

LESSONS LEARNED AFTER ONE YEAR OF WAR IN UKRAINE

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***Abstract:** The author believes that the subject of this article could be of particular interest to Romanian politicians and military personnel of all ranks, active, but also for those in reserve.*

In the context of the invasion of Ukraine (on 24.02.2022), by the Russian Federation without any plausible reason and unprovoked, the concerns of Romania and other countries, that are historically and geographically unluckily situated in what the Russians call with imperial arrogance their “Near Neighbourhood”, have increased dramatically, the main reason for it is that no one knows where this neighbourhood ends.

The material presents some events and facts regarding the preliminaries of the war and the 12 months of atrocious war, from which local civilian and military leaders would have a lot to learn and correct. Let's hope that NATO and the EU have also woken up to reality and finally understood who Putin's Russia is and what it wants.

Keywords: *Ukrainian War, Russia, Ukraine, NATO, EU, Romania.*

1. Introduction

In the morning of 24.02.2023, it was one year since the beginning of the brutal and unprovoked aggression of the Russian Federation against Ukraine, an independent state recognized by the UN and by all the states of the world, within the borders guaranteed in 1991, including by the current aggressor state.

Vladimir Vladimirovich Putin and his aggressive team from the Kremlin have been preparing the aggression since the year 2000, immediately after he obtained, through obscure manoeuvres, the first mandate of president of the Russian Federation, a state entity that includes, in addition to ethnic Russians, another 160 populations and diverse ethnic groups. Available data show that 80% declare themselves Russian, and the remaining 20% are other ethnic groups.

Despite increasingly obvious signals that Russia is preparing politically, militarily, economically and propagandistically for the restoration of the Russian Empire in the form of the U.S.S.R. 2.0, Western decision-makers treated the analyses of political-military analysts from several countries of the world superficially, even with indifference. There

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are hundreds of materials published on various news sites, books and reports that, with solid arguments, have demonstrated that we were approaching a major aggression against Ukraine and then against other states located, due to historical-geographical misfortune, in the so-called close neighbourhood of the Russian Federation.

Thus, in August 2021, in Policy Brief Magazine no. 124¹, a group of historians and political analysts, coming from several Western countries, published under the auspices of the prestigious British Chatham Institute, a lucid analysis of the preconceptions and naiveties affecting the response to Russia's overt aggressive actions. I made a more detailed presentation of that study in the articles published in the *Military Science Journal* no. 4/2021² and no. 2/2022³.

With the exception of the US and British intelligence services, no one wanted to believe that Putin would give the order to attack, despite the "firm" assurances of Kremlin officials that Russia had not attacked and would not attack anyone, although it had troops and weapon systems (about 190,000 soldiers) massed at the borders with Ukraine.

This blindness of some European countries that are members of NATO and/or the EU is inexplicable, given that the signs were visible even to non-specialists.

I must mention that on Romanian news sites, numerous Soviet-Russian trolls brazenly and stupidly claimed that the Russians are staunch pacifists and will not attack.

It is now known that Putin registered the attack order on 02.21.2022, and Kremlin liars have claimed even after this date that the Red Army is only doing routine manoeuvres to train its soldiers. It is a clear sign even for the most gullible individuals that Russia is never to be believed again; one thing it says and another it does.

2. A brief overview of the 12 months that shattered the myth of the invincible Russian Armed Forces:

• **On the morning of Thursday, February 24, at 05:48 Moscow time**, Putin impassively and coldly read the statement for the launch of the "special military operation" (!!) against Ukraine, in which he spoke of "denazification" and "demilitarization" to the neighbouring state, words obsessively repeated daily for a year of aggressive and irresponsible Russian

¹ „Policy Brief” journal, no. 124/2021, available at: <https://expertforum.ro/wp-content/uploads/2021/08/Pol-Brief-124.pdf>, accessed on 25.02.2023.

² Mincu Constantin, „Politica actuală a Federației Ruse - un mister ascuns într-o enigmă”, *Revista de Științe Militare* no. 4/2021.

³ Mincu Constantin, „Posibile lecții de învățat din războiul declanșat de Federația Rusă împotriva Ucrainei”, *Revista de Științe Militare* no. 2/2022.

propaganda (it is now known that the statement was recorded on 21.02.2022)⁴.

- **It is worth noting that the American publication Washington Post** is the one that first announced, on November 30, 2021, based on satellite images and sources in the United States intelligence community, that Russia is massing troops again along its border with Ukraine, 8 years after the illegal annexation of Crimea and the start of the separatist war in Donbas.

- **That information** (substantially argued) immediately caused concern in Western chancelleries and in Kiev, but it was denied (!?) shortly by the Ukrainian Ministry of Defence. Officials in Kiev, however, backtracked on the denial, confirming that the country's intelligence services had detected around 90,000 Russian troops near the shared border. The number would increase by 24.02.2022 to approximately 190,000 soldiers.

- **On November 12, 2021**, the United States sounded the first alarm, with Washington officials explicitly warning that Russia was preparing for an invasion. At that time, a name unknown to the international public, General Kirilo Budanov, the head of Ukraine's military intelligence service, warned in turn on November 21, in an interview with *Military Times*, that Russia was preparing to attack Ukraine by the end of January. He would be off by just a month (Putin's friend, Chinese President Xi Jinping, may have asked him to delay the invasion until after the Communist state's Winter Olympics were over).

- **The political leadership in Kiev**, however, did not seem convinced that Russian President Vladimir Putin could resort to such a crazy gesture. Political leaders in Kiev, including President Volodymyr Zelensky, were wrong.

- **Putin's first public signal** that Russian troops would not be on the Ukrainian border just for "military exercises" came on December 14, 2021, when the Kremlin leader called for "immediate" negotiations with NATO and the US on guarantees that Russia wanted them for its security, amid the tensions with Ukraine that Moscow itself created.

- **Three days later**, the Russian Foreign Minister publishes Russia's claims. Among them were not only the exclusion of the possibility of NATO expanding and accepting Ukraine into the Alliance, but also that all

⁴ „Un an de la declanșarea războiului din Ucraina: Radiografia celor 12 luni care au spulberat mitul armatei ruse invincibile”, available online at: https://www.hotnews.ro/stiri-razboi_ucraina-26104051-razboi-ucraina-radiografia-celor-12-luni-spulberat-mitul-armatei-ruse-invincibile.htm, accessed on 26.02.2023.

its troops be withdrawn from Eastern Europe, from the already Member States, including Romania, Poland, Bulgaria (author's note: an imperial nerve typical for Russia, an aggressor state that wants to control all of Eastern Europe and beyond).

- **Russia's demands being unacceptable**, the US and NATO firmly rejected them. The Kremlin expressed dissatisfaction with the US and NATO response.

- In January 2022, Russia began sending troops to Belarus for "joint military exercises". By February 10, more than 30,000 Russian troops as well as fighter jets had arrived in **Belarus** on Ukraine's northern border.

- **The situation deteriorated sharply on February 21** when, in a delirious speech, Putin recognized the *de facto* independence of the so-called "people's republics" of Donetsk and Luhansk. Immediately afterwards the Russian army entered these Ukrainian territories for "peacekeeping" mission.

- **On February 24, 05:48** Moscow time, Putin orders the invasion, cynically called a "special military operation" (a phrase that has become mandatory in Russia).

- **The war** began with massive bombing and missile attacks by Russian forces against major Ukrainian cities, military and infrastructure targets mapped out by the military command in Moscow months earlier.

- **In the afternoon, Russian troops** entered the Kiev region, thanks to the land corridor offered in the north of Ukraine by the Belarusian dictator Alexander Lukashenko.

- **Chaos broke out in the Ukrainian capital**, with civilians scrambling to take shelter in the subway or flee the city as Zelensky government and its military commanders struggled to grasp the scale of the situation. Russia had attacked on all fronts expecting an easy victory, as it would later prove.

- On Thursday evening, Russian troops occupied the Chernobyl nuclear power plant, and a few hours later the Russians occupied Snake Island, vital for protecting Ukraine's maritime ports.

- Among the most intense fighting on the first day of the war was that at Hostomel airport near Kiev, where the Russian Air Force launched an operation with helicopters and airborne troops worthy of the text books of war. Military analysts later explained that the success of Ukrainian forces in defending this strategic airport had a decisive role in the course of the war.

- If Hostomel fell, it was very likely that Kiev would follow. Instead, although Russian Spetsnaz forces were briefly able to reach the streets of the Ukrainian capital, the bulk of the invading army remained bogged down for weeks tens of kilometres northwest of Kiev.

- **On the fronts in eastern and southern Ukraine**, Putin's forces were advancing rapidly, despite the resistance of the Ukrainian Armed Forces and the incredible courage shown, in some places, by Ukrainian civilians who came out with their bare arms in front of the Russian tanks to try to stop.

- **The Russian army abandons plans to capture the capital of Ukraine:**

- Finally, the firm opposition of the Ukrainian defenders, the **Bairaktar TB2 drone** attacks and the **Javelin** anti-tank systems against the Russian armoured columns, but also the great gaps shown by the Russians in the organization of the command and control system, protected communications as well as poor logistics, led to the stagnation of the offensive;
- As a result, at the end of March, the Russians announced the **“drastic reduction of military activity”** in the area of Kiev and Chernobyl;
- After the withdrawal of the Russian forces, the massacres committed by them in the Kiev region, especially in the city of **Bucea** (released on April 2), came to light. Similar massacres were discovered in **Irpın** and other localities;
- **On April 8**, two Russian rockets hit a train station in Kramatorsk, a city in the Donetsk region, killing dozens of civilians trying to flee the war and injuring 100 others (mostly women and children);
- **The Kremlin** either denied these crimes (crimes against civilians equalize crime against humanity) or stated that they aimed **“military targets”**;
- **On April 14**, the Ukrainians sank the flagship **“MOSKVA”**, the pride of the Black Sea fleet, and initially the Russians attributed the event to the **“stormy sea”**.

- **Russia changes its strategy:**

- **During the spring and early summer months**, the **Military Command in Moscow** decided to change the strategy. It had become obvious that the exhausted Russian forces could no longer sustain a large-scale offensive, let alone one on all fronts (totalling approximately 1,600 km);
- **The first objective** was to complete the conquest of Mariupol, a strategic port city on the Sea of Azov that Russian forces had encircled since March 5, but which stubbornly remained a thorn in the side of Putin's army in southern Ukraine, holding place

troops that Moscow wanted sent in the direction of Nikolaev and then Odessa;

- On April 11, the Russians claimed the conquest of the port area of the city of Mariupol, but the Ukrainian marines remained in position for several days. The soldiers of the Azov Regiment continued their resistance in the basements of the metallurgical plant until mid-May;
- **Over the next two months** Moscow's forces used their overwhelming superiority in artillery as part of a new phase of the war;
- **The Russian army switched to systematically bombing** any Ukrainian positions before they even tried to advance. The official objective had become the conquest of the entire territory of the Luhansk and Donetsk regions. However, the investigation site Meduza first wrote on June 9 that Putin would have decided to annex all the occupied Ukrainian territories, not just the two he used as a pretext for starting the war;
- On June 25, Russian forces managed to completely occupy the city of Severodonetsk in the Luhansk region and the city of Lisichansk, completing the "liberation of the region".

- **American HIMARS enter the scene:**

- **While Russia** was focusing its efforts on eastern Ukraine, a crucial event was taking place in the US. After months of doubts, hesitations and fears from the Democratic administration in Washington, on June 23, the first batch of HIMARS missiles arrived in Kiev;
- **on June 30, the Russian Ministry of Defence** announced that it was withdrawing its garrison from Snake Island, and on July 4, the Ukrainians were returning to the island. The expulsion of the Russians from here was not only a huge boost to the morale of the Ukrainians, but also reopened the way to the resumption of the country's agricultural ports;
- **On the military level, however, the role of the American HIMARS** would be incomparably more important. Although the supplied missiles were only medium-range, they allowed Ukrainian forces to strike deep behind enemy lines, targeting command posts, ammunition and fuel depots, Russian troop logistics hubs and supply infrastructure;
- **The attacks began almost immediately**, quickly causing consternation among Russian military bloggers, Russian war correspondents and propagandists in Moscow. "**HIMARS time**", a reference to the fact that most attacks during the period took

place at night around a certain time, entered the vocabulary of Ukrainian soldiers and became a viral meme on social media;

- **The Antonovskiy bridge over the Dnieper**, crucial for the supply of Russian troops on the west bank of the river, was one of the favourite targets of HIMARS attacks, being out of service since the end of July. In Moscow unrest was growing;
- **Practically, the second part of the summer and the beginning of the autumn** marked a new phase of the war in Ukraine, this time one favourable to Kiev.

• **Ukraine goes on the attack:**

- **In August, the first explosions began** at Russian military bases in Crimea. If at first Russia put the fires and explosions on its territory and that which it controls on the basis of the “negligence” of its military or the “magnifying glass effect”, Russian propaganda gradually begins to admit that they are the result of Ukrainian attacks or sabotage activities;
- **On August 25**, the Ukrainian mass-media announced that the offensive had begun in the Kherson region in the south of the country. The confirmation came from Zelensky’s office, but in an indirect way: Mihailo Podoliak, an adviser to the Ukrainian president, was calling for a “**media blackout**” on military operations in the south of the country, so as not to provide information to the Russian invaders;
- **Weeks followed** when the only picture of what was happening in Kherson could be constituted by fragments of information and video recordings appearing on social networks;
- **There is speculation** that the offensive has failed, but Ukrainians are speaking to the few foreign correspondents allowed near the frontline in the south of the country about the huge losses they have suffered as the Russian army has built multiple defensive lines supported by strengthened fortified positions;
- **On September 10**, something completely unexpected happens hundreds of kilometres away: the Russian front in Kharkiv collapses catastrophically. Russian soldiers are panicking and in many places abandoning their fully functional armoured vehicles and tanks, trying to flee on foot to avoid being targeted by the coordinated drone artillery of the Ukrainian army;
- **As a result**, Russia decrees partial mobilization and fast-tracks the annexation of occupied Ukrainian territories, hoping that bringing them under the protection of Moscow’s nuclear umbrella will deter further Ukrainian attacks. Moscow’s action did not work.

• **Putin's humiliation in three acts:**

- **On October 1, another Ukrainian victory takes place**, smaller but of strong symbolism: its forces manage to liberate the key city of Lîman in the Donetsk region. Russian troops quickly withdrew from the city, just one day after Vladimir Putin had proclaimed with great pomp in Moscow, the annexation of Donetsk, Luhansk, Kherson and Zaporozhye regions to Russia. The humiliation is so great that not even the Russian televisions try to hide it anymore and, coupled with the recent disaster in Kharkiv, it makes the propagandists on the sets go crazy. This is not how a “**special military operation**” is supposed to go;
- **Just two days later**, the Ukrainians also manage to break through the Kherson front, advancing 40 kilometres in just 24 hours, after more than a month of static battles of attrition without notable progress;
- **Meanwhile, a national scandal erupts in Russia** related to the way in which the partial mobilization ordered on September 30, the largest since the World War II, is organized. Putin himself is forced to admit that “mistakes” were made and announces that he has signed a decree correcting the situation. Another wave of discontent will follow, that of Russian recruits who complain about the equipment they receive, the conditions in which they are kept and the training they receive;
- **In Kherson the Ukrainian offensive** seems to have reached a stalemate again. The arrival of the “rasputitsa”, the famous rainy season that makes roads impassable and which many historians say saved Russia in World War II, came to Moscow's aid again. The armoured vehicles of the Ukrainians get stuck in the mud, and the Russian defenders have a moment of respite. But it will be short-lived;
- **The military leadership in Moscow** announces on November 9 that it will evacuate its troops from the west bank of the Dnieper River in Kherson, also abandoning the homonymous regional capital located there. The withdrawal is completed two days later. Ukrainian troops enter Kherson on November 11, liberating the city after more than half a year of Russian occupation. The joy of the locals was boundless;
- **The loss of Kherson** represented yet another humiliating setback for Moscow and Putin: this city was the only regional capital of Ukraine that Russian forces had managed to capture after the start of the invasion. The capitals of Donetsk and Luhansk regions were under the control of Russian separatists before the launch of

the “special military operation”, having been occupied during the fighting that broke out after the annexation of Crimea in 2014;

- **Vladimir Putin’s last humiliation (from 2022) is connected to Crimea**, which he very likely felt as a personal affront. On October 8, there was an explosion on the Kerchi Bridge that put it out of use. This 18-kilometer-long bridge was built after the annexation of Crimea, and is considered the biggest infrastructure achievement during Putin’s more than 20-year tenure (the bridge was not reopened until February 24, 2023).

• **Russia moves to revenge attacks, the front “freezes”**

- **A day after the explosion that disabled the Kerch Bridge**, Putin personally accused Ukraine of attacking it, calling it a “terrorist act” planned by Kiev and carried out by its special services. A day later, on October 10, Kiev and cities across Ukraine were targeted by a massive missile attack. The strikes took place in the morning hours, when people were going to work, to maximize civilian casualties;

- **Russian Attacks with missile and kamikaze drone made in Iran** continued to target Ukrainian cities and the country’s energy infrastructure in the run-up to, and then in the middle of, winter. Neither the Kremlin nor its propagandists were trying to claim that Russia was not launching attacks to terrorize and kill Ukrainian civilians;

- **On the front, despite the opinions of some military analysts** that the arrival of the cold will not necessarily lead to the “freezing” of the front, the fighting has become static. Virtually the only notable advance registered by either side in recent months was the capture of the city of Soledar by Wagner mercenaries in January 2023. At other stages of the war, the occupation of this non-strategic city in the Donetsk region would probably have entered “miscellaneous” category. However, it is emblematic of the results recorded in Ukraine by the “**second army of the world**” that this attack, and the one generated in the direction of Bahmut, were supported by the Wagner group with tens of thousands of prisoners recruited by Evgeni Prigozhin, from Russian prisons (!?);

- **A year after Putin** launched the biggest war of aggression in Europe since the end of the World War II, Ukraine is still resisting, now also boosted by the prospect of receiving the tanks promised by the Western states and perhaps the possible reception of some battle aircrafts;

- **The cost paid by Ukraine** has been, until now (24.02.2023), an enormous one: entire cities wiped off the face of the earth, incalculable material losses, several million people displaced, tens of thousands of soldiers lost and thousands of civilians killed (including over 500 children) during the conflict;
- With Kiev saying it will only accept the liberation of all its territories, including Crimea, occupied almost a decade ago, and Vladimir Putin continuing his increasingly delusional bellicose speeches, there is no prospect of an end to the war yet.

The brief presentation of the conduct of the war in Ukraine, after the launch of the invasion ordered by Vladimir Putin (24.02.2022) is intended, in my opinion, to demonstrate the way of thinking and action of the aggressive team from Moscow, the serious miscalculations of the leader from the Kremlin, as well as the cynicism and cruelty of it and its troops.

Although the Russians are facing heavy losses in men and equipment and show no sign so far (24.02.2023) that they want peace, recent statements by some leaders confirm that they want all of Ukraine and more.

On the other hand, Ukraine defends itself heroically, benefiting from the support of the population, the high morale of the troops and the support of most Western states, led by the USA, support expressed in financial aid, weapons and weapon systems, real-time information, such as and diplomatic support at the UN and other international organizations.

An important role is played by the sanctions applied by the US and the EU to the Russian aggressor and its political and economic elite.

The sources of information for this material were obtained from Romanian and foreign news sites, from TV station reports and from the analyses of Romanian and foreign military specialists.

I am convinced that Romanian politicians and soldiers of all ranks will analyse the conduct of this war and draw the appropriate conclusions regarding:

- Sizing of the Army for peace and war;
- Equipment and weapon systems important for fighting;
- The training of military and civilian personnel according to their responsibilities;
- Status of ammunition stocks and industrial capacities for their production;
- Limiting, if not completely eliminating, the action of the numerous trolls and influencers of the Russian aggressors, very active and virulent on various news channels.

Next, I want to present other aspects of this cruel war, with negative consequences not only for Ukraine, but also for the whole world.

3. The importance of the demographic-military factor in war

Many sources of information are available on the relationship between the size and structure of a country's population and the ability to scale armed forces in peace, crisis and war.

Studying this topic and looking at the realities of the former two world wars, some conclusions can be drawn:

- In the two devastating wars with many millions of victims, armies were formed from large masses of people, in which the main belligerents were based on 5-10% of the total population of their country;

- After the end of the Cold War, military specialists from the relevant powers of the world argued the need to demassify their armies, mainly on the basis of modern technologies and armaments that can compensate for the sometimes dramatic decrease in peacetime forces, as well as those in the mobilization reserves. Thus, now NATO countries have between 0.3 and 0.8% of the population in their armies. In the case of non-NATO states, the percentage at peace is higher (1.1 - 1.5%).

With the above in mind, let's see the current situation in Russia and Ukraine⁵:

- **Russia** has an area of 17,074,400 km² (rank 1 in the world), has a coastline on oceans and seas of 37,000 km, the population is estimated (2017) at 144 million inhabitants (rank 8), of which 80 % Russians, and the remaining 20% belonging to the 160 ethnic groups. Before the invasion, the military forces had a staff of 2,100,000, of which 1,136,000 were soldiers (0.8%), being able to mobilize for war at most 5% of the population, meaning approximately 7,225,000 soldiers (an impressive figure but very difficult to achieve because of the economic, social and political difficulties that would arise). It follows that the figure advanced by the Minister of Defence of the Russian Federation, Serghei Şoigu, of 25 million soldiers liable to be mobilized is a gross lie.

- **Ukraine** has an area of 603,700 km² (rank 44 in the world), has an outlet to the sea of 2782 km. (taking into account the situation before the aggression). The population of Ukraine was in 2021 was 44,000,000 inhabitants (rank 26), of which 77.8% Ukrainians, 17.3% Russians, 0.85% Romanians, and the rest being from the ten ethnic groups. The armed forces, structured in three categories, were 159,000 soldiers before the invasion, representing 0.36% of the population. After the invasion, the force increased to 361,000 troops, and the reserve is estimated at 1 million men, so a total of

⁵ Mincu Constantin, „Posibile lecții de învățat din războiul declanșat de Federația Rusă împotriva Ucrainei”, Revista de Științe Militare, no. 2/2022.

1.361 million troops (3.1% of the total population of Ukraine). But I must mention that according to UN statistics, about 8 million Ukrainians have left the country, and another 6 million are internal migrants in the western part of Ukraine. This fact creates serious problems in the sizing of the army, in the conditions of Russia's war of aggression.

4. Some logistical issues

Many military specialists from almost every corner of the world rightly appreciate the vital role of logistics systems in war. There are thousands of books and studies on this topic, including those by Romanian authors.

- **Russia**, before and after launching the invasion of Ukraine, miscalculated the crushing of Ukraine by three days to a week. As a result, the forces engaged in the invasion (190,000-200,000 soldiers) transported in the invasion columns the necessary weapons, ammunition, fuels, food and other products, just for a short confrontation. The calculation was deeply flawed, with many tank and armoured columns stuck for lack of fuel, ammunition and spare parts.
- **In the first year of the war**, the Russian military leaders tried to solve the serious problems regarding the supply of the troops with the necessary things, but they did not really succeed, the warehouses and transport columns were hit and destroyed by the Ukrainian army, which received information in real time from various cosmic and aerial surveillance sources as well as the locals were able to use available weaponry to remove the danger.
- **On the other hand**, Ukraine had a consolidated logistics system on its own territory (warehouses and other facilities, some hidden and protected), as well as the massive supply of weapons, ammunition, fuel, food and other materials by Western partners.
- It should be noted that the Russian forces made great efforts, hitting Ukraine's logistics and transport infrastructure with missiles, bombs and artillery, with limited effect, as Ukraine managed to continue to defend its territory firmly.

5. Command, control, and communications systems in Russia's war of aggression

It should be noted that in the first part of the war (cynically and hypocritically called "special military operation"), Russia dispersed its forces on a front of more than 1,600 km, largely ignoring the difficulties of command and control of troops, there being no single and effective command of heterogeneous forces, alongside relatively well-trained

professional soldiers, acting untrained and demoralized recruits brought in from Siberia and the Caucasus.

Inter-force and inter-category cooperation communications **were ignored** thus causing unacceptably high losses among the combatants.

It is surprising that after Putin started a massive armament program in 2000, in the field of communications only 30% of units have modern digital equipment with an acceptable level of encryption. **Tactical radios** did not reach fighters and crews, depriving them of real-time command and control.

The mixing of units and sub-units equipped with legacy unencrypted analogue equipment with the few equipped with encrypted frequency hopping digital stations required everyone to work at the legacy level, with the attendant risks. Here is what American General Ben Hodges, former Commander of the US Army in Europe, stated⁶: *The tactical communications of the Russian Armed Forces - one of the major factors that led to the blocking of the Russian invasion.*

There are many other aspects at this point that should be carefully studied in order to draw correct conclusions and lessons, but for lack of space I will stop here.

On the other hand, the Ukrainian Armed Forces fared much better in terms of structuring the command and control system, as well as in the field of communications at all hierarchical levels:

- The existence of a single command and the assignment of extended powers to commanders on all hierarchical levels;
- The presence of radio stations with frequency hopping, used in the US and in other NATO member states, up to the level of fighters and crews;
- Extensive use of satellite voice and data communications, including through the use of **STARLINK** systems;
- Placing command points in protected and well-disguised locations;
- Other specific measures.

As a conclusion on this point, we can say that after a year of war, Ukraine has a serious advantage, which is likely to be consolidated in the coming months.

⁶ „Comunicațiile tactice ale armatei ruse - unul din factorii majori care a dus la blocarea invaziei Rusiei”, available online at: https://www.hotnews.ro/stiri-razboi_ucraina-25449334-comunicatiile-tactice-ale-armatei-ruse-unul-din-factorii-majori-care-dus-blocarea-invaziei-rusiei.htm, accessed on 27.02.2023.

6. Some conclusions and lessons for political and military leaders in Romania⁷

Russia's aggressiveness demonstrated, once again, by the invasion of Ukraine, but also by other gestures and direct threats to some NATO and/or EU member states, should determine quick reactions and firm measurable actions to remedy some shortcomings in the equipping and training of the troops from the Romanian Armed Forces.

We could consider the following aspects:

- **Reviewing the size of the forces at peace** and the mobilization component, taking into account the losses of the parties in the war in Ukraine⁸ (now at peace we have only 0.30% of the country's population, one of the lowest percentages in the Northern Hemisphere);

- **Leaning on the political factor** (President, Parliament, Government, Ministry of Defence), as well as the military factor (Defence General Staff), with more attention and determination on the available forces, the training of the troops, regarding the new weapons systems, high-performance communications and safe, as well as on the living conditions of active military personnel and those still in the mobilized reserve;

- **An honest critical analysis** on the dimensioning of defence budgets and highlighting the discrepancies between the figures on paper and the real ones;

- **Rapid restoration of the domestic industrial base for Defence** (at this moment being knowingly destroyed);

- **Review** of the military apparatus on the entire territory of the country, some areas being devoid of any military presence (!?);

- **An immediate end to attacks and insults against active, reserve and retired military** by some politicians and media representatives. **I believe that in case of danger, neither the World Bank nor the European Commission**, institutions that targeted the Romanian military, will defend us;

- **The cessation** of the appointment of obedient, professionally unprepared persons but with political support to top military positions in the Army (I could give concrete examples, but maybe on another occasion).

⁷ Mincu Constantin, „Împrejurări justificate pentru elita politică și militară a României”, *Revista de Științe Militare*, no. 1/2019.

⁸ „Un an de război: Cât de mult au pierdut Rusia și Ucraina pe front? Bilanțul ambelor armate: tancuri, blindate, aeronave, drone și militari/Ce arată datele confirmate independent”, available online at: https://www.hotnews.ro/stiri-razboi_ucraina-26104877-razboi-cat-mult-pierdut-rusia-ucraina-front-bilanul-ambelor-armate-tancuri-blindate-aeronave-drone-militari.htm, accessed on 25.02.2023.

I believe, finally, that there are many other problems that need to be considered and corrected, as a matter of urgency, the big mistakes and the general state of carelessness.



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