital, SWR and Die Zeit, it is possible to reconstitute in a large sense how and when the attack on pipelines was prepared. As a consequence, it leads to Ukraine. However, the investigators have not found who requested for the destruction of pipeline. The investigators identified a boat, which was used for the attack of the Nord Stream pipelines. The boat was rented by a company in Poland, owned by the Ukrainians. According to investigators, a secret operation on the sea was organized by a group of six people. Nationality of the group of people is not known, because they used false passports for renting the boat. Investigators have not found any proves which would confirm this scenario; they doubt all results of the German investigators, which are not acceptable for Ukraine. In the international security surrounding it is not excluded that it is an operation under the false flag. That means that the marks have been deliberately left to indicate that Ukraine is responsible for the explosion.

**Secretary of Russian Security Council Nikolay Patrushev** told to Argumenty i Fakty about the newest hypothesis of Ukrainian group behind the explosion, which is according to him the work of USA and GB spreading the information about Ukrainian group, which organised sabotage on Nord stream 1 and 2 pipelines. He expressed his doubts about such a group to organise a sabotage of the most important energy corridors leading from Russia to Europe.

In an attempt to cover the real culprits behind this crime, the progovernment Anglo-Saxon media, identified the perpetrators – a group of Ukrainian terrorists, which was done on the orders of the aforementioned conductor. (HN240nline, 2023)

Western media attributed a certain group of Ukrainian terrorists as behind the sabotage, which once again pointed out the terrorist nature of the current Kyiv regime. If newspapers claim that a group of Ukrainian terrorists committed the act of sabotage, the question must be asked whether there is such a group at all, and whether it is capable of doing this in principle. After all, it is no secret that special-purpose units with the appropriate equipment and training are intended to carry out such actions...US and UK have such capabilities, and other NATO countries also use combat swimmers to carry out sabotage missions. (Eruygur, 2023)

Looking back to the written **speeches of the permanent missions to the U.N. of Denmark and Sweden in** a letter dated in September 2022 to the French U.N. Mission, which held the presidency of the 15-member council for September 2022. "The magnitude of the explosions probably corresponded to an explosive load of several hundred kilos" (RINGSTROM & SOLSVIK 2022). It seems logical that a simple yacht hired in Poland by a group of Ukrainians could not organise operation of this significance.

As the **Seymour Hersh** revealed in the article, **Joe Biden's** statement from that memorable press release on February 7, 2022, where he declared in front of **Chancellor Olaf Scholz** that the Nord Stream 2 gas pipeline will become history and cease to exist if Russia crosses the border of Ukraine, that was part of a plan to turn the operation of sabotage of the Nord Stream gas pipelines into an open operation, which will not require the consent of the US Congress. If the president publicly declares that the gas pipeline will end, then according to American jurisprudence, it is no longer a covert operation and there is no need for the approval of Congress. (Exploze Nord stream, 2023). **Seymour Hersh** literally wrote about it:

Several people involved in planning the mission to the pipeline were dismayed by what they believed to be indirect references to the attack. "It was like dropping an atomic bomb on the ground in Tokyo and telling the Japanese we were going to detonate it," the source said. "According to the plan, the sabotage options were to be carried out only after the Russian invasion and were not to be publicly advertised. Biden just didn't understand or ignored it." (Exploze Nord stream, 2023)

**Biden's and Nuland's** indiscretion could have frustrated some of the planners. However, it also created an opportunity. According to this source, some senior CIA officials decided that blowing up the pipelines "can no longer be considered a covert option because the president has just announced that we know how to do it." The plan to blow up the Nord Stream 1 and 2 gas pipelines was suddenly downgraded from a covert operation requiring congressional briefing to what was believed to be a highly classified intelligence operation with the support of the US military. By law, the source explained, "there was no longer a legal requirement to inform Congress about the operation. Now they just had to carry it out - but it still had to be secret. The Russians have above-standard surveillance over the Baltic Sea". (Exploze Nord stream, 2023)

**Seymour Hersch** (RT, 2023 b) came up with another paper that US is trying to "cover up" Nord Stream sabotage role. He expressed that the "the US intentionally provided false stories to the media to cover up the Washington's involvement in the destruction of Russia's Nord Stream 2 pipeline. The CIA was tasked with preparing a cover story – in collaboration with Berin's BND intelligence service – to provide the American and German press with an "alternative version" of the Nord Stream 2 explosions." The story was described

at the beginning of this sub-chapter bout the usage of luxury sailing yacht planting explosives on the Nord Stream pipelines. "In the words of the intelligence community, the agency was 'to pulse the system' in an effort to discount the claim that Biden had ordered the pipeline's destruction," Hersh wrote, citing an anonymous source with access to diplomatic intelligence.

the CIA had completed its task and, with the help of Germany, planted stories in the New York Times and German weekly Die Zeit. These referred to a supposed "ad hoc 'off the books' operation" carried out by a "pro-Ukrainian group," (RT, 2023 b)

"It was a total fabrication by American intelligence that was passed along to the Germans, and aimed at discrediting your story," *a source within the American intelligence community reportedly told Hersh. (RT, 2023 b)* 

**Mychajlo Podoljak who is an advisor** to a Ukrainian President declared at the studio ARD that "Ukraine has nothing to do of course, with the attacks of the Nord Stream 2. There is no confirmation that Ukrainian military or politicians took a part at the operation or that the persons had been sent to act in the name of Ukraine. (STARK, 2023)

As a consequence, Germany, which has been trying for many years to build its economy on the basis of a combination of cheap energy resources from Russia and advanced German technologies, understands better than anyone else that a terrorist attack on the pipeline will definitely lead the German economy to further decline. At the same time, Berlin is well aware that close economic cooperation between Germany and Russia has never suited Washington and London. Ukraine has not lost or gained anything from the destruction of the gas pipeline. Concerning all three hypotheses, the most probable seems the hypothesis two, where USA and Norway are responsible for the explosion of the Nord Stream 2. This is confirmed also thanks to Speech Act theory, where we can find hundreds of speeches by U.S. that the Nord Stream 2 should not exist.

## Conclusion

Central European countries, which were evaluated in Nord Stream 2 are categorised as neutrally favourable. They do not want to provoke its neighbour – Poland, belonging to Vysegrad group - V4 and within the area of Central Europe. As was presented in the speeches of politicians in Central Europe, these countries do not perceive a threat from Russia as it is presented by Poland. Poland is putting forward the idea that the whole Central Europe region is against Nord Stream 2. In fact, Poland is the only Central European country opposed to the project. In general Amity was strongly perceived in several countries such as Slovakia, Hungary or Austria. These countries did not have any problems with Russian suppliers in the past, neither they do perceive any mutual interdependence on gas as conflictive. On the contrary, they seek new ways of how to be more connected to the project of the pipeline in construction, or they look for new ways of constructing another pipeline with Russia. Moreover, they perceive that the European Commision is intervening in their politics, which has resulted in the termination of future pipelines, as it was in the case of South Stream.

The main objective is based on the analysis of illocutionary speech acts of the policy-makers-object of the analysis. Within Regional Energy Security Complex in CEE only Poland makes a part of it with a strong enmity perception towards the energy project. The Nord Stream 2 creates a Regional Energy Security Community. Energy community is composed of more autonomous units, with amity perception towards the energy project. The Nord Stream 2 project has contributed to empirically prove that Central Europe, with the exception of Poland, belongs to the Regional Energy Security Community. The structure of linguistics and reasoning in debates within the Community is not as manifesting as in the Energy Security Complex case. Some states in Central Europe represent a strong criticism towards an external actor – USA involvement in European supercomplex.

When a great empire collapses, each time, at the very end, this fall is framed in a massive and huge war expansion at the end of the empire's existence. This phenomenon is observed in the example of the United States which, in an attempt to prevent the change of the world order from the unipolar Pax Americana system to a multipolar world order, is trying to stop the processes of global transformation of world power and cause the collapse of Russia. It is hoped by the United States that Russia will repeat the fall of the Soviet Union and this time on the second attempt would succeed in breaking Russia into smaller independent entities with the aim of gaining control over all these small states and its natural resources. Therefore, the hypothesis two about the responsibility for the explosion of the Nord Stream pipelines seems the most probable, which was confirmed also in a Speech act analysis of the speeches of U.S. politicians. U.S. politicians from all political spectrum wished to stop the pipeline and desired Europe to diversify its supply chain of LNG gas bought from United States.

## **Abreviations:**

bcm: Billion cubic meters CEE: Central Europe IR: International Relations LNG: Liquefied Natural Gas NS2: Nord Stream 2 RES: Regional Energy Security RESC: Regional Energy Security Complex RSC: Regional Security Complexes RSCT: Regional Security Complex Theory TSI: Three Seas Initiative V4: Vysegrad group (SK, CZ, PL, HU) LNG: Liquefied natural gas

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# **MISSILE SHIELD - TRUTH AND FICTION**

# Eugeniusz Januła<sup>1</sup> - Józef Kubica<sup>2</sup>

#### ABSTRACT

The content of this article is an attempt to analyze the concept and the current and prospective state of anti-missile and anti-aircraft defense systems on a global scale. A comparative attempt was made here to compare the concepts and realities of the American, former Soviet and current Russian anti-missile systems. The authors conclude that the currently existing antimissile systems are not very effective. However, they consider the Russian system to be more mobile and more efficient. A breakthrough in anti-missile technologies can be brought only at the moment by completely innovative electromagnetic and laser installations, while Poland is a whole epoch late with its construction of a classic anti-missile shield.

#### Key words: Anti-missile shield, NATO, Armaments, Poland Army

Missile defense was a kind of natural doctrinal response to the concept of a strategic nuclear-missile attack. However, building an efficient and mobile antimissile weapon turned out to be a much more difficult task than mastering the technology of building missile offensive weapons. In fact, already in the 1960s, both the then superpowers, i.e. the USSR and the United States, began, of course, in great secrecy, to construct anti-missile weapons systems.

As it turned out later, the Soviet Union followed a much more effective path, namely, they tried to build a universal system that would be both anti-aircraft and anti-missile. Early anti-aircraft missile systems include SA-2 "Volkhov", SA-7 "Oka" and finally "Krug" and still very efficient S-200 "Vega". A considerable achievement was the construction of the S-300 anti-aircraft and missile defense system in the mid-1980s, later modified to the S-300 bis. On the basis of this system, a new one with a much greater range and significantly increased capabilities has been developed, the S-400, "Triumf", whose first batteries have been installed since 2009 in the Moscow region as well as in the west of Russia in place of the dismantled S-200.

The S-400 Triumf system, along with subsequent mutations, is considered by specialists to be the best and at the same time the most developed anti-missile and anti-aircraft operating system in the world., about 3 and a half times cheaper than the American equivalent, i.e. the "SM-3" system. Similarly, the latest mutation of the S-400 system is considered to be much more efficient and, of course, also significantly cheaper than the American one, introduced successively but at a slow pace, just in place of the "Patriot" missiles of the THAAD system.

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Russia, in accordance with its war doctrine, does not intend to build a strategic anti-missile system, believing that a very efficient operating system will effectively defend the sensitive regions of the state. At the moment, the next system, i.e. the S-500 Iskander, is already in operation at the implementation stage. This is the same missile that can also be used in the ground-to-surface version with a nuclear warhead. So the Russian Federation has obtained an efficient, universal missile that can hit targets in enemy territory at a distance of about 580 km. The same rocket can also intercept enemy missiles and aircraft at a relatively large distance from the designated target. Even at an altitude of 60 km and at a distance of 350 km It is theoretically the most effective anti-missile technology. However, it must be added here that the trial interceptions using the Iskander S-500 rocket have been few so far, and the trials that took place were surrounded by great secrecy as to the results.

On the other hand, the anti-missile strategic system, according to the Russian side, would entail astronomical expenses without increasing the defense effects if one were to be installed. Here, of course, one can discuss whether, for example, nuclear explosions of anti-missiles, the S-400 system at a distance of about 250 km north and west of Moscow, are a consequence. only in a slightly longer period of time (radioactive fallout) would not cause the destruction of this city, but let's stick to the assessments of Russian strategists for now.

The American side conceptually started similarly to the Red Russians. Namely, on the basis of the "Nike-Hercules" anti-aircraft missile, a much more powerful "Nike-Zeus" anti-missile was built. It was a very efficient anti-missile for its era, i.e. the late 1960s, with a range of about 200 km. However, this range did not arouse admiration of American strategists, because it was an operational anti-missile. As a result, the construction of a dual strategic and operational antimissile system "Spartan-Sprint" was started. In this arrangement, the "Spartan" anti-missile was to intercept incoming enemy missiles, hypothetically still over the Barents Sea, while those enemy missiles that could penetrate the "Spartan" system were to destroy operational "Sprint" missiles with a range of about 90 km. This rocket was supposed to take off with a huge acceleration of 40 g and was armed with a neutron warhead so as to destroy the incoming target and avoid damaging the defended object. The neutron warhead was a "clean" nuclear weapon, unlike the classic atomic warhead. Although the first experiments were promising, it soon turned out that the economic costs of the undertaking would be astronomical.

In order to be able to intercept about 80% of the then Soviet missiles, and it was the mid-1970s and the peace-loving Soviet Union was rapidly expanding its missile and nuclear potential, it was necessary to build about 4,000 missiles. missiles of the "Spartan" class and at least 900 missiles of the "Sprint" system. The program was abandoned when it turned out that the Soviet Union had the technical capabilities of, among others, through nuclear detonations in space, "blinding" American satellites, which were supposed to guide anti-missiles of the "Spartan" system to Soviet strategic missiles, including the largest ones, i.e. SS-18 "Satan" and SS-16. (Podvig et al, 2004)

Another return to anti-missile weapons was more visions and doctrine than real possibilities, propounded by Ronald Reagan, which was later called "star wars". These concepts, which in terms of reality were to be based mainly on laser and electromagnetic technology, were as beautiful as they were generally unrealistic in terms of technology, and not only of that time. Of course, the laser can destroy rockets, or even after separation in the last phase of the flight, specific heads of the enemy, but this laser must simply be "recharged" with huge amounts of energy. The only question is where to get it in space? It is true that more visionaries than technicians proposed various vague concepts such as transporting energy as well as laser beams using giant mirrors installed in space, and alternatively "recharging" lasers with mini nuclear explosions, but these were wishful thinking rather than technological reality. Of course, very intensive work was underway to build the next generation of lasers. Here, the greatest hopes were associated with the blue laser - of course, the color of the light. But these new lasers had exactly the same requirements as the previous generation of laser weapons when it came to the problems of energy consumption and thus the charging technology.

But the then Soviet marshals and generals, and the political team of "old Brezhnev" following them, believed that the US was about to overcome technological barriers and as a result, in the near future, the huge missile potential of the USSR would be nothing more than useless scrap metal. Here both the then Soviet intelligence centers, i.e. the "civilian" KGB and the military GRU, were discredited. Therefore, in the Soviet Union, whose economic situation was never rosy, a decision was made to carry out another gigantic phase of armaments. Simply in this relatively simple way, the then USSR was "armed" to economic death. (Januła, 1998)

It is true, however, that five of the twenty-four military technologies once proposed by Ronald Regan at Livermore Laboratory and MIT are still under development. The result of these studies is at least strategic anti-missile system, which was initially launched by the United States in 1999, and its component was to be a strategic anti-missile base of the NMD system in Poland, together with a Doppler radar station in the Czech Republic. This system is based on the first two stages of the Minuteman -3 strategic rocket, which has been operating in the United States for a long time. The next stage is a cone containing up to twenty steel "hammers; which are supposed to precisely hit individual warheads of the enemy, which are already on an orbital flight after separation.

No longer classical nuclear or explosive warheads, but kinetic ones, i.e. the proverbial hammers, are the latest technology currently used in combating ballistic and operational missiles. It turns out in practice that a precisely controlled kinetic warhead is highly likely to hit an enemy warhead. What is important, it destroys it without causing it to explode. Also, the Russians in the missiles of the S-300 system and subsequent mutations also install, for the most part, kinetic and not explosive warheads.

Doctrinally, the United States, or rather the country's politicians, maintain that the anti-missile system is being built as a kind of antidote to the offensive capabilities of a group of "bandit" states, i.e., as of today, Iran, North Korea and Syria, also Islamists. Of course, the latter mentioned by name, despite the ambitions of President Assad Jr., does not have and will not have any economic and technical possibilities to obtain an effective offensive missile system. On the other hand, the "dear leader" and great leader of the progressive Korea Kim-Jon-Un. has a rather primitive rocket technology. Its latest child, the "Taepodang 3" rocket, is a liquid fuel missile, fueled by a mixture of hydrogen peroxide and oxygen. Such a missile must be filled for about 36 hours before launch, so that it can simply take off. and when fully filled, it can stand on the launch pad for less than half an hour with constant cooling with liquid nitrogen. Otherwise, the hydrogen hydrate will self-explode and destroy everything within 0.5 km. This Korean rocket is guided by a rather outdated system, with the help of two independently operating gyroscopes. So it's a technology similar to the German V-2 or the Soviet SS-4 and SS-5 from the 1960s. And when it was. You shouldn't expect that in about 10 - 15 years North Korea will build accurate, mobile solidpropellant missiles with a range of about 8,000 km kilometers, only such missiles could effectively attack the United States. And yet the hypothetical prospect of the reign of the North Korean cacique certainly does not go that far.

Fanatized religious extremists have potentially greater opportunities - not to be confused with Father Rydzyk's faction, i.e. Shia ayatollahs and mullahs. Iran is currently the fourth largest oil producer in the world. Despite the formal embargo and a major decline in oil prices, financial inflows also provide significant opportunities for technological development. Iran's missile potential today consists of modified and significantly improved missiles of the former Soviet and now Korean "Scud" system, known by Iranian names, respectively, "Shahab 2" and "Shahab 3". The latter, significantly modified "Scuds", can reach Tel Aviv from the silos of the Zagros Mountains. (International Institute for Strategic Studies, 2012) But Iran also has a large number of hired scientists of various nationalities at its service, both in terms of nuclear and missile technologies. Analysts estimate that if progress continues at the current pace, in about 5 to 6 years Iran may obtain, admittedly not very accurate, but reasonably efficient long-range solid-propellant missiles. The question of technology is this. How far will the technicians hired by Iran master the technologies of successive firing of three parts of the carrier rocket, because in order to fly according to the classic trajectory over the North Pole over the territory of the United States, it must be a three-part rocket with today's rocket technology.

So far, the US administration has spent about USD 50 billion on the implementation and construction of 2 bases of the anti-missile strategic shield. This part of the shield nominally exists, because in three bases, in Alaska,

Vandenberg and Iowa, a total of about forty strategic anti-missiles are deployed. However, the calculations showed that for the territory of the USA and Canada to gain effective defense, there would have to be about twenty. Starting from the Samoan islands all the way to Poland. The cost of building one installation was calculated at USD 4.5 billion, and the operation of each of the bases is approximately USD 110 million per year. Thus, the entire global installation would have to cost about USD 150 billion in the construction phase. The construction of this costly worldwide installation was theoretically guaranteed to knock down about 45 percent of the ballistic missiles and warheads. In terms of reality, it would probably be about 10 percent less. (Jakubek-Januła, 2010) So all in all a great investment, which would absolutely not protect against destruction by the enemy.

In addition, not yet the governments of individual countries in which the bases were to be built, but the public began to be seriously concerned that, after all, it is exposing their own territories to a nuclear attack in exchange for nothing. Meanwhile, considering alternative scenarios, the costs of a hypothetical overthrow of theocratic rule in Iran is "only" 2-3 billion dollars. The scheme is quite simple. Iran is a very ethnically divided country. At present, the Iranian Kurds have enforced far-reaching autonomy. But the same is demanded by the Balochs, Pushtuns and about seven other quite powerful nationalities. Guerrilla warfare has been operating in Iran for many years. One of its currents is the monarchist faction identifying itself with the Pahlavi dynasty. The other faction is the former mujahideen of the people money.

The democratic administration of President Barack Obama has fundamentally changed the scope of missile defense strategy. The construction, or rather completion, of a smaller NMD missile base is still underway, this time on the East Coast of Delaware. The next stages are only anti-missile bases on the island of Kiska in the Aleutian archipelago, on Japanese Okinawa, which is ruled by the Americans, and then on American Samoa and British Shetland. The latter installation would work with existing radar stations in southern England and Denmark. But that would be all for now as far as the strategic anti-missile system is concerned. Because it needs to be added that out of the seventeen attempts to intercept, i.e. shoot down a test missile in the NMD system, only half can be considered successful. (Podvig et al, 2004) This is far too little for such an expensive system.

There remains the problem of the anti-missile base in Poland. Initially, it was intended to locate it at the training ground in Orzysz, later it was planned to deploy the missiles in Zegrze Pomorskie or Bory Tucholskie. In the first stage, as far as the base in Poland is concerned, it would have 10 silos, i.e. de facto launchers. That would be enough. The modern technology of launching missiles using the "cold" technique, i.e. on a cushion of compressed air and with the immediate "recharging" of the launcher, significantly increases the capabilities of launching anti-missiles. Theoretically, up to 4 rounds per minute can be fired from

one silo using modern technology. In practice, of course, it shoots a little slower. At the same time, the problem is not the launch itself, but rather the effective tracking of the enemy's missile trajectory and bringing your own anti-missile to a collision course.

In the final, it was decided to build an anti-missile base in Redzikowice, also in Pomerania. Near Slupsk. Of course, the question must be asked why all hypothetical locations concerned the northern regions of Poland. The answer is relatively simple. From the aspect of the curvature of the earth, it follows that missiles fired, for example, from the Smolensk region, where Russian offensive missile launchers are actually located, the missile would fly to the USA in the area of Norwegian Narvik. Hence, an anti-missile launching from Polish Pomerania could shoot it down. Also, the location of an anti-missile base in this area would make it possible to shoot down offensive missiles, Russian of course, stationed on the Kola Peninsula. This peninsula has a great, because: overhanging: location in relation to the North American continent Rockets launched from here simply fly in the shortest possible orbit, over Alaska and Canada, straight to the territory of the USA. However, this is only one side of the issue. Because the reverse looks like this, with an anti-rocket launching from Polish Pomerania, using a higheraltitude orbit, it can catch up with an offensive missile and shoot it down somewhere over the Barents Sea.

However, the construction of an anti-missile base, the NMD system, at least in Poland, has already passed into the history of unrealized facilities. The United States is currently proposing a kind of substitute in the form of building in Redzikowice not a strategic anti-missile system, but only an operational one. Here, it is proposed to deploy sixteen SM-3 rocket launching stations. There are no such rockets yet. But it is realistic insofar as the SM-3 system is to be a development of the SM-1 system currently used by the US Nawa. The Aegis complex is deployed on currently sixteen Ticonderoga-class heavy cruisers. (Weyers Flottentaschenbuch 2013/2015, 2013) The basis of the system is, of course, a Doppler radar that detects enemy objects, tracks them and simultaneously records the flight trajectories of its own missile, which is supposed to shoot down this object. The SM-3 system can be built and installed in about four to six years. It is obvious that at least two Patriot batteries must be installed next to the SM-3 launch pads, which will simply defend the base. This type of facility in the event of a conflict will certainly be the target of the first, preventive attack. Of course, the question arises as to which generation of Patriot missiles the American military would like to place in Poland for the effective defense of their own base. Logical and at the same time obvious, it would seem that it should be the latest generation, i.e. PAC-3. However, the information coming from the Potomac is not very optimistic. The Americans simply intend to place the clearly outdated Patriots of the PAC-1 system in our country. in the offer for the purchase of anti-missiles by Poland; the middle floor; they also offer us the purchase of the PAC-1 system ... Nothing more to say. This system will be completely obsolete

in about ten years. Then, if Poland buys it, it will have to replace it with a new one for a lot of money.

Here, the well-known scenario related to the purchase of the F16 aircraft is almost exactly repeated. We were sold well, we have not yet repaid this transaction in full. Brand new, but generationally outdated aircraft. In order for them to be obsolete in about fifteen years, avionics were installed in them / electronics/block 50/52. Despite the fact that the Polish side asked and even begged for block 60 and timidly even hinted at the latest hypothetical block 70 for now. The latter, however, in reality, when planes were being built for our country in Fort Worth, not yet On the other hand, Saudi Arabia, Oman, Japan and several other countries that bought these planes received the modern Block 60 for their aircraft. (Januła, 2002) However, Poland simply did not deserve such a modern electronics package. At least in the eyes of the big brother from across the ocean. This scenario, as already written above, will certainly be repeated when buying rockets. for the Polish defense system.

The construction of the anti-missile system raises quite understandable protests from the Russian side, because the relative balance in the number of warheads and missiles is currently practically the only military element in which modern Russia is equal to the United States. Russian strategists know perfectly well that a modern and well-functioning system may, in consequence, lead to asymmetry through, for the time being, hypothetical possibilities of eliminating a significant part of the Russian side's offensive missiles.

It has long been known that politics is a kind of chessboard for a game in which cynics win the most. Thanks to anti-missile technology, the Americans gained a significant advantage, also political, in their constant pursuit of global hegemony. The Russian side, on the other hand, as the weaker one, is trying to maintain at least the status quo. However, this arrangement will be significantly affected by the construction of an anti-missile base on our territory. About 35% of the potential of Russian, once Soviet, strategic missiles is located on the Kola Peninsula. This results, as it was written earlier, from the geo-strategic location of this peninsula. Hence, it is also the closest and at the same time the fastest route for an offensive missile on US territory. On the Kola Peninsula, for example, there are 180 Russian "Topol M" (SS-27) missiles. They are one of the most modern Russian missiles with small dimensions and high accuracy, with a flight trajectory: low-high, high-low. Coming back to the field of missile technology, it is practically possible to shoot down "Topols" only about 5 minutes after take-off in high orbit, using the so-called "higher flight parabola" anti-missile. (Sokolski, 2004) It will certainly not be done from the base in Alaska, because "Topol" would appear in this area in about the 9th minute of the flight, but it can be effectively shot down from the base in Poland.

The fuss in Russia over the US missile shield concept is therefore not entirely unfounded, even though, of course, a missile war between the US and NATO, on the one hand, and Russia, on the other, is not realistically envisaged.

There is no doubt, however, that after the construction of all or most of the elements of the anti-missile shield, Russia's military and, consequently, political position will inevitably be relatively weaker. Are Russian threats, such as that it will aim additional missiles with nuclear warheads at Polish territory, of course realistic? Rather not much, but on the principle that quite a large number of tactical and operational "Tochka" and operational "Luna" missiles are already aimed at our territory, the range of which from the Kaliningrad zone covers our entire territory, without the south-western edges. Also aimed at Poland are at least a dozen very modern Iskanders. There is no doubt, however, that if the base is built, just in case, the Russians will aim at it at least a dozen SS-23 medium-range missiles stationed on mobile launchers in the Smolensk region. These are simply the realities of global strategy. (Jakubek-Januła, 2010) However, we are a member of the North Atlantic alliance. It is therefore obvious that any act of aggression on our territory would mean a war with the entire NATO. Therefore, we must reckon with the realities of the world chessboard. Although there are politicians who vocally doubt the far-reaching involvement of the US in the hypothetical defense of Poland and the Eastern European region.

The dilemma is as follows - whether the construction of an anti-missile base on our territory will improve our position towards the United States and for them, to use the words of Zbigniew Brzeziński, who is extremely kind to Poland, we are only a "tertiary ally" and in NATO itself. Opinions are divided here, because it is not really a question of whether the Americans will deploy two "Patriot" missile batteries to defend their strategic anti-missile base. This is a secondary element in this game. It is simply a question of whether the United States will become more involved in political lobbying for Poland's interests in the international arena. This seems very doubtful. Because the center of gravity of American interests is slowly but inevitably shifting from the Atlantic Ocean basin to the Pacific region. In line with the rules of the globalization process, it is natural for Australia to be the US's No. 1 ally in the world.

Poland, on the other hand, may, due to the geopolitical system, be only a forward European flank, both for the United States and countries such as Germany or France. For the latter, however, conducting intensive trade and political dialogue with Russia, we are a troublesome partner, at least for now. Also because we are considered by a large part of Europe to be a Trojan horse or lackey of the United States.

The interests of the United States and the European Union are strategically convergent, but the question is whether the Union, in which further, rapid and objective integration will take place, will pursue a parallel or partnership policy with the United States. And in this system, Poland must look for its place, and the construction of an anti-missile base can and should be used for this purpose. However, we need an intelligent and subtle diplomatic game, which, however, exceeds the intellectual capabilities of the current team, not only of the haughty minister.

The construction of an anti-missile base will not objectively worsen our relations with Russia, unless it is only temporarily. Because these relations are already very bad. But we have to reckon with what seems almost impossible and even astounding at the moment, especially in view of the Ukrainian case, that our big brother from across the Atlantic is trying to get closer, and maybe even include Russia in NATO within 10-15 years, because the alternative is only the inevitable alliance of this country with China. And our doctrine-based anti-Russian policy will then come out sideways. (Brzeziński, 2004) Let's not have any illusions that if the anti-missile base is no longer needed by the United States, the Americans will simply dismantle it. In Europe, we have at least several dozen dismantled American bases - maybe not missile bases. A very good example, although geographically distant from us, was the large Toreyon air base near Madrid. Its construction, converting into today's currency, will cost about 7 billion dollars. Today, there are 8 long and wide runways and a number of other unused infrastructure facilities. This will probably be the case with the base in Poland in due course. However, at present, we should take advantage of this minor but significant economic situation in the US-Poland relationship, otherwise we will have to quote Jan Kochanowski's words that a Pole is stupid both before and after the damage.

In the face of rapidly developing technologies, the question must be asked about the prospects of anti-missile systems or anti-aircraft and anti-missile systems. Although scientific research in the field of armaments is surrounded by secrets and elements of confidentiality, there are already noticeable elements of completely new technologies also in the anti-missile field. What's more, new technologies will probably be much more effective after implementation and application, and at the same time much cheaper than the existing ones.

Americans have achieved technological breakthroughs in two areas. The research and development of the electromagnetic cannon looks particularly promising. This is no longer science fiction but reality. Electromagnetic guns have already been installed on two US Navy ships. During the tests, this type of installation turned out to be very versatile. You can hit both the enemy ship as well as the enemy plane or rocket with such a cannon. The necessary great energy is simply provided by the ship's power plant. Converting one type of energy into another is not such a big deal anymore. Of course, ships with nuclear power plants have the greatest prospects here, because these installations can produce very large amounts of energy. Of course, it's about surface ships, and again, there aren't that many. Russia has, for example, only one.

In any case, the electromagnetic guns are already operational and in about 3-5 years it is planned to build ships equipped with this type of installation as the primary weapon. Also for shooting down enemy planes and missiles. There are also plans to install these types of guns already with high power in Hawaii and Alaska. They would then act as a kind of hunters shooting at the enemy's rockets. The time perspective is about 6-8 years when it comes to starting the construction

of this type of installation. Still, the problem is to obtain great power, which would allow for an effective shot at a distance of 100-150 km.

Significant advances have also been made in laser technology. Several lasers have already been installed, including on board warships. For now, these lasers can sink a small ship, such as a torpedo boat, simply by burning it. They can also effectively fire at planes and missiles at a distance of about 12 km. It should be added that both types of new weapon systems are very accurate.

Analysts believe quite unanimously that these completely new weapons systems will be implemented in about 10 years, and in the next ten years they will become the dominant structures in anti-aircraft and anti-missile technologies.

That is, at a time when a classic anti-missile shield consisting simply of classic anti-missile systems is to be built in Poland at a total cost of about PLN 120 billion. Most likely American production but for the money of the Polish taxpayer, of course. It is not even strange that the main proponent of the construction of this type of shield is a politician who once claimed, let's hope it was a joke, that Polish pilots can also fly on barn doors. The fact that the political world is full of typical mediocrities, graphomaniacs and the like is known not from today. But why should society pay for the exuberant ambitions of politicians. Because the anti-missile shield that is planned to be built in Poland will be very outdated from the very beginning and at the same time very expensive. Could the society have once again been fooled by the slogan "Cannons instead of butter"?

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## THE WARSAW UPRISING—TRUTH AND FICTION

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#### ABSTRACT

The Warsaw Uprising was by far the largest armed uprising in the countries occupied by the Third Reich. In the first uprising, the insurgents liberated almost 70 percent of the territory of the Polish capital. Then, at the beginning of the uprising, it seemed that the Soviet offensive across the Vistula would naturally start and the Polish capital would be liberated. Stalin, however, for purely political reasons, stopped the offensive and allowed the occupiers to suppress the uprising within two months. The Polish government in exile, residing in London, hoped that as a result of the success of the military uprising and liberation of Warsaw, it would install itself in the city and welcome the entering Soviets as a rightful host. However, history turned out completely differently.

#### Key words: Warsaw Uprising, Stalin, London Government, Insurgent Fights

A lot has already been written about the course and various implications of the Warsaw Uprising. Its participants, including very important people, also spoke. Despite this, there are still a number of question marks and controversies. Not so much about the course itself, but rather about the aspect of its genesis, goals and political realities. Because the Uprising was a kind of the last chance of the London camp to take power. Is it real.... The article in question tries to shed some light on some problems related to the uprising and remaining in the deep shadow of the problem itself.

The second half of 1944 was very unfavorable for the Germans. The fact that they were retreating everywhere was already a kind of normality since the operation at Kursk, which was a certain strategic turning point. From the moment of creating the second front, this retreat naturally accelerated and, moreover, it was already very clear to the dignitaries of the Third Reich that the war was definitely lost Despite this, Germany continued to defend itself, and it must be said with a great positive effect for itself. (Żukow, 1972) Hitler, who was lucky again because he avoided the consequences of another, but this time very serious, attack, counted on the increasing divisions between the allies. The marshals and generals who were behind the July assassination attempt on the leader, in turn, sought to start talks on ending the war with the Western Allies.

The approach of the eastern front to the home territory of the Reich and the successful development of the Allied offensive in France, as well as increasingly stronger air raids on industry, communication routes and open cities of Germany,

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also caused obvious changes in the situation. Demographically, Germany was no longer able to make up for its losses on the fronts, and production, which was decisive in the conditions of the world war, began to decline in 1944. In addition, they were practically without allies because Japan in the Pacific and the Far East had its own growing problems, and Italy, despite the release of Mussolini and his attempts to build a fascist republic in the northern part of the country, ceased to matter completely. The only Axis force on the Apennine peninsula was the German army, which, to be fair, defended itself very effectively using the difficult mountainous terrain. (Lipiński, 1972)

In the middle of 1944, the Polish case gradually looked less and less positive. Churchill, a politician as pragmatic as cynical, tried above all to save both the prestige and, above all, the interests of the United Kingdom. For this purpose he was willing to make a covenant with anyone. He hated the Soviet Union, but politically he had to reckon with Stalin more and more. Churchill already knew that the Russians would enter Eastern Europe and in 1944 he tried to get to Berlin faster than them. (Liebefeld, 1971) Hence, on his initiative, a slightly crazy operation was carried out, Market-Garden, which was supposed to open the way to Berlin through the Netherlands for the British, not the Americans. What were the effects of this operation is well known. The Americans, on the other hand, at this stage of the war had nothing against the Russians entering Eastern Europe and even Berlin.

In this situation, the Polish government in London was losing more and more importance. From an ally, he became an increasingly troublesome customer. As the victory was clearly visible, the Polish military effort was also less and less important. London's Poland also lacked a clear leader at that time. Because after the death of General Władysław Sikorski, none of the Polish politicians could be a real partner for the British. It must be clearly said that Stanisław Mikołajczyk was the best possible choice, but he was a politician of a much smaller format than the tragically deceased Sikorski. Others, with President Raczkiewicz at the helm, practically did not matter at all. (Zabiełło, 1968) Moreover, the Polish government was in a bad international situation, into which, unfortunately, the Russians had very skilfully dragged it into. The pretext here was the Katyn massacre. Of course, the Polish government had practically no other choice but to ask the International Red Cross to investigate the matter. The more so that despite the loud Russian propaganda, practically no one had any doubts that this crime and genocide was the work of the Russians. The Russians, however, used the Polish request as a pretext to break off diplomatic relations with the London government. In order not to be constrained in talks, or rather dictating the course of future borders in this part of Europe to which the Soviet army was to enter. Poland was supposed to be the biggest territorially affected here, so maintaining diplomatic relations with it was considered unnecessary by Stalin. After all, since the departure of Anders' troops from the USSR, his typically collaborator political

team was being prepared, which in July 1944 was presented as a substitute for the government, i.e. PKWN.

The London government, although it was not informed about many important things by the English, had in the occupied country and also outside its often very good sources of information. Politicians in London had different visions of the future state and legal order in Poland. But everyone was aware that the Soviets would firstly try to seize the eastern territories of the Republic of Poland and secondly install their own, i.e. submissive government. The British made an attempt to repair Polish-Russian relations. At their insistent requests, Stalin agreed to receive Stanisław Mikołajczyk. (Zabiełło, 1968) And it so happened that the prime minister of the Polish government was in Moscow during the first phase of the uprising.

In mid-1944, the London government was represented in the occupied country at a high level. During the uprising, the government's delegate to the country was appointed deputy prime minister, and several other politicians from his environment were nominated for ministerial positions. Thus, it can be said that part of the government was in the country and functioned in the underground.[6] The Home Army was also expanded, which theoretically was very numerous. Maximum number of Home Army that's almost half a million people. Guerrilla warfare was also conducted with great intensity. But there were also shortcomings. The first was the lack of weapons and equipment. Poland was too far from Great Britain for night drops to supply even a part of the guerrillas with weapons and ammunition. RAF bombers, regardless of whether they took off from Great Britain or Brindisi in Italy, had to cover a very long night route with numerous anti-aircraft defense zones. Losses were very high among the planes sent because they had to return during the day. Other sources of supply of weapons were reaching the hiding places where weapons from the September campaign were hidden or buried. Some weapons were obtained this way, but again, it must be taken into account that the correct ammunition for this weapon was no longer produced. It remained to obtain weapons from the occupier, but it was not a great source of supply and, for obvious reasons, caused losses. So it can be summed up that the Home Army, numerous and quite well trained, with a good commanding staff, was only very poorly supplied and equipped. In Warsaw alone, the Home Army could count up to 50,000. soldiers, but the armament was only enough for about 15,000. people. (Kirchmayer, 1964)

Apart from the Home Army, there were also other formations. The People's Army associated with the underground PPR was much less numerous than the AK. It acted on its own and the lack of coordination of partisan activities in Poland was a big problem. The same can be said about far-right formations. The National Armed Forces were not too numerous or strong, but they also carried out operations completely without coordination with other formations. Theoretically numerous Peasant Battalions were, in turn, a formation that felt the lack of armament the most. BCH sheep were also poorly trained. The NSZ and the NOW

did not, in principle, enter the structures of joint commands and coordination. For obvious reasons, AL also remained as a formation dependent only on PPR and Moscow. (Albert, 1985)

The domestic conspiracy also suffered heavy losses. The arrest of the commander-in-chief, General Grot-Rowecki, in rather unclear circumstances, was unfortunately made at the least expected moment. His successor, General Bór-Komorowski, had neither the class nor the authority of his predecessor. In addition, while General Rowecki was able to keep his distance from politicians, General Komorowski clearly leaned towards one of the sides of the émigré and underground political structure. This must have naturally caused a significant decline in the commandant's authority. In addition, under the new commandant, the chief of staff of the Home Army, General Grzegorz Pełczyński, gained a great deal of influence. and General Okulicki These military men were also completely unnecessarily involved in political games.

The Warsaw Uprising was a kind of final touch to the failed Operation 'The Tempest'. This operation was intended as the assumption of power by the structures of the London government in the occupied country. The first was the thesis that the Germans withdrawing through Polish territory would be completely broken and lost. By the way, they would be militarily weak. The second of the purely military elements, i.e. the Soviet army, was also supposed to function in this concept with the proverbial remnant of strength. The premise was absolutely fantastic. In practice, however, Germany, despite the withdrawal, still retained a large military potential. They were no longer capable of an offensive in a strategic sense, but operational or tactical, of course they were. (Davies, 2006) On the other hand, the Russians, especially in the first stage of the war, including the Battle of the Volga, suffered unimaginable demographic and equipment losses. But they were very strong because human resources were still considerable and the Allied supplies of equipment and own production grew.

Despite these very unfavorable objective premises, attempts were made to carry out 'Burze;'. In practice, it was supposed to look like this: alternatively, either the Home Army was to capture individual towns on its own or also propose joint capture to the Soviet troops. Then, the Home Army was supposed to install the previously prepared civil authorities, i.e. starosts, voivodes, and thus present itself to the Russians as a legal authority. A dozen attempts to carry out this type of scenario were by no means encouraging. In Volhynia, the 27th Home Army Division, after concentration of about 5,000 people, so considering the conditions of the conspiracy, liberated a lot of small towns on their own and then handed them over to the incoming Russians. But the commanders of these formations did not engage in any talks about land administration etc. They kept moving forward. They were replaced by rear units, among them formations of the infamous NKVD. Most often, without any preamble, they arrested both combatants and civilians. Most often, attempts to install the Polish-London administration ended up in gulags. When the partisan units were strong, the Russians usually used tricks. Commanders were then invited for talks and the rest of the unit was sent to a nearby town for 'reorganisation'. (Davies, 2006) It should be added that this 27th AK Division played a large and glorious role in protecting the Polish population of Volhynia against Ukrainian fascists and murderers. Unfortunately, the division's forces were too thin to provide protection to all Polish inhabitants of this province.

Another significant fact was the joint capture of the city of Vilnius by the Home Army and the Red Army. It was in this place that the Home Army command gathered several partisan brigades, and as a result, during several days of heavy fighting for this city, Polish partisans played a significant role. This time it was not appropriate for the Russians to arrest the Poles so immediately, especially since there were several thousand of them. Thus, the already known formula was applied, directing each brigade to a different location, allegedly for reorganization and rearmament. There, a well-known scenario was already followed. (Davies, 2006) However, it should be added as a digression that Stalin ordered the city itself to be handed over to the Lithuanians, as if forgetting about the latter's mass collaboration with the Nazis. As a result, the Storm plan wherever it was wanted to be applied simply failed and people involved in the attempt to install the administration of the London government suffered repressions. Sometimes it functioned, although sporadically even for about two weeks. Because as it was written before, the front units did not engage in talks or far-reaching cooperation with this administration. But often there was a completely pragmatic cooperation in the field of provisions, infrastructure maintenance, etc. (Przygoński, 1980) Everything changed the moment NKVD units arrived. Most often, local representatives of the London government were arrested and deported at that time. It was no different, for example, in Lublin, where for two days the voivode of this ... government was in office.

Despite these very negative experiences, it seemed to the representatives of the London government and the leadership of the Home Army staying in Warsaw that if Warsaw managed to take control of the city for at least a few days and install its administration, the world public opinion and, above all, the Allies, would not allow The Russians installed their own or collaborator power structures. Based on this assumption, the situation on the Eastern Front was analyzed and preparations were made for the uprising in Warsaw. In both cases, things went wrong. Because the analysis of the general war situation was taken mainly from the BBC radio. and only supplemented with data from London and analyzes, often very late, of their own intelligence. At the same time, it must be said that the BBC provided reliable data on the situation on individual fronts. However, those coming from the eastern front had too much generality. It's just that the Russians, in their custom, provided data most often post factum and with a long delay. Most often it was learned via Moscow radio that such places had been liberated and here the towns were mentioned and the enemy had suffered and losses were mentioned here. Of course, this data was analyzed by the British

and provided in a properly condensed form via the BBC. The Home Army's own intelligence in the front-line zone, in turn, had to act with great caution. Both the Germans on their side and the Russians on their side, they liquidated through summary courts and often without, all suspicious people were therefore known in Warsaw that the Soviet offensive was progressing, that the Russians were liberating further regions and towns, as well as installed by the PKWN authorities. But that was all. Well, maybe not entirely. Because both the Home Army Headquarters and the People's Army Command, also residing in Warsaw, knew about each other perfectly well. But contacts were very sporadic. Most often, these were mutual complaints about not informing each other about the operations carried out. There were also complaints about the airdrops of weapons, because here both structures without any inhibitions tried to 'pick up' the weapons dropped both by the British and by the Russians. (Przygoński, 1980) Just like the leadership of the underground PPR, AL was treated instrumentally by the Russians. The main task was to collect information about German formations, possibly destroying communication routes, etc.

The government in London, whose position against the Allies was getting weaker, also clung to the concept of starting an uprising in Warsaw as an important bargaining chip. It was believed that this would increase the prestige of the government and strengthen its position also in relation to the USSR. Especially when the prime minister was in Moscow. But by giving permission, politicians and generals residing in London left the decisions in the hands of a few people from Warsaw. The government's delegate for the country, Deputy Prime Minister Jankowski, was definitely in favor of the uprising, as were the majority of civilians, although some of them were quite cautious. Practically, the decision belonged to the military, four of whom had the most weighting votes. The first three are the previously mentioned generals Bór - Komorowski, Pełczyński and Okulicki. The fourth is the commander of the Warsaw Home Army area, colonel, later General Tadeusz Chruściel 'Monter' It wasn't too bad here, but above all, the poor condition of the armament of the Warsaw AK formations. (Borkiewicz, 1969) Some armament was delivered to Warsaw in June and July 1944 from the forest units, but several hundred rifles and pistols could not change the situation. It is true that, for example, the units of 'Kedyw' were well armed, but it was only a small, albeit elite, formation. Chruściel calculated that with favorable circumstances his units could fight successfully for about 3-4 days. They'll just run out of ammo later on. Pełczyński, in turn, counted on the weapons and ammunition captured in the first hours of the uprising, which was to significantly supplement the combat potential of the insurgents. Once the decision was made, the next one had to be when. Because the choice of the moment of the outbreak of the uprising could not be agreed with the Russians, there was simply no contact with them, but it had to be objectively timed to the moment when the Russians would be just outside Warsaw. After all, the uprising was objectively aimed politically against the USSR. The insurgents and the deputy prime ministergovernment delegate were to welcome the Russians as hosts and full-fledged authorities in the liberated capital. That it was contrary to Stalin's concepts does not need to be justified.

It is true that the Soviet offensive for natural reasons, primarily stretched lines of communication, simply died down. The defending Germans, despite the losses they suffered, were in a much better situation because the shorter the supply lines, the objectively also shortened the front of defense. Hence, they could saturate their formations with more equipment, etc. All this was an obvious question whether the Russians would be able to cross the Vistula River as part of the ongoing offensive. It turned out that yes, because the Red Army captured the Warka-Magnuszewski bridgehead, but not immediately, and moreover, this important bridgehead, which was later used for the next offensive, was too far away to be able to influence Warsaw from it.

Paradoxically, in the city itself, the objective conditions for the uprising were very good at the turn of July and August. Because the Germans were preparing a large operational offensive from Northern Mazovia directed south. For this purpose, they brought a number of land forces north across the Vistula River. In Warsaw itself, only Wehrmacht formations remained, and what remained were mostly logistic units. outbreak of the Uprising. (Borkiewicz, 1969) They also knew perfectly well that the Russians and the London government were practically political enemies and there could be no question of any cooperation.

At the end of July 1944, the Russians entered Praga. It seemed that they would cross the Vistula within a few hours. a few days at the most, General Bór ordered General Monter to start operations. At the headquarters of the Home Army, the most feared at that moment was that the Home Army would be late and would not be able to clear Warsaw of the Germans until the Russians entered. (Ciechanowski, 1987)

The very outbreak of the uprising took the Germans by surprise in a tactical sense. In the first hours of the fight, they captured a number of important objects, perhaps not so much military as administrative ones, and several important strategic points. However, a dozen or so very important positions were not captured. Particularly in the first hours of fighting, the insurgents showed considerable spontaneity and unparalleled courage. But on the other hand, the lack of any strategic thought was evident from the very beginning. Individual platoons rather than companies most often captured German resistance points by surprise. But where the enemy recovered from the first surprise, he defended himself well. And already at this stage, it was necessary on the insurgent side to concentrate troops to achieve strategic goals and, above all, take control of the city center. Meanwhile, during the first hours and later, the first three and four days, the insurgents were still on the offensive, although this offensive was fading away and the Germans were bringing more and more new troops to the city for pacification. (Borkiewicz, 1969)

This was not the worst memento for the insurgents. This misfortune foreshadowing the defeat was the German offensive from the north which, as a result of heavy fights of the armored units, threw the Russians away from a significant part of right-bank Warsaw - Praga. Here, of course, one can speculate that this offensive was actually in favor of Stalin. In order not to help the insurgents. Here it must be added again that this offensive was strong. Poorly supplied and badly worn out during the strategic offensive launched in Belarus, the Soviet troops once again suffered great losses and had to withdraw at least temporarily. (Iwanow, 2010) But the Soviet leadership, also politically surprised by the uprising, had no intention of helping it. Again, we need to go back to specifics. The commander of the 1st Polish Army, General Zygmunt Berling, made an attempt to cross the Vistula in Warsaw on his own. But in military parlance, on your own means using only military means of crossing. The army engineering and sapper brigade had only about thirty rowing boats and two or three motor boats. During the night, this improvised flotilla could cross a river the size of the Vistula with about an army battalion. Assuming no enemy countermeasures. But the enemy countered, and intensely. As a result, on three separate sections, approximately 2.5 battalions were landed with only mortars as support. The question that must be asked is what the army artillery did. Just an artillery brigade that is an integral part of the First Polish Army. supported the landing worse than poorly. Answer why is very simple. Simply, the Polish army, like the entire front, had only minimal supplies of ammunition. The norm predicted at the stop over the Vistula River was only 8 missiles per day to be fired. (Borkiewicz, 1969) These were the realities and despite the heroic fight of those soldiers who reached the left bank of the Vistula River, they managed to join the insurgents only in the area of Czerniaków in a tactical dimension. About 60% of them fell in battle or died during the return crossing, the rest managed to retreat. Berling was dismissed from the post of army commander for this arbitrary landing. There was no great damage here because he was a mediocre commander. Even during the first battle, then only the Kościuszko division at Lenino, he commanded badly. The command of this general at Lenino was exemplified by the great and completely unnecessary losses in people, reaching 2800 people. If we add to this that two German battalions, i.e. circa 1200 certainly well-trained soldiers, defended themselves in front of the division, the results speak for themselves.

In 1944, Berling, as a Pole, simply wanted to help the insurgents. (Kirchmayer, 1964) That he acted against the ideas of his superiors is another thing.

After two days of fighting, the insurgents turned out to be too weak, even against those German troops that were in Warsaw at that time. districts controlled by the insurgents. (Borkiewicz, 1969) Here you have to have a lot of grievances against the Home Army command. Because the plan of the Germans was transparent and the forces were small. Despite the desperate shortage of weapons, it was necessary to dynamise activities and prevent the isolation of individual districts. Because later communication and even evacuation through the sewers are further proofs of heroism, but also the consequences of quite simple mistakes. It should be added that units of other political and military groups, i.e. the People's Army and even the National Armed Forces, operationally deployed in Warsaw, without major obstacles, submitted to the leadership of the uprising and consistently fought in their sections.

Meanwhile, General Komorowski and his staff, despite the fact that the insurgents did not manage to capture all the designated objectives in the first days of the fight, waited with hope for the strategic crossing of the Vistula River by the Russians near Warsaw and the entry of the Soviet Army into the city. Then the already prepared political and military authorities would welcome the Russians. However, it soon became clear that such a solution would not be possible in the near future. (Ciechanowski, 1987) For the reasons already given, ie the German offensive from Northern Mazovia and the situation that the eastern side's offensive naturally expired. There was also a political reason. The Russians had no interest in getting involved in political games such as who rules in Warsaw. Under these conditions, the general situation changed from bad to practically tragic. Because the delegate - Deputy Prime Minister Jankowski and General Komorowski had to literally flood their superiors in London with increasingly urgent calls for airdrops of weapons and equipment and making some arrangements with the Russians. Also Prime Minister Mikołajczyk in Moscow was placed in a very weak position by the course of the fighting in Warsaw as a supplicant. (Albert, 1985) Bombers flew over great distances without fighter escort with partial loads. The effectiveness of these airdrops was estimated at about 15%. The rest of the airdrops fell into the hands of the Germans. (Borkiewicz, 1969) There were still single night drops performed with slightly better efficiency. But it was the proverbial drop in the ocean of needs. It should be added here that the practical English negotiated with the Russians the possibility of making Russian airfields in eastern Poland available to those bombers that were dropping over Warsaw. They just wanted them to be able to take less fuel because they would refill it at Russian airports after airdrops. They could then take on board about 3 tons of cargo more, which multiplied by 600 machines would have to give better results. (Iwanow, 2010) There were such airports. for example, the hub of the Mielec airports, Świdnik Rzeszów. But the Russians cynically declared that they did not have any. They agreed only when it was clearly too late for airdrop assistance. This betrays the true intentions of Stalin and his team. The British, of course, also talked with the Russians about the possibility of accelerating another offensive, including crossing the Vistula in the near south of Warsaw. But the Russians were not interested either. In their talks, they multiplied the difficulties while exaggerating the power of the Germans.

Meanwhile, the German army, along with other forces, brought into the fight, or rather pacification of the uprising, two specific SS brigades. One

composed of criminals, the other of Ukrainian and Russian renegades. These units, under the command of Dirliwanger and Kaminski, were by no means eager to fight, but they ruthlessly robbed, killed civilians, wounded, etc. Min renegades murdered the wounded in several churches changed into field hospitals . (Kirchmayer, 1964) Obergrupenführer von den Bach-Zalewski, who On the German side, he commanded the pacification of Warsaw, he even ordered to shoot dozens of murderers and robbers from these brigades, including one of the commanders.

Since other means failed, at the end of the uprising, General Pełczyński suggested to Komorowski another quite crazy and utopian concept. Namely, the gathering of several thousand partisans from the forest units of the Home Army in the vicinity of the city, especially in the Kampinos Forest, and launching a kind of assault on Warsaw. It should be added that this concept began to be implemented and Home Army partisan units began marches and concentrations in the vicinity of Warsaw. (Borkiewicz, 1969) The fighting for Warsaw itself did not take place because in the meantime the uprising collapsed after two months of fighting. It should also be added here that it was very positive that the general situation on the fronts almost forced the Germans to grant veterans' rights to the surrendering insurgents. On the other hand, the civilian population was treated mercilessly, as they had to make a hasty evacuation on their own without supplies, medicines, etc. It should be noted again, although it should be the subject of separate research, that the mood of the civilian population was initially enthusiastic in the first days of August, and then changed rapidly very much to the detriment of the uprising. This was dictated by the totally deteriorating food, health and social situation, etc. The Germans often shelled and bombed entire quarters of buildings. At that time, the greatest losses were among the civilian population. From the beginning of September, there was a clear gap between the insurgents and the civilian population.

The uprising, apart from the obvious military defeat, was also a total political failure of the entire London camp. Not only because the Tempest plan completely failed, but simply because Churchill and American politicians understood that the peace-loving Stalin and his diadochs of the USSR left no possibility of reaching any agreement with the London government-in-exile. At the same time, he unambiguously focuses on a group concentrated in the Polish Committee of National Liberation, later renamed the provisional government. And Churchill was primarily a British and pragmatist. Everything else was of secondary importance to him. Therefore, over time, the London Poles became for Churchill, more of a nuisance and an obstacle to reaching a good agreement with Stalin for the United Kingdom. Because such an agreement for the post-war period with the constantly growing USSR, the United Kingdom had to achieve in its own interest. That at the expense of the existing allies, not only the Poles, but also many others, it was of little importance to the British.

Therefore, the most important problem is whether the uprising should have been started in Warsaw or whether matters should have been left to their own course, especially after the unsuccessful course of the 'Tempest' operation wherever it had been carried out so far. The answer must be unequivocal Yes. The uprising was purposeful and necessary, if only to make the world, and especially American, public opinion know that there is a Polish problem at all. But it must also be clearly stated that the preparation of the uprising was poorly prepared, etc. It was a much more improvised action than a deliberately prepared one. After all, it was prepared for about a year. The truth of this statement is proved not only by the poor equipment of the insurgents, but also by the great chaos at the beginning when the insurgents were still attacking. There was no prepared strategy for the uprising and no clearly defined military goals. Everything was replaced with typical improvisation and hence the uprising in the military sense quickly had to go on the defensive. And Polish politicians in London, for whom the uprising was supposed to be an important and final political advantage, quickly had to change from the role of those who were to hold serious political assets in their hands to the role of humble and small supplicants, humbly begging for help and rescue.

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## HYBRID THREATS AS A TOOL FOR THREATENING THE STATE SOVEREIGNTY<sup>1</sup>

# Dávid Kollár<sup>2</sup>

#### ABSTRACT

The current concept of hybrid threats refers to actions, methods and ways of conflict that are conducted by state or non-state actors. These are implemented using conventional and unconventional means coordinated within the framework of various forms of information warfare, financial warfare, sabotage and cyberattacks, regardless of the possible clash with the international order. The goal is primarily to undermine, damage or influence security and other decisions at the local, regional, or state level. This is done by exploiting the weaknesses of the adversary, destabilizing, and complicating the search for the perpetrators of these events. Conflicts are often characterized by a mixture of unconventional tactics, decentralized planning, and actions, including the use of both simple and sophisticated innovative technologies. The aim of the article is to articulate term hybrid threats in Western and Russian meaning and outline one of the tools how to fight against them.

Key words: hybrid threats, hybrid warfare, Western meaning, Russian meaning

#### The concept of hybrid threat

It is important to emphasize that almost anything can be called and considered a hybrid threat. Pragmatic use takes the concept to an extreme and thus becomes less comprehensible. The concept of hybrid warfare is thus limitless. If its definition is to be clearly given, it must be pointed out what hybrid warfare is and what it is not. (Bahenský, 2018) As a result of the large number of descriptions of hybrid combat, none of them can be universally applied and are not universally relevant to potential hybrid situations. (McCulloh, 2012)

In general, it is difficult to distinguish the concept of hybrid threat from the so-called comprehensive approach, which was used by the North Atlantic Alliance. Comprehensive approach emphasizes that the conflict can be resolved through the cooperation of military means with civilian units. It is focused on the

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integration of political security, the development of the rule of law, the observance of human rights and freedoms, and the humanitarian dimension of foreign operations. It should combine short-term crisis responses and stabilization with long-term aid and reconstruction. It is important to know the political, historical, military, social contexts, and aspects. (Gedayová, 2015)

The speed, intensity and, above all, the scope of these practices increases with more sophisticated technologies, and hybrid threats thus become more dangerous. Tomorrow's conflicts will not simply be classified as conventional or unconventional, their differences will blur, and the number of means used will multiply.

The classic DIMEFIL hybrid threat tools include:

D) diplomacy (diplomatic) – influencing and coercion through discussion and actions of political representation.

I) information – mass media, social networks, propaganda, and dissemination of misinformation.

M) armed forces (military) – threats through demonstration of military force, combat use of the army, infiltration into the attacked state and its use.

E) economy (economic) – pressure (embargo, sanctions, stopping the supply of energy or raw materials, closing borders, etc.).

F) finance (financial) – destabilization of currency, market, banks, influencing key financial institutions.

I) intelligence – activities of intelligence services, espionage, recruitment of political and state officials to subvert the state.

L) public order and the rule of law (law enforcement – elements of national power) – the use of anti-state subversive activities to attack values, legal aspects, social order. (Ministry of the Interior of the Czech Republic, 2021)

According to David Kilcullen, an expert on counterinsurgency, hybrid threats can further be described as "the operation of any adversary that simultaneously uses, adapts traditional combat operations, asymmetric tactics of insurgent forces, terrorist attacks and criminal activities using new technologies". (Stojar, 2017, p. 3) Fighting and the use of weapons no longer refers only to the activity of armies and the military sphere. Hybrid warfare refers to a wider range of activities than just indirect and asymmetric methods of combat. It can be completely clear (open) or hidden. Attackers primarily try to achieve destabilization without using military means and avoid armed aggression. However, it is very likely that traditional military means will also be involved in hybrid attacks. Cyberattacks in cyberspace are now a traditional element in conducting asymmetric warfare. Their goal is to threaten critical infrastructure, soft as well as hard targets, and thus they can more easily achieve the destabilization of states. It should be noted that the individual components of hybrid warfare are not necessarily dangerous, the threat lies precisely in the combination and alternative use of hybrid methods. Hybrid warfare is complex, and we cannot find a single formula to recognize it.

US Army Major Timothy B. McCulloh compiled a comprehensive theory of hybrid warfare based on six principles:

- 1. the composition of hybrid forces is unique in the context of the forces,
- 2. have a specific ideology,
- 3. they always face an existential threat,
- 4. in hybrid warfare, there is a disproportionate difference in capabilities between the opponents,
- 5. hybrid power includes both conventional and non-conventional components,
- 6. they use defensive operations. (McCulloh, 2012)

However, we can include other conditions among the signs of hybrid war. They can be explained in the case of Ukraine in 2014:

- The invaded country tends to be poorly managed for a long time and does not fulfill its basic functions. The population is polarized into rural and urban, rich, and poor, or, for example, into ethnic minorities and the majority.
- A potential attacker has a certain interest in the threatened country and its population. He can use soft tools such as media control and manipulate public opinion not only through the media (RT, Voice of Russia, Sputnik, ITAR-TASS news agency and RIA Novosti agency), including social networks (pro-Russian bloggers).
- The attacked country cannot effectively control its borders and has no allies to rely on (failed attempt to join NATO)
- The attacker has some value in the international community (Russia as a then member of the G8 and other important international groupings), has influence and can apply his version of events. (Jagello 2000, 2016)

Hybrid wars can also be summarized in seven other principles:

- 1. The composition of hybrid forces and their effects are unique in each individual case.
- 2. They are associated with specific ideologies that form a unified organization that is formed by the social, cultural, and religious identity of hybrid forces.
- 3. Hybrid power perceives an existential threat through a potential attacker. Thanks to this perceived fear, he abandons traditional military dogmas to achieve long-term survival.
- 4. They contain less conventional military assets
- 5. They also contain elements of conventional and non-conventional means, thanks to their combination, their greatest advantage arises.
- 6. They are defensive type of operations.

7. Hybrid organizations use attractive tactics, both physical and cognitive, in the exercise of hybrid power to constantly repel the adversary's forces and will to use them (McCulloh, 2012).

The most common targets in hybrid warfare are the attacker's enemies. Above all, it can be political entities, individual states or international institutions that do not share the same values and interests. They are the USA, NATO, the EU, traditional political parties (greens, social democrats), supporters of sanctions against Russia (Great Britain, Germany), public media and journalists (TV, radio), the Pope, billionaires founding educational funds or all non-profit organizations (International Red Cross, Amnesty International).

All educated people and professors are targeted, and the universities themselves face the same criticism. The existence of global warming and climate change or the importance of ecology are often questioned. Along with the global pandemic, the very existence of the disease is questioned, the effectiveness of vaccination is denied, and conspiracy theories related to the disease COVID-19 are easily spread by people.

#### 2 Hybrid warfare – A Western concept

As in Russia and in the West, there is a discussion about the changing form of modern conflicts, in which the information sphere also plays an important role. However, unlike the Russian one, the Western discussion is more explicit and does not only provide ideas, but also concrete concepts. The term hybrid warfare is important for three reasons. The first is the fact that it represents the dominant Western concept describing modern warfare, which is very often applied to Russian military and non-military operations and activities. Adamsky (2015) believes that many authors do so mistakenly (Adamsky, 2015). The second reason is the fact that Russian theorists also reflect it, but attribute its leadership to the West, led by the USA. The third reason is the fact that hybrid warfare is reflected in Russian strategic documents. The unclear and vague definition of hybrid warfare has been accompanied by debate since its inception, when and by whom the term was first used. In the debate about hybrid war, one can find as many as four sources of its possible origin. Various authors consider Walker, Nemeth, Carayannis and Simpson to be the originator (Hoffman, 2007, Rácz, 2015, Kubeša, Spišák, 2011). The primary reason for defining hybrid warfare is Mattis and Hoffman's criticism of the US National Defense Strategy. Instead, they present the concept of a hybrid war, in which the US will face a combination of different types of means and war (Mattis, Hoffman, 2005). In the following years, Hoffman independently criticizes the US National Defense Strategy in his publications. Based on the aforementioned criticism, the work Conflict in 21st Century: The Rise of Hybrid Warfare was created, which reflects the basic theses of the mainstream concept of hybrid warfare. According to Hoffman (2007), "hybrid threats include a range of different types of warfare, including

conventional capabilities, irregular tactics and formations, including acts of terrorism indiscriminate violence and coercion, and criminality." He adds that hybrid warfare can be waged by a state or a non-state actor, it is possible lead at all levels of war – operational, tactical and strategic (Hoffman, 2007, p. 8). The importance and repeated application of Hoffman's concept is enhanced by the fact that the US Department of Defense has taken it into account in its strategic documents.

In response to Hoffman's published concept of hybrid warfare, a debate about the concept itself developed in 2008–2009. It was conducted on two levels. The first proposed a competing concept of hybrid warfare, while the second advocated Hoffman's concept. A competing concept is offered by McCuen (2008) who develops Nemet's theory and by Glenn (2009), who criticizes the adjective "hybrid" as overused. He considers hybrid warfare more as a subset of irregular warfare than as a new operational concept (Glenn, 2009). On the contrary, in line with Hoffman's concept, but far more complex, Murray and Mansoor define a hybrid war.

Russia's annexation of Crimea and aggression in eastern Ukraine had a fatal impact on the debate reflecting hybrid warfare. As a result of the expansion of the debate, the term became overused and often misapplied (Berzinš, 2015). Also as a result of this overuse, a number of critics of Hoffman's concept appeared, criticizing the concept itself, but also criticizing its connection with Moscow's operations. Paul (2016) belongs to the first group. If there are many threats considered as hybrids, according to Paul, there is no significant one, that is, no one is a hybrid (Paul, 2016). Thus, Paul criticizes the concept for its indeterminacy and vagueness, while Monaghan (2016) bases his criticism on the argument that the concept is nothing new, on the contrary, it has a long history in warfare (Monaghan, 2016). Monaghan can therefore be classified in the second group, but its main representatives are Kofman and Rojansky, Schnaufer and Galeotti. Their central argument is the thesis that Russia has entered a new area of war that has not yet been named. At the same time, the concept of hybrid war cannot be used because it does not sufficiently reflect Russian operations (Schnaufer, 2017, Galeotti, 2016).

#### 3 Hybrid warfare - Russian concept

Although the modern era creates new opportunities for information operations, a significant number of Cold War strategies still form the cornerstone of Russian information warfare. The Soviet Union has a long history of using information as a weapon for political gain—both in the context of mobilizing its own population and demonizing foreign powers. The concept of "Maskirovka" was an integral part of SS strategies, doctrines, and tactics. The term Maskirovka includes concealment and deception and is not identical to the Western concept of the term masking. (Beaumont, 1982) In the 1980s, it was demonstrated by researchers that it was disinformation of all kinds that created the conditions for the successful development of the Maskirovka plan at all levels. The Russian practice of information warfare has developed rapidly since the 1990s, with this development consisting of a series of adaptations following unsuccessful information campaigns by Russia (e.g. in the Chechen wars), accompanied by a successful takeover of the Internet. (Giles, 2016)

Information warfare is only one of the components of the so-called hybrid warfare. The term "hybrid warfare" as used in relation to Russia today refers to the use of a wide variety of subversive tools, many of them non-military, to advance Russian national interests. Russian state and non-state actors use history, culture, language, nationalism to implement disinformation campaigns with broad goals. (Giles, 2016)

In the West, cyber security and information security are considered two different things. In Russia, however, cyber is subordinated to information security, allowing national security planners to oversee both technical data (such as the integrity of password files) and cognitive data (such as political information on websites). (Jaitner, Geers, 2015) Numerous official documents, including the RF Information Security Doctrine, describe computer network operations as an integral part of Russian information security.

For Russia, information warfare is an inclusive concept covering a wide range of different activities. It includes offensive activities using information as a tool, target, or domain of operations. (Giles, 2016) In the Russian construct of information confrontation, it is conducted constantly. (Heickerö, 2020) As stated by Mark Laity, Chief of Strategic Communications at the Supreme Allied Commander Europe (SHAPE), RF information confrontation takes place in every phase of warfare, including covert and peaceful.

Russian information warfare can also be understood as a system of cascading narratives in which the intensity of influence operations and the number of platforms suitable for exploitation change. (Bokša, 2019)

The basic principles of Russia's approach to information threats are consistently evident from Russia's declaratory policy, and the development of their implementation can be traced through official Russian documents. (Lightfoot, 2018) For modern Russian strategists, propaganda is the second army, which was understood by modern Russia in the early 2000s. The beginning of a new era of hybrid war against Ukraine can be considered the Gerasimov Doctrine, which was announced by the Chief of the General Staff of the RF, General Valery Gerasimov, on early 2013. Gerasimov described a new non-linear approach to military strategy, according to which the distinction between peacetime and wartime will disappear — war is never declared, and military actions carried out by the military and covert activities will simultaneously support each other. (Gerasimov, 2013) The doctrine reevaluates the modern concept of interstate conflict and places military action at the level of political, economic, informational, humanitarian and other non-military measures.

The RF is trying to use information warfare to ensure compliance with several political issues, weaken NATO, subvert pro-Western governments, create a pretext for war, annex territory and secure access to European markets on its own terms. For a long time, Russia has been considered a victim of information attacks in the battle between the "historical Russian world" (which includes Ukraine) and the West, where the US is the main adversary. (Jaitner, Geers, 2015) For most of Putin's years, since 2000, the narrative plot of the regime – regardless of its relationship to reality – has positioned Russia as a reliable international partner that is modernizing and democratizing in the peaceful and non-ideological pragmatism of international law. The alternative path of nationalism, military might, and great power hegemony existed only as a subplot that served as background for the most part. However, since the beginning of Putin's third term, particularly in 2014, the Russian narrative has changed significantly. The events in Ukraine in 2014 signaled the moment when a subplot became the main one in the Russian political narrative. Analyzes of the evolution of the Russian political narrative reveal a nationalist revanchism that draws on notions of Russian power and destiny and sees the West as undesirable and hostile. The key moment is the Soviet collapse, after which it is time to refute the rhetoric of the Cold War, because a strong and independent Russia with national interests that demand respect is back on the scene. (Bacon, 2015)

According to Russia's national security strategy of July 2, 2021, Moscow set a course to preserve the all-Russian cultural identity of the Russian, Ukrainian and Belarusian peoples, including strengthening the Russian language as a language of international communication. In 2021, Putin published an essay in which he laid out his interpretation of Ukrainian and Russian history: both countries are one nation and share the same heritage and religion. He explains this development by Moscow's wider confrontation with the West and its goal in Ukraine: the disruption of Ukrainian democracy. Russian political and security elites do not see democratic political movements inside Russia and around the world as a logical consequence of repressive political systems, but rather as the result of Western states using information warfare to promote liberal values.

The Russian political narrative - aimed at domestic and foreign audiences describes the "Russian world", "Russian values" and even the "Russian soul". The narrative of the Russian world focuses mainly on countries with significant Russian-speaking minorities. It focuses on creating and deepening relations between these communities and Russia by labeling them as Russian compatriots and promoting the self-identification of foreign nationals with Russia. (Bokša, 2019) In Putin's narrative, the "fraternal Ukrainian people" are part of the "us" in whose name Russia stands against potential Western penetration.

In relation to the invasion of Ukraine, Putin is behind the story of a heroic anti-fascist liberation of Ukraine, a morally justified military operation with limited Russian losses. Russia began to promote a number of different myths, mostly related to the events of World War II and Ukrainian nationalism in the 1940s. It identified them with modern Ukraine and pointed to neo-Nazism and violence against its own population. At the same time, the image of the "glorious" Soviet Union and its successor, the Russian Federation, is popularized as the protagonist of the fight against Nazism and the defender of the entire Russian-speaking population against the corrupt, illegal, fascist junta that allegedly seized power. (Ivanov, 2021, p. 111) Prior to the start of the war, the Russian Federation stepped up its disinformation efforts to create the false appearance of a Ukrainian genocide against Russians in the Donbass through evacuation efforts and false claims of Ukrainian attacks on civilians. All evidence of war crimes is considered a Western fabrication.

Russia often adopts defensive narratives that justify its positions in the mythologized opposition between East and West. Both the Ukrainian authorities and the international organizations involved are considered mere puppets of the West under the leadership of the United States and NATO. Recent Russian state media narratives are based on the claim that Ukraine, the United States, and NATO are planning a chemical or radiological attack on Russia or Russian-occupied Ukrainian territory. (Lawlor, 2022)

The articulation of the narrative begins at the very top, in the person of Vladimir Putin, and flows down in a pyramidal fashion through traditional media and cyberspace to the lowest level. It targets not only Russian citizens, but the entire Russian-speaking population of the world, with the expectation that the impact of the narrative will spread organically beyond the diaspora. (Jaitner, Geers, 2015) Today, Russia is moving towards the complete isolation of its citizens from information coming from the outside world, closing them in a bubble to remain in the illusion of conducting a special military operation. (Ingram, 2022)

# 4 Strategic communication as a tool for dealing with hybrid operations - the example of the Slovak Republic

At this point, it is first of all appropriate to define the relevant actors who should participate in the creation of strategic communication related to dealing with hybrid action. For this work, the most relevant is the state and state institutions, and as stated, for example, in the National Strategy for Countering Hybrid Operations, the strategic communication system should be "based on the coordination and synchronization of communication activities of all departments and elements of public administration" (MO SR, 2021, p. 8). The army should also have a big say, as one of the frequent targets of hybrid operations. In the Czech Republic, the Command of Information and Cyber Forces (hereinafter VeKySIO) deals with strategic communication, which proactively shows on its social networks how to verify information, explain concepts, but at the same time refutes already spreading misinformation. The third group is international organizations, such as NATO, the EU, and their subgroups and centers, for example NATO StratCom CoE or East StratCom Task Force. Intelligence services are also an important factor in the field of countering hybrid action, which well understand their importance, but as Vangeli (2021) states, "due to their informational nature, they also did not feel they were in a position to recommend to other executive actors what steps they should take in defense against these threats" (Vangeli 2021, p. 204). In addition, the media, the academic sphere and non-profit organizations are also an indirect part, which have the power to inform about threats, spread awareness and help build trust in StratCom of the aforementioned actors. It is the mainstream media, especially the public ones, that play a big role in creating the resilience of the information space (Dvořáková, Syrovátka, 2021). The lack of trust between the citizen and the state is one of the reasons for the feeling of alienation, which can also lead to the support of anti-system movements (Bahenský et al., 2022).

Effective scenarios for combating hybrid threats are based on the use of strategic communication. StratCom plays the biggest role in countering the action aimed against the idea-value anchoring of the company, simply, it is supposed to prevent the disintegration of the company. Both the entire political representation and civil society have a great influence, and StratCom vis-à-vis the population and the adversary is considered the core of the reaction. To describe the individual goals of StratCom when facing a hybrid action, the description will also relate to the definition of target groups and informational effects that communication can achieve. In general, StratCom aims to promote national interests. As stated by the European Parliament, the target audience of strategic communication can be divided based on various characteristics. One of the possibilities is within geography, when it comes to domestic and foreign audiences. Further, according to relations to allies and adversaries, or according to groups, for example, the entire society, government or, for example, a supporter of allies. As for the domestic audience, one of the main goals is to increase the company's resistance to hybrid action. This can be achieved, for example, by informing about individual threats and the ways in which citizens can defend themselves against them. Furthermore, StratCom can also support the reduction of vulnerability and the strengthening of cohesion (Divišová, 2022).

This can be shown on the example of disinformation, when one of the reasons why it tends to be successful is low awareness within the target groups. This is also why the meaning of strategic communication is often related to disinformation campaigns, many times it is even customary to simplify that StratCom is responding to disinformation (Köles, 2022). According to Köles (2002), effective strategic communication can prevent disinformation, which also confirms the claim of the Czech elves, according to whom well-conducted and timely communication reduces the polarization of the public and its susceptibility to being manipulated by disinformation campaigns. StratCom can be used preventively to strengthen people's resistance to disinformation, as well as to refute, correct or suppress it. In this regard, relations with the media, allies and

researchers are important. Official assessments should be used and prevent further risks, perhaps by revealing the enemy's strategy. As for reactive communication, it should be aimed at reassuring society and public safety (Pamment, 2021).

A frequent tactical goal of hybrid action is influencing elections. This, including the manipulation of information, can be expected before the elections to the European Parliament in 2024. In their report, the members of the European Parliament call for closer cooperation in the fight against information manipulation and for increased cooperation in the field of strategic communication, which, according to them, can counter manipulated narratives to fight, whether through raising awareness of possible manipulations, preventive and reactive fight against misinformation and supporting transparent communication of the state regarding the elections and thereby building the trust of citizens.

In the case of targeting a foreign audience, strategic communication can be aimed at gaining the support of allies in the case of some specific diplomatic, military or economic actions in the face of hybrid action. An example can be the lack of strategic communication after the explosions in Vrbětice, which did provoke some support and the expulsion of Russian diplomats from other countries, but the response was not nearly as great as it could have been in the case of good communication.

At the same time, strategic communication should target the enemy, whether domestic or foreign. Depending on the timing of the threats, the communication may have the character of, for example, deterrence campaigns through economic sanctions or demonstrations of military force. StratCom can also serve as deterrence through public opposition, delegitimization or counternarratives, when it involves disrupting the adversary's efforts to establish their own narrative and achieve victory on the moral level of the conflict (Divišová, 2022). The goal is for the originator to realize that there is no value in using a hybrid action against this actor. This is further facilitated by participation in international organizations, diplomacy, building resilience among residents, or demonstrating one's own readiness, ability, and determination to defend oneself and one's allies (MO SR, 2021). For countries the size of the Czech Republic or the Slovak Republic, information is a strategic community that enables early response to situations arising because of hybrid action. Specifically, information activities can be of various forms, for example in the form of written text, videos, graphic processing, up to dialogue with organizations and stakeholders. Appropriate communication channels that reach the target group should be selected for each of these activities. Both traditional media such as television, radio and newspapers can be used, as well as online platforms, social networks, podcasts, or communication applications. However, it does not have to be only technical means, but also personal interactions, exploratory trips or meetings. An example of strategic communication serving to deter the adversary from carrying out hybrid attacks can be found, for example, in Latvia, where one can see

discussions about disinformation in the media or spreading the image of Russia as a threat (Divišová, 2022). Watkins states that it is important to build wider awareness of the hostile activities of other states within society (Watkins, 2020), which is precisely one of the possible outcomes of strategic communication.

Slovakia began to devote itself to building strategic communication around 2017, when it began to appear in strategic documents. One of them was the Security Strategy of the Slovak Republic, which in this area mentions developing the capacities of public administration and strengthening the mechanism of cooperation with the non-governmental, academic and media sectors in the areas of combating disinformation and propaganda. At the same time, as a strategic security interest of the country, it mentions the readiness of the state and society to respond effectively and in a coordinated manner to hybrid threats, which Slovakia is exposed to, for example, in the field of intelligence and information activities or the support of extremist groups (MO SR, 2021). At first, the term was not understood in the same way by individual authorities, and its absence in the terminology dictionary of crisis management was also pointed out by experts. The same year, however, it was added and defined as "the systematic and coordinated use of objective information through verbal and non-verbal means of communication in order to fulfill the strategic interests of the state" (Security Council of the Slovak Republic, 2019).

An important document is the Action Plan for coordinating the fight against hybrid threats, aimed at strengthening the resilience of the state and society, which also deals with strategic communication (MO SR, 2021). Currently, the Concept of Strategic Communication of the Slovak Republic is also being completed, the creation of which was also a task in the action plan. However, it is necessary to set the structures of interdepartmental communication, create guidelines, a national StratCom plan and a crisis communication plan (Hajdu et al., 2022).

The Ministry of Foreign and European Affairs of the Slovak Republic was the first, and for a long time the only, state administration body that introduced a strategic communication department. The department there was established in July 2017. It is subordinate to the communication department, which is under the cabinet of the minister. As stated by Peter Köles, head of the strategic communication department of the Ministry of Foreign Affairs, at this time they found that public support for the direction of Slovakia's foreign policy is not as high as it was around 2004, and therefore wanted to focus attention on the domestic audience as well. They tried to explain more why it is good that the country is a member of the EU and NATO, why Slovakia is anchored in values in the West, and thus at the same time explain foreign political interests (Köles, 2022). In August 2017, the Concept of Strategic Communication document was approved, but it is internal and non-public.

The department for strategic communication understands it as a tool for promoting state policies: "when we want to promote some public policies, quality strategic communication should also be part of it, because it will help build support in the eyes of the public for these policies" (Köles, 2022). They try to communicate clearly, in a timely manner and in such a way that the information reaches the widest possible spectrum of society and the target group (Köles, 2022). At the same time, it strives for proactive and objective communication - based on facts, which will build and strengthen public support for the direction of foreign policy. According to them, it should reflect values such as democracy or the protection of human rights, which will also make communication more authentic and believable (Köles, 2022).

They emphasize the monitoring of the information space. They respond to trends in the international environment. When they sense that a topic is likely to dominate the public debate, they try to proactively communicate it. This can be demonstrated by the example of countering misinformation, when they try to fill the space before it starts to spread. This happened during the Russian invasion of Ukraine in 2022. On the very first day, they drew attention to narratives that had not yet spread through Slovakia, but based on monitoring and cooperation with foreign partners, they knew that they were already circulating, for example, in Poland or the Baltics. They warned that they would probably spread, and indeed they did. Examples of Russian narratives in this case were claims that there are fascists in Ukraine, Russia is only defending itself against aggression, the West is to blame for the conflict, sanctions from the EU are not working and others. This disinformation, as part of a hybrid operation, was intended to create chaos and reduce public support for aid to Ukraine and sanctions against Russia. This is also related to the fact that the department does not try to refute every piece of misinformation, but to fill the space and react indirectly. Another example was the communication after the rocket hit Poland in November 2022, when, according to him, it was mainly important to proactively and timely fill the information space - even before disinformation started to spread (Köles, 2022).

It was a big challenge not only for the MZVaEZ department to communicate the invasion of Ukraine in 2022, but according to Köles (2022) they succeeded and they were ready and able to respond adequately. And this also thanks to cooperation with foreign partners and colleagues in other Slovak institutions. The main narratives they spread were that Russia is the aggressor, Ukraine is the victim and Slovakia must help it, and that Slovakia is safe thanks to membership in NATO and the EU. The highest political representatives immediately in the first days of the conflict communicated these announcements unanimously and received them in the information space. In the same way, some acts of strategic communication, such as the reduction of Russian diplomats or the provision of aid to Ukraine (Köles, 2022), which also, non-verbally, show the attitudes of the institution and the state. For its communication, the department uses a number of channels, but they differ based on the target audience. While they mainly use Twitter for official negotiations and social networks abroad, they work mainly on Facebook and Instagram for the domestic public. They use personal activities, go to regions and, for example, to festivals, where they bring their activities closer to

citizens in an interactive form. They also communicate through a range of media (Köles, 2022).

In addition to international cooperation, they also deal with interdepartmental cooperation. Other Slovak state offices gradually created their own StratCom departments. They communicate with partners from, for example, the defense and health departments or the government office, and as Köles (2022) states, when they have a common topic, they communicate common procedures. The Government Office has a Department for Strategic Communication under the Office of the Security Council of the Slovak Republic, which is under the Department of Corruption Prevention and Crisis Management. In Slovakia, strategic communication is often directly linked to the fight against hybrid threats. For example, when offering an internship in this field, it is directly stated "find an application for your creativity and help increase Slovakia's resistance to hybrid threats" (Growni, 2023). The claim is also supported by the fact that the Ministry of Defense of the Slovak Republic has a Department for Hybrid Threats and Strategic Communication under the office of the Minister of Defense. However, they do not yet have institutional mechanisms (Köles, 2022). The police also became more involved in strategic communication, where it is dealt with by the Department of Communication and Prevention of the Presidium of the Police. With its preventive and educational activities on social networks, the latter helps to counter hybrid action, primarily through the Facebook page Hoaxes and frauds - Slovak Police.

A good example of the coordination of Slovak institutions in the fight against hybrid action using strategic communication was the revelation of the Russian information operation regarding the cemetery from the First World War in the village of Ladomirová in September 2022. The mayor of the village removed the broken concrete curbs from the cemetery due to their bad condition, she said that the mayor gave the graves compare with the country, and therefore sends a diplomatic note to the MZVaEZ. Disseminated disinformation was supposed to serve as a smokescreen for the events in Ukraine, namely the discovery of mass graves in Izhyum. Several departments reacted, for example the MZVaEZ, the Ministry of the Interior, and the mentioned police, at the same time the Russian ambassador was summoned. The narrative reached the media space, and the information was brought to the fore (Köles, 2022). In other posts, the Police Department of Communication and Prevention described the purpose of the information operation, and at the same time reported on the crimes in Izju and the events in Ukraine. They also reported on media that treated misinformation as fact, including a report on Russian state television. The prime minister also appealed to citizens to verify information and be cautious. As Köles (2022) stated, "we saw that those disinformation posts that claimed that alleged harm had occurred were subsequently deleted. So, we can consider this a successful example of how the state can face information campaigns."

As part of the strategic communication of Slovak institutions, several types of content are highlighted. One of them is engaging social media followers through interactive content that both entertains and builds critical thinking. This type of post is published, for example, by the aforementioned website Hoaxes and Frauds - Slovak Police, where people could vote for the hoax of the year. It is also recommended to use simple hashtags and slogans that all participating departments can use at the same time. Less formal communication with citizens and the creation of podcasts are also considered good practice.

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# ANALYSIS OF CRITICAL INFRASTRUCTURE COMPONENTS IN TERMS OF POSSIBLE SECURITY THREATS

### Bożena Konecka-Szydełko<sup>1</sup>

#### ABSTRACT

The uninterrupted operation of critical infrastructure (CI) has a key impact on the security of the state, its citizens and the functioning of many institutions. In addition, close connections and dependencies between individual CI systems additionally enforce the protection of its continuity of operation. In addition, Russia's war of aggression against Ukraine has brought with it new threats - both physical and in the form of cyberattacks - often combined in a hybrid form. Sabotage of the Nord Stream gas pipelines and the German rail network and other recent incidents have clearly shown that the resilience of the EU's critical infrastructure is at risk. The article analyzes the essence of critical infrastructure protection, types of its protection and the possibility of their implementation by the operators of this infrastructure. Reflections and conclusions of the author on the place and role of public administration in the protection of critical infrastructure are also presented.

Keywords: security, critical infrastructure, cyber threats, terrorism, ICT protection

#### Introduction

Critical infrastructure (CI) is a key element from the point of view of national security, stability and economic development, the functioning of societies and individual citizens. Although the infrastructure, which is of particular importance for the functioning of man and the communities created by him, has existed since ancient times, its importance has constantly increased with the development of civilization. Ensuring its safety has also become increasingly important, especially in recent years.

The main turning point in the debate on CI protection was the terrorist attacks of September 11, 2001 in the United States, followed by those in London and Madrid in 2004. They made us realize, firstly, how dramatic the consequences of attacks targeting the most sensitive infrastructures can be; secondly, how interdependent the individual elements of infrastructures are [Hamerrli, Renda, 2010, p. 12], and finally, the fact that not only state actors, but also non-state actors can pose a threat to the functioning of states. In addition, Russia's war of aggression against Ukraine has brought with it new threats - both physical and in

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the form of cyberattacks - often combined in a hybrid form. The sabotage of the Nord Stream gas pipelines and the German rail network, as well as other recent incidents, have clearly shown that the resilience of the EU's critical infrastructure is at risk. In connection with the above, it is extremely important to properly designate critical infrastructure, identify threats and properly plan and implement its protection. The answer to this type of needs is continuous development and improvement, according to the changing conditions of this process. As a result, individual states and international organizations (e.g., the European Union) intensified their activities aimed at protecting CI. Nowadays, however, we observe one more trend, crucial from the point of view of ensuring CI protection - it is the increase in the role and importance of cyber security as the foundation for the functioning and security of CI.

Since the uninterrupted existence and development of the state depend on the condition and efficiency of the specific infrastructure, it should be subject to special protection and defense. In Poland, under various legal acts, there are various definitions and divisions of this infrastructure.

In various legal acts it is defined as:

• facilities of particular importance for the security and defense of the state [Regulation of the Council of Ministers, Dz.U. 2022 pos. 880];

• areas, facilities, equipment and transports subject to mandatory protection [Act, Journal Laws of 2023, item 122];

• critical infrastructure [Act, Journal Laws of 2023, item 122].

In the countries of the European Union, the term critical infrastructure has been adopted [Council Directive 2008/114/EC]. Due to its special importance for the proper functioning of the state economy and society, the aim of this article is to identify critical infrastructure and threats that may cause its malfunction.

In order to achieve the assumed goal, a research problem was formulated with the following content: what infrastructure should be included in the critical infrastructure and what is the impact of threats on objects and devices included in this infrastructure? Since defining the concept of critical infrastructure is a complex task due to the variety of facilities and services included in it and their continuous evolution, and thus the variety of threats that may cause disruptions in the operation of this infrastructure, there is a need to define the following detailed problems:

• What facilities and devices are classified as critical infrastructure?

• What is the importance of critical infrastructure for the proper functioning of the state and its citizens?

• What are the main threats causing disruptions in the operation of the infrastructure critical?

The existing knowledge, supplemented and enriched by studying the literature on the subject, allows for determining the probable solution to the main scientific problem. It was presented in the form of a working hypothesis with the following content: Critical infrastructure, created by facilities and service devices

designed to ensure the proper functioning of the state and the economy, is subject to constant changes resulting from the development of human civilization.

The problem of effective protection of critical infrastructure has been reflected in the applicable legislation, it can be said that the need to protect infrastructure (regardless of what it would be called) is a task of high priority. The variety of criteria according to which the infrastructure is classified means that selected facilities can be classified into different categories (resulting from the above-mentioned legal acts). This also results in an ambiguous division of competences of the authorities responsible for selecting objects of critical importance for the state and defining strategic goals for their protection [Lidwa, Krzeszowski, Więcek, Kamiński, 2012, pp. 41-45]. It should not be forgotten that part of this infrastructure is in private hands (communication systems, ICT, transport).

This requires appropriate cooperation between the administrators of individual systems and awareness that in the event of disruptions and irregularities, the effects may not only cover the direct users of the infrastructure, but also have an international character.

### 1 What is critical infrastructure and stages of its identification

Critical infrastructure are systems and their functionally related objects, including buildings, devices, installations, services crucial for the security of the state and its citizens and serving to ensure the efficient functioning of public administration bodies, as well as institutions and entrepreneurs [www.gov .pl/web/rcb/narodowy-program]. The graphical depiction of CI is shown in Figure 1

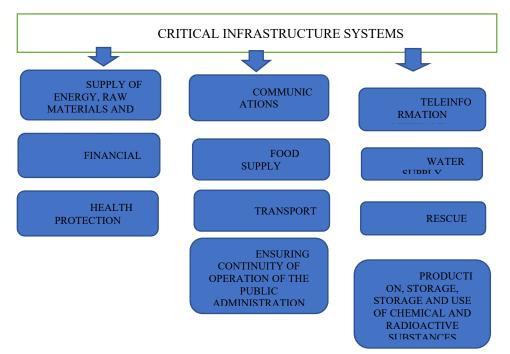


Figure 1. Composition of critical infrastructure systems Source: Own study based on: Act of 26 April 2007 on crisis management (Journal of Laws of 2023, item 122).

The term critical infrastructure (CI) refers primarily to domestic resources that are of fundamental importance for the functioning of the state and its citizens. This term means the physical facilities, supply systems, technologies and information networks that as a result of destruction, disruption or damage, they become unavailable for a longer period, and thus may significantly affect the social or economic conditions of society or affect the ability to ensure national defense and security.

European Critical Infrastructure are systems and their functionally interrelated facilities in the field of electricity, oil and natural gas as well as road, rail, air, inland waterways, ocean shipping, short sea shipping and ports, located on the territory of Member States Member States of the European Union, the disruption or destruction of which would have a significant impact on at least two Member States. The country's membership in the European Union is associated with the creation of new or adaptation of existing national legal solutions and terminology to the corresponding EU solutions. In Poland, the Act of 26 April 2007 on crisis management was passed [Act, Journal Laws of 2023, item 122]. The Act specifies, among others: rules for categorizing objects as belonging to critical infrastructure, drawing up their lists, as well as criteria for qualifying an object as belonging to European critical infrastructure (point 6a of the Act [Act, Journal of Laws of 2023, item 122]).

There are two types of criteria: sectoral and cross-sectional:

- Sectoral criteria are approximate numerical thresholds that characterize the parameters included in the critical infrastructure systems of facilities, devices and installations or functions performed by these facilities, devices and installations, determining the identification of critical infrastructure.

- Cross-cutting criteria include: • the casualty criterion – assessed in relation to the possible number of fatalities or injuries; • economic effects criterion – assessed in relation to the significance of economic losses or deterioration of the quality of goods and services; • social impact criterion - assessed in terms of impact on public confidence, physical suffering to individuals and disruption of daily life, including loss of essential services. The listed criteria are confidential.

The areas included in the critical infrastructure specified in art. 3 of the Act [Act, Journal Laws of 2023, item 122] do not indicate the list of specific systems used and functionally related objects included in them, including devices, installations, services crucial for the security of the state and its citizens and serving to ensure the efficient functioning of public administration bodies, as well as institutions and entrepreneurs. This is due to the dynamic nature of the services and related systems, as well as the fact that the list of its components, as well as the detailed criteria and thresholds for determining its components, belong to the

group of sensitive information which, if disclosed, could be used to planning and carry out activities aimed at disrupting or destroying critical infrastructure equipment. Proper identification of elements included in the critical infrastructure within individual sectors, as well as the formulation of security requirements for their protection, allows for the design of security measures that should be adequate to the identified threats and risks. It should be remembered that the security of the entire infrastructure is related with taking all actions aimed at ensuring functionality, business continuity and its integrity, in order to prevent threats and limit and neutralize their effects.

The stages of identifying critical infrastructure and determining security measures are presented in Figure 2.

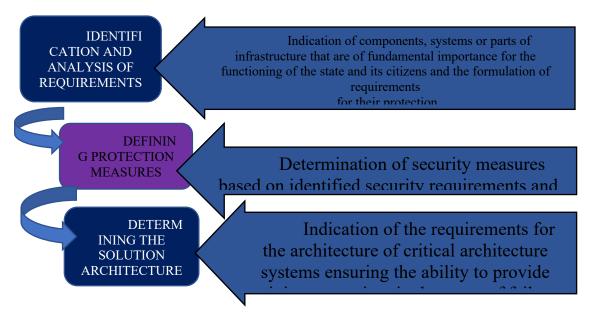


Figure 2. Stages of identifying critical infrastructure and defining security measures.

Source: Own study based on: Act of 26 April 2007 on crisis management (Journal of Laws of 2023, item 122).

#### 2 Threats to critical infrastructure

The process of man becoming independent from nature and the unpredictable consequences of its operation through technological development, which is an expression of expanding man's independence and meeting his needs, paradoxically introduced a new threat - technological dependence [Pomykalski, 2001].

Threats that may cause a crisis situation affecting the security and functioning of the entire state or its individual regions can be divided into the following categories:

I - Threats resulting from natural disasters: • Flood, • Fire, • Drought, • Earthquake.

II- Threats related to human activity - PURPOSE: • Threats constituting a deliberate human act of a terrorist nature, • Economic and political threats.

III - Human-related hazards -UNINTENDED: • Construction errors of facilities and installations constituting elements of critical infrastructure, • Improper maintenance and operation of critical infrastructure equipment.

The impact of selected risk groups on elements of critical infrastructure is presented in

Table 1.By analyzing the areas of risk related to critical infrastructure, certain categories and groups of threats significant to the level of security can be identified. In this way, the risk management process is systematized [Wróbel, 2019, pp. 61-63] and it could be considered to use this analysis to maintain the risk register on an ongoing basis for the purposes of the Report on threats to national security [Regulation Journal of Laws of 23.12.2020. pos. 2344].

Element of	Threat	Danger	Consequences
Critical	category		
Infrastructure			
Energy supply system, energy resources and fuels	Category II	Fuel explosion due to electrostatic discharge caused by failure of electronic parts and devices that monitor fuel vapor and pressure. Regulating the capacity of connections of energy systems (electricity and gas) as a result of taking control over the management system of the country's energy network, including the control of electricity transmission and distribution.	Chaos among the population, impact on physical suffering - many victims or injured, ecological consequences - contamination of the area, preventing the provision of services and disruption of everyday life, economic losses.
Communication system and ICT networks	Category II and III	No or limited possibilities of using mobile communication systems for public and special applications as a result of improper protection of management sessions and configuration of active	Panic and disorganization among the population.

Table 1. Types of threats to critical infrastructure

		network elements. Inability to use generally available teletransmission and communication systems as a result of damage to the main telecommunications nodes.	
Financial and banking (stock exchange) systems	Category II and III	Instability and limited usability systems for conducting operations on the money market, including IT platforms supporting stock exchange operations as a result of errors in the software. Restriction of bank and brokerage accounts available via the Internet, including the possibility of accepting on-fine orders and settling transactions made in the network of ATMs and POS terminals as a result of the introduction of malicious software.	Lack of access to means of payment - conflicts among the population, theft, and extortion.
Food and water supply systems	Category II and III	Contamination of water supply sources as a result of incorrect operation of water purification and treatment control systems as a result of introducing distortions into the control system and water parameters. Environmental pollution due to improper storage of waste.	Significant impact on physical suffering and disruption of daily life, including loss of essential services, possible epidemics.
Health and rescue systems	Category II and III	Lack of communication between rescue and order services and the Armed Forces as a result of	Impact on public confidence, increased number of sudden deaths

		1. 1.1.	1
		disabling or incorrect	among the
		operation of the systems	population.
		supporting the emergency	
		number 112. Lack of	
		coordination of actions in	
		the event of a disaster as a	
		result of the	
		immobilization of	
		telecommunications	
		nodes at emergency	
		notification centers or the	
		introduction of	
		interference in the radio	
		channels of the	
		communication system of	
		medical rescue and public	
		order services and the	
		Armed Forces.	
Transport	Category		Casualties or
systems	II	as a result of taking	injuries, ecological
5		control over the track	consequences when
		circuits transmitting to the	transporting
		locomotive a signal about	dangerous
		the occupancy of the	substances.
		tracks and the maximum	
		permissible speed or	
		introducing distortions	
		into the telematics system	
		and overriding the track	
		occupancy control	
		system. Failure of traffic	
		light/traffic control	
		systems, including	
		intelligent transport	
		systems that monitor the	
		movement of public	
		transport vehicles and	
		control traffic signals in a	
		-	
		way that minimizes traffic	
Sustana	Cotocom	jams on the roads.	A hig impact on
Systems	Category		A big impact on
ensuring the	II and III	1 1	public confidence
continuity of		result of introducing	and

public		distortions into public	a sudden increase in
administration		registers in order to lose	crime.
		the integrity of the	
		collected data. Lack of	
		wired communication as a	
		result of incorrect	
		operation of	
		telecommunication	
		systems.	
Systems of	Category		Ecological
production,	I and III	resulting from	consequences and
storage, storage		construction errors of	contamination of the
and use of		objects	area.
chemical and		installations storing	alca.
radioactive		Ū.	
		dangerous substances or	
substances,		improper access and lack	
including		of monitoring of the	
pipelines of		storage sites for these	
hazardous		substances. Fire or	
substances		explosion of hazardous	
		substances as a result of	
		electrostatic discharges or	
		overloading of measuring	
		devices providing	
		signaling of hazards	
		(early warning systems).	
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Source: National Critical Infrastructure Protection Program [www.gov.pl/web/rcb/narodowy-program].

## **3** Forms of terrorist attacks on critical infrastructure systems

Terrorist attacks are among the significant threats to critical infrastructure facilities.

The most important objects in the first CI system are undoubtedly power plants, including:

a direct attack on the system, an attack through the power system, the possibility of sabotage inside the power plant, the takeover of the reactor control system and the impact of a large aircraft (passenger or transport aircraft) on the reactor of the power plant. This is particularly dangerous for old-type power plants, whose reactors have not been protected against such an eventuality [Sadowski, 2019, p. 9].

Communication systems and ICT networks are systems and networks whose malfunction or damage - regardless of the causes and scope - may cause a

significant threat to human life or health, defense interests and the security of the state and citizens, or expose these interests to at least significant damage. A separate problem is cyberterrorism, which consists in intentionally disrupting the interactive, organized circulation of information in cyberspace. The facilities in the group of financial systems include the headquarters of banks and their field offices, headquarters of financial exchanges, mints and securities factories, payment systems, settlement centers for payment cards and ATM networks. A terrorist attack may take the form of a bomb attack aimed at destroying infrastructure and causing losses in personnel and clients, or a cyber-attack on financial IT systems [Sadowski, 2019, p. 10].

Carrying out terrorist attacks against the food supply system (agricultural sector) is referred to as agroterrorism. It is a type of bioterrorism and can be defined as the deliberate release of animal or plant pathogens to cause fear, economic losses and destabilization of the state [Sadowski, 2019, p. 10].

The aim of terrorist activities may be to cause significant losses in people, to cause panic or to cause economic losses by stopping exports as a result of food contamination at one of its production levels. An equally sensitive system is the water supply system, especially in large urban agglomerations. It is made up of drinking water intakes and waterworks. An attack on this system may consist in contaminating water intakes with biological or chemical agents. The purpose of a terrorist attack with the use of this type of weapon will be to cause death or disease in a large area, which may take epidemic proportions, which may result in loss of trust in the authorities and destabilization of social and political structures.

Critical infrastructure related to transport and communication is one of the main targets of terrorist attacks. All types of transport and communication are at risk: air, rail, road and sea, as well as related infrastructure. Therefore, the objects of a terrorist attack may be elements of airport infrastructure and aircraft both at airports and during take-off and landing operations, as well as during the flight. The threat of a terrorist attack at the airport is still a current threat. It is also possible to use means of destruction to destroy (damage) the infrastructure of the airport or the aircraft. Another type of terrorist threat is an attack aimed at air traffic control and airport management systems using computer networks by cyberterrorists [Sadowski, 2019, p. 11].

The aim of a terrorist attack on the facilities of the rescue system infrastructure (crisis management centers, fire stations of the State Fire Service, facilities of the State Medical Rescue Service, technical emergency services) will be to destabilize management centers and directing the rescue operation, eliminating the rescuers and destroying the vehicles and rescue equipment, or to prevent rescue operations.

The system ensuring the continuity of the functioning of public administration consists of state administration facilities, especially those where state authorities responsible for counteracting, combating, recognizing terrorism or crisis management are located. They are one of the main targets of terrorist attacks around the world due to their strategic and symbolic nature. The databases in these objects may also be at risk.

Production, storage, storage and application systems for chemical and radioactive substances are profitable targets for terrorist attacks. The effects of attacks using explosives or artillery means of destruction can cause widespread fires or the release of large amounts of poisonous substances into the atmosphere, the so-called toxic industrial agents (TŚP), causing mass human poisoning or environmental contamination [Sadowski, 2019, p. 11].

# 4 The place and role of public administration in the protection of critical infrastructure

Contemporary social life is determined by digital technologies and ICT systems. The process of digital transformation applies to both the business area and the activities of public administration. It is accompanied by new threats and related risks. At the same time, mutual interdependence arises, as a result of which one person may own the infrastructure (and risks related to it), and someone else may own the effects resulting from the dysfunction of this infrastructure (risk related to social consequences).

Even if we can precisely determine whether the infrastructure is owned by the administration or a private entity, it does not necessarily mean that we can determine who is responsible for the secondary effects of the failure of this infrastructure. The fact that public administration cannot do without electricity supplied by business entities is obvious to everyone. However, it is no longer so obvious that the administration, through state registers or providing tax settlement programs, affects the processes carried out by the business world. In the latter case, it can even be said that the activity of the administration is a source of operational risk for the business entity. Even this cursory review of the phenomena we are dealing with indicates that emergence and comprehensive protection of critical infrastructure (CI for short) must be constantly adapted to the technical, economic and social reality[www.gov.pl/web/rcb/narodowyprogram].

Critical infrastructure is of key importance for the existence of the state, and within it - the organized society. If there is a disruption in its functioning, the state and its institutions may lose, in whole or in part, the ability to carry out their duties basic administrative and service functions, as well as to exercise effective control over its entire territory.

#### Conclusion

Today, it is impossible to imagine life without the surrounding infrastructure or the solutions it brings. The pace of technological development bringing technical innovations practically every day is no longer surprising, and the universality and usefulness of services resulting from it have become addictive. However, the 21st century does not pose questions about the sense of these changes, but about: How to survive in a world saturated with technologies? How to enjoy the achievements of modernity and not become their victim at the same time? A man aware of new threats increasingly directs his expectations towards the state to reduce the risk of their occurrence. It is the state and international organizations, due to the extent of the infrastructure and its crossborder nature and universality, are predestined to assume this responsibility. One of the tools allowing to control threats, at least in part, is CI. Paying attention to the sensitive elements of the human environment and identifying their characteristic features, and as a consequence, creating specific solutions dedicated to them made it possible to reduce the risk of dysfunction of the services provided by them.

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# ARE DISINFORMATION AND HOAXES THE GREATEST SECURITY THREAT TODAY?<sup>1</sup>

# Svetozár Krno<sup>2</sup> - Beáta Izsófová<sup>3</sup>

#### ABSTRACT

This study deals with various forms of spreading faulty judgments, unconscious and conscious lies, while also addressing the impact of purposeful disinformation and hoaxes on the population in a democratic political system. In addition, the study focuses on stereotypical prejudices, traditional flawed methodological procedures or techniques in the analysis of key political issues, and habitual fallacies and untruths, falsities that invade the public space in the form of hoaxes. It also compares them from the position of impact on security.

Key words: canard, hoax, truth, security, neo-colonialism, cultural racism

The effectiveness and meaningfulness of discussions are limited by three key factors:

1. methods of reasoning and argumentation,

2. interests and aims of the parties involved, and last but not least

3. factual knowledge of the discussants about the topic.

Many truly influential personalities commented on the frequent incompetence of discussions in the public space, but let us mention perhaps the most competent author from the end of the classical period of Greece. Aristotle (Ἀριστοτέλης Aristotélēs, 384–322 BC) points out in the first paragraph of the first chapter of the work *Sophistical Refutations* (Σοφιστικοὶ Ἔλεγχοι, Sophistikoi Elenchoi) that refutation and proving often represent paralogisms, fallacies and not proofs. In the following paragraph, he distinguishes between real syllogisms (σιλγογισμός, syllogismos, which means *conclusion, inference*)<sup>4</sup> and those that only appear to be syllogisms (Aristotle, 1978).

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<sup>&</sup>lt;sup>4</sup> A syllogism is a logical statement according to which one of the statements is derived from two premises. Its definition was given by **Aristotle** in *Prior Analytics* (Άναλυτικὰ Πρότερα, Analytica Priora), the third part of a six-volume work, later called the *Organon*. A syllogism

Among others, **I. Kant** (1724–1804) followed up on Aristotle. In the work *Critique of Pure Reason* (Kritik der reinen Vernunft, 1781), in the chapter *The paralogisms of pure reason*, on the example of the soul, he discusses four forms of logical paralogism, i.e. of inadvertent faulty judgment, which "will have its ground in the nature of human reason, and will bring with it an unavoidable, although not insoluble, illusion" (Kant, 1998, pp. 411). This way of argumentation<sup>5</sup> differs from sophistry, which uses conscious logical errors to assert certain interests, in other words, it is an outwardly logically structured deception.<sup>6</sup>

The mentioned authors distinguished between distorted statements and uttered falsehoods and between an unconscious logical error and a conscious intention. In 21<sup>st</sup> century, words such as *fake*, *disinformation*, and *hoax* began to be used very frequently in the dictionaries of many nations. These terms have a certain negative connotation. Their content differs from the relatively innocent canards, the aim of which was not to spread political, economic or worldview positions by means of deliberate lies, but only to be the most original, engaging, and responsive in the competitive environment of the mass media, even at the cost of the fact that the reputation of their seriousness would decrease over time.<sup>7</sup>

The mentioned serious terms such as *fake*, *disinformation*, and *hoax* are not always used adequately, which consequently devalues their social meaning as is the case with many terms related to politics. In a political struggle, they are used to label and ostracize as an effective verbal weapon against an opponent with whom we are afraid to enter into a serious discussion. Here, instead of the *argumentum ad rem* (argument directed to the point) method, *argumentum ad* 

corresponds to deductive reasoning, in which we usually proceed from a general statement and arrive at a unique conclusion, in contrast to inductive reasoning, in which the process of reasoning and argumentation is reversed (according to this, if object  $X^1$  has property Y and object  $X^2$  also has property Y, object  $X^N$  will have property Y, too).

<sup>&</sup>lt;sup>5</sup> In the next chapter, entitled *The antinomy of pure reason*, he follows on the ancient Greek *aporias* (ἄπορίā, aporíā = meaning literally *no road* and figurative *dead end*) spread mainly by **Zeno of Elea** (490–430 BC) (Kant, 1998, pp. 459–495). Antinomies (ἀντί, antí means *against, in opposition to*, and νόμος, nómos means *law* = contradiction in the law) are created by combining two contradictory, equally justified judgments.

<sup>&</sup>lt;sup>6</sup> In ancient Greece, sophistry was often reduced to eristics (from Eris, the ancient Greek goddess of chaos, strife, and discord; eristikē technē = *the art of sparing*), to verbal techniques aimed at denying the opponent's arguments and winning the dispute at any cost. It is related to demagoguery (δημος, démos means *people*, αγωγος agógos means *leader*), which acquired a negative connotation in classical Greece only after the departure of **Pericles** (around 495-429 BC) from the leadership of Athens.

<sup>&</sup>lt;sup>7</sup> "New Year's Eve and other humorous editions of printed periodicals, for instance, became a special type of canards, bringing various fictional stories that already declared clear literary fiction in addition to being printed in italics. It was evident to the educated reader that they did not offer a purely factual account. Hence, it was not a deception, but a fair and open effort to entertain the recipient" (Krno – Izsófová, 2022, p. 99).

*hominem* (argument directed to the person)<sup>8</sup> is used. Its goal is to discredit the opponent and thus also their ideas without actually discussing the chosen problem.

The activities with which the above-mentioned four concepts are connected affect the company's operation, including safety issues. The interest in them is logical, natural, and inevitable, when analysing their origin, spread, reception, and reactions of the democratic state to them. The problem arises when the objective needs of society are changed to "campaign fashion". Sometimes, however, one forgets about other spreading of ignorant and unfounded claims, which disrupt the state and the world community in security issues in a different and no less powerful way.

At launch of European Diplomatic Academy on October 13, 2022, J. **Borrell** (1947) gave an opening speech with a long reflection on the relationship of the intrigued majority of Europe to most of the rest of the world, which begins with the following words: *"Here, Bruges is a good example of the European garden. Yes, Europe is a garden. We have built a garden. Everything works. It is the best combination of political freedom, economic prosperity and social cohesion that the humankind has been able to build – the three things together. And here, Bruges is maybe a good representation of beautiful things, intellectual life, wellbeing.* 

"The rest of the world [...] is not exactly a garden. Most of the rest of the world is a jungle, and the jungle could invade the garden. The gardeners should take care of it, but they will not protect the garden by building walls. A nice small garden surrounded by high walls in order to prevent the jungle from coming in is not going to be a solution. Because the jungle has a strong growth capacity, and the wall will never be high enough in order to protect the garden.

"The gardeners have to go to the jungle. Europeans have to be much more engaged with the rest of the world. Otherwise, the rest of the world will invade us, by different ways and means.

"Yes, this is my most important message: we have to be much more engaged with the rest of the world.

"We are privileged people. We built a combination of these three things – political freedom, economic prosperity, social cohesion – and we cannot pretend to survive as an exception. It has to be a way of supporting the others facing the big challenges of our time" (EU Debates, 2022, 0:53-3:00 [online]).

<sup>&</sup>lt;sup>8</sup> We distinguish three types of the aforementioned argumentation:

a) *Argumentum ad hominem personam* (to personality) represents a militant attack on the opponent, an attempt at his human and professional dishonour and more or less rejection of substantive discussion.

b) Argumentum ad hominem circumstantiae (according to the circumstances) is used when we want to challenge the opinion opponent by saying that, due to their position, actions, interpersonal relations, they cannot be objective and unbiased in the given topic.

c) Argumentum ad hominem tu quoque (and you too) focuses on contradictions in the opponent's sentences.

The term jungle comes from the Sanskrit word jangala (जङ्गल). In its current meaning, it refers to dense moist equatorial and tropical forests not only with dense vegetation, but also with fauna. In a broader sense, impassable forest stands and zones closer to the Earth's poles. It was popularized by R. Kipling (1865–1936) in the novel The Jungle Book (1894), in which he depicts the world of local animals as a utopian idyll in which each individual has his place and in which everyone works together. This English writer, winner of the Nobel Prize for Literature in 1907, followed up on the Russian natural scientist and philosopher, P. A. Kropotkin (П. А. Кропоткин, 1842–1921), who claimed that among the animals from the Amazon basin to the Siberian rivers in the territory of present-day Buriatsk, in which he undertook exploratory expeditions, reciprocity and cooperation, but not competition, dominate (Кропоткин, 1907, pp. 21-42). According to him, here, in the land of harmony, there is no room for the heightened human egoism described by T. Hobbes (1588-1679)9. For example, he considered the Indians, who gave the word jungle to the world, eternally "unruly" children with anti-liberal attitudes that are underdeveloped in terms of civilization, unable to act independently and destined for "help" from the so-called higher civilization.

The concept of the jungle carries a metaphor. It has a distinctly negative connotation. By metropolitan jungle we mean slums on the outskirts of megalopolises, in which residents live in inhumane conditions. The metaphor of the jungle refers to a world with a highly competitive system that lacks fair or any rules, and in which the stronger, but especially the more malicious and amoral defeats the weaker and more decent. American writer and politician **U. B. Sinclair Jr.** (1878–1968) in the novel *The Jungle* (1906), a realistic naturalistic story about a meat processing plant in Chicago, in which workers worked in horrible sanitary conditions and without social security. He wrote the book in the form of a realistic report in which he avoided what we nowadays call political correctness. He used a method called muckraking.

The negativity of the jungle, however, does not apply absolutely. It depends on the perspective from which we look at the forest. **J. E. Pałkiewicz** (1942), an Italian expeditious tourist, sailor and poet of Polish origin, wrote in his bestseller *Urban survival manual* that the greatest dangers lie in wait for us not in the polar regions, in the endless deserts, in the harsh mountains or in the Amazon jungle, but in a big city. High population density, traffic problems, unhealthy environment, quality of drinking water, and, in many areas of the world, supply difficulties – all of these drastically affect our lives and lead to stress, neurotic

<sup>&</sup>lt;sup>9</sup> In his play *The Comedy of Asses* (Asinaria), the Roman satirist **T. M. Plautus** (254-184 BC) used the statement "*Lupus est homo homini, non homo, quom qualis sit non novit*" (translated as "*Man is no man, but a wolf, to a stranger,*" or "*A man is a wolf rather than a man to another man, when he has not yet found out what he is like.*"), which was revived by **T. Hobbes**.

interactions, crime, and loss of human qualities, which would not have developed so much in the original environment (Pałkiewicz, 1986).

However, **Borrell**'s reasoning carries a pervasive negative symbolism: it unconsciously continues the traditions of moderate cultural racism, which, unlike biological racism, does not take an extreme form. It also corresponds with the Calvinist-Presbyterian concept of predestination.

Even G. W. F. Hegel, who immensely enriched the development of European philosophy, did not avoid racism and continued the traditions. According to him, "deceit and cunning are the fundamental characteristics of the Hindoo. Cheating, stealing, robbing, murdering are with him habitual. Humbly crouching and abject before a victor and lord, he is recklessly barbarous to the vanquished and subject" (Hegel, p. 158).

**R. Kipling**, a great storyteller and painter of characters from India, which he knew and loved sincerely, considered the natives as eternally immature children, dependent on the help of adults. In the well-known poem *The White Man's Burden* (1899), he perceives the British as the bearer of culture with a higher moral mission to educate and lead the "wild" Indians, to reshape them in his image, without asking them whether they stand for the British mission and, if so, what kind of help they are interested in. A strict reader will also discover elements of cultural racism in the verses.

"Take up the White Man's burden— Send forth the best ye breed— Go bind your sons to exile To serve your captives' need; To wait in heavy harness On fluttered folk and wild— Your new-caught sullen peoples, Half devil and half child" (Kipling, 1899, [online]).

Kipling became an enthusiastic and sincere supporter of British colonialism. By the term imperialism he understood the spread of the values of the "higher" British civilization – the so-called Pax Britannica. The mentioned poem caused great indignation not only in the developing world. To this day, it is evaluated in two ways in Europe. Many conservative supporters of British colonialism identify with the poem.

Orientalism became the ideological continuation of cultural racism. This term was popularised thanks to the American literary scholar of Palestinian origin working in the USA **E. W. Said** (1935–2003). In his most famous work, he mentions the four basic Orientalist dogmas: "[...] one is the absolute and systematic difference between the West, which is rational, developed, humane, superior, and the Orient, which is aberrant, undeveloped, inferior. Another dogma is that abstractions about the Orient, particularly those based on texts representing a 'classical' Oriental civilization, are always preferable to direct evidence drawn from modern Oriental realities. A third dogma is that the Orient

is eternal, uniform, and incapable of defining itself; therefore it is assumed that a highly generalized and systematic vocabulary for describing the Orient from a Western standpoint is inevitable and even scientifically 'objective'. A fourth dogma is that the Orient is at bottom something either to be feared (the Yellow Peril, the Mongol hordes, the brown dominions) or to be controlled (by pacification, research and development, outright occupation whenever possible)" (Said, 1979, pp. 300-301).

Orientalist statements and behaviour do not count with the majority of the world as equal partners.<sup>10</sup> It does not disrupt security relationships. The attitude of many developing and former developing countries to the current war in Ukraine is not related to sympathy with the Kremlin's international policy, but to long-standing efforts to recognise equality. During the international conference Globsec 2022 Bratislava Forum in Bratislava, Slovakia, on June 3, 2022, Indian Minister of External Affairs **S. Jaishankar** (1955) stated that *"Europe has to grow out of the mind-set that Europe's problems are the world's problems but world's problems are not Europe's problems"* (Ministry of External Affairs, India, 2022, 21:45-21:55 [online]).

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# THE PHENOMENON OF SURVEILLANCE AND PEOPLE'S RIGHTS

# Jozef Lysý<sup>1</sup>

#### ABSTRACT

The question we are trying to answer concerns capitalism, which we also are experiencing in Slovakia. The one that is presented to us demands from us utopian ideals while it abandons relations with people, it does not need society; in this colony, surveillance is sufficient, surveillance that is in the hands of the surveillance capitalists. It is disturbing that the efforts for which the domination of man was sufficient are being overcome. What follows is the overthrow of the sovereignty of the people, the key institution of modern times, with all its historical vicissitudes, including liberal democracy.

#### Keywords: behavior, capitalism, data, rights, surveillance

In our political and media environment, the opinion that the traditional way of communicating or processing content is not enough has been asserted, too. With the transition to the digital space, the way information is delivered is also changing. This also applies to documentaries; they too have fallen into the space of genre hybridization and are handled by means of feature films with actors. The evolution we are witnessing has fully affected journalism and news reporting. In Slovakia, too, the use of artificial intelligence as an online tool for moderating commentary has been launched. The boundaries that must not be crossed are human rights, racial and religious tolerance and a clear stance on violations of international law and conventions.

We find ourselves in an era of surveillance capitalism, which is accompanied by a disruption of organic relations between people. Surveillance capitalists are different from traditional utopians. They extract and sell our lives to finance their freedom and our subjugation, their leadership and our ignorance of what they know (Zuboff, 2022). This reversal cannot but have an impact on the relationship to democracy as opposed to the period of industrial capitalism. The structural independence of the surveillance capitalists shapes the phenomenon of "radical indifference." This is a form of social order in which the field of action is not the state but the market, and radical indifference is then an asocial mode of knowledge (Zuboff, 2022). In our case, we are facing the ambition of Google and Facebook to replace professional journalism. In other words, we have equivalence without equality, which cannot but be a distortion of reality (fake news). This is happening in an environment in which there is a shift from a division of labor to a division of knowledge. This would be impossible without radical indifference.

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It is here that every new chapter in the centuries-old history of human emancipation must begin. Can the instability of the second modernity give way to a new synthesis? Apple once embarked on this journey, and for a while it seemed that its fusion of capitalism and digital technology might lead towards a third modernity, a surveillance capitalism. Surveillance capitalism is shaping a new economic order, argues Shoshana Zuboff. After Snowden and Assange, we are well aware that the issue is not just about the gathering of information, but about the gathering of data that large technology companies such as Google and Facebook use to predict our behavior and also to influence and correct it. We are becoming the material that surveillance capitalism is turning into data, infodata. Some of it is used to improve products or services and the rest becomes privately owned behavioral surplus. The data includes our location, age, profession, lifestyle, habits and a host of personal and professional preferences. The society we find ourselves in has one word, dreadfulness. At first it looked like a significant economic modification was coming. What was forgotten in the excitement and addiction was that the forces of capital in the real-world economy were claiming ownership of the digital sphere. In 2007, Mark Zuckerberg declared that privacy was no longer a social norm (Zuboff, 2022). The discovery of online contracts has been a wonderland. Sacred concepts such as "agreement", "promise", since antiquity fundamental to the development of the institution of contract, have degenerated into a magic signal that merely indicates that the company using a standardized form of contract wishes to oblige the contract recipient. It is a unilateral usurpation of rights without the consent of the user. If the recipient of the service wants to transact with the firm, he must enter the legal universe it has invented. It was when the behavioral surplus (a huge mass of information, data, data) emerged that brought about the infinite regress of the conditions of expropriation.

Surveillance capitalism is a system that collects users' personal data to gain information about their behavior and then, by analyzing this information, creates a "behavioral prediction" (an idea of how the user will behave) that it then uses to gain profit. They have created a surplus of data that has this magical name: "behavioral surplus". What followed?

The form of capitalism Zuboff writes about does not abandon the established capitalist "laws" (competitive production, productivity and growth), but the previous dynamics operate in the context of a new logic of accumulation. For the necessary development of the means of modifying behavior as a "means of production", it uses machine intelligence in a more complex system of activities thanks to which a framework for unprecedented instrumentalist power and its social consequences is created. It started optimistically, with the invention of Google. It was in 2002 that surveillance capitalism took root. Coincidentally, it was the valorization of 'behavioral surplus' (human behavior in the form of data). Data logs found that among the most frequently searched queries on Google was the phrase "Carol Brady's maiden name." This 1970s TV character became a

question on the TV program also known in this country, Who Wants to Be a Millionaire? (actually it all has been working to this day, not just the reality show, but other replications as well). A wave of questions flooded the Google server on this issue. The repository of this data became a predictive force and information capitalism became a lucrative surveillance project (Zuboff, 2022). This was followed by the institutionalization of an unusual governance structure. Google began to create a dynastic lineage of the company. This took place in 2011, and Google bosses Page and Brin created a new shareholder share structure with three classes of A and B shares, to which they added a third "C" share with no voting rights. The truncated "C" shares ensure that Page and Brin retain control far into the future. In 2017, they already controlled 83% of the class with super-voting rights, giving them 51% of the voting rights. This accomplishment of theirs has begun to be emulated by many Silicon Valley company founders. This was most evident at Facebook. Zuckerberg's non-voting Class "C" shares helped cement his personal control, although he later withdrew it under pressure from investors.

At this point, Zuboff cites Hannah Arendt, who examined the export of capital by British capitalists to Asia and Africa in the mid-nineteenth century and concluded that here, in underdeveloped regions without industry and political organizations, where violence had more freedom than in any Western country, the so-called laws of capitalism could create reality (Zuboff, 2022). The philosopher of language, John Searle, explained the concept of declaration as a particular mode of speech and action that creates facts out of nothing and establishes a new reality out of "nothing." The declaration describes the world as if the desired changes were already true: "We make something real by pretending that it exists" wrote Searle (after Zuboff 2022). Several centuries before Google, the Spanish conquistadors did this to America. Googe came up with a proclamation created out of nothing. The facts they proclaimed were expected (after the expropriation of the corporations). This invasion and conquest implicit in the declaration left the founders of Google, its fans and the devoted press in a state of ecstasy (like ESET and the Denník N (Daily N) in our country). The declaration consists of six statements:

- We claim human experience as a raw material that is freely available. On the basis of this assertion, we can ignore considerations of individual rights, interests, information, or understanding.

- Based on our claim, we claim the right to convert experience into behavioral data

- Our right to take, by virtue of our claim to free resources, grants us the right to possess behavioral data derived from human experience

- Our rights to take and own grant us the right to know which data to disclose

- Our rights to take, own and know grant us the right to decide how we use our knowledge

- Our rights to take, own, know and decide grant us rights to the terms and conditions that our rights to take, own, know and decide will preserve.

The age of surveillance capitalism was inaugurated by this "declaration" and the age of conquest began (Zuboff, 216). Then followed the invention of ways to extract data for movable (e.g. by the Massachusetts Institute of Technology's MIT Media Lab), which includes streaming etc. virtually to digital omniscience.

The most controversial and influential figure in American psychology as a science of human behavior was B.F. Skinner (1904-1990). He spent most of his career in the psychology department at Harvard University. Zuboff knew him personally and, in her words, had intimate discussions with him. Behaviorism provoked and continues to provoke indignation. But Zuboff was intrigued by the behaviorists' scientific perspective on the concept of the Other. Human behavior will yield to scientific research only when psychologists learn to view people as other. This new view is the idea of the human being as an organism. Again, the human being is thought of as an "it", an "other", a "they". An organism among organisms, like an earthworm, a lettuce, or a leech. Freedom in action was to Skinner what chance is to physics (Zuboff, 2022). Knowledge does not liberate us, but rather deprives us of the illusion of freedom. Here, then, in a nutshell, is a sample of what lies behind one of the most overused terms of today and how otherness.

Skinner's vision of society today is orchestrated and implemented by big data, ubiquitous digital devices, higher mathematics, large-scale theories, a multitude of respected authors, institutional legitimacy, generous funding, and high-ranking friends in corporations, without provoking a global response and moral backlash... This is a testament to (Skinner's) vision of a 21<sup>st</sup> century society, realized by means that were not available to Skinner.

The accumulation of freedom and leadership, combined with the lack of organic relationships between people, creates a collectivist orientation for "surveillance capitalism" that differs from the origins of capitalism and has found its outgrowth in neoliberalism. It is a new form of collectivism in which the "collective colony", is not centered by the state but by the market. The colony imitates the 'termite state'. The high priests of neoliberalism practice the applied art of radical indifference, which is essentially an asocial way of knowing. Hayek in 1978 put it this way: "I influence public opinion. Nor do I believe that changing the law will do any good until public opinion is changed... the main thing is to change opinion: if Milton Friedman thinks the same thing (according to Zuboff, 2022).

Since in this world freedom is accidental, to a person who accepts the scientific view that human society is a group of organisms, the proposal to divide it into classes seems absurd. Zuboff worries about the difficulties with modern conceptions of behaviorism, not because they are wrong, but because they might become the truth of modern society. The promising flowering of human activity may end in the deadliest, most sterile passivity history has ever known. (Zuboff, 438). This was also the thought of Hannah Arendt, the German philosopher and author of The Origins of Totalitarianism, which Zuboff quoted.

In surveillance capitalism we are data in an information society. Ironically, the offer of this new age is: from each according to his abilities, to each according to his needs, except not according to my needs, but according to our offer. Moreover, it is hard to shake the idea that surveillance capitalism is not geopolitics. Then that explains everything.

Power unrestrained by democracy can lead to despair and exile. Thus, Zuboff returns to Thomas Paine, who urged every generation to assert its will once illegitimate powers seize the future and we find ourselves in the tug of a fate we did not choose. If the present or any other generation is willing to submit to slavery, it does not diminish the next generation's right to freedom: wrongs have no legal justification. In The Rights of Man, he rejected the hereditary and monarchical system, advocating popular sovereignty and civil rights. He rejected the idea of a minimal state and advocated a program of a socially responsible state. He recommended that the state fund unemployment benefits, old-age pensions, a national welfare system, maternity benefits, orphan benefits, proposed a progressive wealth tax, and advocated redistributive taxation. Paine opposed censorship and the disenfranchisement of women, an enemy of bigotry, an advocate of toleration; he died forgotten in the United States.

Finally, Egon Bondy: And even if World War III does not take place, there will be enough incentive for bourgeois democracy in the countries of the First World to increasingly become a charade and a cover for totalitarianism with all its abominations, starting with the monopolistic denigration of the population - because this denigration is the most terrible weapon of the ruling class of the new type: never before in history has it been more sophisticated and based on scientific foundations (Bondy, 2002).

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# THE IMPERATIVE LINK BETWEEN ENVIRONMENTAL SECURITY AND ENVIRONMENTAL RESPONSIBILITY<sup>1</sup>

# Anna Mravcová<sup>2</sup> - Jana Gálová<sup>3</sup>

#### ABSTRACT

Despite the intense global political efforts, we observe that individual, particularly environmental problems persist, indeed, the environmental crisis continues to deepen and intensify, while the time for its consequences to reach catastrophic levels is shortening. Within this, climate change is considered to be the most serious problem endangering global environmental security, because its consequences may be much more serious and far-reaching than those of other global environmental problems. In this context, the aim of our paper is to examine and highlight the importance of environmental security in the context of environmental crisis. It is precisely the environmental security that is not only gaining in significance today but is also under considerable threat. Therefore, in the context of the above, we analyse its evolving and the urgency of the need of its support, as well as its necessary connection with environmental responsibility, which we perceive primarily as a political category. As the results indicate, only an active and strict approach of political elites and global community can lead to a more sustainable and safer direction of development for the future.

*Key words: environmental security, environmental responsibility, environmental crisis, environmental problems, anthropocentric approach* 

#### Introduction

Humanity is currently facing many serious problems and challenges, particularly environmental ones. The world has reached an environmental crisis that continues to deepen and intensify, with the time running out before its consequences reach catastrophic levels. Many of the processes that we are observing are occurring naturally, but most of them are caused by man and his "God complex", who is trying to assert its dominion and control over nature as well. Gradually, according to many experts, we have entered a new geological epoch called the Anthropocene, in which man is the dominant category in all the fundamental changes in the world (see more for example in, St'ahel, 2019).

Although man has always influenced his local environment, these activities have not had a significant impact and serious consequences in the past. However, the Industrial Revolution and the transition from the Holocene to the

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Anthropocene was a turning point that began to change this (more in Lax, 2021). Globalisation and humanity's ability to influence the environment globally play an important role in this. However, there are many perspectives on the environmental crisis, its causes and solutions. We agree with R. St'ahel that the global environmental crisis is fundamentally the result of the human strategy of overproduction, accumulation and consumption, the implementation of which is now reaching the limits of natural resources and of nature's capacity to absorb the pollution caused by this (more in Suša – Sťahel, 2016). S. Krno also see human as the cause of this crisis. He claims, the result of the current era is that the ideal citizens have become a homogenized, unilaterally oriented persons, dependent on excessive consumption with high, unified artificial consumption habits (Krno, 2007, pg. 433). In general, however, it can be said that the environmental crisis is a consequence of human activity and the fact that man has stopped seeing nature as a necessity for his survival and has turned his greatness into a defeat of nature. One of the key characteristics of the environmental crisis is therefore the very complexity of humanity's impact on ecosystems (see also Martin et al. 2015).

Decades of unlimited exploitation, with the naive belief of unlimited resources and possibilities, have led to a situation where the future of not only humanity, but also all living organisms, is indeed severely threatened. We are currently facing the consequences of our actions, which, without effective intervention, would ultimately lead to the destruction of the living world.

The environmental crisis is real and the data shows that the state of the environment is already alarming and the catastrophic predictions are becoming more and more closer. Now it is endangering also the security sphere as there is great linkage between environmental change, degradation and possible violent conflict. Environmental security is increasingly viewed by various experts and agencies as a critical task of governments, international organizations and whole global community (see Wenning et al., 2007). Increases in human population and resource use are placing growing pressure on natural resources, leading to destabilization of ecosystems globally. Human interventions have a direct impact on the environment. Overexploitation of natural resources due to population and economic growth has led to the degradation of the environment and environmental crisis and so to the consequent loss of ecological integrity and the ability to support future of mankind any other species on this planet, not only a growth (Wenning et al., 2007).

Already the Rio Declaration on Environment and Development signifies that the global community of states officially recognises that there is a link between peace, human well-being and environmental protection (Barnett, 2007). The relationship between environmental changes and environmental degradation in relation to the issue of security has taken on greater importance as new challenges have emerged, particularly since the Cold War, and environmental problems have begun to become truly global and increasing. The question of the relationship between the environment and security has become a common concern of scientists and professionals and in the political community, especially since traditional security concepts based on national sovereignty are not sufficient (Zurlini – Müller, 2008).

In this respect, environmental responsibility has become an important category, especially its political and collective dimension, because it is the latter, thanks to political power as an essential category, which can also bring about real and calculable change. The related assumption, based on the Anthropocene system, that humanity is responsible for its own destiny and must learn how to manage its environment, leads to the need to address the root causes of the environmental crisis and to strongly rethink the links between environment, security and social change (see more in, Hardt, 2012).

The aim of this paper is to examine and highlight the importance of environmental security in the context of environmental crisis. We can see that it is precisely the environmental security that is not only gaining in significance today, but it is also under considerable threat. Therefore, in the context of the above, we analyse its development and mainly the urgency of the need of its support. Then we focus our attention to the necessary link among the environmental security and environmental responsibility, which we perceive primarily as a political category. As our results indicate, only an active and strict approach of political elites and global community can lead to a more sustainable and safer direction of development for the future and to maintain the life on Earth.

# 1 Environmental security and possible future threats arising from it

The concept of environmental security emerged at the United Nations Conference on the Human Environment in 1972 (Buzan – Wæver – Wilde, 1998, pg. 71). After the Cold War and the disappearance of this type of threat, focus turned to the environmental crisis and its importance as it has global reach accompanied with a high level of degradation (Smil, 1997, pg. 107). Environmental security is a category with many views on it. It has been defined by many scientists, governments and organizations, however there is not consensus on a single definition among them. Existing definitions are usually based on fundamental features: it is about repairing damage to the environment in order to:

- Sustain human life on Earth;
- Preserve the internal values of the environment, as well as to prevent damage, attacks, or other forms of human (Glenn Gordon Perelet, 1997–1998).

Environmental security can, for example, be defined as "the relative security of the public from environmental threats caused by natural or human processes, by lack of awareness, accident, mismanagement, or management design, and originating within or beyond national boundaries" (Enviro-portál, 2012). In the context of environmental security, it is therefore important to look for links between environmental change and the potential outbreak of violent conflict, which is becoming one of the central debates within the concept. Many resource conflict theorists believe that environmental change cannot be considered as an imminent cause of conflict, but rather as an accelerating factor (Baechler, 1999; De Soyza, 2002).

However, over time, as the crisis deepens and its effects intensify, this will no longer be the rule and security will be seriously threatened precisely because of the consequences of the environmental crisis, when, for example, the struggle over resources or land may be the most frequent conflicts that transcend national borders.

In order to understand the deeper significance of environmental security, we can work with the definition by Belluck et al. (2005), which states that "environmental security involves actions that guard against environmental degradation in order to preserve or protect human, material, and natural resources at scales ranging from global to local." This definition assumes linkages between individuals, households, communities, regions, nation-states, and globally, as well as linkages between different levels of ecological order (Wenning et al., 2007).

However, environmental security must be clearly distinguished from environmental protection (as security refers to the balance between human socioeconomic needs and technology, whereas protection refers to the application of technical solutions to maintain a certain level of environmental quality) (Wenning et al., 2007). Enhancing environmental security requires consideration of three basic elements:

1) Understanding the basic human and environmental conditions;

2) Anticipating various possibilities by which security could be compromised;

3) Analyzing the range of options to enhance, prevent, or minimize unforeseen events that could occur. Each of these elements must be examined in terms of the pressures imposed on it by three basic environmental security challenges:

- natural resource demands;
- environmental events;
- human activities (Wenning et al., 2007, pg. 23).

The concept of environmental security has historically been associated with environmentally initiated conflicts caused by environmental degradation in one or more of the following areas: overexploitation of renewable resources, pollution or impoverishment of human-populated places. This concept has been elaborated mainly by international policy researchers, focusing on the role of scarcity of renewable resources such as arable land, forests, water and fish stocks. Environmental security has been discussed as an international security policy concept (Zurlini – Müller, 2008).

Its importance derives partly from the fact that:

- Environment is the most transnational issue and its security is an important dimension of peace, national security and human rights;
- Over the next 100 years, 1/3 of the world's land cover will change and the world will therefore face increasingly difficult choices in terms of consumption etc.;
- Ecosystem services, recovery, conservation and degradation;
- Environmental security is central to national security and involves the dynamics and interconnections between people and natural resources (Zurlini Müller, 2008, pg. 1351).

Environmental security focuses also on the ecological conditions necessary for sustainable development. It includes discussions of the mentioned connection between environmental change and conflict, as well as broader global policy issues that link resources and international relations to the need for a different approach to development and security (Dalby, 2020).

The goal of environmental security is according to the above to protect people from the immediate and long-term destructive impacts of nature, and mostly the threats posed to nature by humans, and the degradation of the natural environment (Santamarta-Cerezal – Bermúdez-Cañete – Ioras, 2013). It encompasses concerns about the negative impact of human activities on the environment, the direct and indirect effects of environmental scarcity and degradation, and the insecurity experienced by individuals and groups as a result of environmental change (Santamarta-Cerezal and Hernández-Gutiérrez, 2013).

In this context, climate change is a challenge in security policy that is increasingly moving from the environmental agenda to the international security agenda. And so, it is the climate change that many see as one of the greatest challenges facing the world today, particularly in the context of environmental security.

So far, most attention has been paid to the environmental impact of climate change. But climate change will also have an increasingly fundamental impact on all areas of societies' lives – economic, political, social. For example, the questionable future of the millions of Bangladeshis whose approximately 1/3 of the country will disappear below sea level by 2050 as a result of rising sea levels clearly poses a major challenge for environmental security (see for example, Shariful Islam, 2011; Rusiňák, 2009). This problem raises not only immigration but also many other security-related issues. And many other countries are involved as well. Among the European ones, the problem is particularly the Netherlands. However, climate change will also make many territories uninhabitable for other reasons, such as desertification, resource depletion, etc.

According to St'ahel (2015), climate change is the most serious threat of the environmental crisis. He states that, climate change will, for example, make the current way of food production impossible in the future, which will have much more serious consequences than other impacts of the environmental crisis. This crisis will manifest itself mainly as a food crisis and later as an economic, social

and political crisis. He points here to the category of environmental responsibility, which he sees in the context of environmental security, and understands it mainly as a political and legal category, not a moral one (St'ahel, 2015).

Another factor negatively affecting the environmental security of states is the energetic consumption of economies. We saw its importance, for example, during the first wave of the COVID-19 pandemic.

Environmental security is a very topical and pressing issue. As environmental degradation has a major impact across national borders, environmental security is on the agenda of all major and influential international and non-governmental organisations. However, the effectiveness of measures remains a matter for individual states. Security as a "public good" concerns everyone, including the environment. It is only by involving all actors in society in the process of protecting the environment, reducing energy consumption or preventing environmental disasters and much more that we can achieve the desired change towards a more sustainable development (see also Rusiňák, 2009). From the individual, through small and medium-sized enterprises, multinational corporations, state entities, to international organisations and global community, however, the decisive role and fundamental influence on the effectiveness of change is political influence, and in particular that of individual states possessing the necessary form of coercion in the form of political power.

The different aspects of security are here primarily linked to political responsibility and the ability of the state to provide security for its citizens. Therefore, in the context of the above, even within environmental responsibility, although it has different categories, political responsibility is the most essential one for change towards positive development.

# 2 Global political environmental responsibility as one of the necessities of environmental security

We can look at environmental responsibility variously, however the political and collective environmental responsibility we perceive as the crucial here. We therefore understand environmental responsibility mainly as political category, not moral and ethical. Individual and moral appeal is of course important too. For example, H. Jonas established a new category of responsibility – the responsibility to preserve the conditions for the long-term sustainability of human life on Earth and described it as an ethic of self-limitation for the good of the members of one's own community and for the good of people who live in other parts of the world, or for those who will come after us (Jonas, 2011). Also D. Špirko highlighted this type of responsibility as an attempt to revive the consciousness that it is within our power to reverse the world order, even to destroy it. This forces us to realise our responsibility not only for what we have created, but also for what was given to us – for the life on Earth (Špirko, 2011, pg. 16). It is the concept of future-oriented responsibility (Špirko, 2019). Like

Jonas also H. Skolimowski built the principle of environmental responsibility on the principle of respect for life. Skolimowski here even argues that "once we understand the unity of life and the fact that we ourselves are part of that unity, then we must take responsibility for all life" (Skolimowski, 1996, pg. 144). However, we must agree with Jonas that this principle itself is not sufficiently effective. In his first opinion responsible human behaviour for the future requires a powerful factor – fear. This means that we must be aware of possible threats in order to have sufficient will to defend ourselves against the negative consequences of our actions (Jonas, 1979).<sup>4</sup>

However, many philosophers, and later also Jonas himself, are sceptical of man's ability to voluntarily limit own freedoms and accept the necessary environmental responsibility. The possibilities can be seen mainly in laws, regulations or coercions – in the role of states. I. Dubnička expressed this even more clearly when he stated that "moral imperatives do not move the crowd" (Dubnička, 2007, pg. 399), especially when they are in conflict with economic and political imperatives. This means that "the path of agreements, regulations, laws, or systemic measures is more likely to be effective" (Dubnicka 2007, p. 399). Even Aristotle was already in Ancient times aware that, given human nature, politics and law are necessary to create an environment conducive to a moral life (Aristoteles, 1979) and he stated that "we need laws, because most people bow before coercion rather than before advice and before punishment rather than before beautiful" (Aristoteles, 1979, pg. 259). In this context also St'ahel (2015) states, that the political and legal means can be the most effective in overcoming or mitigating environmental threats.

The importance of the role of state in the area of environmental responsibility and actions is therefore undeniable. State's interventions can be effective and successful in bringing about positive changes through a variety of coercive means and mainly thanks to the political power with which they dispose.<sup>5</sup>

In this context, political environmental responsibility is crucial category, not only of individual states but also of the entire international community. Therefore, the emergence of global environmental responsibility as an essential norm in international relations has a big value and has been greatly expanding in international society (more in Falkner, 2020). The individual states as well as whole international community need to bear responsibility for common global environment.

As also R. Falkner (2020, pgs. 3, 4) describes, the global environmental responsibility has its origins in a diverse set of ideas about the relationship between human society and nature. Global environmental responsibility means

<sup>&</sup>lt;sup>4</sup> Similar was the situation during the first wave of COVID-19 pandemic – people felt fear and therefore accepted the imposed restrictions.

<sup>&</sup>lt;sup>5</sup> For example, as many studies show, norms and regulations of states – forms of coercion – reduce emissions, waste or other environmental challenges to a visibly higher level than actions of individuals as those regulations are enforced under the threat of sanctions.

that states, social groups, and also individuals shall operate transnationally in favour of the environment and mitigating environmental crisis.

The emergence and strengthening of global environmental responsibility manifest itself in the growth of a wide network of international rules, agreements and organisations, and the universalization of an environmental citizenship principle that expects states to engage in global efforts to tackle global environmental degradation (Falkner, 2020, pg. 24).

This clearly means that each state has responsibility and obligation to treat the environment friendly and sustainably. We therefore agree with M. Mason (2005, pg. 2) that very important is here the question of remedy, or effective regulatory controls. Political and legal rules of environmental responsibility must be effectively adapted to collective danger and address unacceptable environmental behaviour.

As we see states as individuals have to bear the environmental responsibility for their governance and actions. Likewise, the international community must do this with an effective planetary environmental management. It is the international law that is the most important source of environmental regulations and obligations created to limit transnational environmental harm. It requires binding obligations on states and all other actors to follow specified norms of behaviour (Mason, 2005, pg. 18). For these reasons and because of the pressure created by the worsening global environment, the whole international community and individual states must adopt various environmental regulations, obligations and restrictions to coordinate actions inside the states as well as globally. However, the main problem of international community is also according to Mason (2005, pg. 17) and many others the absence of authoritative rulemaking body. Therefore, multilateral environmental treaties are being created to bring order and agreement on how common environmental goals can be internationally harmonized with the preferences of sovereign states and world.

This is precisely the most effective way how to approach environmental threats and prevent environmental conflicts co support environmental security. But it must be a common and coordinated political approach of all countries worldwide.

# Conclusion

The Anthropocentric system has brought the world into imminent threat, with compromised environmental security and possible catastrophic consequences. A return to the Holocene is no longer possible. But to avoid a much worse scenario, we need to transform our societies from the foundations, with an emphasis on the application of environmental responsibility at political and global level.

At present, we still do not have sufficient knowledge of all the consequences that an environmental crisis can really have on environmental security. However, individual national interests should not be the dominant category in the efforts to uncover them. The decision-making process in environmental management, especially with respect to environmental security, is increasingly complex because it must balance economic, environmental, human, political, and other competing variables. Without responsible systematic and transparent decision-making framework that offers explicit and really effective solutions based on reliable scientific tools and approaches, public and environmental security remains compromised (Wenning et al., 2007).

Environmental security is both a highly acute issue and a threat at the same time. In the worsening environmental crisis, there are growing threats of armed conflicts because of the resources that we are already seeing today, although under different pretences. However, they will increase in the future and will probably represent the majority of emerging conflicts. It is therefore necessary to understand the inevitable link between environmental security and environmental responsibility. Although environmental responsibility has many dimensions, each of which has its more than pressing significance, in the context of environmental security it is necessary to support and realize its political and global dimension.

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# EU-NATO COOPERATION IN SECURING EUROPE'S DEFENCE<sup>1</sup>

# Antonín Novotný<sup>2</sup>

#### ABSTRACT

Over the past few years, the need to strengthen NATO and EU cohesion and cooperation has become increasingly apparent as a result of the escalating security situation in Europe and globally. In the past year, both organisations have initiated steps from the highest political level to strengthen mutual strategic cooperation in defence and security. However, cooperation in these areas has been ongoing for more than 20 years. During this time, new functionalities have been achieved that can contribute to the EU's defence and security. The aim of this article is to describe chronologically the history of EU-NATO cooperation in ensuring the defence of Europe, highlighting key points and indicating the future of this cooperation.

Keywords: European Union, European, NATO, military capability, defence

#### Introduction

Working together: a stronger European defence for a stronger NATO. EU-*NATO cooperation is crucial to our defence and to European and global security.* Making this cooperation even deeper will remain at the heart of European defence efforts. (Josep Borrell, High Representative of the Union for Foreign Affairs and Security Policy and Vice-President of the EC. EU-NATO Cooperation, 2022). The EU-NATO cooperation plays a key role in ensuring Europe's security and defence. The strategic partnership between the two organizations is based on shared democratic values and the interconnectedness of transatlantic security. A stronger European defence is a significant contribution to the mutual relationship and for NATO itself, which remains the cornerstone of collective defence. Thanks to the EU-NATO cooperation, we can better utilize both the organizations' resources and tools in dealing with crises and increasing our peoples' security. A unified and coordinated approach of the EU and NATO is key for our security and place in the world. Our goal is thus to strengthen, deepen, and expand the strategic partnership, political dialogue, and overall cooperation between the EU and NATO. Cooperation in these areas has been ongoing for more than 20 years and especially now is very important in connection of Russian war against Ukraine. One of the key principles of EU-NATO cooperation is the single set of forces. This means that common members do not have one armed force for NATO

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and another for the EU. Therefore, efficiency must be ensured and duplication avoided. The EU and NATO are thus working to streamline priorities and converge defence planning processes. Synergies are also sought when it comes to cooperation in civil and military operations, in military exercises and as regards defence industrial development. The highest levels of EU and NATO leadership also coordinate on political and diplomatic issues to ensure a coherent and common approach in the Euro-Atlantic community.

# 1 EU – NATO cooperation short chronology

EU and NATO cooperation in defence and security areas has been ongoing for more than 20 years - Fig. 1. Strengthening the NATO-EU strategic partnership is particularly important in the current security environment, in which both organisations and their members are facing the same challenges to the east and south. The EU-NATO cooperation is a key component of a safe Euro-Atlantic area. A strong and safe EU means stronger and safer NATO, which remains the cornerstone of our collective defence. The EU and NATO have a great potential to complement each other with their respective tools. Their even-closer cooperation can thus help prevent duplicity and allows for higher effectiveness. (EU-NATO Cooperation, MoD&Armed Forces of the Czech Republic). But, if the EU wants better protect its citizens and defend its values, needs to take strategic action on defence and increase its capacity to act autonomously. Fig.1– Timeline of EU-NATO cooperation



Source: EC. Infographic – EU-NATO: a cooperation through the years. 2023

# Milestones

# 2003: Berlin Plus Arrangements - start of EU-NATO cooperation

As part of the framework for cooperation adopted on 17 March 2003, the so-called "Berlin Plus" arrangements provide the basis for NATO-EU cooperation in crisis management in the context of EU-led operations that make use of NATO's collective assets and capabilities, including command arrangements and assistance in operational planning. In effect, they allow the Alliance to support EU-led operations in which NATO as a whole is not engaged.

# 2016: Brussels Joint Declaration (first)

On 8 July 2016, the President of the European Council and the President of the European Commission, together with the Secretary General of the North Atlantic Treaty Organization signed a Joint Declaration in Warsaw with a view to giving new impetus and new substance to the EU-NATO strategic partnership. They identified seven concrete areas for enhanced cooperation between the EU and NATO:

- 1. Countering Hybrid Threats;
- 2. Operational Cooperation Including at Sea and On Migration;
- 3. Cyber Security and Defence;
- 4. Defence Capabilities;
- 5. Defence Industry and Research;
- 6. Exercises;

7. Supporting Eastern and Southern Partners' Capacity- Building Efforts. (Joint Declaration by the President of European Council and the President of the European Commission and the Secretary General of the NATO, July, 2016).

On the basis of the mandate by the Joint Declaration, common sets of proposals were endorsed by the EU and NATO Councils in December 2016 and 2017. Altogether 74 concrete actions are under implementation in the seven areas (EU-NATO Cooperation, March, 2020).

# 2018: Brussels Joint Declaration (second)

On 10 July, 2018, the President of the European Council and the President of the European Commission, together with the Secretary General of the North Atlantic Treaty Organization signed a second Joint Declaration in Brussels calling for swift and demonstrable progress in implementation.

Cooperation between the EU and NATO is now the established norm and daily practice and continues to take place on the basis of key guiding principles: openness, transparency, inclusiveness and reciprocity, in full respect of the decision-making autonomy and procedures of both organisations without

prejudice to the specific character of the security and defence policy of any Member State (Joint Declaration by the President of European Council and the President of the European Commission and the Secretary General of the NATO, July, 2018).

# March, 2022: Endorsement of the EU Strategic Compass

The development and adoption of the EU Strategic Compass document is a new chapter in European integration, which opens up new possibilities for joint cooperation between EU member states in the field of security. The most visible manifestation of the new European defence policy is a rapid deployment unit of five thousand soldiers composed of elements of ground, air and naval forces, jointly trained and able to flexibly adapt to needs and specific situations.

The EU's ambition is the ability to quickly deploy forces and carry out a robust operation (mainly executive operations, crisis management operations, first-line units, intervention forces), especially in a non-permissive environment. The core parts of document Strategic Compass are:

- 1. Crisis Management (ACT) developing the EU Rapid Deployment Capacity of up to 5000 troops;
- 2. Resilience (PROTECT) secure EU citizens against fast-changing threats (hybrid, cyber-attacks, interference);
- 3. Capabilities (INVEST) jointly investing in key military capabilities to operate on land, at sea, in the air, in the cyber domain and in outer space;
- 4. Partnerships (PARTNER) strengthening cooperation with NATO and the UN, as well as with OSCE, AU and ASEAN. (EC. Strategic Compass, March, 2022).

# June, 2022: Endorsement of the 2022 NATO Strategic Concept

Comes amid a new, more insecure geopolitical environment characterized by rising strategic competition, instability, and attacks by authoritarian states on the liberal international rules-based order. NATO is determined to safeguard the freedom and security of allies.

In response, the new concept shifts the strategic direction of the alliance, including through:

- an increased focus on bolstering deterrence and defence, along with a new emphasis on building resilience;

- the identification of Russia as "the most significant and direct" threat to the Alliance;

- the first ever reference to China as a strategic challenge and declaration that developments in the Indo-Pacific affect the security of the NATO allies. Next conclusions are:

- terrorism, in all its forms and manifestations, is the most direct asymmetric threat to the security of citizens and to international peace and prosperity;
- focus on bolstering deterrence and defence in a number of ways, including by strengthening integrated air and missile defence, forward defence, and the prepositioning of ammunition and equipment;
- investing in NATO is the best way to ensure the enduring bond between European and North American Allies, while contributing to global peace and stability. (NATO HQ. NATO 2022 Strategic Concept).

# 2023: Brussels Joint Declaration (third)

On 10 January 2023, the EU and NATO signed a joint declaration in Brussels. They condemned in the strongest possible terms Russia's aggression against Ukraine and reiterated their unwavering support to the country.

The declaration also sets out a shared vision of how the EU and NATO will act together against common security threats. The EU and NATO will expand and deepen their cooperation on areas such as:

- the growing geostrategic competition;
- resilience and the protection of critical infrastructure;
- emerging and disruptive technologies;
- space;
- the security implications of climate change;
- foreign information manipulation and interference. (EC. EU-NATO Cooperation, on line).

The deployment scenarios of the Alliance's forces envisage operations of a significantly larger scale than is the case with the EU. However, unlike NATO, the EU envisages conducting crisis management operations in which, in addition to military forces, a civilian element will be represented (police, judicial, legal and diplomatic forces, representation of other ministries of EU countries, non-governmental organizations, etc.).

One of the plans is for the EU to jointly identify defence gaps and reduce its dependence on the purchase of military technology from non-EU countries. An analysis of the weak points of European defence is also included, which should be the basis for joint projects and technology purchases. Without investments in European products, whether common or offered by individual European countries, the EU will hardly come close to greater strategic autonomy.

The relationship between the EU and NATO is precisely expressed in point 8 of this declaration: "NATO remains the foundation of collective defence for its Allies and essential for Euro Atlantic security. We recognise the value of a stronger and more capable European defence that contributes positively to global and transatlantic security and is complementary to, and interoperable with NATO

(Joint Declaration by the President of European Council and the President of the European Commission and the Secretary General of the NATO, January, 2023). The development of European defence capabilities, while ensuring coherence and complementarity and avoiding unnecessary duplication, is key in joint efforts to make the Euro-Atlantic area safer and contributes to transatlantic burden-sharing. NATO and the EU currently have 21-member countries in common. Close cooperation between NATO and the EU is an important element in the development of an international "comprehensive approach" to crisis management and operations, which requires the effective application of both military and civilian means. The current joint security and defence agenda between the EU and NATO is shown in Figure 2.

### Fig.2 - EU-NATO cooperation agenda



Source: EP. Understanding EU-NATO cooperation Theory and practice, 2020

So far, seven progress reports have been submitted jointly by the High Representative-Vice President and the Secretary General of NATO to the respective Councils highlighting key achievements and concrete deliverables across all areas of interaction (EC. EU-NATO Cooperation, online).

# Conclusions

In the current strategic environment, in facing old and new challenges alike, cooperation between the European Union and the North Atlantic Treaty Organisation remains essential. The security of the EU and NATO are interconnected. Not only are 21 EU Member States also NATO Allies – together, they can also mobilise a broad range of tools and make the most efficient use of resources to address challenges and enhance the security of their citizens. EU-NATO cooperation constitutes an integral pillar of the EU's work aimed at strengthening European security and defence. The partnership between the two organisations fosters the transatlantic bond, while EU defence initiatives contribute to Trans-Atlantic burden- sharing. A stronger EU and a stronger NATO are mutually reinforcing.

If we want to have an independent European capability for larger military operations, we must have the supporting elements that are lacking today. These are strategic transportation - mainly air, but also sea, strategic intelligence and strategic communication, as well as offensive cyber capabilities. If we don't have that, Europe will not be able to conduct any operation without the United States of America.

In the past, French President Emmanuel Macron was a big supporter of the idea of an independent European army. Currently, they are talking about strengthening the European identity, but within the framework of the European pillar of NATO. It must be stated that any duplication of the command or logistics structure between the EU and NATO would not make sense, as we do not have the financial or human resources for this.

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# GLOVES IN THE PHARMACEUTICAL INDUSTRY AND SELECTED ASPECTS OF THEIR USE AND EVALUATION

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#### ABSTRACT

The pharmaceutical industry integrates several procedures and processes that are associated with safety and necessity of using personal protective equipment. Within the whole complex of requirements discussed in this article, the most important ones in terms of the issue at hand are those related to resistance to toxic substances. A paper deals with specification of basic aspects concerning understanding occupational safety and health issues from a general perspective and then focusing on the requirements that apply to companies and firms producing medical products. In the article, the individual terms are defined. In addition, the standards that are relevant for the evaluation of personal protective equipment are listed. The article also lists the most important theoretical issues, which will be discussed more specifically from the practical point of view in part two.

*Key words:* Personal protective equipment, occupational safety and health, gloves, norm, pharmaceutical industry

#### Introduction

In practice, the protection of the surface of employees' hands is implemented at different levels and with the need to specify different requirements. It is evident that completely different requirements will be set for personal protective equipment (PPE) of the glove type intended for members of the Fire Rescue Service (FRS) of the Czech Republic (CR), members of the Chemical Service of the FRS of the CR, in industry for the protection of employees working in the pharmaceutical and chemical industry, paint shops, welding shops, sawmills, mines, i.e. wherever it is necessary to ensure protection against the action of toxic substances, flying dust particles, aerosols, biological substances, etc. Different requirements will also be set for gloves used by the public in the performance of public protection tasks. It is important to note, however, that despite a number of differences in approaches to the selection of PPE in terms of its final use, there are requirements that are identical and, in essence, quite fundamental. From the point of view of the focus of the text of the related articles, these include, in particular, the provision of long-term protection

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of the wearer against the effects of toxic, biological and radioactive substances throughout the working time (shift), respecting the basic requirements for user comfort. For this reason, it appears that it is very important to have at least a general overview of the reliability, durability and overall usefulness of glove-type PPE in the spheres of human activity of interest. It is therefore essential that employers, and especially users, have a basic understanding of what a particular piece of equipment is used for and what degree of protection it will provide (Sýkora, 2008). One of the industries where glove-type PPE is widely used is the pharmaceutical industry (Matyášek, 2021, Matyášek et al, 2022).

#### 1 Health and safety at work

There is no established and uniform definition of occupational safety and health (OSH). However, there is no doubt that it is an interdisciplinary or inter scientific field that can be defined as rules or measures established by legislation to prevent danger or damage to human health during the work process (BOZP.cz, 2022). It must be remembered that since time immemorial, every job has been accompanied by various risks and resulting dangers. These hazards can result in damage to health or even physical death if the employer is unaware of the extent of their impact on the employee. For these reasons, OSH is part of any work activity and is influenced by the nature of the work and the working conditions. OHS primarily refers to the totality of measures taken to protect the life and health of workers. However, OSH performs a preventive function, that is, it is based on the basic idea that at the current stage of scientific and technical development it is possible to prevent almost every accident, and a production function, which gives prominence to the importance of OSH for the smooth and high-quality organisation of the work and production process, while having a direct impact on the level of production increase. The issue of OSH integrates a number of measures, including, for example, the specification of occupational safety and health objectives and OSH legislation. The main objective of OSH will be to contribute permanently to the prevention of occupational accidents, occupational diseases or loss of life. From the point of view of OSH legislation, it is necessary to highlight Act No 262/2006 Coll., which is closely related to the Labour Code and Act No 309/2006 Coll., which incorporates the relevant European Union regulations and other OSH requirements in labour relations and the provision of OSH in activities or services outside labour relations.

# 1.1 Hygiene at work

Occupational hygiene is a field that is very closely oriented towards OSH. It deals primarily with the assessment of work activities that may affect the health of the employee (Bezpečnost práce.info, 2022). The aim of this sector is to ensure that the working environment and other working conditions are consistent with

the natural characteristics of the employees and to protect them from harmful effects, excessive and unnatural stresses on the human body. In addition, they need to have an active effect on improving the health of workers and helping to develop creative abilities (Janáková, 1999). Legally, the issue of occupational hygiene is linked to the following laws, regulations and decrees:

- Act No. 262/2006 Coll., Labour Code;
- Act No. 309/2006 Coll., on ensuring other conditions of occupational safety and health;
- Act No 258/2000 Coll., on the protection of public health;
- Government Regulation No. 361/2007 Coll., laying down conditions for occupational health protection;
- Government Regulation No. 291/2015 Coll., on the protection of health against non-ionising radiation;
- Government Regulation No. 272/2011 Coll., on the protection of health against the adverse effects of noise and vibration;
- Decree No. 432/2003 Coll., laying down the conditions for categorising work, limit values for indicators of biological exposure tests, conditions for the collection of biological material for the performance of biological exposure tests and the formalities for reporting work with asbestos and biological agents.

# **1.2 Categorisation of work**

The classification of a job into a particular category reflects a comprehensive assessment of the level of burden of factors determining the quality of working conditions from a health perspective. The basis for classification is an assessment of the occurrence and risk of factors that are capable of affecting the health of workers and the level of protection provided. These are mainly risk factors falling into the categories of physical, chemical and biological agents. It also includes factors related to dust, physical stress, heat and cold stress, psychological and visual stress and other factors that can or do affect workers' health. In this respect, the division of work is classified into four categories according to their riskiness. The criteria, factors and limits for classifying work into each category are laid down in Decree No 432/2003 Coll. Risk assessment and minimum protective measures are laid down in the Labour Code, the Act on ensuring other conditions of occupational safety and health and Government Decree No 361/2007 Coll.

- **Category 1 work** work performed under conditions where, according to the current state of knowledge, no adverse effect on the health of the worker is likely;
- **Category 2 work** work performed where, according to the current state of knowledge, adverse effects on health can be expected only in exceptional circumstances, particularly in susceptible individuals. It is therefore work in

which the hygiene limits for factors laid down by specific legislation are not exceeded and work which fulfils the other criteria for classification in category 2 according to Annex 1 to Decree No 432/2003 Coll;

- Category 3 work work performed where the hygiene limits are exceeded and work fulfilling the other criteria for classification as Category 3 work under Annex 1 to Decree No 432/2003 Coll., where the exposure of the natural persons performing the work is not reliably reduced by technical measures below those limits. It is therefore necessary to use PPE, organisational and other protective measures to ensure the protection of the health of individuals, and to carry out work in which occupational diseases occur repeatedly or, with statistically significant frequency, diseases which can be regarded as occupationally related according to current standards;
- **Category 4 work** work performed where there is a high risk of health hazards. In category 4 work, the risk of exposure cannot be completely eliminated, even if available and applicable protective measures are used.

# 2 Personal protective equipment

PPE is considered to be equipment that protects employees from hazards. They must not endanger the employee's health, must not hinder the performance of work and must comply with the requirements laid down in specific legislation.

# 2.1 Division of personal protective equipment

In terms of protection of parts of the human body, PPE is divided into protection devices:

- head this group of PPE includes protective helmets, which are used e.g. on construction sites or in mines. It also includes caps, berets, hair nets or waterproof hats;
- hearing protection this group of PPE includes earplugs and earmuffs, noise protection helmets or earmuffs that can be attached to safety helmets;
- eye and face this group of PPE includes protective, X-ray, laser, ultraviolet and infrared goggles. It also includes face shields, welding masks and helmets;
- **respiratory** this group of PPE includes particulate filters, gas filters and radioactive dust filters. It also includes air supply isolation devices, respiratory protective equipment with removable welding mask;
- hands and arms this group includes gloves for protection against machinery and hand tools. In addition, gloves for protection against chemical and biological substances; last but not least, gloves for electricians, for protection against heat, protective sleeves and protective sleeves for heavy work;
- **feet** this includes half-boots, ankle boots, semi-high boots, protective high boots, toe-protective boots, boots and slippers with heat-resistant soles and

heated boots, vibration-resistant boots, anti-static boots, clogs, knee protectors, removable ankle protectors and gaiters;

- **torso and abdomen** this includes protective vests, jackets and aprons for protection against machinery and hand tools. In addition, chemical and biological PPE, heated vests, life jackets, X-ray aprons and lap belts;
- **full body** this group includes workwear that protects against molten metal splashes or infrared radiation. It also includes heat and flame resistant clothing, thermal clothing, dustproof clothing, gasproof clothing, fluorescent and reflective clothing and accessories.

# 2.2 Hand and arms protection

When the phrase "hand protection" is used, it usually means protecting the entire hand, which means from the fingertips to the shoulder. Gloves are most commonly used to protect the hands. Other, but not as frequently used, devices are various types of finger protection, sleeves, sleeve protectors and protective ointments (Vojta, 1997). Protective gloves protect the hand or part of the hand. Gloves also cover part of the forearm and arm. The protective properties of gloves are determined by the material from which they are made. These materials of construction have different mechanical and chemical properties that determine the degree of protection of the device. The length of the cuff is also important for protective gloves. Gloves with short, medium or long cuffs are available. The material composition of the gloves is a very important factor for hand protection. Gloves are made of the following materials and combinations of materials.

- Cotton;
- Textile;
- Leather;
- Metal;
- Coated;
- Rubber nitrile, vinyl latex;
- Special.

The classification of PPE according to its intended use and basic material specifications, focusing on protection of the arm and hand, is shown in Figure 1.

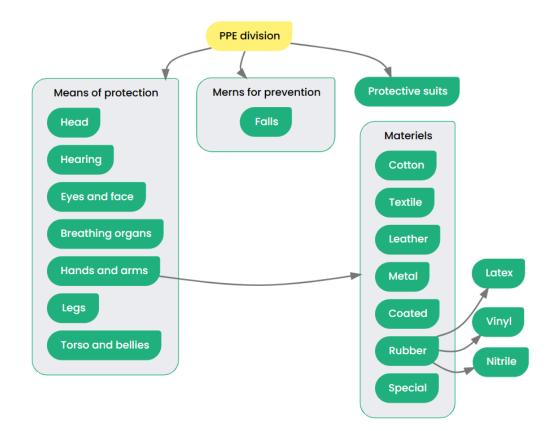


Figure 1 Classification of PPE-divisions by purpose with a focus on gloves and basic materiel specification (own elaboration)

# **3** Definitional determination of terms

# 3.1 Definitions, names and terms

In the context of the issue of hand protection, it is possible to encounter the following terms, which are defined by the relevant standards:

- **degradation** harmful changes affecting the mechanical properties of the glove material caused by contact with chemicals (EN 374-1);
- **burn time** the time measured in seconds from the extinction of the flame until the glow stops. If the sample is not ignited by the ignition source but glows after the source is removed, then the burn time is measured from the time the ignition source is eliminated;
- **penetration time** is the time taken from the start of contact of the test chemical with the outer surface of the glove material until it is detected on the other side of the material surface (EN 374-1);
- **spontaneous flame burning time** is the time, defined in seconds, from the time of removal of the ignition source until the flame on the test sample is extinguished (EN ISO 6941);

- flame propagation time is the time taken for the flame on the burning material to travel a specified distance under specific test conditions (EN ISO 6941);
- **incident heat flux density** the amount of energy incident per unit time on the exposed surface of the sample (EN 367);
- **burn-in** is the continuation of the burning of the material under the test conditions after the flame burning has ceased or, if not so burning, after the ignition source has been removed (EN ISO 6941);
- **exposure** is the exposure of a living person or thing to ionising radiation from external sources. These sources may be X, alpha, beta, gamma or neutron radiation (EN 421);
- **penetration** is the 'movement' of a chemical or micro-organism through pores, seams, holes or other imperfections in the material of protective gloves at a level that is not molecular (EN 421);
- permeation is the process by which a chemical moves through the glove material at the molecular level (Slabotinský, 2020; Macháčková, 2008). The permeation process includes: sorption of the chemical molecules from the surface of the material (outside) that is in contact with the chemical, diffusion of the sorbed molecules within the material and desorption of the molecules from the opposite side (inside) of the material surface (EN 374-1). This concept is very often associated with the term 'penetration time'. The equivalent of permeation or permeation is also pervaporation, which is the process where a substance is brought to the membrane in a liquid state and after transport is released from the membrane by evaporation as a vapour; (Šperlová, 2019; Ong, 2016)
- **uniform protection** a glove that is made of identical material or materials to provide a uniform level of protection for the whole hand (EN 388);
- **specific protection** a glove that is made to provide an improved level of protection for a particular part of the hand (EN 388);
- gripping ability the manipulative ability to perform activities (EN 420).

# **3.2 Standards for protective gloves**

The issue of protective gloves is covered by the standards according to which gloves are tested and classified.

# EN ISO 21420 - Common requirements for gloves

All gloves used as PPE must meet this basic standard. It describes the general requirements and test methods. The first thing to do is to choose the correct size, which is derived from the circumference of the hand, measured across the palm above the thumb. Common sizes are listed in Table 1.

Hand size	Hand	Hand length [mm]	
circumference			
	[mm]		
4	101	<160	
5	127	<160	
6	152	160	
7	178	171	
8	203	182	
9	229	192	
10	254	204	
11	279	215	
12	304	>215	
13	329	>215	

Table 1 Sizes of gloves (VÚBP, 2022)

The basic standard also classifies gloves according to their gripping properties, which depend on the thickness of the glove material, its elasticity and the possibility of deformation. As with other glove parameters, there are classes of performance (Table 2). The higher the class, the better the glove performance. The gripping ability is tested by handling small rollers of 40 mm in height in a given diameter.

Table 2 Gripping ability (VÚBP, 2022)

Design class	Smallest diameter	
1	11,0	
2	9,5	
3	8,0	
4	6,5	
5	5,0	

#### EN 388+A1 Protection against mechanical hazards

The standard distinguishes three elementary types of mechanical hazards abrasion, cutting and puncture. In addition to these mechanical risks, the standard verifies another mechanical property, namely resistance to further tearing. In all these properties, classes of performance are distinguished. Some gloves also protect against impact. In order for a glove to be classified as protecting against mechanical hazards, it must have at least one property verified for design class 1 or higher. It must therefore meet the requirements for:

- **abrasion resistance** the test is carried out with a special glass paper, whereby a cyclical plane motion is performed until a puncture occurs. There are four classes of cycle performance (from 100 to 8000), with the highest class having the highest resistance;
- **blade cut resistance** in this test the glove is cut by an oppositely rotating circular blade which performs an alternating motion under a prescribed load. The result of this test is evaluated by an index number (from 1,2 to 20), according to which five classes of performance are distinguished, the highest class indicating the highest cut resistance;
- **TDM cut resistance** for highly resistant gloves, a cut test according to EN ISO 13997 is carried out. According to the results of this test, the glove is designated one of six classes, designated A-F;
- resistance to further tearing this test provides information on the mechanical resistance of the gloves tested. However, the test is not indicative of protection against a specific risk. While a high value is usually considered better, a low value is required in case of possible entrapment by moving machine parts. Four classes of design are distinguished according to the force that the material is able to withstand during tearing. The values in these classes range from 10 N to 75 N. Higher class equals higher resistance;
- **puncture resistance** this type of test is determined by the force required to penetrate a steel needle of the specified dimensions through the body under test. This body is fixed in a fixture. However, it is not a test of resistance to puncture by a thin needle. There are four classes ranging from 20 N to 150 N. Higher classes correspond to higher resistance;
- **impact resistance** impact protection is applied to gloves against mechanical hazards. This implies that the tested glove provides some attenuation when impacting the knuckles, the back of the hand or the palm. However, this is not the dominant protective feature.

# EN 407 Protection against thermal hazards

This standard specifies gloves against thermal hazards. The standard distinguishes six thermal hazards. In all these characteristics, classes of performance are further distinguished, which indicate the intensity of protection.

• **burning behaviour** - the glove is exposed to a flame and the time of spontaneous combustion by the flame and the subsequent glow after the flame has receded are measured. Four classes are distinguished. The lowest class burns for a maximum of 20 seconds, the highest class burns for a maximum of 2 seconds and glows for a maximum of 5 seconds after the flame has receded. The glove material must not drip and the inner surface of the glove must not show signs of melting;

- **contact heat** gloves are divided into four classes. The contact temperature is between 100 °C and 500 °C. The time to reach the pain threshold, which is defined as a 10 °C increase in temperature on contact, is measured. This time must be at least 15 seconds. In most cases, the palm of the hand is tested;
- **convective heat** classification into one of four heat classes indicates the level of protection against ambient temperature. The heat transfer index of the glove is measured and is given in seconds. The glove material sample is tested at a defined distance from a defined flame. The result is the time taken for the temperature behind the sample to increase by 24 °C. Class 1 is defined by an index greater than 4 seconds, and for the best class 4 it is a time greater than 18 seconds;
- radiant heat Radiant or radiant heat is very often found in combination with convective heat. Radiant heat is characterised by a directional effect. As a rule, a sample from the back of the glove is tested. Heat transfer is measured by examining the time it takes for the temperature behind the glove sample to rise by 24 °C. The minimum value for Class 1 performance is 7 seconds, for Class 4 it is a minimum of 95 seconds;
- **spattering of small particles of molten metal** the glove material is tested by the impact of droplets of molten metal. The temperature behind the material sample shall not rise by more than 40 °C after the impact of a given number of droplets. Gloves classified in performance class 1 shall withstand a minimum of 10 droplets under these conditions. Gloves in Class 4 shall resist at least 35 drops;
- large amounts of molten metal a defined amount of molten iron is poured on the gloves. The sample of the glove under test shall not ignite and puncture. Also, steel droplets shall not remain trapped on the glove. The material behind the sample, which imitates leather, cannot be damaged in any way. The first class of design must withstand 30 g of molten iron, the fourth class must withstand 40 g of molten metal.

# EN 511 - Protective gloves against cold

This standard defines requirements and test methods for gloves that protect against cold transmitted by convection and conduction down to -50 °C.

- resistance to convective cold this depends on the thermal insulation properties of the gloves. The performance level can be 0 4;
- resistance to contact cold this parameter is based on the heat resistance of the glove material when exposed to contact with a cold object. The performance level may be 0 4;
- water permeability according to EN ISO 15383, gloves can be tested for water permeability. If no water enters the glove for more than 30 minutes, the test is successful.

#### EN ISO 374-1 - Protective gloves against hazardous chemicals

This standard defines requirements for protective gloves that protect the wearer from hazardous chemicals. The standard includes two types of chemical protection, namely: full chemical protection and low chemical protection.

- **full protection** gloves that comply with full protection according to EN ISO 374-1 are divided into the following three types:
  - type A gloves of this type must resist six chemicals, from the list of chemicals listed in the standard (Table 3);
  - type B gloves of this type shall resist three chemicals from the list of chemicals given in the standard (Table 3);
  - type C gloves of this type shall resist at least one chemical from the list of chemicals given in the standard (Table 3).

The test chemicals listed in the standard and in Table 3 are identified by their own letter code.

Code letter	Chemical	CAS	Class
		number	
А	Methanol	67-56-1	Simple
			alcohol
В	Acetone	67-64-1	Ketone
С	Acetonitrile	75-05-8	Nitrile
			mixture
D	Dichloromethane	75-09-2	Chlorinated
			hydrocarbon
E	Carbon disulphide	75-15-0	Sulphur
			containing
			organic
			compound
F	Toluene	108-88-3	Aromatic
			hydrocarbon
G	Diethylamine	109-89-7	Amine
Н	Tetrahydrofuran	109-99-9	Heterocyclic
			and ether
			mixture
Ι	Ethyl acetate	141-78-6	Ester
J	n-Heptane	142-82-5	Saturated
	_		hydrocarbon
K	Sodium hydroxide,	1310-73-2	Inorganic
	40%		base

Table 3 Test chemicals according to EN ISO 374-1

Code letter	Chemical	CAS	Class
		number	
L	Sulphuric acid, 96%	7664-93-9	Inorganic
			mineral acid,
			oxidizing
М	Nitric acid, 65%	7697-32-2	Inorganic
			mineral acid,
			oxidizing
Ν	Acetic acid, 99%	64-19-7	Organic acid
Ο	Ammonia 25%	1336-21-6	Inorganic
			base
Р	Hydrogen peroxide,	7722-84-1	Peroxide
	30%		
S	Hydrofluoric acid,	7664-39-3	Inorganic
	40%		mineral acid
Т	Formaldehyde, 37%	50-00-0	Aldehyde

• **low chemical protection** - such gloves protect the wearer from cleaning agents with weak action and easily reversible effect. They are intended for e.g. washing dishes and protection against diluted detergent solutions.

The norm of EN ISO 374-1 also specifies the performance classes. In terms of chemical resistance, gloves are tested for resistance to penetration and permeation of chemicals. Analytical methods determine the concentration of the test chemical that will permeate the glove material. The resistance (or resistance time, or protective breakthrough time). This time is generally referred to as the penetration time. The resulting resistance time determines the performance class (Table 4) of a particular glove. The rule of thumb here is that the higher the class, the more effective the chemical protection of the glove against the chemical in question is guaranteed.

Table 4 Permeation	according to	EN ISO 374-1
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Measured breakthrough time [min]	Resistance class	
>10	1	
>30	2	
>60	3	
>120	4	
>240	5	
>480	6	

The gloves must also have a specified degradation according to EN 374-4 for all chemicals listed in the marking. This information must be given in the instructions. The gloves shall be provided with the appropriate pictograms as shown in Figure 2, the letter(s) below the pictogram referring to the entry in the left-hand column of Table 3.



Figure 2 Examples of pictograms according to EN ISO 374-1

## Other protective glove norms (standards)

The issue of protective gloves is also covered by other standards that specify utility and safety requirements. In pharmaceutical companies, these gloves are mainly used in maintenance workshops and other external work. These standards are:

- EN 421 Protective gloves against ionising radiation and radioactive contamination;
- EN 381-7 Protective clothing for users of hand chainsaws Part 7: Requirements for protective gloves against chainsaw cuts;
- EN 12477 Gloves for welders;
- **DIN EN 1082** Protection against cuts and stings by hand knives;
- EN ISO 10819 Protective gloves against vibration shock vibration handarm vibration;
- EN 60903 live working;
- EN 61340 ESD Protection of electrical components against electrostatic phenomena ("Gloves Standards," 2021).

## Conclusion

The issue of occupational health integrates a number of aspects that must be continuously evaluated and respected. Under the Labour Code, the employer is obliged to ensure the safety and health protection of employees at work, taking into account the risks to their life and health that may be involved in the performance of their work. It is important to note that the occupational health and safety obligations imposed on employers by the Labour Code or by specific legislation are an integral and equal part of the job duties of managers at all levels of management within the scope of the posts they hold. The issue of OSH is therefore an area of social activity which includes all requirements, measures, means and methods contributing to the creation of working conditions which ensure the health of workers and their ability to work. The aim of implementing OSH is not only to create these conditions but also to maintain them during the work process. To achieve this goal, it uses methods and knowledge of related disciplines from the technical, human and economic sciences in accordance with the trends in the development of science and technology, draws on their results, synthesises them and further develops and applies them. In order to ensure OSH in companies and firms, a system is created which should interconnect the abovementioned aspects of OSH into a functional whole.

In the pharmaceutical industry, the problems associated with so-called chemical factors are very significant. This field of factors includes both organic and inorganic compounds in pure state and in mixtures. Chemical compounds in the working environment enter the body most often through the respiratory tract (in the form of gases, vapours or solid or liquid aerosols - smoke, dust, mist), skin or ingestion.

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## PROTECTIVE EQUIPMENT USED BY STUDENTS IN HEALTH CARE FACILITIES DURING THE COVID-19 PANDEMIC

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#### ABSTRACT

Even though the pandemic and epidemiological situation associated with the spread of COVID 19 is permanently on the wane, it is necessary to look back at the problems that had to be addressed to protect the population from the effects of contamination and disease caused by this virus. The paper deals with the issue of personal protective equipment and selected approaches to their use in healthcare facilities. The theoretical part focuses on the specification of the equipment and its basic characteristics, not only from the point of view of health protection of medical personnel, but also from the general perspective. Suggestions on possible ways of handling personal protective equipment are the main part of the article.

Key words: COVID, pandemic, personal protective equipment, medical device, protection

#### Introduction

Working in healthcare is one of the most demanding professions not only in terms of the complex physical and psychological load on staff (Heráková, 2022; Heráková, Otřísal, 2022). These include shift work, handling excessive (too heavy) loads when working with patients, exposure to ionizing and non-ionizing radiation, including electric or magnetic fields and electromagnetic radiation, vibration, noise, disinfectants and many other negative factors contributing to the development of non-specific and specific occupational diseases. The working environment in which healthcare personnel work is another factor that negatively affects the health of personnel. For these reasons, healthcare professions are classified as hazardous occupations. It is not only in times of pandemics that the hospital environment is more likely to transmit infectious disease. Healthcare personnel are obliged to comply with anti-epidemic measures, including barrier nursing care, the use of personal protective equipment (PPE) and compliance with basic hygiene rules. At the outset, we consider it necessary to point out that the term personal protective equipment is also very often used, which, as the available literature shows, are synonymous in meaning.

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Since December 2019, when the first cases of people infected with the new virus appeared in China's Hubei province, specifically in the city of Wu-chan, we have been dealing with the SARS-CoV-2 (hereafter referred to as "COVID") epidemic practically until today. It is not without interest that the first infected person in the Czech Republic (CR) was recorded on 1 March 2020 (Trojánek, 2020).

Throughout the pandemic, the increased patient burden was mainly experienced by health care facilities (HCFs) and their staff. When dealing with COVID-positive and suspected patients, it was necessary to modify or create entirely new guidelines describing the proper management of these patients in order to protect staff as much as possible. Even though these procedures have been issued and probably continuously updated, thousands of cases of infected health personnel have been consistently reported. As a consequence, during the period under review, there was an overload of additional medical staff who very often had to work beyond their mental and physical strength. These shortcomings stemmed from a number of aspects which, on the one hand, could have been predicted, but on the other hand were the result of ad hoc decision-making, which was often not at all straightforward and was carried out under great pressure from politicians and the public.

## 1. Personnel protective equipment

## 1.1 Division of aids

The division of PPE can be made according to several criteria, which are presented, for example, by the Occupational Safety Research Institute (Výzkumný ústav bezpečnosti práce, 2022). However, for the purposes of this article, the division based on the purpose-oriented Safety At Work portal (2022) is the most appropriate. PPE includes protective equipment designed to protect the eyes, respiratory tract, hands and the rest of the body, etc. A comprehensive approach to their division is shown in the diagram in Figure 1. Figure 2 shows a diagram of the division of individual protective equipment (IPE), which in general terms also belongs to PPE.

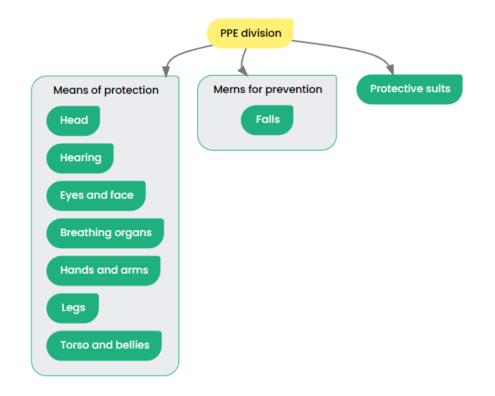


Figure 1a Division of PPE according to its purpose (own elaboration)

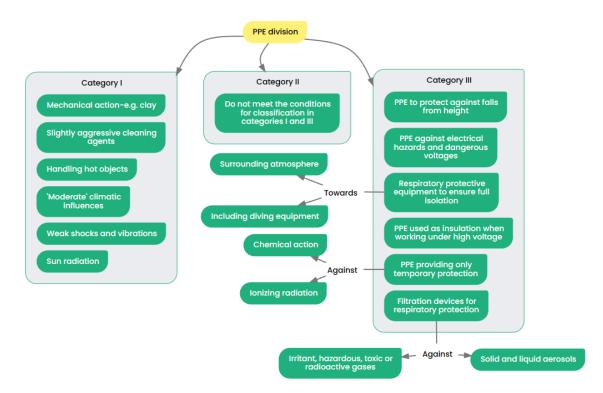


Figure 1b Distribution of PPE by categories (own elaboration)

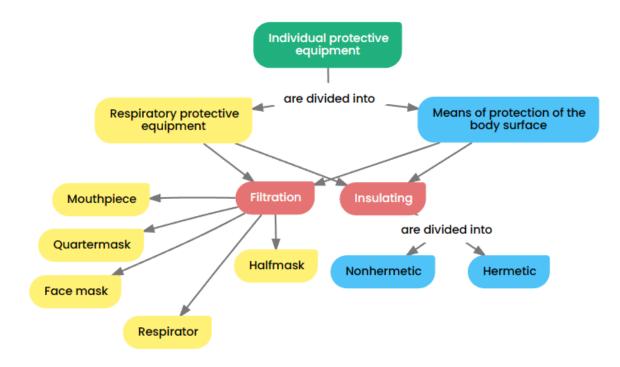


Figure 2 IPE division (own elaboration)

The full functionality of PPE necessarily includes a perfect knowledge of handling procedures, especially during donning and doffing. In this way, their effectiveness as declared by the manufacturer is guaranteed. However, the use of PPE alone is not enough. It is necessary that the rules of barrier nursing care and proper hand hygiene are observed (Ministerstvo zdravotnictví, 2022). Before and while using PPE, general principles apply, as shown schematically in Figure 3:

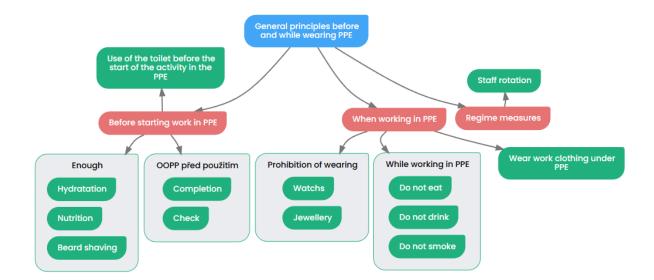


Figure 3 General principles before and while wearing PPE (own elaboration)

## **1.2 Organisational measures**

According to the Ministry of Health (MoH), PPE use zones are distinguished into the so-called non-COVID and COVID zones. Under normal conditions, i.e., in the non-covid zone during a pandemic, surgical drapes and gloves are recommended for use during routine procedures without the production of aerosols, droplets and dust. Procedures where a greater risk of aerosol formation is anticipated are suctioning and airway care, tracheal intubation, bronchoscopy or cardiopulmonary resuscitation. When the healthcare worker is in contact with aerosol, he/she uses a higher respiratory protection, namely a respirator marked with the FFP2/N95 class. Workplaces that are specifically designated to work with COVID patients, i.e., work in a COVID zone and are in direct contact with the infection, use FFP2/N95 respirators even for routine procedures, together with a disposable protective gown, cap, gloves and eye protection, i.e. goggles or face shield. Where there is an increased risk of aerosol generation in COVID positive persons, respirators of a higher protection class designated as FFP3 are used.

## 1.3 Respiratory and body surface protection

Respiratory and body surface protection integrates the requirements for respiratory and body surface protection. It is important to note that the use of PPE significantly reduces (minimises) the risk of contaminant transfer from person to person. For this reason, it is important to use this equipment especially in places where there is a higher concentration of people. According to a study (Adjodah, 2021), a decrease in newly infected and hospitalized cases of COVID-positive persons has been shown when the preventive measures of wearing respirators are established at the state level. These figures correspond to 14% of the highest recorded number of new infections, which is 3.55 fewer new infections per 100,000 persons, 0.13 fewer deaths per 100,000 persons, or 13% of the US population, and a decrease of 7% in hospitalizations for COVID over the 25-day study period.

Otřísal (2020), at the beginning of the pandemic, considered the fundamental problem of the company to be that the meanings of terms such as pro respirator and medical drape were not clearly understood. The primary purpose of a respirator is to protect its wearer, whereas a medical drape is used primarily to protect other people. The drape is not made of adequate materials to contain any virus, let alone the coronavirus. Their qualitative division and specification were only understood by the public when their virtually universal use was mandated.

Safety glasses are used to protect the eyes. These can be used repeatedly after decontamination, which is specified by the manufacturer in terms of the procedure and decontamination agents used. Healthcare workers who wear dioptric spectacles shall put the goggles on afterwards. It is always important to test the functionality and tightness of this PPE. Protective face shields have been manufactured (printed) to protect the entire face. In particular, disposable protective caps were used to protect the hair part.

Sterile or non-sterile gloves are used to protect the hands. Like all products used in healthcare, gloves must meet certain parameters and be certified for their use. According to the European Centre for Disease Prevention and Control (2022), it is recommended to use at least two pairs of gloves when coming into contact with a COVID-positive patient or client. When there is a shortage of hand protection equipment in a given health or social care facility, it is recommended to keep identical gloves for multiple patients with the same diagnosis, for example when providing care to COVID-positive patients in a shared room. Even so, hand disinfection must occur when changing patients to prevent the spread of other pathogens between them. Disinfection can be performed if the gloves do not show signs of damage, such as tearing, discolouration or shape change. If the gloves show any of these signs, they cannot be used further and must be disposed of.

The basic protection of the entire body surface includes blouses and trousers, which are usually used for one shift. In the event of contamination with biological material or damage to clothing, it is replaced and subsequently handled as infectious waste. This standard garment is covered by a disposable waterproof protective jacket, which is part of the PPE. In the USA, body protection gowns are subject to ANSI and AAMI PB70 standards, where these devices are classified into four levels according to their resistance to liquids. The lowest level is designated by the number 1 and the highest by the number 4. Another standard used by the US is ASTM F1671. These standard tests strength and resistance to potential physical and chemical agents. In Europe, the European standard EN 13759 is mainly used for sheathing, which is classified as highly effective for protection against microorganisms. Standard EN 14126 includes a specification for the penetration of biological fluids when tested together with the application of pressures ranging from 0 to 20 kPa. Protective full-body suits or so-called tyvek suits are used for body protection. According to the WHO, these protective fullbody suits are only suitable in emergency situations, which was not the case in the first wave of COVID. In contrast, in Korea, these PPEs were among the initial recommendations for the use of body protection. As the situation evolved, clarification then followed as to in which situations it is appropriate to choose a protective body suit and in which cases only a disposable protective jacket will suffice. In Korea at that time, there was no standard for assessing the suitability of PPE, and therefore only international standards were followed. To protect against infection with the COVID virus, the duration of exposure, the pressure exerted on the PPE, and the specific type of procedure performed on the COVIDpositive patient or client need to be assessed. In addition, the fact that the use of a full body protective suit generates more heat, overheating of the body, dehydration and faster fatigue than disposable protective gowns that do not completely cover the entire body surface (Park, 2020) must be taken into account.

#### 2 Handling personal protective equipment

In March 2020, the National Reference Centre for Healthcare Associated Infections (NRCI) published an educational material for hospital facilities in the Czech Republic, which is a manual for the correct donning and doffing of PPE. This manual is chronologically described and supplemented with photographs for better clarity for their users. These educational materials have been followed up by working groups (state institutions, organisations), in particular the Integrated Central Management Team of the Smart Quarantine of the MoH, the Ministry of Labour and Social Affairs together with the Centre for Biological Protection (CBO), which have created manuals for donning and doffing PPE, which are illustrated with photographs and video instructions and supplemented with basic information. They are freely accessible to health workers and the general public. The manuals are available on the MoH website, specifically on the link dealing exclusively with COVIDU virus disease. The two guidelines mentioned differ in several areas of dressing. These include the chronological procedure or the noninclusion of certain PPE components. Individual hospitals approach the PPE dressing methodology individually and create their own standards specific to the type of ward based on the recommendations issued during the pandemic, which have been continuously modified and changed.

## **2.1 Dressing procedures**

According to the NRCI methodology, it is important to replenish sufficient fluids, not to starve and to use the toilet before donning PPE (Figure 3). Before donning, the health worker performs hygienic hand disinfection and then the protective gown is donned first. This is fastened so that it is not loose and does not restrict the worker's movement. The second step is to put on respiratory protection, i.e., a respirator or surgical drape. Persons who own dioptric spectacles take them off and only after putting on the respirator do they put their spectacles back on. The respirator is fitted according to the manufacturer's recommendations. First the respirator is fitted to the nose, the fixation elastics are placed on the top of the head and as a last step the whole respirator is fixed around the chin and face. The respirator is checked for functionality immediately after fitting. No air must escape around the respirator during exhalation and inhalation. If the respirator is well sealed, goggles are fitted so that the lower edge of the goggles overlaps the upper edge of the respirator. This is followed by a protective cap that must overlap both earlobes and the top edge of the goggles. If a face shield is provided, it is put on after the hair protection is worn. The last step is to put on at least two pairs of protective gloves. These must overlap the sleeves sufficiently to avoid exposing the skin. The second pair of gloves should be coloured differently from the first pair of gloves for better visibility in case of contamination or tearing.

The steps of handling when donning PPE are therefore as follows: (Národní referenční centrum pro infekce spojené se zdravotní péčí, 2022)

- Step 1: Hygienic hand disinfection;
- Step 2: Protective cover;
- Step 3: Respirator/surgical drape;
- Step 4: Eye protection;
- Step 5: Hair protection;
- Step 6: Hand protection.

In accordance with the second methodology issued by the CBO, the first activity that needs to be carried out before putting on the PPE is to set up the PPE at the designated place. The person putting on the PPE then removes all bracelets, watches, earrings and jewellery. He/she shall adjust his/her hair so that it is tightly clasped and does not interfere with dressing or undressing. For men, more care should be taken with beards, which should be shaved to ensure proper PPE tightness. Before dressing, it is recommended to perform basic biological needs, namely adequate food, drink and use of the toilet. The person then puts on washable footwear and puts on the first pair of protective gloves. The person puts on a gown, which is tied behind the neck and at waist level. The cloak must cover the entire back. The sleeve of the gown extends over the gloves and the person secures it with protective tape around the entire wrist. It is recommended that a tab be left at the end of the tape to assist in undressing. This is followed by putting on the respiratory protection and checking its functionality. Respirators must be moulded to the shape of the face to prevent fogging of the goggles or shield. Air must not escape around the respirator when exhaling. Protective goggles or shields are fitted after the respirator has been correctly fitted and shaped. Then the hair part is covered, with a protective cap that must cover the hair, forehead and ears. This is followed by putting on a second pair of gloves. Last but not least, it is necessary to check the functionality and correct fit of all PPE components. When entering infectious areas, the person no longer touches the facial area and does not adjust the PPE components. According to this methodology, the steps are as follows: (Ministerstvo zdravotnictví České republiky, 2022)

- Step 1: Put on washable shoes;
- Step 2: Putting on the first pair of gloves;
- Step 3: Protective jacket;
- Step 4: Fastening the protective jacket;
- Step 5: Respiratory protection;
- Step 6: Eye protection;
- Step 7: Hair protection;
- Step 8: Putting on the second pair of gloves.

## **2.2 Undressing procedures**

Taking off the PPE itself is more important than putting it on, as contaminated material is handled. The first step according to the methodology is to remove the outer protective gloves. The gloves are removed from the arm to the fingers by grasping the edge and rolling them inside out. The second glove is removed in the same manner, and both are then placed in the infectious waste. Once the gloves are removed, the head section is moved to the head and the protective cap is removed. This is removed from the top of the head to the forehead so that the gloves do not touch the hair or skin. Alcohol disinfection of the gloves follows after placing the protective cap in the infectious waste. Then, the fixation elastic of the goggles is grasped at the top of the head and, with a careful forward movement, removed from the head and placed in a predetermined location. These protective devices can be reused after prior decontamination. In the event that we have another person available to assist with the removal of the protective gown by untying the knots on the back. If no helper is available, the person unties the knots at the waist and behind the neck himself, grasps the cloak from the outside so as not to touch the clothing, and then the cloak is pulled down from the shoulders to the arms by rolling inwards. In this way, the contaminated part inside the jacket is retained. The last pair of protective gloves is rolled up with the jacket. Everything is disposed of in the infectious waste, followed by hygienic hand disinfection. The respirator or surgical drape is then removed, again from the top of the head forward without touching the face, hands or clothing. The respiratory protection is placed in the infectious waste followed by hygienic hand disinfection. The PPE removal methodology consists of the following steps:

- Step 1: Remove gloves;
- Step 2: Removing the hair protection;
- Step 3: Disinfecting the gloves
- Step 4: Remove eye protection;
- Step 5: Removing the gown;
- Step 6: Remove the second pair of gloves;
- Step 7: Hygienic hand disinfection;
- Step 8: Removal of respiratory protection;
- Step 9: Hygienic hand disinfection.

According to the CBO methodology, the removal of PPE is mandated to be carried out at pre-designated locations that are equipped with the necessary equipment. Undressing should be done in a calm manner and each activity should be interspersed with hand disinfection. The first step is the actual disinfection of the top pair of gloves together with the front of the protective gown. The person then unbinds the protective gown behind the neck and at the waist. This is followed by further disinfection of the hands, as there has been contact with contaminated clothing. The person then removes the top pair of gloves and places it in the infectious waste. The isolation tape that covered the transition between the gloves and the gown is peeled off. The person disinfects their hands. The person slowly pulls off the protective gown and touches the outer contaminated part of the gown. The contaminated part is rolled inwards. This rolled-up gown is placed in the infectious waste. The waste must not be compressed in the container, as this could cause the infectious aerosol from the contaminated clothing and components to swirl. This is followed by further hand disinfection. Removing the hair protection from the back to the front and placing it in the infectious waste. Further disinfection of gloves. Removal of eye protection in the same direction as the cap was removed. It is important that the person does not touch the facial area as they still have the bottom pair of protective gloves. The goggles or shield do not need to be placed in the infectious waste, but both can be reused after decontamination. Therefore, these components are placed in pre-prepared containers. Redisinfection of gloves. Respiratory protection is removed during exhalation, then placed in infectious waste. The protective gloves are then removed. The first glove is removed by touching the glove to the outer surface. The second glove is removed by the inner uncontaminated surface. This is followed by disinfection of the hands and any exposed body parts, such as the neck in some cases. Exit from the area set aside for removal of PPE should be via the disinfection mat. This is followed by removal of protective footwear and hand disinfection. Chronological procedure for removing PPE:

- Step 1: Hand disinfection;
- Step 2: Untie the sheath;
- Step 3: Hand disinfection;
- Step 4: Taking off the first pair of gloves;
- Step 5: Removing the adhesive tape on the hands;
- Step 6: Disinfect hands;
- Step 7: Remove the gown;
- Step 8: Disinfect hands;
- Step 9: Remove hair protection;
- Step 10: Disinfect hands;
- Step 11: Remove eye protection;

- Step 12: Disinfect hands;
- Step 13: Remove respiratory protection;
- Step 14: Remove gloves;
- Step 15: Disinfect hands and neck;
- Step 16: Passing through the disinfectant pad;
- Step 17: Remove protective footwear;
- Step 18: Hand disinfection

# **3** Proposal for a procedure for the development of an individual methodological procedure

Considering the documented information from various studies, it has been shown that there was a shortage of PPE only in the early days of the 2019 pandemic. During 2020 and 2021, there were drastic changes in the production and also innovation of these devices. There have also been a number of research and testing not only in the epidemiology of the spread of the virus but also in the PPE itself. Given these advances, there is also a need to innovate the methodological procedures for handling PPE (Figure 4). The first step in developing these procedures should always be to map the premises in which the PPE will be used. This information about the premises is important to delineate a basic clean and dirty zone. The procedures in this article do not address or mention these zones. Guidelines for the allocation of these spaces were published on the MoH website, but they only covered general guidelines and their outlines were not applicable in all HCFs or social services precisely because of the variety of spatial provision. It is therefore important to specify what each of the designated zones should look like, what it should contain and what is needed to establish it. These include:

- a clean zone;
- transition between clean and dirty zones;
- dirty zone.

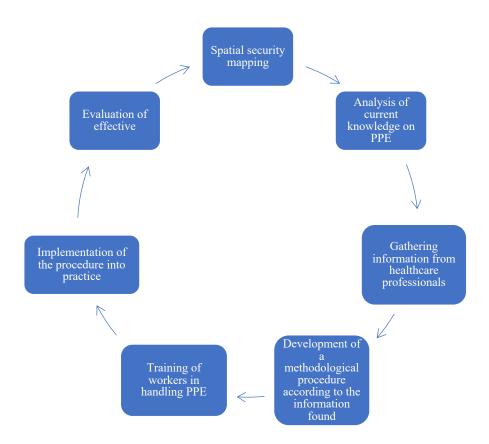


Figure 4 Procedure for developing an individual methodological approach

After the general specification of these zones, it is possible for all HCFs and social services to have their own drawing of the transition from clean to dirty zone according to their spatial and material security, i.e., individually tailored according to the possibilities. For this, a thorough analysis of the spaces is needed, and it is not possible to do this design so called from the table, as most of these procedures are created so far.

Once the zones in the HCFs or social service facilities have been divided, it is necessary to proceed to the selection of PPE to be used in COVID positive and suspected patients. The choice of PPE should be preceded by an analysis of studies conducted to date, focusing on possible coronavirus contamination. For example, the study of Jung (2021) points to contamination mainly of the patient's environment but of the holistic protective sheath itself, which is part of the PPE used, in only three cases. By collecting more similar studies conducted on a larger sample of respondents, some types of PPE such as the holistic protective suit can be eliminated if the lower probability of transmission through clothing is confirmed. If some types of PPE are not used at all by staff, despite their provision for the particular PPE, it is a matter for consideration whether it is appropriate to include this PPE in the methodological procedures. It would also be desirable to find out from health personnel which type of PPE they prefer. Particularly for

respiratory protection, different types of respirators are produced and, according to many researchers, respiratory protection is one of the most important aspects in preventing the spread of coronavirus. By analysing the preference and perishability of certain types of respirators, it is possible to target a different manufacturer or production company that no longer focuses on the quantity but also on the quality of these products. The economic burden on the HCFs and social services can be alleviated by purchasing better quality PPE that does not exhibit elements of frequent perishability.

When developing a methodological procedure for donning and doffing PPE, it is always necessary to follow the recommendations of the PPE manufacturer. In particular, focus on the shelf life and recommendations for the use of the PPE. Preparation prior to donning the PPE must also be included in the donning procedure. Thereafter, incorporate the steps as recommended by the manufacturer of each PPE and the general procedures issued by the MoH, WHO, CDC or KHS according to current knowledge. The completion of the methodological procedure should be followed by a testing phase by an unbiased person. Both in terms of word processing and pictorial attachments that should be included. If no errors are found, the personnel who will use the PPE in question should be trained by an OSH trainer or epidemiologist. The training itself should focus on both theory and practice. The practical part itself should outweigh the theory. Each of the trainees should be able to put on and take off the PPE correctly according to the established methodological procedures without contaminating themselves or the environment. The training of medical personnel and the implementation of the new procedures in practice should be followed by an evaluation of the effectiveness of the issued methodological procedure with the passage of time. Whether this would be in the form of an interview with medical staff using PPE or the use of online questionnaires. In the event of ineffectiveness or an increased number of contaminations of healthcare personnel, the guidance procedure should be re-evaluated and adapted earlier. Also, when new facts in PPE innovation or epidemic developments of COVID in the country or in the world are identified, the procedures should be adapted according to the recommendations based on relevant information. The proposed model respects the recommendations of the KS-COVID Recommendation on the use of PPE for healthcare workers (Ministerstvo zdravotnictví České republiky, 2022).

#### Conclusion

Methodological recommendations for handling PPE at the onset of the pandemic differed significantly from the coming months due to the ever-changing epidemic situation worldwide. During the pandemic, there was significant innovation in the field of protective equipment, not only for the respiratory tract. Today, the Czech Republic has the most effective devices developed by the best institutions. On the other hand, it should be noted that some web portals where basic information for the general public was placed have been gradually updated and websites that were functional at the beginning of the pandemic situation and provided a range of very useful information have been deleted and some data have been redirected to current websites. Therefore, it will be necessary to set up a system for the permanent storage of data and information related to past emergencies and to set up a system that will lead to the improvement of the educational activities carried out not only in schools in the training of future health personnel, but also in the HCFs.

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## REACTIONS OF SELECTED NATO EASTERN WING COUNTRIES TO THE CURRENT SECURITY SITUATION IN EUROPE<sup>1</sup>

## Ladislav Pásztor<sup>2</sup>

#### ABSTRACT

In its strategic environment description, the NATO 2022 Security Concept defined the security threats directly targeting Europe, especially the eastern wing of the Alliance. Russia's buildup of its military presence in the Baltic, the Black Sea, and the Mediterranean region, and its military integration with Belarus challenged the Alliance's security. After their aggression against Georgia in 2008, the illegal annexation of Crimea, and unsuccessful efforts to control the eastern part of Ukraine in the spring of 2014, Russian troops invaded Ukraine on 24<sup>th</sup> February 2022, violating its sovereignty and territorial integrity, making the Russian Federation a significant and direct threat to NATO's security. Pervasive instability in Africa and the Middle East, and the possible disruption of the fragile balance in the Western Balkans contribute to irregular migration. The People's Republic of China also presents a challenge to our interests, security, and values, and seeks to undermine the rules-based international order. This paper aims to analyse the presence of primary security threats in the national strategic documents of the V4 countries and Romania. The synthesis of the acquired knowledge supplemented with information on the governments' attitudes after the Russian aggression against Ukraine indicates the current attitudes of the governments of the evaluated states.

Key words: security threats, V4 countries, Romania, Russian aggression, irregular migration

#### Introduction

Based on the NATO 2022 Strategic Concept, this paper addresses several main security challenges, risks, and threats. The first is Russia, which poses the most significant and direct threat, followed by irregular migration, continuously representing security risks and challenges. The second is China, which employs a broad range of political, economic, and military tools to increase its global influence, making a remaining opaque security challenge. The third security challenge is Ukraine as a target of Russian aggression (NATO 2022 Strategic Concept, 2022). The research is based on currently valid security strategies and whether they contain these challenges, risks, and threats. Subsequently, it discusses the revision of the governments' attitude towards these security challenges and threats, as well as the support to Ukraine in its fight against Russian aggression.

<sup>&</sup>lt;sup>1</sup> *Disclaimer:* The paper reflects the status valid as of 28<sup>th</sup> February 2023.

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All evaluated countries are located on the eastern flank of NATO and (except the Czech Republic) have direct borders with Ukraine, have a growing economy, and are member countries of NATO and the EU, as well as several Central European regional formats of cooperation. Finally, during the Cold War all the assessed states belonged to the sphere of influence of the Soviet Union and were on the eastern side of the Iron Curtain.

The national security strategies comprehensively interpret a country's defence through the individual main security sectors (military, political, economic, social, environmental, and information technology) and comprise the country's basic and guiding security document. Poland's current security strategy (Strategia Bezpieczeństwa Narodowego Rzeczypospolitej Polskiej, hereinafter SBNRP) was approved by President Andrzej Duda on 12<sup>th</sup> May 2020. The National Council of the Slovak Republic adopted the new Security Strategy of the Slovak Republic (Bezpečnostná stratégia Slovenskej republiky, hereinafter BSSR) on 28th January 2021, and the Slovakian Defence Strategy (Obranná stratégia Slovenskej republiky, hereinafter OSSR) on the previous day. On 21st April 2020, the Hungarian government adopted Hungary's National Security Strategy (Magyarország Nemzeti Biztonsági Stratégiája, hereinafter MNBS). At a joint meeting, the Romanian Chamber of Deputies and the Senate on 30<sup>th</sup> June 2020 approved the National Defense Strategy of Romania for the period 2020-2024 (Strategiei Naționale de Apărare a Țării, hereinafter SNAT) (Pásztor, 2023).

Due to the peculiarities of the Czech strategic culture, the paragraph takes into account the Security Strategy of the Czech Republic (*Bezpečnostní strategie České republiky*, hereinafter BSČR), approved on 4<sup>th</sup> February 2015 by the Czech government (Usnesení vlády č. 79..., 2015) also the Defence Strategy (*Obranná strategie České republiky*, hereinafter OSČR) adopted on 13<sup>th</sup> March 2017 by the Czech government (Usnesení vlády České republiky..., 2017). Because the Security and Defence strategies of the Czech Republic are significantly outdated, the paper considers the Policy Statement of the Government of the Czech Republic (*Programové prohlášení vlády České republiky*, hereinafter PPVČR) (Programové prohlášení vlády, 2022).

The author uses a three-level scale to name the security factor levels. The first is the lowest level of reflection, the "*security challenge*", when dangerous factors can affect the power relations of a given region. The second is the medium level, the "*security risk*", when national interests may be harmed, causing some losses. The third is the highest level, the "*security threat*", when national interests may be harmed and indirectly affect the preservation of national values. In this case, the possibility of coercion or violent solutions also exists to achieve an external interest (Resperger, 2013).

## 1 Attitudes towards the Russian Federation

In its SBNRP, Poland states that Russia's neo-imperial policy is the most serious threat. The aggression against Georgia, the illegal annexation of Crimea, and activities in eastern Ukraine violated the basic principles of international law, and undermined the pillars of the European security system. The Russian Federation is intensively developing its offensive military capabilities by extending its military presence in the Baltic Sea region, in the Kaliningrad Oblast, conducting large-scale military exercises based on scenarios assuming a conflict with the NATO member states, rapid deployment of large military formations, and even the use of nuclear weapons. Furthermore, the Russian Federation performs comprehensive actions below the threshold of war activities (hybrid warfare) and other non-military activities (including cyber-attacks and disinformation) to rebuild its power and spheres of influence (SBNRP, 2020, p. 6.).

According to the Security Strategy of the Slovak Republic, the Russian Federation's aggressive behaviour provoked the conflict in Georgia and eastern Ukraine and the illegal occupation of Crimea, which grossly violates international law and political obligations (BSSR, 2021, paragraph 26). The deterioration of the European security environment due to the breach of the sovereignty and territorial integrity of Ukraine by Russia is stated in Slovakian Defence Strategy (OSSR, 2021, paragraph 10e). Slovakia is interested in developing good mutual relations with Russia in an open critical dialogue on issues where values and interests diverge. Therefore, in necessary cases, it will also support the application of restrictive measures. At the same time, the Russian Federation is an important participant and partner in managing international threats and challenges. At the same time, with its aggressive approach in the military, security and political fields, it represents the main challenge to the security of the Euro-Atlantic area (BSSR, 2021, paragraph 81). Even if the document does not state it directly, it is clear that Russia dominates the supply of energy carriers to Slovakia. Consequently, the purposeful interruption of supplies of energy carriers and transport interconnections would endanger Slovakian critical infrastructure (BSSR, 2021, paragraphs 33, 34). The same applies to cyber-attacks and hybrid threats (BSSR, 2021, paragraphs 32, 35).

The Czech Republic does not directly mention Russia as a security challenge in its strategy. Still, from the point of view of energy security and the related threat to critical infrastructure due to the interruption of supplies of strategic raw materials or energy, it is clear that the threat is posed primarily by Russia (BSČR, 2015, paragraphs 21, 75–77). The same is true of the threat posed by unilateral attempts by "*some states*" to build spheres of influence through a combination of political, economic and military pressure and intelligence activities (BSČR, 2015, paragraph 19). The Defence Strategy of the Czech Republic directly names the Russian Federation, which openly pursues its power

ambitions in Eastern Europe, including through military force (OSČR, 2017, paragraph 4). **Petr Fiala**'s government policy undertook to review the relationship with Russia and update strategic documents by 2023 (PPVČR, 2022, pp. 25, 29).

Hungary's National Security Strategy states that the Russian Federation is one of the key actors in the international system, essential in managing several global and regional security issues. However, significant tensions have developed recently in the relations between NATO and Russia and between the EU and Russia. Hungary regards the maintenance of the cohesion of NATO and of the EU as one of its priorities. At the same time, it is interested in the pragmatic development of Hungarian-Russian relations and economic cooperation (MNBS, 2020, paragraph 118).

The National Defence Strategy of Romania notes the aggressive behaviour of the Russian Federation in the form of militarisation of the Black Sea region (including strengthening its offensive military capabilities) and hybrid actions carried out to maintain a tense atmosphere of insecurity near Romania (SNAT, 2020, paragraphs 6, 109). The Militarisation of Crimea and the Black Sea basin by the Russian Federation generates significant challenges to the national strategic interests aimed at securing EU and NATO borders, ensuring energy security and stability in the Black Sea Region (SNAT, 2020, paragraph 119). The attitude and activities of the Russian Federation carried out in violation of international law led to continued and extended divergences with many Western and NATO states and represented a serious obstacle to identifying viable solutions for stability and predictability of the security environment (SNAT, 2020, paragraph 66). The Russian Federation harms the security environment in the eastern neighbourhood of Romania, especially the Republic of Moldova, Ukraine, and Georgia. The Russian Federation's arsenal stationed in Transnistria tends to extend the security crisis in eastern Ukraine, triggered in the context of the illegal annexation of Crimea (SNAT, 2020, paragraphs 108, 155).

Each assessed country, except Hungary, sets Russia as a destabilising element of European security. From Poland and Romania's aspect, Russia represents a long-term security threat. These states have already gradually diversified their energy dependence on Russia, so becoming independent from Russian energy carriers will not be difficult. The strategic documents of Slovakia and the Czech Republic assess Russia only as a security challenge. Still, they indirectly consider it a security risk in the context of energy dependence and hybrid threats. The Czech-Russian relations reached a low point in April 2021 after revealing that the same two Russian GRU officers who poisoned Sergei Skripal and his daughter in Salisbury in 2018 were behind the explosion of the ammunition depots in Vrbětice in 2014 (Hevő – Pásztor, 2022, pp. 221-222). After the Russian military aggression against Ukraine in February 2022, the Czech Republic and Slovakia assess Russia as a security threat, even though they know their energy dependence on Russian energy carriers.<sup>3</sup> The Hungarian security strategy also considers Russia a security risk. However, due to Hungary's high dependence on Russian energy carriers<sup>4</sup> and the delay in diversification processes, it wants to continue pragmatic economic cooperation, thus prioritising its national interests (Orbán Viktor évértékelő beszéde, 2023).

#### 2 Attitudes towards irregular migration

Persistent regional and internal conflicts in the southern European neighbourhood are a security risk for Poland. Because of this, along with rapid population growth and differences in living standards, migratory pressure has increased, challenging Europe's security (SBNRP, 2020, p. 7). The SBNRP stipulates elaborating a comprehensive migration policy coordinated with the economic, social and security policy. This policy must consider the current and expected needs of the labour market and the integration of migrants into Polish society, ensuring social cohesion and counterbalancing possible threats to public order and security related to migration processes (SBNRP, 2020, p. 32).

Slovakia identifies the Middle East, North Africa, the Sahel and the Horn of Africa regions as a source of security threats and of challenges such as terrorism, religious extremism, and irregular migration. There is rivalry among local states for regional leadership and influence, with regard to religious, ethnic, economic and social conflicts, and not least geopolitical competition among external actors (BSSR, 2021, paragraph 28). Slovakia listed irregular migration as a direct security threat. The Western Balkan migration route passes through Slovakia so it is both a transit and destination country for (ir)regular migrants entering the Schengen area. At the same time, Slovakia considers the lack of integration of migrants, the spread of radicalism and extremism, as well as fake news and disinformation about migrants a security threat (BSSR, 2021,

<sup>&</sup>lt;sup>3</sup> After the "vrbětice" case, the Czech Republic excluded Russia from completing the Dukovany nuclear power plants (Hevő – Pásztor, 2022, pp. 221-222.), and since January 2023, it has no longer purchased any natural gas from Russia (Síkela, 2023). Slovak nuclear power plants - Jaslovské Bohunice and Mochovce - are built on Russian technologies and entirely dependent on Russian nuclear fuel (Funtíková, 2023).

<sup>&</sup>lt;sup>4</sup> In 2020, Hungary had 95% dependence on Russian natural gas (Buzás, 2022), in 2022 it had only 85% (Csiki, 2022). To produce electricity sold in Hungary, power plants used 68.1% nuclear, 7.1% renewable and 24.8 fossil (of which 53.8% natural gas) energy sources (Energiamix, 2021). 75% of Hungary's electricity consumption is produced by domestic power plants, 40% of which is provided by the Paks nuclear power plant, which can obtain the necessary heating elements from several sources (Csiki, 2022). The arguments of the MOL refinery about the technological complexity of the transition to the processing of a type of oil different from the Russian URAL to a business strategy instead (with the support of the Hungarian government) because the company has been working on diversification in several stages since 2014 (Kiss, 2023).

paragraph 40). According to Slovakia's defence strategy, massive irregular migration significantly impacts ensuring defence (OSSR, 2021, paragraph 10j).

In its security strategy, the Czech Republic also includes relevant security threats that do not directly impact its security but threaten allies. The strategy mentions irregular migration several times but never once as a direct threat to the Czech Republic (BSČR, 2015, pp. 8–12, 15, 17). The Czech defence strategy considers irregular migration "*alarming*" but does not list the Czech Republic as a target country. The EU is generally the target of irregular migration (OSČR, 2017, paragraph 4). **Fiala**'s government policy statement promotes access to migration without mandatory quotas and prevention in the place of origin and the countries with migration routes (PPVČR, 2022, pp. 27, 29, 33).

Hungary takes the most radical approach to irregular migration of all the evaluated countries, considering it the primary security threat (although labelled differently) affecting the national interests of Hungary (MNBS, 2020, paragraph 124a).

Romania links irregular migration to other threats, such as organised crime, terrorism, and international trafficking of high-risk illegal drugs (SNAT, 2020, paragraphs 61, 82, 130, 150). It identifies the starting point of the migration wave (Middle East, North Africa, Afghanistan, and Pakistan) which flows through Romania as a secondary transit route to the West (SNAT, 2020, paragraph 70).

It can be stated that irregular migration is a security threat to Slovakia and Hungary. Czechia and Poland had treated irregular migration as a security challenge before they confronted the migration wave directly at their borders.<sup>5</sup> We can state that these two countries have re-evaluated their attitude towards irregular migration and consider it at least a security threat. Romania continues considering irregular migration a security challenge.

## 3 Attitudes towards the People's Republic of China

Poland ranks China among the strategic rivals of the USA and Russia. Because the USA is a critical strategic partner for Poland and Russia has generated several security threats at both global and regional levels, it is clearly stated that China also poses a security risk for Poland (SBNRP, 2020, pp. 6–7).

The Slovak security strategy assesses China as an essential participant and partner in meeting global challenges. However, it is also an economic and technological competitor and systemic rival of the EU. China significantly

<sup>&</sup>lt;sup>5</sup> For more than ten months, Poland was affected by irregular migration from August 2021. In response to EU sanctions against Belarus, Belarusian President Alexander Lukashenko encouraged migrants from the Middle East and elsewhere to enter the European Union illegally through Lithuania and Latvia, and later primarily through Poland (Bielecka, 2022). Since the number of irregular migrants in the Czech Republic increased, the Czech government introduced temporary border controls with Slovakia on 29<sup>th</sup> September 2022 (Čtvrtletní zpráva o migraci za 3. čtvrtletí, 2022, p. 6).

increases its power potential and political influence based on rapidly growing military capabilities, which it assertively uses in combination with economic power and strategic investments to advance its interests (BSSR, 2021, paragraph 82). Behind the threat of military use of modern technologies, without directly naming an actor the Slovakian security strategy suggests that it is China.

The Czech defence strategy does not directly name China but indirectly considers it an ambitious economic actor (OSČR, 2015, paragraph 19). The Czech government policy statement confirmed its earlier decisions to exclude Chinese and Russian companies from its nuclear program (PVVČR, 2022, p. 10).

Hungary considers China the world's second largest national economy and centre of civilisation. It was interested in the pragmatic maintenance and strengthening of Hungarian-Chinese economic relations, primarily through mutually beneficial involvement in the "Modern Silk Road" (»Belt and Road Initiative«) program aimed at strengthening trade relations connecting the European, African and Asian continents. At the same time, in the case of Chinese investments in critical infrastructure – in the most advanced information and communication technologies – China's activities are classified as a security risk (MNBS, 2020, paragraph 119).

The Romanian defence strategy does not mention China as an emerging global power at all. As China's international (emerging) power objectives and aspirations encourage the United States to respond accordingly (SNAT, 2020, paragraph 83) the Romanian assessment of China reflects the American attitude, which makes it clear that Romania will accept the US position regarding China as a security risk.

Based on the security documents of the evaluated countries, China poses a security risk to each of them. By excluding China from its peaceful nuclear program, the Czech Republic moved it into the security threat. For other countries, except Hungary, a cautious approach to China can be assumed. Hungary continues to develop its strategic economic partnership with China (FM: Hungary's economy..., 2023); and through mitigating the regional security risks Budapest draws attention to in its own security strategy.<sup>6</sup>

## 4 Attitudes towards Ukraine

Strengthening the independence, sovereignty, and territorial integrity of Ukraine (as well as of Georgia and Moldova) are essential elements of the international security system. Therefore, Poland supports the Euro-Atlantic accession aspirations of these countries (SBNRP, 2020, p. 25).

<sup>&</sup>lt;sup>6</sup> According to MNBS: "While capitalising on economic cooperation, we must also take into account the factors resulting from the vulnerability that may stem from investment in critical infrastructure by an emerging China, its appearance as a possible supplier of state-of-the-art info-communications technology, and in general by an increase in its regional influence." (MNBS, paragraph 119).

The Slovak Republic rejects any attempts to question the Euro-Atlantic ambitions and aspirations of partners such as Ukraine, Georgia, or the countries of the Western Balkans (BSSR, 2021, paragraph 72). The end of the armed conflict in Ukraine and restoring its sovereignty and territorial integrity, including the return of illegally occupied Crimea, is essential for Slovakia. Therefore, it will try to support a political solution to Ukraine's conflict and contribute to the fulfilment of Ukraine's Euro-Atlantic ambitions (BSSR, 2021, paragraph 78). Slovakia will continue to promote the maintenance of natural gas transportation through the territory of Ukraine (BSSR, 2021, paragraph 89).

Ukraine is not explicitly mentioned in any of the evaluated documents of the Czech Republic. We can indirectly identify it as part of the "*Eastern Partnership of EU*" support in the security strategy (BSČR, 2015, paragraph 51). The Czech defence strategy points to the realisation of Russia's power ambitions through military force in Eastern Europe (OSČR, 2017, paragraph 4), and in the Program Statement we can identify Ukraine as part of the "*Eastern Partnership*" (PPVČR, 2022, p. 27).

Hungary is interested in a strong, democratic, stable, economically developing Ukraine and balanced bilateral relations. At the same time, legitimate efforts to strengthen Ukrainian national consciousness must not lead to the impairment of the acquired rights of the Transcarpathian Hungarian community<sup>7</sup> (MNBS, 2020, paragraph 88).

<sup>&</sup>lt;sup>7</sup> Hungarian-Ukrainian relations regarding the protection of national minorities have been deteriorating since 2011 when the Hungarian-Ukrainian Joint Commission for National Minorities last met. This session ended without signing the minutes for two reasons. The first was the non-recognition of Hungary's demand for creating a separate electoral district in the Zakarpattia region with a predominance of the Hungarian national minority and the creation of an individual "Tisza-melléki" district in which the Hungarian minority would prevail. The second was the rejection of Ukraine's request to cancel the simplified issuance of Schengen visas by Hungary only for members of the Hungarian national minority, which was provided by confirming the provision of financial coverage for the stay in Hungary (Fedinec, 2022). Further deterioration of bilateral relations occurred after 2017, when Ukraine, in response to the Russian annexation of Crimea and the occupation of the Donetsk and Luhansk regions, limited the right to education in the language of national minorities. The new legislation introduces compulsory teaching of all subjects in the Ukrainian language from the fifth year of primary school (Školský zákon..., 2017). In December 2022, the National Council of Ukraine adopted the Ukrainian Law on National Minorities. It is a crucial requirement for the country's EU accession. The law mentioned protecting the rights of minorities, including the right to selfidentification, the use of the languages of national minorities, education, and participation in political, economic, social, and cultural life. However, according to Budapest's position, the law further narrows the rights of national minorities living on the territory of Ukraine, including Hungarians (Kreft-Horváth, 2022). The Ukrainian Education Act and the Act on National Minorities directly contradict the policy of protection of the Hungarian national minority living beyond the borders of Hungary, which remained living in the territory of the successor states after the collapse of Austro-Hungarian Monarchy. The Hungarian national minority living abroad is an inseparable part of the country; therefore, Hungary feels responsible for their safety, exercising the rights of the minority abroad and improving their living conditions.

The Romanian defence strategy does not take a clear position towards Ukraine. It mentions the country only twice, without evaluation, in connection with the deterioration of regional cooperation due to Russia's actions, which is the influence of the security crisis in eastern Ukraine, primarily on the Republic of Moldova, Ukraine and Georgia (SNAT, 2020, paragraph 108) of and Russia's illegal annexation of Crimea (SNAT, 2020, paragraph 155). In this context, Russia's actions contributed to the deterioration of the regional security situation, significantly affecting Romania's eastern neighbourhood.

The evaluated countries want a potent, democratic, stable, and economically developing Ukraine. When Russia launched its unprovoked fullscale aggression against Ukraine on 24<sup>th</sup> February 2022, millions of Ukrainians (primarily women with children) sought safety abroad. The V4 countries and Romania were the first to lend them a helping hand and provide temporary refuge or passage to other EU counties. Nearly 1.6 million reside in Poland, just shy of 491 thousand in the Czech Republic, around 110 thousand in Romania and Slovakia and slightly more than 34 thousand in Hungary. Since the beginning of the conflict, the Polish, Hungarian, Romanian, and Slovakian borders have been crossed by some 9.8 million, nearly 2.3 million, almost 2 million, and just shy of 2.2 million refugees respectively (Ukraine Refugee Situation, 2023). Financial support was also provided: Poland – 3.559 billion Euros (military commitment: 2.428 billion Euros), the Czech Republic - 0.57 billion Euros (military commitment: 0.464 billion Euros), Slovakia – 0.224 billion Euros (military commitment: 0.215 billion Euros), Hungary – 0.047 billion Euros, no military assistance<sup>8</sup> and Romania – 0.011 billion Euros (Military commitment: 0.003 billion Euros) (Ukraine Tracker..., 2023).

From the above numbers it is possible to conclude that no country denied humanitarian aid to Ukrainian refugees. The refugees decided to settle in countries that are linguistically close to them. There is a clear continuity with security strategies regarding military assistance to Ukraine.

#### Conclusion

The table below contains synthesized analytical outputs on the reactions of the governments of the evaluated countries to the change in the security environment compared to the valid strategic documents.

Therefore, denying previously granted privileges based on the European and Euro-Atlantic value systems is unacceptable for Budapest (Pásztor, 2020).

Ukraine indirectly admitted its tough stance on the use of the language of national minorities during peace talks with Russia in March 2022 (Орлова, 2022).

<sup>&</sup>lt;sup>8</sup> As early as the beginning of the Russian-Ukrainian conflict in February 2022 Hungary declared that it would not give weapons to Ukraine and would not permit to transport them through Hungary. Hungary justified its position with the safety of the Hungarian national minority living in Ukraine and supporting peace negotiations between Russia and Ukraine.

security factor / country	Russia	irregular migration	China	Ukraine	security assessment
Poland	threat	challenge	risk	support	strategy
	threat	threat	risk	support	February 2023
Slovakia	risk	threat	risk	support	strategies
	threat	threat	risk	support	February 2023
Czechia	risk	challenge	challenge	support	strategies
	threat	threat	threat	support	February 2023
Hungary	risk	threat	risk	support but set conditions	strategy
	risk	threat	risk	support but set conditions	February 2023
Romania	threat	challenge	risk	support	strategy

1. Table: Analysis-evaluation matrix of the security factor levels

Source: author based on this paper

Poland and Romania continuously consider Russia a security threat. After the change in the security environment, Slovakia and the Czech Republic shifted their perception of Russia from a security risk to a security threat. Hungary maintains its attitude towards Russia at the same level (a security risk), also maintaining its economic relations with Russia (Orbán Viktor évértékelő beszéde, 2023). Regarding irregular migration, Slovakia, Hungary (a security threat), and Romania (a security challenge) did not change their position. The Czech Republic and Poland, after the direct experience with irregular migration, consider it a security threat. A qualitative jump is evident in the Czech Republic, which has reclassified irregular migration from the lowest to the highest security factor levels. Poland, Slovakia, Hungary, and Romania's attitudes toward China have not changed – they consider it a security risk country. The Czech Republic has had a significant shift, similar to the case of illegal migration, from security challenge to security risk. The attitude of all the evaluated states towards Ukraine is the same. They are interested in a sovereign, economically strong and prosperous Ukraine; support restoring its territorial integrity and its efforts to defend itself against Russian aggression. Regarding Hungary and Romania, direct military support is zero or minimal, but it is necessary to clarify that both countries contribute to the European Peace Facility (EPF).9 Hungary also links Ukraine's Euro-Atlantic integration efforts to restoring the previously recognized rights of the Hungarian national minority.

In summary, the conclusion is that Poland and Romania's security strategies reflect Russia's security threat. After Russia started its "special military operation" in Ukraine in February 2022, the Czech Republic and Slovakia revised

<sup>&</sup>lt;sup>9</sup> With the EPF, the EU funds the common costs of military Common Security and Defence Policy (CSDP) missions and operations, including military support for Ukraine (European Peace Facility, 2023).

their assessment from risk to threat. All the mentioned countries are gradually becoming independent of Russian energy carriers, except Hungary, which, although considering Russia a security risk, maintains business relations with Russia to preserve its competitive advantage, especially in importing energy carriers. The issue of illegal migration had been evaluated by the governments as less critical before they confronted with that security threat. Technologically advanced China is considered a security risk, except by the Czech Republic, which nevertheless excluded it from its nuclear power plant program. Hungary, on the contrary, is interested in developing and deepening trade relations with China (to preserve its competitive advantage). Each evaluated country is interested in a stable and economically strong Ukraine. Otherwise, if Ukraine were a collapsing or unstable state, it would pose a security challenge to every neighbouring country.

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## REBUILD THE TRUST IN BALKAN – INITIATIVE OPEN BALKAN

## Vesna Stanković Pejnović<sup>1</sup>

#### ABSTRACT

Open Balkan is not an alternative to membership in the EU but is an accelerated way for the countries to faster rebuild trust and prepare for membership in the EU, as well as utilize the untapped opportunities for synergy and cooperation. As long as the EU has an unstable and turbulent Western Balkans region in its neighborhood, it will not be able to deal with and resolve key issues and challenges or establish its long-term strategic position in international relations and respond to challenges of regional globalization. The patrimonial relationship of the European Union implying of the absence of desire for local ownership of the regional integration process. The connection and cooperation of the countries of the Western Balkans in the formed discourse does not necessarily bring benefits, but only if there is "leadership" of the European integration, but the leaders are deprived of responsibility for the failure of the process.

Key words: Open Balkan, Western Balkan, cooperation, enlargement, EU

#### Introduction

In the Western Balkans region, there are more than 30 initiatives underway that involve countries of the region. The strategic commitment of all the countries is membership in the EU and NATO, whereas Serbia insists on military neutrality. The leading regional initiatives are the Berlin Process and Open Balkan.

The "mini-Schengen" regional cooperation initiative launched on 10 October 2019 in Novi Sad included Serbia, North Macedonia and Albania. The initiative was renamed into "Open Balkan" on 29 July 2021 at a meeting in Skopje. It is expected that Bosnia and Herzegovina, Montenegro and Kosovo will also join the initiative.

EU members must demonstrate vision with respect to the enlargement process, because had there been no enlargement of the EU in the past it would have never evolved into such a respectable regional integration. As the EU has 27 members, there is always the possibility of various conditionings and blockades, although member countries should refrain from such options and find institutional solutions to such issues. The indecisiveness of the EU can have strategic consequences in the Western Balkans, as there are real threats that due to the uncertainty of the EU enlargement process and pressure of the local public some countries could change their geopolitical orientation. (Stanković Pejnović,2018, pg. 148) It is necessary

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to finalize the dialogue between the official Belgrade and Pristina with the signing of a comprehensive legally binding agreement on normalization of relations, as well as that countries in the region intensively work on the initiated regional cooperation, and particularly the Open Balkan initiative. Some 19 million residents of Western Balkans will definitely not and cannot endanger an integration including 450 million residents. It is necessary to define whether there will be enlargement of the EU and when, as the enlargement of the EU cannot be postponed indefinitely. The uncertainty of the EU enlargement process actually plays into the hands of the part of the public in the Western Balkans that opposes membership of their countries in the EU and is to the benefit of the rivals and adversaries of the EU, while regional cooperation is a path to accelerated membership in the EU.

## Western Balkans between Berlin Process and Open Balkan

Regional initiatives such as the "Open Balkan" and the Berlin Process share the fate of failure until long-term solutions to bilateral disputes are found. The same applies to the process of European integration. In the absence of local ownership of the processes and responsibility for the political decisions of the leaders of the Western Balkans, the prospect of membership remains an irrational political goal. The leaders of the region also ignore the fact that the formal policy of enlargement, which has as its goal the full membership of the candidate state in the EU, has turned into a process of accession without membership (Samardžić, 2018, pg.680).

Striving to keep the countries of the Western Balkans on the European path, to speed up the approach of the Western Balkans to the European Union, to reduce the increase in the influence of third parties in the region, but also to prevent the further growth of Euroscepticism in the Western Balkans, the Berlin Process was launched at the initiative of Germany. The focus of the Berlin Process itself, since its launch in 2014, was related to intensified sectoral cooperation, development of regional infrastructure and increased cooperation in the field of security, but it gradually moved to other economic issues in the Western Balkans (Minić, 2019, pg. 27–28)

Being on the European periphery, the Western Balkans, so far, has been unable to absorb any form of regional cooperation based on the decisive role of local actors without the control and monitoring of external actors. All attempts at regional cooperation, which would be based entirely on "regional ownership", have not really yielded results during the former transformation of the Stability Pact for South-Eastern Europe into the Regional Cooperation Council in the period 2006–2008. (Đukanović, 2020, pg. 149–151) joining the European Union requires constant supervision, not only at the internal level, but also at the level of regional initiatives, and not only in the context of raising institutional capacities but also in the resolution of identity disputes. In this way, the existence of a regional Balkan connection beyond the initiative and coordination of the European Union is actually a blasphemous activity for many local and European actors. (Surlić, Lazarević, Kolarski, 2022, pg. 65)

In 2014 in the Western Balkans, two European countries, Germany and United Kingdom, launched an initiative that changed the approach to the implementation of the integration process. On the basis of the UK-German initiative the Reform Agenda for Bosnia and Herzegovina was adopted in 2015. Political reforms, such as implementation of the judgements of the European Court for Human Rights were postponed for some other time in the future and have still not been implemented. This initiative allowed for the Stabilization and Accession Agreement (SAA) between the EU and Bosnia and Herzegovina to enter into force. Power in this case was undeniably demonstrated because the expressed discourse showed social dominance in terms of control of a certain group and institutions in relation to the actions and opinions of others (van Dijk, 2001, pg.355).

In early November the same year the leaders of the six Western Balkans countries met at a summit organized within the framework of the Berlin Process and signed agreements on mutual recognition of identification cards, university diplomas and professional qualifications among the countries. This means that the visa regime between Kosovo and Bosnia and Herzegovina will be abolished, which constitutes a major breakthrough in regional relations. Ratification of the three agreements would prove that the Berlin Process has received a new momentum. Open Balkan is an autochthone regional initiative, initially named "mini-Schengen". It was launched at a meeting between Serbian President Aleksandar Vučić, Prime Ministers of Albania and North Macedonia, Edi Rama and Zoran Zaev, respectively, in October 2019 in Novi Sad. They initially stressed the European Union's strong backing for the project, but Brussels has never stated so explicitly. The biggest burden is the interpretation that regional initiatives, especially "Mini-Schengen"/ "Open Balkan" are a kind of waiting room before the EU, which permanently marks the region as a new buffer zone (Karakoça and Botić 2021, pg.17)

The leaders of the three countries, together with representatives of the business community from the region, met on July 29, 2021, as part of the Forum for Regional Economic Cooperation in Skopje. On that occasion, they announced that the initiative known until then as "Mini Schengen" was given the new name "Open Balkan". On that occasion, the leaders of the three countries signed three documents: Memorandum of Understanding on cooperation to facilitate import, export and movement of goods in the Western Balkans; Memorandum of Understanding free access to the labor market in the Western Balkans, and Agreement on cooperation in disaster protection in the Western Balkans, which will facilitate trade in the region and enable a single labor market, but also mutual assistance in emergency situations (Vlada Republike Srbije, 2021).

Since the very appearance of the idea of full implementation of the four freedoms of movement of people, services, capital, and goods in the Western Balkans, i.e., colloquially named the Little Schengen, significant resistance has emerged in the region. (Đukanović, Đorđević, 2020, pg. 609– 611). Open Balkan is becoming an embryo of new economic clusters that will be created in the region and constitute the competitive advantage of the countries and the region. The Western Balkans countries have to established stronger political, economic, scientific, cultural, sport and every other form of cooperation and approach EU together, as a group of countries with clearly defined goals, requests and interests.

Berlin Process and Open Balkan initiative are not incompatible, because both are directed towards membership in the EU. The Berlin Process is primarily in the function of achievement of German interests in the region, while the Open Balkan initiative is a genuine idea of the leaders in the region, who need to rebuild the impaired trust, devise new forms of future cooperation and tap the available resources, primarily led by their national interests.

Comparing the Berlin Process and the "Open Balkan", the President of Montenegro, Milo Đukanović, declares: "Everything we do through the Berlin Process, is aimed at reaching the standards that will eventually qualify us for membership; 'Open Balkan' does not insist on European standards and in a way, it seems to me, 'Open Balkan' is a prepared initiative that would be a kind of alternative for the membership of the Western Balkan countries in the EU" (CDM 2022)

### **Open Balkan concept and key challenges**

Being on the European periphery, the Western Balkans, so far, has been unable to absorb any form of regional cooperation based on the decisive role of local actors without the control and monitoring of external actors.

All attempts at regional cooperation, which would be based entirely on "regional ownership", have not really yielded results during the former transformation of the Stability Pact for South-Eastern Europe into the Regional Cooperation Council in the period 2006–2008. (Dukanović, 2020, pg.149–151).

The most significant problems for its operation are the lack of minimal mutual trust in the Western Balkans, the direct lack of coordination of the Open Balkan initiative by the European Union and the United States, as well as the dominant forms of regional cooperation that already exist, such as the South-East European Cooperation Process, the Regional Cooperation Council, and the Berlin Process. In addition, the impossibility of a real projection of the regional Balkan identity appears as a significant problem, as does the feeling of certain supremacy in the local public concerning the region, because it is considered imposed and superfluous.

EU has failed to support pro-European forces in the Western Balkans in recent years but, on the contrary, has managed to strengthen Euroscepticism and

anti-Europeanism through its (non) actions. Therefore, any more developed concept of regional cooperation is considered a substitute for EU membership and is increasingly creating resistance related to multilateral cooperation and integration. There are also fears that the Common Regional Market, which is being developed under the auspices of the Berlin Process and the Regional Cooperation Council, will serve as a "consolation prize" for EU membership, i.e., for some type of economic cooperation in the Western Balkans and integration into the European Single Market outside of other forms of integration already in place in the EU. (Đukanović, Krstić, 2021, pg. 9–26).

The appearance of the COVID-19 pandemic at the beginning of 2020 caused a certain suspension of concrete activities of the initiative. Moreover, after the start of the pandemic, the focus was on maintaining regional green corridors with the aim of timely and successful supply of the Western Balkan countries in a crisis that threatened to go beyond the health framework and move to a broader economic one.

The Little Schengen, as an initiative, has its roots in considerations from the previous decade related to the interconnection of countries in the Western Balkans characterized by joint life in the former common state, but also to the very difficult dissolution of Yugoslavia. (Đukanović, Dašić, 2021, pg.617–636).

The United States' backing for the Little Schengen has been apparent since the initiative's inception. This was the general stance of President Donald Trump's administration toward the Western Balkans, and it was specifically referenced in September 2020 in the "Washington Agreement," in which Kosovo agreed to join this regional structure. (Muharremi, 2021.)

That, however, did not happen. The Atlantic Council, and the Open Society Foundation, provided significant support for the project by hosting conferences on the occasion. Through diplomatic efforts, the new US administration of Joseph Biden is attempting to persuade the governments of Bosnia and Herzegovina and Montenegro to join this project. According to Gabriel Escobar, US Deputy Assistant Secretary of State and Special Envoy for the Western Balkans, in addition to the two fundamental "pillars" (EU and NATO membership), the US foreign policy toward the Western Balkans includes regional cooperation as the third pillar, with the Open Balkan playing a key role. (Eskobar, 2022) The reality consists of the American game of power (financial and military power of the "international community).In order to implement their power as easily as possible, they developed the use value of tutoring democracy and pragmatic cryptoideology. (Stanković Pejnović, 2021, pg.232)

US believes that the Open Balkan remains an important constituent of the so-called third pillar of its foreign policy towards the Balkans, which is confirmed by the meetings held in Washington. At the same time, the EU has not quite determined how it sees the future of the institutionalized relationship with the region, namely the Berlin Process and the Open Balkan. (Palokaj, 2021)Although there are indications that the new Federal Government in Germany will support

the predominant actions of the Berlin Process, it should be noted that only at the very end of her term, former Chancellor Angela Merkel supported the Open Balkan without significant hesitation, which was a characteristic of her earlier stance. (Matijašević, 2022). Despite the complex geopolitical circumstances and the obvious lack of confidence in the Western Balkans, there is a certain optimism in business circles, particularly among national chambers of commerce, that the Open Balkan initiative will develop further. (Komarčević, 2022).

If the Open Balkan concept would be implemented, it is necessary to define how the legislation in the countries will be amended and governed. There is also the issue of alignment with European legislation and, on the other hand, the potential framework of the Open Balkan, which could cause significant conflict. (Reflektor, 2022) The question arises how to regulate this when member states are at different stages of the dynamics of European integration and numerous harmonizations of their legislation with the European acquis also arises. Lawyers and politicians often raise the issue of borders being open and fighting regional security challenges (corruption, organized crime, etc.). Former Montenegrin Prime Minister Igor Lukšić pointed out that the potential removal of borders could be a problem because, with the entry of certain actors into the EU, they must be strengthened again. The potential way of leaving this initiative, as well as the entry of new members into the Open Balkan, is not legally regulated. (Portal Analitika, 2022) There are also persistent doubts regarding why barely half of the regional parties participate in this multilateral format, as well as what the multilateral format's future realistic successes are.

There is a space for the EU, probably together with the US, to take over this Open Balkan project and harmonize it in principle with the European acquis and fundamental freedoms. (Aktualno, 2022) The Open Balkan, but also the whole complex of regional initiatives that have emerged over the past two and a half decades, should become connected, inclusive, long-term, and self-sustaining forms. The full inclusion of the Open Balkan will not be ensured without some kind of external oversight and coordination of this initiative. In addition to functional intergovernmental cooperation, the Open Balkan should provide unequivocal support to local and regional authorities for strengthening crossborder cooperation and further facilitating border crossings for citizens of the Open Balkan. The concept of overcoming mutual distrust of the public and political actors of countries participating in the Open Balkan, or considering entering into this arrangement, must be based on liberation from any form of internal domination and hegemony. The format of cooperation between the representative bodies of the Western Balkan countries was also strengthened through the Parliamentary Assembly of the Western Balkans. (Non-paper, 2013)

### EU-Western Balkans Summit, Tirana Declaration

The leaders of the European Union and its Member States, in consultation with Western Balkans leaders, and in the presence of regional and international stakeholders, held on December 6, 2022 the EU-Western Balkans Summit and concluded their meeting with the "Tirana Declaration". (Tirana Declaration, 2022) The WB-Agenda and the topics of relevance for the Western Balkans Info Hub (in particular research, innovation, education, youth and sports) have also been addressed. The EU reconfirms its full and unequivocal commitment to the European Union membership perspective of the Western Balkans and calls for the acceleration of the accession process, based upon credible reforms by Partners, fair and rigorous conditionality and the principle of own merits, which is in our mutual interest.

The EU welcomes the Western Balkans Partners' resolve to uphold core European values and principles, in line with international law. The EU also welcomes the restated commitment of the Western Balkans Partners to the primacy of democracy, fundamental rights and values and the rule of law, including separation of powers. It underlines the need for sustained efforts in the fight against corruption and organized crime, strengthened support for good governance, human rights, gender equality and the rights of persons belonging to minorities.

A common vision of the future involves mutual responsibilities and shared values. As deepened cooperation with Partners, EU urge Balkan countries to make swift and sustained progress towards full alignment with the EU Common Foreign and Security Policy (CFSP) and to act accordingly, including on EU restrictive measures.

According to Declaration the EU remains the region's closest partner, main investor and trading partner and principal donor. The exceptional scale and range of this support should be made more visible and reflected proactively by the Partners in their public debate and communication, so that citizens can appreciate the concrete benefits of the partnership. The European Council has invited the Commission, the High Representative and the Council to further advance the gradual integration of the region already during the enlargement process itself in a reversible and merit-based manner.

The EU recalls the importance of continuing reforms, both for the benefit of citizens and as a basis for continued EU support, notably in the area of rule of law, and in particular those reforms related to the independence and functioning of the judiciary and the fight against corruption and organized crime. The EU continues to fully support the Western Balkans Partners' commitment to inclusive regional cooperation and strengthening good neighbourly relations, including with EU Member States. Declaration is supported the efforts of the EU High Representative and the EU Special Representative for the Belgrade-Pristina Dialogue and other Western Balkan regional issues and expect on create progress by the two Parties towards a comprehensive legally binding agreement on normalization of relations between them. This is critical for the stability and development of the whole region and for ensuring that the Parties can continue on their respective European paths. We reiterate our strong expectation that all past agreements are fully respected and implemented without delay. It is urged both Parties to engage constructively to resolve all their bilateral disputes and refrain from unilateral and/or provocative action that could lead to tensions and violence and rhetoric that is not conducive to the Dialogue.

Declaration welcomes the successful first meeting of the European Political Community, which took place on 6 October 2022 in Prague. The meeting provided a platform for political coordination and an opportunity for in-depth exchanges on pressing issues concerning the entire continent. We look forward to the next meeting to be held in the Republic of Moldovain the first half of 2023.

The EU's new Energy Support Package, worth EUR 1 billion in grants that can bring EUR 2.5 billion in investments, will help the Western Balkans mitigate the impact of the energy crisis and accelerate the energy transition in the region. The Package is funded via the Instrument for Pre-accession Assistance (IPA III) and includes immediate, short and medium-term measures to provide help to citizens and businesses in the Western Balkans. EUR 500 million in grants will go to immediate support for vulnerable families and SMEs. Another EUR 500 million in grants will be dedicated to investments supporting the energy transition and energy independence, to fund improvements to gas and electricity infrastructure and interconnectors including LNG, as well as new renewable energy projects, energy efficiency measures, upgrades of energy transmission systems, district heating and schemes to improve the energy efficiency of old apartment buildings.

Continued implementation of the Economic and Investment Plan (EIP) and the Green and Digital Agendas for the Western Balkans will help strengthen the region's economy and resilience, including through further support for connectivity, energy transition and diversification of energy supplies. The EU and the Western Balkans are determined to accelerate and deepen our political and policy engagement, including inter alia through the holding of regular EU-Western Balkans Summits, the participation of Western Balkans Partners in highlevel EU events and regular CFSP dialogues. The EU and the Western Balkans are determined to further strengthen the cooperation on core security and defense issues, including at operational level.

### Conlusion

Unlike the Berlin process and its achievements, which were achieved under the full control mechanism of the European Union, "Mini-Schengen" represented a higher degree of regional ownership due to less coordination with Brussels (Surlić, Lazarević, Kolarski, 2022, pg. 61) If the "Open Balkan" together with the Berlin process aims to create a single regional market, very difficult harmonization of the system lies ahead. The mere establishment of a customs union would mean equalizing customs duties, i.e. average customs rates, which obviously differ from country to country, and it is further complicated by the fact that three out of five countries are members of the World Trade Organization and are not allowed to raise customs duties above the consolidated level (Rapaić 2020, pg.584–85)

The perspective of the Open Balkan development is unequivocally in the shadow of the events on the European continent and, above all, the current crisis and the war in Ukraine. Thus, in fact, the stability of the Balkan Peninsula and the Western Balkans depends on the development of the situation in this country and the epilogue of the war that is being fought in it. The (re) activation of the Open Balkan and its full inclusion can be stimulated by the EU and the US before all other Western actors.

The EU policy tried to connect progress in integration with the resolution of status disputes through mutual agreements (Keil 2013, 350). However, the process so far has shown that the problems of limited statehood have seriously restrained the transformative power of the EU in the Western Balkans - so that the EU could not encourage democratization or the process of state building despite the proclaimed perspective of membership for the entire region (Börzel 2011, pg.14).

The parallelism of regional cooperation policies in the European environment, such as the Open Balkan, on the one hand, but also the emphasis on these types of pan-national policies, create resistance among many actors in the region. (Jovićević, Popov, 2022)

The discourse on the "Open Balkan" as an obstacle to the successful European integration of Montenegro is widespread. Ervin Ibrahimović, Deputy Prime Minister and leader of the Bosniak Party, claims that the "Open Balkan" initiative does not have his support, nor the support of the Bosniak Party, because "the priority task of the current administration is to accelerate EU integration and all institutional capacities should be directed towards that goal" (Radio Slobodna Evropa 2022).

In a similar way, the discourse was built by the Albanian representatives in Kosovo. Hashim Thaçi also said about "Mini-Schengen": "For Kosovo, the only vision is membership in the European Union and NATO. Therefore, we do not want to replace our Euro-Atlantic perspective with any regional initiative under any circumstances" (Radio Slobodna Evropa 2019).

The patrimonial relationship required from the structures of the European Union speaks of the absence of desire for local ownership of the regional integration process. The connection and cooperation of the countries of the Western Balkans in the formed discourse does not necessarily bring benefits, but only if there is "leadership" of the European Union. In such a framework, there is no real progress in European integration, but the leaders are deprived of responsibility for the failure of the process. At the same time, "Open Balkan" is the only one denounced as a redundant regional initiative among dozens of initiatives that are formed and persist in the Western Balkans despite the questionability of their purpose and goal. (Surlić, Lazarević, Kolarski, 2022, pg. 65)

Functional regional cooperation should be the aspiration of everyone in the Western Balkans region, but it must be conceived in such a way that it is not an "imposed framework" on anyone, but a completely adequate form of intensive intergovernmental cooperation. This excludes any attempts to establish dominance, homogenism, or majoritarianism between individual actors in this part of Europe. Such regional cooperation should be long-term and (self) sustainable even after the potential accession of the Western Balkan countries to the EU, as a reflection of joint efforts and regional specifics.

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# THE PLACE AND ROLE OF POPULATION PROTECTION IN EDUCATION

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#### ABSTRACT

The place and role of crisis management issues has its own historical roots within management. Crisis management deals with crisis situations, their prevention and their effective liquidation. It can also use as an integral part of management in other sectors of human activity, e.g. in ecology in environmental accidents, in health care in the event of various epidemics, but the states should have crisis management and emergency plans to implement in the event of natural disasters, social crises or operational accidents e.g. energy companies at the same time.

Key words: crisis management, problems, planning, population, organizing, control

### Introduction

With the development of human civilization, the rescue of members of the family, the weaker and the injured, was always proportionate to the situation and the needs. In this way, their own rescue activities were developed resulting from the technical possibilities of the development stage of civilization. This fact is documented by historical materials, especially written data (Sumer, ancient China). The issues of protecting the population against the emergence of extraordinary events and solving crisis situations were part of the life of historically distant generations already in ancient times, not only today. Due to the circumstances, their urgency comes more and more to the fore.

### 1 Management

Management is one of the most important human activities. Since people began to group together to achieve goals that they could not achieve as individuals, management has become necessary to ensure the coordination of individual efforts. As society began to rely more and more on group efforts and the number of organized groups continued to increase, the importance of managers and management increased. This name can also be used to refer to a group of managers in an organizational unit, while the concept depends on specific contexts (Ochrana, 2001).

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Management can be defined as the process of systematic execution of all managerial functions and effective use of all resources to set and achieve goals. Managerial functions are mainly planning, organizing, managing human resources, leading and controlling. Management has many sub-parts that differ in the subject of the application and the point of view. Some management approaches are considered decisive (e.g. marketing, quality systems, strategic management, etc.), but ideally they should be used in a comprehensive and balanced manner (Mitchell, 2005). Management is a comprehensive set of proven approaches, opinions, experiences, recommendations and methods that executives (i.e. managers) use to manage specific activities (i.e. managerial functions) necessary to achieve a set of diverse organizational goals.

The term management can be understood as management with a strong participation of the human factor. As with other activities (medicine, engineering, accounting, etc.), in the case of management there is a certain part of "art", but the most important factor in successful crisis management remains the use of systematic knowledge (Fotr, 2003). Management analyses are much easier if they are based on a suitable structure of useful and clear activities.

## 1.1 Place of crisis management

People have always had to deal with various adverse influences for the sake of their existence. At the same time, it is demonstrable that humanity has developed through the management of adverse influences. The present brings new approaches to the understanding of adverse effects - it requires that they be approached comprehensively and purposefully, not only by the so-called method of learning from trial and error. For this reason, a new discipline is being developed, which is called crisis management. However, a somewhat superficial approach still prevails in his conception. Crisis management primarily deals with the essence of adverse influences that can affect people's existence, and is based on what human society is based on - the living and social environment (Fotr, 2003).

The environment consists of inorganic nature, plants and animals and the means created by man and with which he interferes with nature. The social environment consists of human society and the various communities that people create within this society. One person is usually a member of several communities (e.g. family, village, company, state, nation, etc.). The grouping of people into different communities results from the need to satisfy their different needs and protect their different interests in the interest of their own existence (Tidd, 2000). The need to associate is a basic need of all living organisms. From the point of view of the systems approach, society and community are open, living, complex and learning systems. This means that they exist in interaction with their environment, that their basic goal is to preserve their existence, that essential sources of their development are information, that they are so-called poorly

structured, and that they have the ability to achieve a better arrangement in the future based on the analysis of the results of their functioning so far period.

The basic states in the development of the system are its normal and crisis state. The normal state can be defined as a state of dynamic equilibrium of the system with its surroundings. A state of crisis can be defined as a state of such disruption of the system's activity and conditions of existence that there is a threat of its long-term degradation or even extinction. The crisis state of the system can be defined as an unforeseen state of the system, which usually requires the immediate action of the management subject (Grasseová, 2008). It is about the state of the system, which means on the one hand a threat, on the other hand also opportunities for further development. During its development, the system naturally goes through alternating normal and crisis states. Whether this transition will manifest itself negatively (as a threat) or positively (as an opportunity) is determined on the one hand by objective conditions (possible variants of spontaneous, spontaneous development of the system) and on the other hand by subjective conditions (the ability and possibility of the purposeful action of the management subject to influence the spontaneous course). In this case, the ability of the management entity to foresee possible future states of the system and the ability to find or create and effectively use the necessary resources (Grasseová, 2008). The ability to predict possible future states is basically the ability to distinguish signals of such possible directions of force action between the system and its surroundings, which may turn into a threat to the development of the system or bring opportunities for a better organization of the system. In both cases, these are manifestations of a clash of antagonistic forces that signal a mismatch between the system and its surroundings.

Conflicts have both a negative (destructive) and a positive (constructive) side of action. From the point of view of the positive side, they are regulators and stimuli for system changes, i.e. various mechanisms that direct development so that its negative side does not prevail. This makes it possible to ensure a controlled transition of the system through a crisis state to a new normal state with a better arrangement to the surroundings than it was originally and thus to ensure a positive development of the system. The negative side of the effects of conflicts is that if there are no regulators and incentives or if they are not introduced in time, conflicts can develop into crises (Kanki, 2010).

Crisis management deals with the possibilities of how to manage possible threats as efficiently as possible. Since many threats can be neutralized by effective (mostly timely) use of opportunities, or at least mitigate the effects of a possible spontaneous (lively) manifestation of the destructive effects of crisis situations, the subject of crisis management should also be the possible management of emerging opportunities. Without it, the essence of the emerging problems cannot be solved. A crisis situation arises in an exposed part of the system, where the potential for possible action to change the current state of the system arises (both in a positive and negative direction). If the managing entity is unable to identify the emergency situation in time (or does not want to or ignores it for various reasons), then the probability of spontaneous emergence of a crisis situation and even the demise of the system increases. The demise of the system is associated with the fact that a certain random extraordinary event triggers the crisis and thus releases the crisis potential (Veber, 2002). This initial event is followed by a number of others, as the individual parts of the system are directly or indirectly connected to the focus by certain links into one whole. If the managing entity notices an extraordinary situation in time and if it knows how, if it is willing and if it can gather and apply certain resources in time, then it will ensure a controlled transition of the system through the crisis state without a major threat to the existence of the system.

## 1.2 The role of crisis management

Crisis management is characterized by immediate management of a significant number of problems. This is a situation similar to ordinary management, when the difference lies mainly in the urgency of solving problems (the time factor becomes critical), in the circular dependence of problems and in the distribution of management links, where there is no constructive cooperation, especially at the middle link of management (due to mutual blame personnel change of the top management, where the new management must solve operational problems as a priority) (Nenadál, 2008).

An organizational crisis can be defined as a disruption of the balance in one of its subsystems, which may threaten the achievement of the organization's goal or even lead to a threat to its continued existence. If there is a timely recognition of the causes of the crisis and their elimination by management interventions, it does not have to lead to a deepening of the crisis, which ends only with the demise of the organization. Crisis management (Office, 2010) deals with solving the crisis of the organization. From a broader perspective, crisis management is used as a preventive tool already in the assessment of risks that may be the potential cause of a crisis. From a narrower perspective, crisis management can be understood as a system of principles and tools actively applied by the management of the organization to manage the crisis situation and lead it to the path of further development. Understanding the sources of crises, their typology, as well as the systematization of the causes of their occurrence is an integral part of managing a crisis situation.

A large number of risks result from the activities of the organization and from changes in its environment that directly or indirectly affect the organization and from dysfunction between systems. Their management must be integrated both in the formulation of the organization's goals, as well as in strategy and routine activities. It is impossible to look at it detachedly and without connection to other activities. Risk management cannot be understood as a one-time or periodic activity, but as a permanent activity that not only identifies risks, but also monitors their changes (Office, 2010). It is part of crisis management understood in a broader sense, that is, the concept of not only successfully solving a crisis, but above all eliminating its occurrence and reducing its negative impact.

Determining risk as the probability of failure accompanied by a corresponding loss is the basis for the activity of the insurance industry, credit policy in banks, but also in the protection of the civilian population or in the military when choosing a strategy of operations or determining combat effectiveness. In the insurance industry, on the basis of probability theory and mathematical statistics, there must be a certain balance between insurance income, expenses for the fulfillment of insurance claims, overhead costs and the insurance company's profit. Problems usually arise during natural disasters or large-scale disasters, when theoretical assumptions based on normal conditions cease to apply (Office, 2010). A similar approach is used in the banking sector when determining interest rates on deposits and loans, taking into account overhead, profit and the market situation. Risky situations can also arise here due to loan defaults and spontaneous withdrawal of deposits. In banks, the relevant teams deal with the analysis of such perceived risks and formulate the principles of the bank's policy from the point of view of risk minimization in general and with regard to specific clients.

## 1.3 Risk Management

In general, risk management represents the process of preventing the effect of already existing or future negative factors and suggests possible solutions suitable for eliminating the effect of undesirable influences. On the contrary, it makes it possible to take advantage of the opportunities of positive influences. The decision-making process based on risk analysis is part of risk management. After considering the factors based on the analyses, it is necessary to analyze and compare possible preventive and regulatory measures and select those that will minimize the existing or potential risk. The critical phase is then the selection of the optimal solution. According to Smejkal and Raise (Smejkal, 2010), the selection of the optimal solution begins with the determination of the level of risk, through the evaluation of the economic costs of possible solutions to reduce the risk and their benefits, the evaluation of the impacts and benefits and the analysis of the possible consequences of the adopted decision. Next, a decision on the implementation of risk reduction measures and feedback follows.

If the level of risk is unacceptable, it requires stopping the ongoing processes and taking measures to reduce the risk. If it is an acceptable but not insignificant risk with a significant potential for profit, a plan of preventive measures to reduce it follows. For residual risks that cannot be effectively reduced by countermeasures, crisis plans are processed as a basic part of crisis management (Smejkal, 2010).

According to Smejkal and Raise (Smejkal, 2010), the basic areas of risk management are divided as follows:

- natural disasters and accidents (technological risks);
- environmental protection risks;
- financial risks (insurance, investment);
- project risks;
- business risks (marketing, strategic, budget risk, management risk);
- technical risks

## 1.3.1 Risk analysis

According to Smejkal and Raise (Smejkal, 2010), risk usually does not exist in isolation. These are mostly a combination of risks, which in their impact can pose a threat to the subject. Due to the number of risks, it is necessary to determine priorities in terms of impact and probability of their occurrence and then focus primarily on key risk areas.

The sequence of risk analysis according to Smejkal and Raise (Smejkal, 2010) is described below.

- determination of the risk analysis boundary the risk analysis boundary is represented by an imaginary line separating specific assets that will be included in the analysis from other assets. When setting a boundary the analysis is primarily based on the strategy and goals of management. Assets that are relevant to management's objectives due to the risk reduction process will be included in the analysis and will be located within the analysis boundary. Other assets will be outside the defined limit of the risk analysis. Within the boundary will be the specific assets of which the entity is composed, or assets that are relevant from the point of view of the current intention;
- identification of risks identification consists in creating a list (catalogue) of all assets that located within the limits of the risk analysis;
- determining the value and grouping of assets assessing the value of a specific asset is primarily based on the amount of damage that would be caused by the destruction or loss of the asset. Usually, when determining the value of an asset, it is based on its cost (purchase price, replacement purchase price) or income (market position, employee know-how) characteristics. It is very important to determine whether it is a unique asset or an asset that can easily be replaced. The asset's value is also reflected in the subject's dependence on its existence, but also on the proper functioning of the specific, valued asset. More precisely, it is necessary to map the damages that will occur when the functionality is limited or the asset is lost, before its restoration takes place. For risk analysis, the value of the asset can also be determined using the method of the weighted average of values according to all the aspects used. Since there are usually a large number of assets, their number can be reduced by grouping assets

according to specific considerations to create groups of assets with similar characteristics. Assets of similar quality, price, purpose, etc. can be grouped together. A group of assets formed in this way then acts as just one asset. For each asset (element, part of the system) that is assigned a certain value (valuation of the asset), an adequate method of protection must be set. The most important assets include data, information and knowledge (intellectual property), technical and software resources, communication devices, documents (paper documents), company personnel, etc.;

- identification of threats identification of threats is carried out by selecting potential threats that could threaten at least one of the entity's assets in some way. To obtain a list of threats to the subject, it is advisable to use one of the methods such as brainstorming, the Delphi method, etc.;
- analysis of threats and vulnerabilities a specific threat is evaluated against a given asset (group of assets). For assets to which a threat can be applied, the level of threat to that asset and the level of vulnerability of the asset to that threat are determined. When determining the level of a given threat, it is mainly based on factors such as dangerousness, motivation and approach. Factors such as sensitivity and criticality are used to determine the level of vulnerability. When analyzing threats and vulnerabilities, countermeasures implemented to mitigate threats or to eliminate them are taken into account. These countermeasures can then reduce both the threat level and the potential vulnerability level;
- the probability of the phenomenon not always the phenomenon that is the subject of investigation will actually occur. This is a situation where a specific set of given initial conditions does not always lead to the same result. The description of a certain phenomenon is then supplemented with the probability with which this phenomenon can occur.

## Conclusion

The subject of crisis management is the handling of extraordinary events and crisis situations of various scales in all phases of the solution. A crisis situation can arise from the very nature of things without the intention to provoke a crisis, or on the basis of a conflict, i.e. with the intention to provoke a crisis. With this breakdown, it is not important whether the conflict arises gradually on the basis of different interests (e.g. political conflict, commercial conflict, etc.) or suddenly (e.g. robbery).

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# THE INFLUENCE OF THE RUSSIAN-UKRAINIAN WAR ON EDUCATION IN UKRAINE

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#### ABSTRACT

The war significantly disrupted the stability of the country and affected all aspects of life. The war in Ukraine led to the emergence of a number of specific dangers that affect various spheres of the functioning of the economy and social life, including education. The educational system of Ukraine has changed significantly as a result of the war. These changes were primarily aimed at ensuring the safety of pupils, students and teachers, improving the quality of education and developing innovative teaching methods. Violations of energy security in Ukraine affect the possibility of conducting classes in face-to-face, mixed and remote formats. There have been changes in the training program for pupils and students. The article analyzes the impact of war hazards on the educational sector, draws conclusions about the stability of the education system in the conditions of war risks.

Key words: war, education of Ukraine, security, dangers, educational institutions, safety

### Introduction

The Russian-Ukrainian war began with the annexation of Crimea in 2014 and the subsequent confrontation on the territory of Luhansk and Donetsk regions. Already at this stage, there was a significant impact on the education system of Ukraine. In the occupied territories of Luhansk and Donetsk regions, schools and other educational institutions were closed, and teachers and other education workers who remained in these territories were threatened with persecution for their views. At the same time, the war caused a large number of displaced persons, among whom there were many children and young people who needed training and adaptation to new living conditions.

The evacuation of educational institutions from the occupied territories was very important for ensuring the normal functioning of the education system in Ukraine during the war. It was necessary to ensure the safety of teaching staff and students who were at risk in the occupied territory. For a successful evacuation, it was necessary to coordinate the work of various state bodies and organizations, in particular, the Ministry of Education and Science of Ukraine and relevant local education management bodies.

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The war, due to economic difficulties, has made it difficult to finance the education system. The negative impact on education has been caused by interruptions in the supply of electricity, lack of textbooks and other educational materials, lack of access to some important resources and services for education, an increase in the number of displaced persons, and the need for additional support to integrate children and young people from areas of active military operations into a new learning environment. Measures have been developed to admit students and applicants from occupied territories to educational institutions. For this purpose, special admission rules and procedures were developed, which allowed students and applicants from occupied territories to access educational services in areas under Ukrainian control. Programs were created for displaced children and children living in conflict zones to provide them with access to education and support their psychological well-being.

As a result of the war in Ukraine, a number of measures were introduced to increase the safety of students and teachers. In particular, evacuation drills were conducted, and safety systems were installed in schools and other educational institutions.

Due to the war and the threat to national security, education on safety has become particularly important in Ukraine. The Ukrainian education system responded to this need and reformed and supplemented a number of subjects. New safety programs and disciplines were introduced and became an integral part of all educational levels. Safety education has been intensified in schools. Children are taught how to act in emergency situations, how to keep calm, and ensure their safety. New safety courses have been introduced in schools and higher education institutions, such as cybersecurity.

## **Purpose and methodology**

The purpose of the article is to publish an analysis of the impact of the war on specific elements of Ukrainian education and the education system as a whole. A full analysis of the impact of the war would require a detailed study of the following aspects:

- ✓ Evacuation of educational institutions and employment of teaching staff. Possibilities for the education of evacuated students, students, and doctoral students in Ukrainian or foreign educational institutions.
- ✓ Impact of the war on the development of the educational system, in particular on the number of students who continue their education.
- ✓ Level of safety in educational institutions in connection with military threats.
- ✓ Determination of changes in the programs of general education schools and higher education institutions as a result of the war.
- ✓ Education on safety issues, including an analysis of discipline programs.

✓ Introduction of distance learning and innovation to reduce the risks of military threats.

The research used retrospective and comparative analysis, induction and deduction, and statistical analysis. Such research methods are quite effective in analyzing complex social phenomena, such as war and its impact on the education system. Comparative analysis allows identifying changes and trends in the development of the education system in different periods, while content analysis allows determining key topics and issues that arise in educational programs and materials for students. Retrospective analysis allows determining the historical context and studying the experience of previous generations, which can be useful for understanding modern challenges and solving problems. Statistical analysis allows obtaining accurate data on the state of the education system and assessing risks associated with war and its impact on education. Each of these methods helps to obtain a comprehensive picture and increase the objectivity of the research.

## Main part

To understand the situation that has arisen in the education system of Ukraine in the conditions of war, it is necessary to analyze the main causes and factors that affect the safety of the educational process. One of the main reasons is the change in the socio-political situation in Ukraine, which has arisen as a result of the war with Russia.

As a result of the hostilities, educational institutions are being destroyed. The Ministry of Education and Science has collected numerous facts and arguments that indicate that Russian troops deliberately destroy schools, universities, kindergartens, and children's homes. As of the time of writing this article, 2711 educational institutions have been damaged in Ukraine due to bombing and shelling, and 440 have been completely destroyed (Site Saveschools.in.ua, 2023).

The war has had a negative impact on the financial support and materialtechnical base of schools and higher education institutions, which has affected the resilience of the education system and its effectiveness in functioning during the war.

In the conditions of the war, the motivation of the teaching staff has also undergone certain changes. Most of them perform their professional duties not only to provide quality education to students, but also to ensure their safety and protection from possible threats. There have been cases where the evacuation of educational institutions was not led by rectors or directors, but by heads of departments or other members of the educational institution's scientific and pedagogical community. Unfortunately, it was not possible to evacuate schools and institutions of preschool and extracurricular education due to objective reasons.

As a result of the war in Donbas, a number of universities and other institutions of higher education located in the territories controlled by the socalled "DNR" and "LNR" pseudo-republics were evacuated. Among them were Shevchenko National University of Luhansk, Tugan-Baranovsky Donetsk National University of Economics and Trade, Donetsk National University, Volodymyr Dahl East Ukrainian National University, and other educational institutions. The second wave of evacuations was caused by the full-scale aggression of Russia, which began on February 24, 2022. The evacuation of universities became necessary to preserve the lives and health of students, teachers, and university staff. Most of the evacuated universities were relocated to other cities in Ukraine, where conditions were created for their functioning. In particular, Kherson State University was evacuated to the western Ukrainian city of Ivano-Frankivsk (Kherson State University moved to Prykarpattia, 2022; Kherson State University, 2023). In 2014, due to the war in Donbas, the Taras Shevchenko National University of Luhansk was evacuated to Starobilsk - a district center in Luhansk region, where a separate faculty of this university was already operating before the war. The second evacuation in 2022 forced the management center of the university to relocate to Poltava, where since 2014 the university had been renting premises for the Faculty of Foreign Languages and the Institute of Culture and Arts (*Юлія Гуз*, 2022). The situation with the evacuation of any large educational institution is complicated by the fact that these institutions have a number of branches, separate departments or faculties that may be located in different cities.

Despite the difficult conditions, universities, vocational education institutions, schools, and preschools continue to operate and provide high-quality education.

The beginning of the war in 2014 only affected a part of the education institutions located in Crimea and the self-proclaimed territories later called "Luhansk People's Republic" and "Donetsk People's Republic." In the context of Russia's full-scale aggression, on February 24, 2022, the Ukrainian education system had to declare a two-week break to preserve the lives of all participants in the educational process. The Ministry of Education and Science of Ukraine, in a letter dated February 25, 2022, No. 1/3276-22, recommended temporarily suspending the educational process in preschool, general secondary, and vocational (professional-technical) education institutions (About the organization of the educational process, 2022).

Despite the announcement of holidays in many educational institutions, activities did not stop. Some educational institutions became a temporary residence for refugees. Volunteer activities were carried out in educational institutions, including the collection of humanitarian aid, and teachers and students made camouflage nets for the front line, etc.

The resumption of the educational process began in western regions of Ukraine, primarily in the Ivano-Frankivsk and Lviv regions. By mid-March 2022,

the educational process had already been restored in schools, vocational education institutions, and pre-school education institutions in these regions.

Several measures were taken to simplify the enrollment of evacuated students. In particular, priority registration for evacuated students in general secondary education institutions was ensured, with only one parent's application required. Special programs and methodological materials were developed for schools that admitted evacuated students to support their learning and adaptation to new conditions. Free textbooks were provided for evacuated schools, and financial support was also provided for evacuated students to ensure they had equal opportunities for learning as other students.

Distance schools and platforms provided support for the restoration of the educational process in Ukraine. There are several online schools in Ukraine, such as EdEra (Educational Era, 2023), DAR, Jamm School, Prometheus, Atmosferna School, Optima, Nova Generatsiya, and others. Some of them provide the opportunity to receive a full education in a distance form, while others offer online courses on specific subjects. The use of resources from distance schools and other institutions helped provide access to education for children who were far away from schools or could not attend school for various reasons. The restoration of education was facilitated by several online learning platforms, such as Coursera, Udemy, Khan Academy, Liko Education Online, OkStudy, GIOS, which provide access to a large number of courses and educational materials on various subjects (Distance schools and learning platforms provide free access for education seekers, 2022).

The Ministry of Education and Science of Ukraine has published a series of letters and directives containing instructions for schools and educational institutions on organizing the educational process in the conditions of war. In particular, on March 29, 2022, the Ministry of Education and Science of Ukraine published letter "1/3725-22 "On the organization of the educational process in primary school in wartime." This letter emphasized the priority of using distance learning system. It was proposed to use electronic textbooks that can be saved on one's own computer to use them in offline mode. This significantly improved the educational process in case of communication system failures and power outages.

The documents of the Ministry of Education and Science of Ukraine contain recommendations regarding the safety of students and teaching staff, ensuring necessary resources for learning (such as textbooks, computers, access to the Internet), organizing distance learning, providing psychological support for students and teachers, and other recommendations that will help ensure normal development of students in the conditions of war. The necessary actions of teachers and students after the "Air alarm" signal, etc. were described in detail.

The educational process in Ukrainian educational institutions under the conditions of a state of war takes place in distance, face-to-face (offline), and combined forms. The choice of the form of conducting the educational process is left to the discretion of the head of the specific educational institution, taking into

account the wishes of parents. It is the head of the educational institution who is responsible for the safety of students and staff. In addition to determining military risks, the head of the educational institution takes into account the availability and capacity of shelters in which students and teachers will stay during an air raid. Not only teaching staff, but also administrative personnel, parents, students, and pupils are involved in ensuring the safety of participants in the educational process. The National Strategy for Ensuring the Safety of People in the Conditions of War provides for the implementation of measures to prevent and respond to possible threats, safety briefings, studying risks and responding to them to preserve their own lives and the lives of people in their immediate environment. During the initial stages of an air raid, the educational process was interrupted. Nowadays, in many educational institutions, teachers continue classes with their students in shelters.

Air raids not only affect in-person classes, but also distance learning. According to established rules, distance learning, webinars, etc. are suspended after an air raid warning and resume after the warning is over. Distance learning can continue during air raids if all participants in the educational process are in shelters. In this context, we understand that each participant independently moves to a shelter and connects to continue the lesson. Unfortunately, not all shelters have internet access, so the opportunity to conduct distance learning during air raids is not always available.

Another factor that negatively affects the educational process is planned and unplanned power outages. Power outages in Ukraine are a forced measure that is a consequence of military strikes on Ukraine's energy sector. Some of the consequences of power outages on the implementation of the educational process include:

- ✓ Complications or impossibility of working with computer equipment. This is a problem for teachers and students who use computers during their studies.
- ✓ Libraries and other resource centers are forced to suspend their activities because they do not have electricity to support their work.
- ✓ The availability of electricity is a necessary condition for conducting online learning and video conferencing, especially for students of general education schools and those who study remotely.
- ✓ Limitations on access to online resources: In many schools and universities, online resources such as electronic libraries, learning platforms, and web conferences are an important component of learning. If electricity is cut off, access to these resources may be limited, which complicates the conduct of lessons and activities.

Additionally, power outages can affect the maintenance of educational facilities, such as air conditioning, heating, and lighting. As a result, the worsening conditions of classes may lead to a decrease in productivity and have a negative impact on the health of participants in the educational process.

To address this problem, educational institutions install small electric power generators. In Ukraine, a system of "resilience points" has been created, which are equipped with their own generators and internet access systems. The availability of electricity and the internet allows participation in remote classes. Most often, students and teachers use resilience points among educators.

The war has significantly changed the social attitude towards Russia and everything Russian. The percentage of Ukrainians who stopped using the Russian language has increased significantly. The education system in Ukraine has long created conditions for the mandatory use of the Ukrainian language. The status of the Russian language in the education system of Ukraine has been changing all the time. During the Soviet Union era, there were few (mostly Eastern) regions of Ukraine where there were no or almost no schools teaching in Ukrainian. Only in the central and especially western regions of Ukraine were there enough schools teaching in Ukrainian. Gradually, the number of schools teaching in Russian decreased. After the full-scale aggression of Russia in 2022, there were no schools teaching in Russian on the territories controlled by Ukraine. It should be noted that the Russian language and literature were taught as separate subjects in schools. The study of Russian as a foreign language also underwent certain reductions, which led to an increase in the number of hours devoted to learning English. The Ministry of Education and Science of Ukraine withdrew a number of language and literature programs, including the programs "Russian language for general education institutions teaching in Russian" for grades 5-9, "Literature (Russian and foreign)" and "Russian language and literature (integrated course) for general education institutions teaching in Russian" for grades 10-11.

In the curriculum of the subject "World Literature", works by certain Russian and Belarusian authors have been removed. Instead, works by European authors have been added to the program. Changes to the content of education have also affected subjects such as "World History", "History of Ukraine", "History: Ukraine and the World", "Basics of Health", "Safety, Health and Well-being", "Defense of Ukraine", literature, geography, and legal studies (Updating the curriculum through the war: what changes have been made, 2022). The changes in the programs were motivated by the need for a more detailed consideration of certain historical moments and accents in geography. Questions related to human rights, International humanitarian law, and the Russo-Ukrainian war were added to the curriculum of legal studies and civic education.

Questions related to ensuring security from the risks of war have been added to the programs of "Basics of Health", "Safety, Health and Well-being", and "Defense of Ukraine".

In 2022, the Ministry of Education and Science of Ukraine updated the curriculum for the subject of "Basics of Health" for students in grades 6-9, adding topics related to the risks of wartime. The program includes topics such as warning signals to the population, actions during air raids and shelling, choosing reliable shelter, dealing with explosive materials, providing pre-medical

assistance and psychological self-help, behavior with armed individuals, and survival in extreme situations. The curriculum for the subject of "Basics of Health" now includes 18 to 33 new topics, depending on the grade level, with 18 topics added for 6th grade, 24 for 7th grade, 33 for 8th grade, and 32 for 9th grade (Fig. 1).

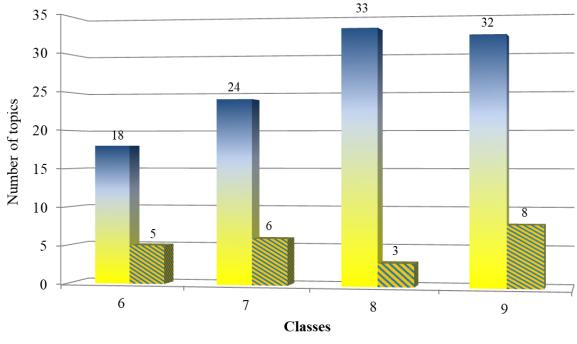


Fig. 1. Graph of the number of added topics and practical tasks by grade in the updated 2022 program of the subject "Fundamentals of Health". *\*Source - own elaboration.* 

Most of the added topics are dedicated to issues related to protection from wartime dangers. The number of practical lessons is considerably smaller, ranging from 3 to 8. Practical lessons on first aid have been added in each grade, and lessons on psychological assistance have been added in 7th and 9th grades.

The Ministry of Education and Science of Ukraine recommends including similar additions to the integrated course "Health, Safety and Well-being". The subject "Defense of Ukraine" for grades 10-11 is supplemented with similar topics. In addition, the subject includes a practical aspect - preparation for conscription to the Armed Forces of Ukraine and familiarization with military equipment. All of this aims to increase the awareness of young citizens about the importance of defending their country and readiness to act in conditions of external threat. Changes in the content of the subject provide for an increase in the role of educating students at the state and national levels, as well as providing practical skills for protecting their own safety and the safety of their people in times of war.

## Conclusions

The education system of Ukraine has undergone many changes due to the war. Despite forced evacuation, destruction, and constant threats of missile strikes and bombing, the education system of Ukraine continued to function and carry out reforms that had been initiated earlier. In the face of real military threats, the safety of participants in the educational process became a priority in the education system. In order to ensure safety, educational institutions widely used distance and blended learning formats. Despite the difficulties associated with the partial destruction of the energy system by Russian aggressors, educational institutions managed to overcome them. The use of autonomous power generators and the creation of resilience points, while not fully solving the problem, allowed for the continuation of the educational process. Changes in the socio-political situation and the emergence of a number of military threats forced the revision of the content of several educational programs. Changes in educational programs primarily affected school subjects.

All changes in educational programs can be grouped into several categories:

- ✓ Changes related to the need to ensure personal safety and the safety of the immediate surroundings in conditions of military threats.
- ✓ Strengthening of national-patriotic and military-patriotic education and knowledge of Ukrainian history.
- ✓ Formation of responsible civic position and acquisition of additional competencies in legal aspects.

Analyzing the changes in education in Ukraine over 9 years of war, including a year of full-scale aggression by Russia, it can be stated that Ukrainian education is adapting to the real challenges and needs of society in times of war and is functioning successfully.

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# SECURITY THREATS IN CYBERSPACE OF THE REPUBLIC OF POLAND IN 2021

# Krzysztof Żołyniak<sup>1</sup>

#### ABSTRACT

With the rapid development of technology over the course of years the concept of cyberspace significantly was changing. Currently it is primarily virtual space where connected by a network computers and other digital media (telephones, tablets, radio, television) communicate together. Cyberspace is a particular medium which undoubtedly has revolutionized the modern world. The rapid development of information systems serves the national economy development in particular in the field of communication, trade, transport and financial services. With the use of digital technologies creating cyberspace social relationships are created, and services on the Internet have become a tool facilitating the influence on social groups behaviour as well as impacts in the political sphere. Each significant distortion of cyberspace functioning, whether global or local, will influence the security of business transactions, citizens' sense of security, efficiency of public sector institutions, the course of production and service processes, and as a result national security in general. The article presents security threats of cyberspace. It describes methods and types of cyber attacks, the author indicates the most important threats of telecommunication systems as well as provides us with the statistics of incidents and alerts of security threats of cyberspace of the Republic of Poland in 2021 on the basis of the Report on the State of Cyber security of Poland issued by the Computer Security Incident Response Team CSIRT GOV.

Key words: security, cybersecurity, cyberspace, threats, the Republic of Poland

#### 1 The essence of threats in cyberspace

Cyberspace nowadays is a network with global coverage, which in practice means possibility of unlimited actions undertaking and publishing of any information that is available for unlimited number of consumers. At the same time cyberspace for the majority of countries 'became *in fact* critical infrastructure that is why critical infrastructure facilities function on its basis (...) and economy as well as national security became comletelu dependent on technology and IT infrastructure' (Aleksandrowicz, 2021). For this reason, it is analyzed not only because of its benefits but most of all by the prism of possible threats affecting security of country, socjety and individuals (Grocki, 2012).

Security threats can be definied as 'turn of events within which with high probability may happen loss or limitation of conditions for undisturbed existence and internal development or violation or loss of state sovereignty and its

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partnership treatment in relations – as a result of the use of political, psychological, economic and military violence (Nowak, 2011)'.

Forms of cyberspace threats differ from each other, due to used methods and technologies but also perpetrators' factors motivations or the degree of organisation. For this reason, they may have different consequences both in terms of technical, legal, political, economic but also social (Lakomy, 2015).

## 2 Methods and types of cyber attacks

In the attempt to analysis of forms of security threats in cyberspace it is worth paying attention to a cyber attack term. In simple terms, the cyber attack is 'a cyber oparation both offensive and defensive which ought to bring (...) damage or destruction of objects (...). These are also attacks on computers, information, networks and systems dependent on computers' (Lakomy, 2015). From another perspective, cyber attack is an action taken with 'an aid of computer networks in order to lock, undermine, disrupt or destroy information on computers and networks (Lakomy, 2015)'.

In the subject literature many different classifications are used. One of them is based on division of attacks into those of active and passive character. According to another classification there are so called zero day attacks and following day attacks. The most effective are the first ones, which use undiscovered mistake in system or application. This attack consists of two stages: first there is detection of weakness and then attack is performer. On the other hand, following day attacks apply discovered security vulnerabilities taking advantage of the fact that administrators failed in security improvements (Lakomy, 2015)'.

It is also important to indicate division of methods and forms which is based on the criteria of operational methods, and therefore measures and techniques. It allows to distinguish:

- 'computer viruses and worms',
- so called logic bombs, which provide activating of additional functions of particular logic component of computer, and therefore they contribute to obstructing its proper functioning,
- Trojan horses, and therefore programmes which perform appropriate actions without the knowledge of the user,
- chipping, so access through installing additional chips,
- the back door technique so the possibility of entering the system and at the same time omitting its security sphere,
- spoofing, so impersonation
- ▶ hijacking, which consists of transmission capturing between two systems,
- sniffing, so tracking of the movements in network including eavesdropping,

- Van Eyck's receptors, and therefore replica of images peeping that are displayed on the monitor while simultaneously using the effect of sending by the monitor strong electromagnetic signal,
- Denial of Service, and therefore denial of service by single service blocking or blocking of an entire server sometimes by its overloading with a large amount of questions,
- flooding, so sending such a number of request to attacked system or computer that it is unable to obtain,
- spamming, and therefore sending unwanted mail in attachments where malware may be uploaded (Szul-Wałecka, 2014).

In view of developing technology as well as network resources the number of cyber attacks in cyberspace is growing dynamically.

## **3** Threats to information and communication systems in the country

Telecommunication threats in recent years became one of the issues and challenges for national and international security which dominated the activity of nations around the world. It turns out that particularly in recent three decades of information revolution accompanied development of various forms of harmful use of telecommunication networks, thus they progressively became a space in which 'not only the units but also countries and transnational subject such as terrorist organizations are working. Their activity is connected with formation of new, unprecedented threats of national and international security (Lakomy, 2013)'.

It is worth to noting that telecommunication threats are not appropriate to particular countries due to the model of network functioning they are transnational, global. In this way effective counteraction does not depend 'only on solutions at unit, local and state level but also on effective cooperation mechanisms at international level' (Lakomy, 2013).

According to M. Lakomy in various international documents and special literature the most commonly indicated telecommunication threats are:

- Unstructured such as: hacking, hacktivism, patriotic hacktivism, cyber crime,
- Structured, for example cyber terrirism, cyber espionage, military use of cyberspace (Lakomy, 2013).

Undoubtedly, hacking is the oldest form of exploitation of errors and gaps in computer security from which originate all contemporary threats (Lakomy, 2015). In everyday language hacker term is used in order to criminals, acting in network, determination. In connection with this 'hacking' may be understood as 'hacking *sensu stricto*, so as a behaviour consisting in gaining access to telecommunication system and computer data as well as hacking *sensu largo* as set of determining particularly all crimes commited in network (of course, except, for example, the distribution of pornography or copyright infringement)' (Radoniewicz, 2016).

In hacking unauthorized person gains most frequently data and information in the computer. Hackers look for gaps or errors in the software systems, securities, computer programmes. They use advanced programmes and techniques, thanks to this they are able to break passwords to different online accounts (Chałubińska-Jentkiewicz, 2015).

Nowadays, hackers very often use prepared computer programmes which replace them in giving additional commands during the whole process. That is why a lot of complicated actions may be performer by one programme which mean that these attacks are especially dangerous for state security (Radoniewicz, 2016).

Hacktivism, in turn, is 'unstructured form of telecommunication security threats which extracted from the main hacking movement in the 1980's (Lakomy, 2015)'. Contemporary popularized form hacktivism reached at the beginning of the 21st century. In 2001 *Hactivismo Declaration* was published which was based on the Universal Declaration of Human Rights. It underlines the significance of word and information, while emphasizing that 'governments increasingly limit them by Internet censorship. Establishment in 2003 of 4chan.org website has also contributed to the development of hactivism. It became the cradle of hacktivism organizations (Lakomy, 2015).

It is also worth to consider an unique form of hacktivism, and therefore patriotic hacktivism, which refers to 'unique group of cyber warriors' and so people acting in cyberspace mainly for national reasons (Lakomy, 2015). Patriotic hacktivists differ from hacktivists with 'different nature of action: their attacks are definitely more invasive, and mainly based on DDoS methods against websites, they may also include other, more dangerous techniques. Their aim is not only draw the public's attention on specific problem but primarily support the state's or nation's own interests during conflict or political crisis' (Lakomy, 2015).

Another unstructured threat is cyber crime, or rather its third generation connected with 'automation' process of cyber crime which is an effect of malicious software and botnet usage. The third generation of cyber crime is distinguished primarily by 'low possibility to detect the perpetrator and organised criminal structures centered around so called computing underworld. Computer criminals target particular teleinformation system, use combinations of quiet and complex attacks with the usage of special software. With the usage of bots which gain confidential information through *keylogger* and *screen scraper* they collect information about usernames and passwords, or gain confidential information using among others social engineering by creating fake websites' (Siwicki, 2013).

It should be said, that attacks on teleinformation systems are no longer random and chaotic but professional and aimed at specific purposes realisation. In order to fact that they are directed against institutions responsible for national defence and space security or against critical structures they became a real and big threat to state security (Siwicki, 2013).

Among unstructured threats, firstly we must point to cyber terrorism (Lakomy, 2015). The cyber terrorism phenomenon mainly includes computer networks usage as tools making it possible to perform attack, paralyzing or serious limitation of the possibility of using national structures, but also intimidation or enforcing the government or international community to perform specific actions (Lakomy, 2015).

Referring to the literature of the subject literature several characteristics of cyber terrorism may be indicated. Primarily, such as conventional terrorism, it can be activity carried out by countries having legal personality of the state, as well as various non-state groups, including terrorist organisations, solitary fighters or radical movements acting on the basis of specific ideology. However, in contrast to hacking or hacktivism, cyber terrorism has a fundamental impact on national and international security. Performed cyber attacks can have serious consequences. It is a threat which is distinguished by significant degree of perpertrators' organisation, well thought out and planned mode of action (Lakomy, 2015).

As another unstructured telecommunication threats is considered cyber espionage which especially in recent years due to significant technological opportunities is becoming inceasingly important. Genarally, they may be characterized as performing cyber attacks in order to obtain significant, implicit information by countries and connected with them particular non-state groups. As opposed to traditional forms of intelligence capability using technological achievements is usually more efficient, difficult to detect, and what is important more secure because intrusions expose intelligence agents less to the danger of stopping them by foreign services (Lakomy, 2015).

Against the backgroung of the above-mentioned it is worth noting that increasingly there are voices indicating that 'telecommunication space may be used as the fifth war theatre next to ground, water, air and space. This would suggest that cyberspace would no longer be a domain used by criminals, hackers or terrorists but also armies of individual countries (Lakomy, 2015).

## 4 Statistics of incidents and alerts of cyberspace threats.

After a wide presentation of security threats, we proceed to the incidents analysis that were captured by Computer Security Incident Response Team CSIRT GOV. However, before this happens, it seems reasonable to explain what the CSIRT GOV team is. Namely, the computer security incident response team CSIRT GOV is conducted by the head of the Internal Security Agency and performs the function of CSIRT of the national level (Report on the State of Cybersecurity of Poland in 2021, 2022). It is responsible for coordination of actions responding to computer incidents occurring in the area specified in Art. 26, paragraph 7 of the National Cybersecurity System Act of 5 July, 2018 (the National Cybersecurity System Act, 2020). One of the most significant tasks is to identify, prevent and detect threats that compromise in security, important from the point of view of the continuity of the functioning of the state systems or ICT network systems covered by a single list of facilities, installations, equipment and services included in critical infrastructure, as well as information and communication systems of owners and owners of facilities, installations or critical infrastructure equipment referred to in Art. 5b, paragraph 7 point 1 of Act from April 26, 2007 about crisis management (the Act on Crisis Management, 2020). CSIRT GOV team uses ARAKIS-GOV- such as an Early Warning System for threats on the Internet. This system is the result of cooperation between the Department of ICT Security of ABW and the CERT Polska team operating within NASK. ARAKIS-GOV was created to support the protection of the resources of the telecommunication administration (Security Incident Response Team, 2020). The main task of the system is to detect and automatically describe threats occurring in ICT networks on the basis of aggregation, analysis and correlation of data form various sources (Report on the State of Cybersecurity of Poland in 2021, 2022).

In 2021, the CSIRT GOV team of more than 760 thousand reports registered 26 899 incidents. This represents an increase of about 15% compared to the previous year, when 23 309 incidents were identified. The statistics collected, indicate a continuing upward trend both incoming reports and registered incidents. The increase in recorded reports is mainly due to the number of alarms generated by ARAKIS GOV system (Report on the State of Cybersecurity of Poland in 2021, 2022).

Analyzing the statistics of incidents reporting broken down by sectors it may be noticed that in 2021 most reports were submitted to critical infrastructure operators - 9196 registered incidents. This is a significant increase compared to the previous year when a total of 2626 incidents related to critical infrastructure were reported. The next sectors in terms of the number of registered notifications were institutions (7203 applications) and authorities, where identified 5563 of notifications. The following places were the ministries of 3056 incidents as well as service and military 1237 notifications. On the other hand, a fairly large group of registered incidents concerned other sectors 644 (Report on the State of Cybersecurity of Poland in 2021, 2022).

According to the report of the CSIRT GOV team the most common form of the incident in 2021 was known as 'virus'. 24 171 incidents were identified in this category and they were notifications from ARAKIS GOV system. They concerned alarms that were, among other things, evidence of workstation infection in the state administration or critical infrastructure operator. The second largest category is 'vulnerability' which identified 1 148 incidents in IT resources, understood as a weakness of the ICT system, configuration errors and lack of an appropriate security policy, related to the update and verification of properly implemented ICT solutions. The third most numerous category is 'social engineering' covering 904 incidents. These threats are related to phishing campaigns, impersonation and attacks in the field of social engineering against users of information and communication systems, which are designed to phishing confidential information, infection of a computer by malicious software or persuading the user to take specific actions (Report on the State of Cybersecurity of Poland in 2021, 2022). In this category, the most incidents concerned impersonating websites that use the image of an entity often aimed at phishing funds or login details. The next category is 'unavailability' (310 registered incidents). This category includes events related to the unavailability of websites, technical failures and technical work. 158 incidents involving reports were recorded in the 'publication' category which include reports of leaks, publications on the network of stolen information, disinformation, defamation or copyright infringement. The next category 'scanning' covered 118 incidents related to reconnaissance of ICT infrastructure of government administration and infrastructure. In the category 'attack' 74 incidents related to all kinds of attacks on ICT systems, e.g. DDoS, DoS, containment breach were reported. A total of 16 incidents were recorded in the last 'botnet' category, so the threats to identify computers that belong to the network of acquired computers (Report on the State of Cybersecurity of Poland in 2021, 2022).

Regarding recorded incidents, there is a noticeable increase in the number of registered incidents with other quarters. The highest growth was recorded between the first and second quarters of 2021, in turn the highest number of incidents (10 314) were recorded in the fourth quarter of 2021. In 2021, the CSIRT GOV team also recorded an increased number of incidents which were related to disclosed vulnerabilities indicated as particularly important for the security of ICT infrastructure due to the widespread use of vulnerable software. Threats related to security breaches of SolarWinds Orion software were identified at the beginning of the first quarter of 2021. This software was designed to manage and monitor the operation of the server infrastructure. The attack was carried out using the SolarWinds Orion notifications, where the malicious code was identified (Report on the State of Cybersecurity of Poland in 2021, 2022).

Another threat detected in 2021, which appeared at the turn of the second and third quarters, was a critical vulnerability to the Logon Proxy in MS Exchange Server (versions 2013, 2016, 2019). The vulnerability concerned the possibility of being placed on a web server (which is a part of Exchange) prepared file of aspx acting as webshell. The parameters passed in the sent request were used for executing code on the server side. The attacks were related to four security vulnerabilities (Report on the State of Cybersecurity of Poland in 2021, 2022).

In September 2021 there appeared another information concerning the issue of vulnerability in MS Exchange Server. The vulnerability was caused by mass scanning of Microsoft Exchange e-mail servers in search of a chain of vulnerabilities that were collectively referred to as ProxyShell. It it concerned in principle three vulnerabilities, which enabled, inter alia, remote execution of unauthenticated code on Microsoft Exchange servers (Report on the State of Cybersecurity of Poland in 2021, 2022).

In December 2021, a vulnerability was detected in the Apache Log4j library, for versions 2.0-alpha1 up to and including 2.17.0, excluding 2.12.4 version. Vulnerabilities allowed, among others, remote code execution with the privileges of the application, for example webserver using Log4j. According to the fact that this vulnerability has been identified as one of the most critical vulnerabilities for server infrastructure, especially available on the Internet and concerned a number of services, the incident was coordinated within the Computer Security Incident Response Teams such as CSIRT GOV, CSIRT MON and CSIRT NASK. This vulnerability has been identified as potentially broadly affecting cybersecurity with a potentially large range (Report on the State of Cybersecurity of Poland in 2021, 2022).

The CSIRT GOV team as part of mitigation actions sends warnings to state authorities and critical infrastructure operators containing information concerned identified risks together with compromise indicators. In 2021, a total of 115 such warnings were distributed. The most warnings -57, concerned information about IoC, that is, about trade-off indicators that is about the compromise indicators of the identified threats, for example IoC for malicious network traffic or suspicious domains. The next group of warnings was vulnerability information, among others information about vulnerabilities detected in various types of software and systems. This category contains software-related vulnerabilities warnings (two warnings were distributed at the beginning of the year), vulnerabilities ProxyLogon and ProxyShell in Microsoft Exchange Server (distributed 7 warnings), as well as critical vulnerability in the Apache Log4j library (11 warnings were sent). Warnings about identified phishing campaigns were sent out a total of 14. There are also 5 warnings in the other category which informed, i.e. about introduction of the ALPHA CRP alarm level. There is also a single warning about the risk of impersonating. (Report on the State of Cybersecurity of Poland in 2021, 2022).

In 2021, the CSIRT GOV team conducted an analysis of almost 7 thousand files reported by entities, more than 500 of which have been identified as malicious (Report on the State of Cybersecurity of Poland in 2021, 2022).

Analysis in research environments has shown that 5 618 files did not show any malicious features, 509 has been identified as malicious, 393 as suspicious and 347 with unmarked status (e.g. due to a lack of proper start-up). Most malware samples in 2021 were recognized as *Agent Tesla* - a trojan that allows you to access the workstation remotely (Remote Access Trojan). *Snake Keylogger* software that focuses on stealing sensitive information from the victim's device, this includes, above all, contents that are typed with the usage of keyboard. *GuLoader* – downloads the actual encrypted malicious code from external resources, i.e. Google Drive resources, and then activates it in memory, as well as *HTML Phisher* contained a fake login form to the alleged email server, after entering real data, it sent data to an external server using GET HTTP methods. (Report on the State of Cybersecurity of Poland in 2021, 2022).

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## DEVELOPMENT DIRECTIONS OF NUCLEAR TECHNOLOGY TOWARDS THE MOST PROMISING SOURCE OF ENERGY<sup>1</sup>

## Bogdan Stojanović<sup>2</sup>

#### ABSTRACT

This paper explores the scope and limitations of nuclear energy in general, as well as trends in the development of nuclear technology. The big question is whether renewable energy sources can replace the growing global hunger for energy. Due to their polluting effects and relatively rapid drying up, fossil fuels will have to be replaced. What is the alternative? The author argues that renewable sources do not have the capacity to replace fossil fuels on the pedestal of world energy needs and that only nuclear energy is capable of this. The main hypothesis of the work is that nuclear energy is currently one of the cleanest form of energy production despite all its shortcomings, but in the not so distant future it will convincingly become the most ecological and cost-effective way of energy production. The main axes of development of nuclear technology with huge potential are: fusion reactors, thorium-based nuclear reactors and uranium extraction from seawater. All three fields of development have already been experimentally and operationally proven to work, and future progress is based on improving their commercial viability. Analyzing the consequences of the successful implementation of fusion and thorium reactors, with potentially unlimited sources of nuclear fuel, the author dares to predict when nuclear energy will take the number one position in the global energy arena.

*Keywords:* nuclear energy, nuclear fusion, thorium-based reactor, energy security, uranium extraction, source of energy, ITER.

#### Present and future of energy sources

The birth and advancement of humankind have been made possible by energy. In light of the fact that all matter and energy are interchangeable elements, it can be said to be identical with existence. When we discuss energy, we consider outside sources, such as mechanical power, steam engine power, internal combustion engine power, sun power, electricity, etc. Man has discovered a way to transform one form of energy into another and utilize it for his benefit. Here comes the key question, from which sources man can draw the energy? Because energy is required for lighting, heating, cooking, starting vehicles and aircraft, industrial output, and transportation in the contemporary world, there is an

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increasing need for it. The control of energy supplies has been the subject of numerous conflicts, and there is a complicated connection between energy and politics in general. The idea of energy security is being addressed more frequently because the creation, access, and distribution of energy sources are significant global problems. Coal, along with the steam engine, became the primary energy source that, starting in the middle of the 18th century, allowed for massive industrial output and the storing of extra goods. Coal, along with the steam engine, became the primary energy source that, starting in the middle of the 18th century, allowed for massive industrial output and the storing of extra goods. The 19th century can be considered the century of coal, the 20th century the century of oil, and the 21st century the opening of new fields of energy creation (nuclear fusion energy), even though the dominance of the triad of fossil energy sources continues. (coal, oil, and gas). Although the concept of nuclear fusion has the potential to provide humankind with almost limitless and inexpensive energy, we will need to wait a while before it becomes commercially viable (Vujić, Stojanović i Madžgalj, 2015).

The idea of an energy mix that uses both sustainable (biomass, solar, wind, and geothermal energy) and non-renewable energy sources is being discussed more and more. Less than 12% of the world's main energy comes from green sources, despite the strong propaganda and lobbying efforts of political-economic interest groups in favor of these sources (Ritchie and Roser, 2022a). Around 84% of the world's energy is produced using natural fuels, with nuclear energy making up 4.3% of that total (Ritchie and Roser, 2022a). Oil derivatives are the main source of energy for transportation, but for the generation of power, the scenario is somewhat different. Coal makes up 36.7% of the overall energy used in the creation of electricity, while gas makes up 23.5%, hydropower 15.8%, and nuclear power 10.4% (Ritchie and Roser, 2022b). Only 5.3% of the world's power is generated by wind energy, and even less, 2.7%, by solar cells (Ritchie and Roser, 2022b).

Possession of natural resources gives countries a comparative advantage in international relations, and technological inventiveness brings some to the foreground, while other types of resources fall into the background. Oil was not a resource of power in the 16th century, any more than uranium was in the 19th century. Despite the deceptiveness of the dominant resource, there is a constant human need for energy, sharply increasing with industrial production and motorized transport of goods and people. Oil was used in oil lamps and lighthouses in the 19th century and gained importance only in the 20th century with the commercial use of internal combustion engines. Energy sources strongly demonstrated their political potential during the Arab-Israeli conflicts in the seventies of the 20th century, when there was an oil crisis caused by a deliberate increase in the price of oil by Arab exporters.

The geopolitics of energy includes the uneven distribution of oil and gas, considering that over 90% of these fuels are stationed in just 20 countries in the

world. In terms of energy, Russia is a superpower that directs the foreign policy courses of many countries in the world, especially member states of the European Union (EU). For instance, Russia ranks eighth in the list of countries with the largest oil reserves (Worldometer, 2022a), second in coal reserves (Worldometer, 2022b) and by far first in gas reserves, with almost a quarter of the world's deposits (Worldometer, 2022c). The quantity of fossil resources and the time frame during which their sources will run out are specific topics for analysis. According to the rate of global use, there will be 133 years' worth of coal, 52 years' worth of gas, and just 47 years' worth of oil left. (Worldometer, 2022b). Human inventiveness in technologies and the discovery of new deposits will probably extend the period of extraction of fossil resources. All experts do, however, concur that they will mainly vanish by the end of the 21st century. The need to abandon oil and gas before they leave us drives countries to alternative energy sources. The greenhouse effect, more or less caused by the consumption of fossil fuels, further accelerates the transition of the developed countries of the world to alternative energy sources. Regardless of the questionable dynamics of the global energy transition and the undoubted dominance of oil and gas in the next fifty years, nuclear energy occupies a special place in the energy mix.

#### The power of atoms: development of civilian nuclear technology

The origins of nuclear technology date back to the Second World War, which produced only one military nuclear force. The United States of America (US) opened a race for atomic weapons, and with the expansion of the nuclear club, the danger of nuclear war loomed over the planet (Петровић и Стојановић, 2012, c. 93-97). When humanity entered the nuclear age in 1945, the whole thing was a complete unknown, even to scientists who were unsure whether the first nuclear explosion in the Los Alamos desert would ignite the entire atmosphere or have a limited effect. Relevant analyses identify as many as 34 nuclear weapons development programs, of which only ten countries have developed nuclear weapons (Стојановић, 2021). Until the sixties of the 20th century, nuclear technology was reserved for the military domain, although the idea of nuclear energy for civilian purposes was initiated as early as December 8, 1953, by US President Dwight Eisenhower through the "Atoms for Peace" program (Eisenhower, 1953). The use value of nuclear energy, apart from the practice of deterrence, has been seen in the production of electricity, medicine, agriculture and the transport drive of large vessels, icebreakers and even missiles. The formal beginning of the commercial use of nuclear energy was in 1956 when the first commercial nuclear power plant was opened in Cumberland (BBC, 2019). In the 1960s, nuclear reactors were built on both sides of the "Iron Curtain", so today, there are as many as 448 nuclear reactors for the production of electricity in the world (Bhutada, 2022).

New nuclear power facilities are being built in large numbers of industrialized nations or those working toward that status. These nations, which continued to construct nuclear plants after Fukushima incident, are Japan, South Korea, South Africa, France, India, Poland and many others. There are currently nuclear reactors in at least 40 different nations. Considering how much mercury and other heavy metals are released into the atmosphere by thermal power plants, nations are moving toward "cleaner" energy sources. Nuclear power plants have a functional life that is only 20 years greater than thermal power plants. The statistics indicate that even in the most industrialized nations in the world, the socalled alternative energy sources, such as solar energy or energy from turbines that harness wind power, have a small percentage of the global energy market. Even in the richest nations, like Germany, where energy costs have skyrocketed since the decision to close down nuclear power facilities, solar panels and turbines are very costly. The main issue with alternative energy sources is that they are aspirational choices that cannot satiate the world's insatiable appetite for energy. When factoring in the initial investment, ongoing operating costs, and long-term investment, electricity produced by wind energy costs on average \$90 per megawatt-hour, electricity produced by solar energy \$88.7, electricity produced by coal-fired power plants \$41, electricity produced by hydroelectric power plants \$38 and electricity produced by gas plants 36 dollars, while the cost of electricity from nuclear source costs 33 dollars per megawatt-hour (Antonini, 2022). The Institute for Nuclear Energy estimates that more than 140,000 hectares of land are needed for a wind farm to produce energy comparable to one 1,000 megawatt nuclear plant (Antonini, 2022).

Nuclear technology is experiencing almost daily progress. Nuclear technology is improving, lengthening the durability of reactors and decreasing the original investment. The fourth and fifth versions of nuclear reactors will undoubtedly lower the risks of catastrophe to the lowest possible degree. These reactors will produce significantly less nuclear debris than earlier versions. Simply stated, nations that choose not to develop nuclear power facilities will soon find themselves in the unfavorable situation of having to depend on fossil fuels, and since their supply will be forever diminished, they will be forced to import energy.

#### Three revolutionary breakthroughs in the nuclear technology of the future

The world economy continues to grow at an annual rate of 3 to 4%, which means that it doubles every twenty years (Saks, 2014, s. 423). All this implies a multiplied increase in the needs of current generations for all resources and the big question of their survival for the generations yet to come. The use of nuclear energy is consistent and complementary to the goals of sustainable development. It is most important to mention three breakthroughs in the field of nuclear technology: nuclear fusion, thorium-based reactors and the extraction of uranium

from seawater. Each of these three technological advances has been experimentally demonstrated to be feasible, and progress to commercial profitability is yet to come.

#### Nuclear fusion

The Sun, as a star on whose activity our lives depend, works and emits energy precisely on the principle of nuclear fusion. This means that the main source of all energy that exists on Earth is nuclear fusion. We actually owe all life on the planet to the nuclear fusion that occurs naturally in the Sun. The question that arises is whether man is capable of creating a mechanism for the production and control of energy obtained by fusion. From fiction to reality, fusion has the potential to provide cheap energy to humanity in unlimited quantities. Back at the summit in Geneva in 1985, the leader of the Soviet Union, Mikhail Gorbachev, proposed to US President Ronald Reagan that the two superpowers jointly launch a project to develop nuclear fusion for civilian purposes. French President Francois Mitterrand and British Prime Minister Margaret Thatcher also took part in the negotiations. That's when the idea was born that was embodied through the International Thermonuclear Experimental Reactor (ITER) project, which was formalized in 2006 at the Elysée Palace by the EU, the United States of America, China, India, Russia, Japan and South Korea.

ITER is already being built in the south of France. It will be the largest experimental tokamak nuclear fusion reactor and the largest magnetic confinement plasma physics experiment in the world when the main reactor and first plasma are finished, which is anticipated to happen in late 2025 (ITER 2022). ITER is intended to demonstrate that net fusion energy generation is possible, but due to the complexity of the reactor and the enormous superconducting magnets necessary to hold the hot gases in place, it comes at a significant cost, estimates for its construction roughly \$25 billion (Clery, 2022).

In the not-so-distant year 2033, the first commercial nuclear power plant was designed to produce energy through the nuclear fusion of deuterium and tritium. The power plant is named "DEMO", short for "Demonstration Power Plant" and is a continuation of the ITER program that would successfully transition from the experimental to the commercial phase by constructing this nuclear power plant (ITER, 2022). The importance of ITER is also shown by the fact that it is the most expensive joint scientific project of several countries since the International Space Station.

The main problem that prolongs the commercialization of nuclear fusion lies in the fact that nuclear fusion takes place at extremely high temperatures, several times higher than on the surface of the Sun. This means that an enormous amount of energy is needed in order to heat the atoms to such an extent and encourage their fusion. Tiny hydrogen isotopes have a strong fusion resistance. National Ignition Facility at the Lawrence Livermore National Laboratory (LLNL) in California made an important step towards nuclear fusion research. Experimental fusion reaction in laboratory produced more energy than it took to start the reaction (Chang, 2022). Fusion reactions in the past have required more energy inputs than they have generated. Nuclear fusion may not be commercially viable for another 30 years but future fusion power plants are clearly visible (Rapier, 2023).

Why are efforts and resources being invested to develop fusion in the energy sector? Deuterium and tritium, which are needed for nuclear fusion, and which in a few decades will be the fuel for fusion nuclear power plants, although they exist in nature in negligible quantities, are relatively easy to produce. In addition to natural limitations, resources such as oil, coal and natural gas carry with them the costs of the impact of external factors such as natural disasters that can cause environmental catastrophe. How much does it cost us to spill a tanker into the sea? Or treating people affected by the ill effects of coal mining? With deuterium and tritium fusion fuels, costs due to external action have a marginal value. An important technological fact of the future fusion reactors is that there is no risk of the reactor melting, thus avoiding disasters like the one from Chernobyl or recently from Fukushima. From the socio-political aspect, today we are familiar with wars for resources. Conflicts based on the possession of oil-rich territories such as Middle East are evident. By switching to fusion, we avoid economic and political tensions and pressures because fusion fuels do not depend on geographical distribution. Therefore, there is no monopoly of a certain region on a necessary resource, as is the case today with oil in the Middle East or natural gas in Russia. Therefore, in addition to the fact that energy from nuclear fusion is the most ecologically clean, potentially extremely cheap, it is also the most politically benign when viewed through the prism of geopolitical interests.

#### **Thorium-based reactors**

The use of thorium as a nuclear fuel might represent yet another technical advance in the realm of nuclear energy. Compared to uranium, thorium is less radioactive and generates less nuclear waste. In addition to being more prevalent in nature than uranium, its isotope thorium-232 may be turned into uranium-233, and it also offers safer handling and produces far less nuclear waste (Петровић, 2010). Because thorium originates from surface miners as opposed to deep mines, it is simpler to get. From the middle of the 1950s until the middle of the 1970s, when nuclear energy was still in its infancy, there was a lot of interest in developing thorium fuels and fuel cycles to replace uranium stocks. For nations with significant thorium resources but relatively little uranium stocks for their long-term nuclear power program, thorium fuels and fuel cycles are especially important.

Thorium is 3 to 4 times more common than uranium in nature, extensively dispersed, and is a resource that can be easily mined in many nations, although it

has not yet been used for commercial purposes. As a result, thorium fuels support uranium fuels and assure the long-term viability of nuclear power (IAEA, 2005). The thorium fuel cycle is a desirable method for creating long-lasting nuclear energy with minimal radiotoxic waste (IAEA 2005). The problem with thorium is that due to its higher melting point, it requires the artificial creation of higher temperatures. Also, in 1980 International Atomic Energy Agency (IAEA) pointed out protactinium (element produced in thorium reactors) as a problem for generating uranium-233 which is material for nuclear weapons. Conclusion of IAEA report entitled "Advanced Fuel Cycle and Reactor Concepts" was that thorium fuel cycle is equivalent to uranium/plutonium cycles in terms of weapongrade material proliferation (Uribe, 2018). Practically, uranium-233 has better properties for nuclear weapons than uranium-235 but is always contaminated with small amounts of uranium-232 which is huge emitter of gamma radiation and tehrefore more dangerous to handle (Halem, 2014).

From the perspective of energy production, thorium has enormous potential. Thorium fuel cycles have appealing qualities include reduced levels of waste creation, a lower concentration of transuranic elements in that waste, and the ability to diversify the source of nuclear fuel. Despite these benefits, creating an economic rationale to carry out the required development work is one of the biggest obstacles to the commercialization of thorium fuels (WNA, 2020). As a by-product, thorium must be extracted using more expensive techniques than uranium. The quantity of thorium that can currently be extracted from the ground in an economical way is therefore less than the amount of uranium. However, if there was a greater need for thorium and its use in nuclear power plant development, this may alter (Vlasov, 2023).

China declared the completion of its first experimental thorium-based nuclear reactor in August 2021. The reactor will be tested over the following several years. It was built in the northern part of the nation, in the heart of the Gobi Desert. Beijing intends to build another reactor that might be capable of producing power for more than 100,000 houses if the experiment is successful (Vlasov, 2023). China is not the only country hoping to benefit from thorium's special qualities. India, Japan, the United Kingdom, the United States of America, and other nations have previously shown a keen interest in research into thorium's potential use in nuclear power. This metal has the potential to replace uranium, the most popular nuclear fuel, with one that is more plentiful and more eco-friendly.

#### Extraction of uranium from seawater

Although uranium is not a renewable energy source, its quantitative availability and extraction process help to preserve other finite resources, making it sustainable (Conca, 2016). A secure and predictable supply is provided by uranium's high energy density (1 ton of uranium has the same amount of energy

as 14,000–23,000 tons of coal), ease of stockpile management, and vast geographic spread of its resources (NEA, 2023). The effects on humans and the environment are minimized by modern uranium mining and processing techniques. Although some believe there is a limited supply of uranium, two prior phases of vigorous investigation in the 1940s and 1970s, driven by rising demand, revealed amounts of resources significantly in excess of anticipated requirements. Natural uranium has been generated in excess of 2.3 million tons, and throughout the same time span, recognized uranium resources have mostly risen (NEA, 2023). The known uranium reserves as of right now would be sufficient for more than 100 years' worth of energy production (at current rates) (Conca, 2016).

The prospect of obtaining uranium from seawater as an alternate source of nuclear energy is being discussed by more and more experts. The difficulty in extracting uranium comes from the fact that saltwater has a relatively low concentration of uranium content. There are a lot of techniques for uranium extraction from seawater, including adsorption, pouring, electrochemistry, and more. According to the majority of analysis, method of adsorption, which involves a specific resin that can bind uranium, could be the most efficient. Another popular method involves the use of electrochemical cells that attract uranium, and then the uranium is extracted from the cells. Uranium can be found in seawater at a concentration of only about three micrograms per liter. However, due to the large amount of water contained in the oceans, the total amount of uranium in seawater is estimated at 4.5 billion tons, which is a thousand times more than the uranium currently found in the world's reserves (Abate, 2017).

One of the few countries with a strong commitment to extraction uranium from seawater is Japan, which has consistently made the most research efforts. Japan Tobacco and Salt Corporation conducted the initial studies on the extraction in the 1960s (Kanno, 1984). Since then, laboratory studies have been conducted at several colleges and institutions. The Japanese government began a program to investigate the extraction of uranium from seawater in 1974. In recent research, the Japanese Atomic Energy Agency (JAEA) produced a fibrous amidoximebased preirradiation adsorbent for saltwater uranium extraction and carried out a marine experiment to assess the seawater uranium collection (Rao, 2010, pp. 4-5). About 7 kilometers off the coast of Aomori, Japan, a stack design with a floating frame and cage of adsorption beds was constructed. This location's sea depth was around 40 meters. The 0.5 M hydrochloric acid fractionally eluted the adsorbed uranium on the adsorbent fabric. For 30 days of soaking, the uranium absorption was 0.5 g-U/kg-ad on average (Rao, 2010, 5). This experiment accumulated enough uranium to equal around one kilogram of yellow cake during the course of 240 days submerged in the water (Rao, 2010, p. 5). Before the extracted uranium can be utilized for the manufacturing of yellow cake, it must first undergo a further purification by solvent extraction. Although it was experimentally proven to work, the cost of structure for collecting uranium

accounted for about 80% of the value of the extracted uranium, which is still far from commercial viability.

Some scientists claim that, using existing technologies, it would be possible to extract enough uranium from seawater to fuel nuclear power plants for more than 10,000 years (Abate, 2016). However, this procedure is currently considered too expensive to be economically viable. There are still many concerns about the extraction of uranium from seawater, including questions about the environmental consequences of this process. With the increasing demand for nuclear energy, many scientists believe that this area is worth further research. Although the extraction of uranium from seawater can be challenging, the potential for obtaining nuclear energy from this source is great and can play an important role in the future of nuclear energy.

### Conclusion

We are witnessing a constant increase in energy consumption, while at the same time the problems of lack of energy resources, environmental pollution and the global greenhouse effect are growing. Nuclear energy is a proven part of the energy mix and of all energy sources it has the most space for improvement. Nuclear fusion has the potential to provide mankind with unlimited and cheap energy without the effects of destroying the environment. Thorium reactors can be a kind of bridge between classical types of nuclear energy production and nuclear fusion. Extracting uranium from the ocean overcomes the problem of limited nuclear fuel resources, and when it first becomes commercially viable, it will significantly lower the cost of producing nuclear fuel. All three technological advances in the field of nuclear energy are developing in parallel, and the most significant of all is the fact that each of them has been experimentally proven to be achievable in practice. Although it is difficult to predict the time spans when these technologies will find widespread use, we can venture to conclude that it is only a few decades of additional research. The future definitely belongs to nuclear energy!

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