



Joint War Termination Strategy for the Russo- Ukrainian Conflict

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The CBA Initiatives Center is a public organization that helps strengthen Ukraine's defense capabilities. We conduct research on the security and defense sectors, develop effective solutions and advocate for their implementation in public policy.

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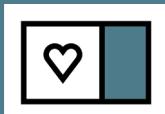
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Prospects of an immediate negotiated settlement



Initially attributing Russian interest to the acquisition of territories with a large share of the Russian-speaking population and preventing Ukraine from joining NATO, the US negotiators expected that accommodating Russia's territorial ambitions and explicit rejection of Ukraine's future in NATO would satisfy Moscow and allow the US to settle the conflict.¹ Russia, however, showed little enthusiasm for the proposal, laying out its own vision.

In addition to a demand to transfer control of the unoccupied parts of the four regions it claimed after the sham referendums in 2022, Moscow sought formal recognition of its occupation, including previously annexed Crimea. It further insisted on Ukraine's neutrality, restrictions on military cooperation with foreign states, a severe cap on the size of the Ukrainian forces and changes to Ukrainian domestic laws on cultural, language, educational, and religious issues.² In other words, it reiterated the terms previously promoted during the negotiations in Istanbul in 2022, hardened by new territorial demands.³

Acceptance of these terms would equate to formal recognition of the Russian sphere of influence over Ukraine. The changes to domestic laws would allow Moscow to restore its cultural and religious influence in Ukraine, while restrictions on the size of military forces and international military cooperation render Kyiv defenceless. Facing a constant threat of a new invasion and being unable to protect the country, any Ukrainian government would have little choice but to submit to the Kremlin. Essentially, Ukraine would be Belarusified.

These terms proved to be beyond Ukrainian redlines.⁴ Even though the willingness to accept a compromise increased,⁵ the majority of Ukrainians refused to accept Russian terms and preferred their chances in a fight even without the US support to an outright surrender.⁶ Under pressure from Washington, Ukraine agreed to unconditionally stop the conflict, leaving the occupied territories under de facto Russian control, but excluded the possibility of de jure recognition or acceptance of the restrictions promoted by Russia.⁷

Yet Russia remained committed to its maximalist agenda. As Ukraine's primary partners visibly hesitate to continue their support, despite Ukraine facing challenges with force generation and struggling to protect its critical infrastructure from Russian combined air attacks, Moscow reasonably

¹ Steve Witkoff's Critical Role in Negotiating Global Peace: <https://www.youtube.com/watch?v=acvu2LBumGo>

² Russia lays out demands for talks with US on Ukraine, sources say: <https://www.reuters.com/world/europe/russia-lays-out-demands-talks-with-us-ukraine-sources-say-2025-03-13/>

³ Ukraine-Russia Peace Is as Elusive as Ever: <https://www.nytimes.com/interactive/2024/06/15/world/europe/ukraine-russia-ceasefire-deal.html>

⁴ Zelenskyi ozvuchyv chervoni linii dla Ukrainy u myrnykh perehovorakh z RF: <https://www.eurointegration.com.ua/news/2025/03/19/7207544/>

⁵ Dynamika hotovnosti do terytorialnykh postupok ta rol okremykh parametiv u mozhlivyykh: <https://kiis.com.ua/?lang=ukr&cat=reports&id=1506&page=1>

⁶ Ukrainians in a mood at least as stubborn as their president's: <https://www.economist.com/europe/2025/03/12/is-zelensky-a-disliked-dictator-or-a-popular-hero>

⁷ Zelenskyi ozvuchyv chervoni linii dla Ukrainy u myrnykh perehovorakh z RF: <https://www.eurointegration.com.ua/news/2025/03/19/7207544/>

expected to gain more by further military actions than by accepting a compromise.

The tacit threat by the US to impose additional economic restrictions achieved little in moderation of these demands. Surviving three years under one of the strictest sanction regimes, Moscow seems optimistic about its ability to mitigate the impact of sanctions through imports and cooperation with non-Western states.⁸ Moreover, the repeated postponement of new sanctions in order to preserve space for a negotiated solution⁹ convinced Moscow that it could continue to avoid new economic restrictions by prolonging the negotiation process.

Struggling to achieve a broader settlement, the US attempted to secure a ceasefire. Ceasefire may be a useful tool for promoting a settlement in a conflict characterized by a mutually damaging stalemate, when both parties seek an exit from the conflict but fail to agree on a framework due to mutual distrust. In such circumstances, an externally brokered truce reinforced by peacekeepers may offer an escape from a security dilemma, opening up a way to broader settlement. Yet this was not the case for the Russo-Ukrainian war.

As Russia believed it could improve its perspectives by continuing war, it had no reason to accept a truce unless it improved its strategic position. Under such circumstances, negotiations turned into another battlefield, where Kyiv attempted to highlight Russia's unwillingness to pursue peace in the hope of preserving military support and strengthening the sanction regime, while Moscow instrumentalized the process to improve its stance for further military actions.

The dynamic is evident in developments surrounding the idea of a 30-day ceasefire. In an attempt to exemplify Russia's unwillingness to pursue peace, Ukraine offered a 30-day ceasefire without preconditions.¹⁰ Moscow rejected the proposal, demanding to suspend military assistance for Ukraine and its mobilization process as a precondition for a ceasefire.¹¹ Since Russia did not offer any concession on its side, while unilateral termination of the mobilization and a pause in military support would risk swinging the balance of power in Moscow's favor, undermining Ukraine's defence, Kyiv refused the Russian proposal.

A similar dynamic plagued the negotiations for a partial truce. As Russia remained committed to its maximalist agenda, it did not have incentives to limit its military actions, except to offer minor concessions to prevent the

⁸ Plenarnoe zasedaniye sъezda RSPP: <http://www.kremlin.ru/events/president/news/76474>

⁹ Trump says he will not impose more sanctions on Russia: <https://www.cnn.com/politics/live-news/trump-presidency-news-05-19-25>

¹⁰ Zelenskyi: 30-denне перemyria zalezhatyme vid sylnoi vidpovidi SShA na vymohy Rosii: <https://www.ukrinform.ua/rubric-politics/3970702-zelenskij-30denne-peremira-zalezatime-vid-silnoi-vidpovidi-ssa-na-vimogi-rosii.html>

¹¹ Sovmestnaia press-konferentsiya s Prezydentom Belorussyy Aleksandrom Lukashenko: <http://kremlin.ru/events/president/news/76450>

introduction of new economic restrictions or to trade a ceasefire on the secondary theaters for more essential assets.

The Russian model of maritime truce, for example, entailed relief of sanctions in exchange for the ceasefire in the theater where the Russian navy cannot operate due to the risk posed by Ukrainian drones.¹² In the case of the energy ceasefire, Russia only temporarily redirected its strikes from larger infrastructure objects to smaller, harder to monitor targets, such as transformers, and civilian objects not covered by the agreement.¹³ The Eastern ceasefire briefly decreased the intensity of military action, becoming a symbolic step to placate an increasingly irritated Washington.¹⁴ While the three-day truce to commemorate Victory Day intended only to shield Russia from potential humiliation caused by Ukraine's long-range strikes in front of international guests.¹⁵

Faced with the European ultimatum to accept an unconditional 30-day ceasefire or face new economic restrictions, Russia essentially rejected the ultimatum, offering direct talks with Ukraine.¹⁶ Such talks would simply allow Moscow to postpone the introduction of new sanctions while instrumentalizing the negotiations to sow discord between Ukraine and its external partners. Ultimately, Russia's persistent maximalist demands, which are irreconcilable with the minimal acceptable terms for Ukraine, preclude meaningful progress toward peace.

As long as Moscow expects to improve its position with further military action, it does not have any incentive to moderate its position. If peace in Ukraine is to be achieved, the strategic context of the conflict has to be changed. More specifically, it is necessary to undermine Russia's perspective of making further gains by prolonging the confrontation. This would require reaffirming the steady flow of military assistance, boosting Ukrainian resilience, and surging the costs of Russia's aggression.

If Russia's ability to make further gains on the battlefield diminishes, the prospects of outlasting the external support or breaking Ukraine's will are bleak, and the growing economic problems lead to concern about protest moods, Russia will have incentives to seek an exit strategy. The conflict will be ripe for meaningful negotiations.

¹² Russia says sanctions must be lifted before Ukraine maritime ceasefire can start: <https://www.bbc.com/news/articles/c93n05z48ld0>

¹³ Росія понад 30 разів порушила енергетичне перемир'я: <https://susilne.media/996547-rosia-ponad-30-raziv-porusila-energeticne-peremira-mzs/>

¹⁴ Ukraine Says Russia Broke Its Own Easter Cease-Fire Vow: <https://www.nytimes.com/2025/04/20/world/europe/ukraine-russia-easter-truce.html>

¹⁵ Putin leads Victory Day celebration in Moscow under tight security: <https://www.bbc.com/news/articles/cly3807exyn0>

¹⁶ Zaivalenye Prezydenta Rossyy dlia SMY: <http://kremlin.ru/events/president/news/76899>

Building the foundation for meaningful negotiations



Ensure a steady flow of external support

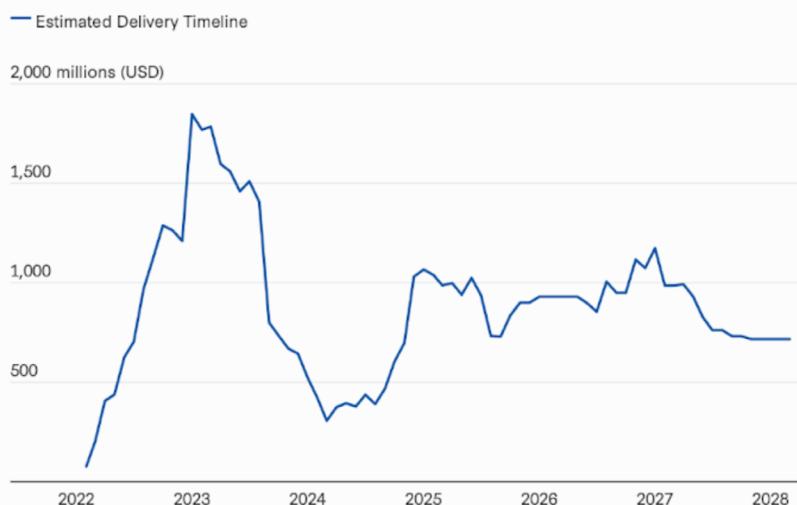
Agree on the modality of cooperation with the US

US support for Ukraine is critical for creating the conditions for balanced negotiations. While a broad list of capabilities is provided by European countries or produced by Ukraine, the role of the US is indispensable in intelligence and air defence. Preserving the sanction regime is also critical for maximizing the pressure on the Russian government and creating incentives to end the conflict.

Although Washington upholds the sanction regime and, despite a short pause to encourage Ukraine to accept compromises, continues intelligence sharing, it does not seem inclined to provide further financial support or military equipment. From the Trump administration's perspective, Ukraine's support is primarily a European responsibility, while the US should focus on more pressing issues such as its domestic economy, border security, and strategic competition with China.¹⁷

Despite the new administration's position, it is possible that Ukraine continues to receive the assistance previously approved by the Biden administration. In particular, contracts worth \$21 billion with the US defence industry under the Ukraine Security Assistance Initiative (USAID) are unlikely to be completed. Given the congested production line in the US defence industry, the delivery time can possibly extend up to 2026-2028.¹⁸ If this assessment is correct, Ukraine will continue to receive artillery munitions, armoured vehicles, interceptors for air defence systems under the remaining contracts.

Estimated Deliveries of U.S. Military Equipment to Ukraine¹⁹



Source: CSIS calculations from DOD budget documents.

CSIS

¹⁷ Ukraine's security guarantees are Europe's responsibility, Trump tells Zelensky: <https://kyivindependent.com/ukraines-security-guarantees-are-europees-responsibility-trump-tells-zelensky/>

¹⁸ Is Ukraine Now Doomed?: <https://www.osis.org/analysis/ukraine-now-doomed>

¹⁹ Ibid.

Moreover, while the US is unlikely to provide additional military assistance, Washington might be willing to sell necessary equipment to Ukraine. Such cooperation would sit well with the ambition of the Trump administration to boost domestic manufacturing and secure new economic opportunities. If this type of modality of cooperation is possible, Ukraine would be able to acquire the equipment necessary given sufficient funds.

The most straightforward way to finance procurement is the confiscation of Russian assets frozen in Europe. This option has been previously rejected due to concerns about the impact on the European financial system, legal considerations, and the expectation of using frozen assets as a bargaining chip. Yet these arguments do not stand up to scrutiny.

The role of frozen assets as a bargaining chip is highly questionable. Despite being on the table for three years of war, Moscow did not demonstrate intentions to compromise in exchange for its assets. This is not atypical for Russia. Historically, under the threat of economic restrictions, Russia has repeatedly prioritized its power ambitions over financial considerations. Even now, Russia continues to burn through its National Sovereign Wealth Fund (NSWF) to sustain military actions.²⁰

The legal concerns surrounding the confiscation are also increasingly challenged. A growing number of legal scholars argue that the confiscation of frozen assets constitutes lawful countermeasures under the Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA).²¹ According to Article 48 of the ARSIWA, the countermeasures are not required to be invoked exclusively by a victim of a violation. "If the obligation breached is owed to the international community as a whole" – as prohibition of the use of force against the territorial integrity or political independence of any state is – "any State other than an injured State is entitled to invoke the responsibility of another State".²²

The decision to confiscate Russian assets also does not undermine the principle of reversibility. In the end, the assets can be repaid later if Russia performs "the obligation of reparation" under ARSIWA.²³ Given that Russia's damage to Ukraine far exceeds the costs of its frozen assets, if Moscow decided to pay reparations, Ukraine would be able to return the costs of the frozen assets from the reparations received.

From a financial standpoint, European countries have already crossed the Rubicon by freezing Russian assets. It is hard to envision what additional

²⁰ Large Budget Deficit In January Could Spell Trouble; Underlying Vulnerabilities May Surface: <https://sanctions.kse.ua/en/large-budget-deficit-in-january-could-spell-trouble-underlying-vulnerabilities-may-surface/>

²¹ The legal, practical, and moral case for transferring Russian sovereign assets to Ukraine: <https://rdi.org/wp-content/uploads/2023/09/2023.09.17-MPP-Report.pdf>

²² Responsibility of States for Internationally Wrongful Acts: https://legal.un.org/ilc/texts/instruments/english/draft_articles/9_6_2001.pdf

²³ Sanctions, Confiscation, and the Rule of Law: https://shs.cairn.info/article/E_RED_005_0035/pdf?lang=en&ID_ARTICLE=E_RED_005_0035

incentives confiscation would create. Any actor who might be concerned about similar measures against it would have disentangled from the West's financial infrastructure once the Russian assets were frozen, regardless of whether they are confiscated on top of it – this scenario failed to materialize simply due to the lack of meaningful alternatives to Western currencies.²⁴

Despite the list of concerns, confiscating frozen assets is a legally, morally, financially, and strategically sound decision. It is a single opportunity to finance procurement of necessary equipment from the US without overburdening European economies.

Signal long-term commitment

Despite assurances of supporting Ukraine as long as it takes, few countries have initially made formal, financial, multi-year commitments. The assistance was approved based on an annual political decision. The visible hesitation of Ukrainian partners creates incentives for Russia to stay in the conflict in the hope that political changes or fatigue force the West to limit its assistance, opening the way for military victory. If the conditions for a ceasefire are to be established, this paradigm has to change.

Several countries, such as Norway,²⁵ Sweden,²⁶ Denmark,²⁷ the UK,²⁸ Canada,²⁹ Latvia,³⁰ Lithuania,³¹ Estonia,³² the Netherlands,³³ and Germany³⁴ have already made long-term financial obligations. Multi-year financial resources are also available under the Ukraine Assistance Fund, part of the European Peace Facility.³⁵

²⁴ Freeze to Seize or to Appear?: <https://www.rusi.org/explore-our-research/publications/commentary/freeze-seize-or-appease-why-russian-assets-are-not-bargaining-chip>

²⁵ The Nansen Support Programme for Ukraine: <https://www.norad.no/en/thematic-areas/humanitarian-assistance-and-comprehensive-response-and-the-nansen-programme-for-ukraine/the-nansen-support-programme-for-ukraine/the-nansen-support-programme-for-ukraine/>

²⁶ Press release from Ministry of Defence, Ministry of Finance SEK 75 billion in military support to Ukraine: <https://www.government.se/press-releases/2024/05/sek-75-billion-in-military-support-to-ukraine/>

²⁷ Donationspakke XXV: Militær støtte til Ukraine for 6,7 mia. kroner: <https://www.fmn.dk/da/nyheder/2025/donationspakke-xxv-militær-støtte-til-ukraine-for-67-mia-kroner/>

²⁸ UK-Ukraine 100 Year Partnership Declaration: <https://www.gov.uk/government/publications/uk-ukraine-100-year-partnership-declaration/uk-ukraine-100-year-partnership-declaration>

²⁹ Canadian donations and military support to Ukraine: <https://www.canada.ca/en/department-national-defence/campaigns/canadian-military-support-to-ukraine.html>

³⁰ Agreement between Ukraine and the Republic of Latvia on long-term support and security commitments: <https://www.president.gov.ua/en/news/ugoda-mizh-ukrainoyu-ta-latvijskoyu-respublikoyu-pro-dovgos-90189>

³¹ State Defence Council discussed assistance to Ukraine plan of the National Defence System and significant decisions to strengthen the Armed Forces: <https://kam.lt/en/state-defence-council-discussed-assistance-to-ukraine-plan-of-the-national-defence-system-and-significant-decisions-to-strengthen-the-armed-forces/>

³² Agreement on Security Cooperation and Long-term Support between Ukraine and Estonia: <https://www.president.gov.ua/en/news/ugoda-pro-spivrobitnictvo-u-sferi-bezpeki-ta-dovgostrokovu-p-91793>

³³ Voorjaarsnota 2024: extra geld voor Oekraïne, decentrale overheden en Defensie: <https://www.rijksoverheid.nl/actueel/nieuws/2024/04/15/voorjaarsnota-2024>

³⁴ Germany Allocates Funds for Long-Term Military Aid to Ukraine: <https://militarnyi.com/en/news/germany-allocates-funds-for-long-term-military-aid-to-ukraine/>

³⁵ Ukraine, the European Peace Facility and additional financing: <https://epthinktank.eu/2024/09/03/ukraine-the-european-peace-facility-and-additional-financing/>

Yet, without the contribution from the US, the overall commitments fall short of the Ukrainian needs. For 2025, European countries committed €23 billion (\$26 billion).³⁶ For 2026, the promised level of support does not exceed \$20 billion.³⁷ In other words, Ukraine faces a potential 47% reduction of assistance this year and a 53% drop in 2026, as compared to previous annual military aid of \$40-43 billion.³⁸

The remaining contracts under USAI might help offset the shortfall, though they are highly unlikely to make up the full \$20 billion. The ReArm Europe/Readiness 2030 project might also partially fill the gap, particularly thanks to access to €150 billion-worth of loans for defence equipment.³⁹ But in practice, it is far from being guaranteed that the European states will be willing to take considerable loans for Ukraine's sake on top of already announced assistance. Moreover since the loans are expected to cover both Ukrainian needs and the rearmament of 27 European armies plagued by decades of underinvestment, Ukraine's share may end up being significantly smaller than anticipated, raising concerns about whether the funds will be sufficient to sustain its war effort. This is a poor signal to send Moscow if a ceasefire is to be expected.

The strongest signal would be firm, Ukraine-specific financial commitments that ensure funding for Ukraine's defense needs over the coming years. Such commitments are possible even without additional excessive pressure on the European Union's or its member states' budgets through confiscating Russian frozen assets. About €210 billion of assets immobilized in Europe could finance Ukrainian defence needs for years.

This would significantly alter Moscow's calculations. If Ukraine can finance its defence needs through the following years, as European, US, and Ukrainian industrial output grows, Ukraine will receive a larger share of military equipment. Russia's defense production will likely struggle to further increase production due to labour shortages⁴⁰ and mounting financial constraints.⁴¹ As a result, the material balance of power could be expected to increasingly turn in Ukraine's favour.

Under such circumstances, as Russia's deteriorating material balance of power becomes increasingly evident, its expectation of achieving broader objectives by prolonging the conflict would prove far more problematic. This would undermine one of the most crucial assumptions, incentivizing Moscow to continue military actions, creating a more favourable strategic context for peace negotiations.

³⁶ EU commits EUR 23B in military aid to Ukraine for 2025 – Kallas: <https://www.ukrinform.net/rubric-ato/3980967-eu-commits-eur-23b-in-military-aid-to-ukraine-for-2025-kallas.html>

³⁷ Author's calculations based on official press-releases.

³⁸ Ukraine Support Tracker: <https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/>

³⁹ ReArm Europe Plan/Readiness 2030:

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/769566/EPRS_BRI\(2025\)769566_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/769566/EPRS_BRI(2025)769566_EN.pdf)

⁴⁰ Russia is facing a severe labor shortage: <https://meduza.io/en/feature/2024/12/11/a-perfect-storm>

⁴¹ Russia is on a slow path to bankruptcy, but how slow?: <https://warontheroocks.com/2024/09/russia-is-on-a-slow-path-to-bankruptcy-but-how-slow/>

Limit the impact of Russian blackmail

To turn the tables, Russia might turn to a tried and tested instrument for limiting external support for Ukraine – nuclear blackmail. Previously, facing ambiguous threats and redlines, the Biden administration appeared to follow a strategy of careful calibration – signaling its intent to provide new capabilities, gauging Russia's reaction, and taking long pauses between arms deliveries to assess escalation risks.⁴² This approach has led to notorious delays, resulting in missed opportunities and excessive strain on the Ukrainian military, ultimately leaving Ukraine in a worse strategic position than it could have been.⁴³ If Russia's calculation is to be changed, the current approach of managing escalation must be changed.

It is now clear that the threat of nuclear escalation was greatly exaggerated. The exaggeration of the threat is often a result of the presumed irrationality of the Kremlin.⁴⁴ This, in turn, leads to the belief that, even if using nuclear weapons would be counterproductive, it still cannot be ruled out. This assessment, however, usually stems from mirror-imaging – projecting Western values and strategic goals onto Russia. When Moscow's actions deviate from these expectations, Western analysts mistakenly conclude that the Kremlin is irrational rather than recognizing that it operates under a different strategic logic.

The issue is not that the Kremlin is irrational. In a purely instrumental sense, it operates rationally, though like any other state, its decision-making is influenced by biases and cognitive shortcuts.⁴⁵ Russian behavior often defies Western expectations because its core values are centered on status, territorial control, and regime survival, and only partially overlap with those of typical Western states. The Kremlin is fully capable of weighing the advantages and disadvantages of various scenarios and making calculated decisions based on these assessments, even with its paradigm of values.

States typically articulate the core values whose violation could justify a nuclear response through their nuclear doctrines. In the case of Russia, however, this is a misplaced approach. Russia's nuclear doctrine defines a broad range of scenarios as potential triggers for a nuclear response, from ballistic missile attacks on Russian territory to aggression that poses a critical threat to its sovereignty or territorial integrity.⁴⁶ The ambiguity of these

⁴² Escalation Management in Ukraine: Assessing the U.S. Response to Russia's Manipulation of Risk: <https://sais.jhu.edu/kissinger/programs-and-projects/kissinger-center-papers/escalation-management-ukraine-response-russias-manipulation-risk>

⁴³ Western fear of escalation will hand Putin an historic victory in Ukraine: <https://www.atlanticcouncil.org/blogs/ukrainealert/western-fear-of-escalation-will-hand-putin-an-historic-victory-in-ukraine/>

⁴⁴ Is Putin Irrational? What Nuclear Strategic Theory Says About Deterrence of Potentially Irrational Opponents: <https://www.rand.org/pubs/commentary/2022/03/is-putin-irrational-what-nuclear-strategic-theory-says.html>

⁴⁵ Ibid.

⁴⁶ Ob utverzhdenyy Osnov hosudarstvennoi polityky Rossyiskoi Federatsyy v oblasty yadernoho sderzhivaniya: <http://publication.pravo.gov.ru/document/0001202411190001?index=7>

formulations is intentional. In particular, recent refinements to Russia's nuclear doctrine are more of a psychological operation than a signal of strategic stability. In these circumstances, the Kremlin's real red lines should be deduced based on the past behaviour and characteristics of the state system.

Like any other political community, Russia prioritizes its survival as a state. It is reasonable to believe that the Kremlin might consider using nuclear weapons if it perceives an existential threat to Russia. Given its authoritarian nature, regime survival is likely just as critical. Whether a decisive loss in Ukraine would threaten the regime remains debatable. Yet it is mainly theoretical. A complete Russian military collapse and full territorial liberation are unlikely in the current phase of the war.

Russia appears ready to suffer territorial losses without nuclear escalation. The Russian military withdrew from Kherson – officially annexed under its constitution – without triggering a nuclear response. Nor did it resort to a nuclear weapon in the case of the occupation of the Kursk Oblast. While reports suggest that Russia considered a nuclear attack in Autumn 2022, when it suffered relatively significant territorial losses,⁴⁷ an intended informational operation cannot be discarded. Moreover, the apparent absence of a nuclear strike leads to the conclusion that Russian authorities did not consider the nuclear response warranted.

The provision of Western heavy weapons, insertion into Russian territory, long-range attacks using Western missiles – all of which the Kremlin previously labeled as red lines – have not triggered a nuclear response. This is not surprising since Russia has much to lose and little to gain from the use of a nuclear weapon.

Given the high dispersion of Ukrainian forces, tactical nuclear missiles are of limited utility for military purposes. Moscow might hope to leverage the psychological impact of a nuclear strike, targeting a major city, to force Ukraine into surrender. However, this would be a dangerous gamble at best. Rather than breaking Ukraine's will, such an attack could have the opposite effect, galvanizing Ukrainians to fight out of vengeance while simultaneously uniting the world against Russia.

Key global players – the US,⁴⁸ China,⁴⁹ and India⁵⁰ – have made it clear that the nuclear taboo remains a fundamental pillar of their foreign policy and that any violation, even if purely for demonstrative purposes, would be unacceptable.

⁴⁷ Biden's Armageddon Moment: When Nuclear Detonation Seemed Possible in Ukraine: <https://www.nytimes.com/2024/03/09/us/politics/biden-nuclear-russia-ukraine.html>

⁴⁸ The USA has promised to destroy all positions of the Russians in Ukraine if they use nuclear weapons: <https://www.theguardian.com/world/article/2024/may/25/poland-foreign-minister-radoslaw-sikorski-long-term-rearmament-europe>

⁴⁹ Antony Blinken: 'China has been trying to have it both ways: <https://www.ft.com/content/25798b9f-1ad9-4f7f-ab9e-d6f36bbe3edf>

⁵⁰ India's defence minister warns against nuclear weapons in call with Russian counterpart: <https://www.reuters.com/world/indias-defence-minister-warns-against-nuclear-weapons-call-with-russian-2022-10-26/>

Russia's economic dependence on China and India compels Moscow to consider their positions, as disregarding them risks total economic isolation and subsequent risks for political stability. Russia is also likely anxious about the risks of spiral escalation with Western nuclear powers. Surprisingly, Western analysts have at times overlooked the fact that Russia has just as much incentive to avoid mutual nuclear destruction, treating the Kremlin almost as if it were a suicidal state.

The ineffectiveness of a nuclear weapon for promoting its political agenda means that Moscow is highly unlikely to resort to nuclear escalation unless it considers it to be the only way to repel an existential threat to the state or ensure the survival of the regime. Since Ukraine is not in a position to achieve either of these, even with increased military support, there is no rational reason to further impede Ukraine's strategic position by withholding capabilities, creating artificial delays, or imposing additional restrictions.

This does not mean that Russia will abandon its nuclear blackmail. On the contrary, if Moscow perceives that it cannot achieve its objectives militarily, it may double down on psychological pressure. Counterintuitive as it is, excessive causation increased the risk of escalation. The more the West retreats in the face of Russian nuclear blackmail, the more it convinces Moscow that it might avoid consequences for a limited nuclear strike by threatening even greater escalation. There is a real, often neglected danger of undermining deterrence, making it not entirely unreasonable for Russia to resort to extreme measures in pursuit of a larger prize.

The relative success of nuclear blackmail is also noted by other actors. For some, this is another reason to develop their nuclear arsenal. For others, it is a demonstration of effectiveness and the lack of costs of nuclear blackmail which incentivize them to mimic the practice. As the number of nuclear states and instances of nuclear blackmail grow, so does the probability of a nuclear incident. It is thus in the best interest of global strategic stability to demonstrate the futility of nuclear coercion before the practice gains wider traction.

Specifically, in the case of Ukraine, if long-term security assistance is assured, Western and Ukrainian production rates are growing, and Russia cannot expect to undermine the supply of equipment through nuclear blackmail, its long-term military prospects would worsen. Under such circumstances, it could only bet on exhausting Ukraine and breaking its will to fight.

Improve Ukraine's resilience

Alter military strategy

The initial Ukrainian idea of restoring its territorial integrity and pushing the Russian military out of Ukraine in a series of offensive campaigns is unlikely to succeed. Nor is it likely that Ukraine would be able to significantly improve its negotiation position with new offensive operations.

While the limited success of Ukraine's previous offensive campaigns is often attributed to the delayed and constrained provision of external assistance, the underlying problem is more fundamental. The vulnerability of armored vehicles to UAVs and anti-tank guided missiles, the lack of air superiority, the disproportionate increase in the destructive power and accuracy of artillery, as well as the transparency of the battlefield due to the widespread use of sensors forces belligerents to operate in small, highly dispersed, and largely dismounted formations.⁵¹ This prevents the launching of rapid, deep, and decisive mechanized offensives championed in the post-World War II period. Instead, the battlespace in Ukraine is characterized by the dominance of defense over offense, which leads to the positional and attritional nature of military actions.⁵²

Under such circumstances, Ukraine succeeded in advancing several dozen kilometers when achieving an effect of surprise, but consistently stalled in grinding attritional campaigns once the enemy regained its footing. Equally, the Russian military failed to reach a decisive military victory, despite a favourable balance of power. Thanks to high tolerance for casualties, vast demographic reserves, and substantial stockpiles of equipment, it has managed to grind forward, but only occupying small villages at the cost of staggering losses.

The Russian example is illustrative. Even enjoying a favourable balance of power, overcoming the reality of contemporary warfare's positional nature is challenging. With limited Ukrainian resources, large-scale offensive operations have an even worse chance of achieving strategic success. On the contrary, in the current circumstances, such attempts would risk overstraining the Ukrainian military, allowing Russia to make larger gains.

Given the resource constraints, Ukraine should best aim to stabilize the frontline to diminish Russia's ability to make further progress. If Russia is stuck in a stalemate with no prospect of achieving further results, while its domestic problems are mounting, Ukraine would have a chance to stop the conflict without suffering restrictions on its military forces, foreign policy, and domestic decisions, as well as avoiding formal recognition of the Russian occupation.

⁵¹ Tactical Developments During the Third Year of the Russo-Ukrainian War: <https://warontherocks.com/2024/09/russia-is-on-a-slow-path-to-bankruptcy-but-how-slow/>

⁵² To defeat Putin in a long war, Ukraine must switch to active defense in 2024: <https://www.atlanticcouncil.org/blogs/ukrainealert/paving-the-way-for-putins-defeat-ukraine-must-prioritize-defense-in-2024/>

To stabilize the frontline, Ukraine needs a defensive posture that would allow it to benefit from the dominance of defense over offense. This does not preclude local counterattacks or raids to overstretch the Russian military. Nor does this entail an overly static tactic. Quite the contrary: to avoid exhausting its limited resources, Ukraine would be best to conduct elastic defense, permitting troops to retreat when the conditions are unfavourable. Rather than rigidly holding the line, stabilizing the frontline should be based on using a defensive posture to exhaust Russian forces and degrade their offensive potential.

Despite significant nominally large reserves, Russia is vulnerable to attrition due to political, economic, and technical constraints. Russian production of new artillery is limited to about 50 guns per year due to a shortage of the rotary forging machines needed to produce barrels.⁵³ To sustain its artillery arsenal, Moscow relies on refurbishing old Soviet artillery and cannibalizing barrels from other systems to maintain its artillery power. While these reserves are unlikely to be completely exhausted soon, their quality is rapidly declining.⁵⁴ Due to high losses, Russia has to deploy increasingly older and less sophisticated systems.⁵⁵ Reduced accuracy weakens Russian firepower, while the shorter range and poorer mobility of these older systems make them more vulnerable to Ukrainian counter-battery fire and drone attacks. With every loss of a modern artillery piece, Russia is forced to rely even more on aging, inferior systems, weakening its battlefield capabilities.

Likewise, more than 85% of the tanks and infantry fighting vehicles (IFV) that the Russians field are refurbished Soviet-era vehicles.⁵⁶ As Russia struggles to produce new tanks and IFVs in sufficient quantities, it risks suffering an acute deficit once its storage facilities are depleted. Satellite surveys of Russian storage bases suggest that at the current rate of losses, Russia could face a shortage of armored vehicles and tanks by the end of 2025 - first half of 2026.⁵⁷ While armor plays a more modest role in this war, the depletion of Russia's armored fleet will limit the firepower it can bring onto the battlefield. Furthermore, as armor is often used to transport infantry safely to the frontlines⁵⁸, Russian troops will become increasingly exposed to attacks from Ukrainian drones and artillery.

⁵³ Might Russia run out of big guns?: <https://www.economist.com/the-economist-explains/2024/03/20/might-russia-run-out-of-big-guns>

⁵⁴ Stan vorozhui artyleriia ta yii perspektivy: https://www.vishchun.com/post/stan_vorozhui_artyleriia_ta_yii_perspektivy

⁵⁵ Russia brings back World War II M-30 122mm howitzers to support ongoing artillery demands in Ukraine: <https://armyrecognition.com/focus-analysis-conflicts/army/conflicts-in-the-world/russia-ukraine-war-2022/russia-brings-back-world-war-ii-m30-122mm-howitzers-to-support-ongoing-artillery-demands-in-ukraine>

⁵⁶ A methodology for degrading the arms of Russian Federation: <https://static.rusi.org/methodology-degrading-arms-russia-rusi-op-june-2024.pdf>

⁵⁷ Russia's vast stocks of Soviet-era weaponry are running out: <https://www.economist.com/europe/2024/07/16/russias-vast-stocks-of-soviet-era-weapons-are-running-out>

⁵⁸ Tactical developments during the third year of the Russo-Ukrainian War: <https://static.rusi.org/tactical-developments-third-year-russo-ukrainian-war-february-2205.pdf>

This might become particularly problematic in the context of the Russian force generation model. The Kremlin hesitates to announce a new cycle of mobilization due to the risks to political stability. The previous partial mobilization in autumn 2022 led to the exile of up to 700,000 Russians,⁵⁹ widespread protests, and a series of arson attacks on draft offices.⁶⁰ To mitigate risks, Moscow turned to alternative measures, offering high sign-up bonuses, drafting convicts in exchange for pardons, and recruiting foreign nationals with financial incentives. This practice provided Russia with an average of 30,000 recruits per month throughout 2024.⁶¹

Even though the tempo of recruitment allowed Russia to enlarge its army when the intensity of operations was low,⁶² during the most intensive periods of military actions, it roughly corresponded to Russian casualties.⁶³ This signified that increased Ukrainian lethality can unbalance Russian force generation efforts, making them unsustainable for high-intensity offensive campaigns.

To exploit these vulnerabilities, Ukraine needs to increase its lethality. This can be done not only by boosting firepower, but also by organizational changes to encourage the multiplication of the best practices and improvement of the ability to synchronize the impact across multiple dimensions and levels of war.

Attritional warfare, however, is a double-edged sword. Russia will undoubtedly attempt to exploit Ukrainian weaknesses and exhaust its defence capabilities. To benefit from the diminishing offensive capabilities of Russia, Ukraine also needs to preserve its own potential. This entails measures to minimize casualties and improve the force generation process.

Reorganize the military structure

After the collapse of the Soviet Union, economic difficulties and the absence of an immediate military threat led Ukraine to reduce the size of its armed forces. This downsizing required corresponding structural adjustments. Following numerous experiments, Ukraine adopted a brigade-battalion structure.⁶⁴ In theory, the approach was supposed to increase the military's mobility and firepower. Yet in practice, the operational level of Ukrainian forces essentially disappeared, with corresponding consequences for firepower and the ability to synchronize tactical units.

⁵⁹ Rossiu posle 21 sentiabria pokynuly okolo 700 000 hrazhdan: <https://www.forbes.ru/society/478827-rossiu-posle-21-sentabra-pokinuli-okolo-700-000-grazdan>

⁶⁰ Boiling Under the Lid: <https://acleddata.com/2024/03/06/boiling-under-the-lid-protest-potential-ahead-of-russias-2024-presidential-election/>

⁶¹ Russians motivated to fight for money, 1,000-1,100 people join army every day: <https://newsukraine.rbc.ua/interview/russians-motivated-to-fight-for-money-1000-1705323575.html>

⁶² Ukraine's top general to Le Monde: The number of Russian troops is constantly increasing: https://www.lemonde.fr/en/international/article/2024/12/17/ukraine-s-top-general-to-le-monde-the-number-of-russian-troops-is-constantly-increasing_6736188_4.html

⁶³ Russia Sends Waves of Troops to the Front in a Brutal Style of Fighting: <https://www.nytimes.com/2024/06/27/us/politics/russia-casualties-ukraine-war.html>

⁶⁴ Brief history of land forces of Ukraine: <https://irbis-nbuv.gov.ua/ulib/item/ukr0000028067>

To mitigate the problem, after the Russian military invaded the east of Ukraine in 2014, the Ukrainian military created temporary operational-tactical groups.⁶⁵ After the full-scale invasion, the practice was expanded to improve the ability to coordinate a significantly enlarged army.

Since the groups are temporary formations, they do not have their own dedicated staff. Instead, officers are sent to the groups from other headquarters on a rotating basis. Due to the lack of prolonged experience in cooperation, each new group of officers lacks the understanding of weaknesses and strengths of their subordinate units, their needs and capabilities, commonly established practices and procedures, and shared vocabulary. Moreover, after each rotation, the understanding of the combat environment is lost, effectively preventing new staff from performing their responsibilities until they develop sufficient situational awareness. Not surprisingly, the level of trust between groups' commanders and their units tends to be low, and actions on the tactical and operational levels are desynchronized.⁶⁶

The issue is exacerbated by the crises on the front lines and the tendency to address them by redeploying individual battalions or companies to support the defense of vulnerable locations. Consequently, it is common for a brigade to command a diverse mix of battalions and companies pulled from other units, while its subordinate elements are scattered across different frontline areas.⁶⁷ In such circumstances, units' cohesion tends to be weak, and the chain of command is fractured.

To address these issues, the Ukrainian military has initiated a reform process to replace temporary groups with a permanent corps structure.⁶⁸ Although the decision to create a corps, bypassing the division level, is misplaced and would result in both lower Ukraine-NATO interoperability and an excessive number of subordinate units for the corps level, establishing a permanent staff at the operational level would significantly improve situational awareness and the ability to coordinate tactical units.

In order to restore cohesion and the chain of command, Ukraine would also need to reshuffle its deployed units. Given the ongoing intensity of military actions, this is not a trivial task. A rapid, massive reshuffle is unlikely to be feasible without significant setbacks at the frontline. However, a gradual transformation is plausible. Brigades with an undermined chain of command could be redeployed outside the main strike zones, particularly to areas where their defense relies on natural obstacles. The relatively lower intensity

⁶⁵ White Book 2015: https://www.mil.gov.ua/content/files/whitebook/WB_2015.pdf

⁶⁶ Based on unpublished field study of CBA Initiative Center

⁶⁷ Ukrainski bryhadny ne voiuju povnym skladom, bataliony vidpravliaju na rizni napriamky: <https://nv.ua/ukr/ukraine/events/batalyon-ukrajinskikh-brigad-vidpravlyayut-voyuvati-na-rizni-napryamki-ce-problema-novini-ukrajini-50468289.html>

⁶⁸ Prystupyly do realizatsii zakhodiv z perekhodu na korpusnu strukturu: <https://www.zsu.gov.ua/prystupyly-do-realizaciyi-zahodiv-z-perekhodu-na-korpusnu-strukturu-golovnokomanduvach-zs-ukrayiny-general-oleksandr-syrskyj/>

of military operations in these areas and favorable defensive positions would allow such brigades to maintain the line with fewer forces and progressively return the detached elements to their original formations.

Additionally, halting the creation of new units and redirecting the manpower flow to existing formations⁶⁹ would help alleviate the human resource deficit within these units. The replenished units would then be able to return attached elements to their original formations without suffering a significant decline in combat capabilities.

If successful, the reform would allow Ukraine to restore its ability to synchronize tactical and operational actions, bridging gaps between frontline units and operational command. The success of the reform will, however, depend not only on the ability to reshuffle the units and restore the chain of command, but also on finding sufficient numbers of operational-level officers to staff the corps level. Partly, the issue can be addressed by assigning officers with experience in temporary groups to the corps on a permanent basis. However, since the number of corps exceeds the number of temporary groups, and many officers who previously served in them hold primary assignments elsewhere, there is likely to be a shortage of adequately qualified personnel.

In order to address this, the Ukrainian military will have to promote the officers from a tactical level. But given the qualitative differences between the tactical and operational levels, the personnel promoted would need additional training to perform effectively. With the overstretched officer staff, ongoing military actions, and mixed experience of operational-level command, Ukraine is unlikely to have the capabilities to organize the training at the necessary scale. The Ukrainian partners could fill the gap by providing short-term training for the future corps leaders, thereby boosting its command and control capabilities and increasing the chances of the Ukrainian military's successful reorganization.

Scale up successful units

Ukrainian organizational culture and leadership practices are plagued by what is colloquially called sovok or Soviet legacy, based on the presumed source of the problem. Sovok is typically described as a rigid, top-down, and bureaucratic-centered culture.⁷⁰ Leaders socialized in this culture tend to display dogmatic thinking, an overly authoritarian management style, and a tendency to micromanage. They prioritize organizational politics, administrative processes, and symbolic representation of their power over actual combat performance and efficiency.⁷¹

⁶⁹ V Ukrayini prypynly formuvannia novykh bryhad: <https://militarnyi.com/uk/news/v-ukrayini-prypynly-formuvannya-novyh-brygad-ofis-prezydenta/>

⁷⁰ Chomu viiskovi zviliajutsia za armii: https://savelife.in.ua/wp-content/plugins/pdfjs-viewer-shortcode/pdfjs/web/viewer.php?file=https://savelife.in.ua/wp-content/uploads/2022/07/ZSU_Web_public_UA.pdf

⁷¹ «Paperova armiya», sovok i rezhym ekonomii. Za ostannii rik zminy v ZSU ne na krashche: <https://texty.org.ua/articles/100733/paperova-armiya-sovok-i-rezhym-ekonomiyi-za-ostannij-rik-zminy-v-zsu-ne-na-krashe/>

Despite the name, the problem is far from being unique to the Soviet military. Sovok exhibits the qualities that have haunted the military structures of various countries for centuries, predominantly due to a tendency for closed, conservative, and hierarchical organizations to promote leaders with authoritarian and rule-oriented traits. The military systems, haunted by such organizational culture, tend to suffer from low combat effectiveness, poor decision-making and adaptability as well as low innovation potential.⁷²

Similar consequences of Sovok are reported in Ukraine. Sovok is typically blamed for slow introduction of new technological solutions, contemporary practices of management and information exchange, disproportionate losses of equipment and personnel, distortion of information coming from the tactical level to the operational and strategic ones, as well as a resulting low level of morale.

Transforming the organization culture of the Ukrainian military would undoubtedly require systemic reforms, first of all, in the military education and training system. Yet scaling up units that display more positive culture could offer a short-term remedy.

Although widespread within the Ukrainian military, Sovok is by no means universal. Individual officers who rejected such an approach remain in the system, usually driven by idealism.⁷³ After the Russian invasion of 2014, the inflow of people from volunteer battalions, initially formed outside of the military system and thus unattached by its organizational culture, also formed units with a new culture.⁷⁴ An additional boost to new practices was given by the Western training missions deployed in Ukraine after 2014.⁷⁵ Later, a full-scale invasion brought a significant number of people without former military experience into the ranks. Over time, many of them have gone up in rank, taking officer posts.

These people created the aforementioned islands of new organizational culture and leadership practices. The brigades and battalions that they represent are highly heterogeneous. They are nonetheless similar in discarding a rigid, bureaucracy-centered approach, choosing instead to foster flexibility, adaptability, and innovation, prioritizing tactical and operational efficiency over strict compliance with formal procedures. By redirecting a larger share of recruits and equipment to these units and helping them to expand, Ukraine can socialize newcomers into a more positive culture thereby gradually transforming the Ukrainian military.

Many of these units are already well-known and expand naturally by attracting

⁷² Ibid.

⁷³ Chomu viiskovi zviliiniautsia za armii: https://savelife.in.ua/wp-content/plugins/pdfjs-viewer-shortcode/pdfjs/web/viewer.php?file=https://savelife.in.ua/wp-content/uploads/2022/07/ZSU_Web_public_UA.pdf

⁷⁴ Mylko V.I. Dobrovolchi bataliony Ukrayny 2014–2019: http://www.history.org.ua/?termin=dobrovolchi_bataliony_ukrajiny_2014_2019

⁷⁵ What Impact Did Canada's Military Have on Ukrainian Resistance?: <https://thewalrus.ca/canada-training-ukraine/>

a disproportionate number of volunteers. To identify others, a data-driven approach might be useful. No single parameter would suffice to identify the most promising candidates. Higher-than-average losses might result from a particularly challenging operational environment or a lack of equipment. The same is true of territorial losses or the level of desertion if taken in isolation. Yet, when interpreted in the context of the intensity of military activity in the unit's area of responsibility and the local balance of power, the combination of casualties, equipment losses, inflicted damage, territorial gains or losses, desertion rates, personnel transfers, and volunteer inflows can provide a meaningful and informative picture. The units that excel across a broad spectrum of parameters, even in challenging conditions, are the best candidates for enlargement. Simultaneously, the metrics can identify inadequate military organizations that can be potentially disbanded and scattered across more effective units, thereby gradually transforming the Ukrainian military.

Reform basic combat training

Mass mobilization brings a considerable number of former civilians into the ranks of the armed forces after only a short training process. Their effectiveness largely depends on the quality of the basic training they receive. Yet the current state of the training system exhibits significant deficiencies, including a program structure that appears poorly adapted to contemporary requirements, a critical deficit of qualified instructional personnel, and subpar material conditions at training facilities.

Recent attempts to reform the system focused on refining the training program.⁷⁶ This proved to be a misplaced focus, as the formal demands of the programs fail to improve the training process, which cannot be executed on the ground due to material constraints, poorly designed processes, and a lack of personnel and qualifications.

More specifically, inadequate remuneration, poor living conditions, excessive workload, and low prestige of the position discourage potential candidates from taking the instructor roles. It is not atypical for instructors to seek a transfer to well-respected and better-paid combat positions, dwindling the pool of trainers. Due to the overstretched capabilities and exhausted personnel, the effectiveness of the training tends to be low.

Another critical issue concerns the instructors' qualifications. While many instructors may have extensive military experience, this does not necessarily translate into practical teaching skills. As many instructors lack formal pedagogical training, they may struggle to structure lessons, engage learners, accommodate different learning styles, and assess recruits' progress.

⁷⁶ BZVP: yak zminylas pidhotovka ukrainskykh novobrantsiv za dosvidom viiny?: <https://militarnyi.com/uk/articles/bzvp-yak-zminylas-pidgotovka-ukrayinskyh-novobrantsiv-za-dosvidom-vijny/>

These issues overlap with many infrastructural, material, and procedural obstacles. For example, the risk of Russian combined air attacks forced the training centers out across vast geographical areas. Since training centers typically lack sufficient transport, hours of training are wasted on transferring between the training and living facilities on foot. This, in turn, makes instructors compensate for the time losses by compressing the training program. Simultaneously, due to the lack of dedicated administrative staff, routine tasks such as cooking, guarding, cleaning, and facility maintenance are assigned to recruits on a rotational basis, diverting their time and energy from core training activities. Not least important are the extremely poor living conditions. While they are sometimes excused as mental preparation for field conditions, low living standards contribute to worsening recruits' health conditions. It is typical for recruits to report prolonged periods of illness and exacerbation of chronic diseases, which prevent them from effectively learning the new material and practicing the necessary skills. The intended training time as a part of a formal program thus rarely corresponds to the reality on the ground.

Naturally, under such circumstances, the morale and motivation of recruits also tend to be low. Not only does it have a detrimental effect on the learning process, but it also contributes to desertion during the basic combat training and spreads a negative reputation of the Ukrainian military among friends and relations of trainees, undermining mobilization.⁷⁷

The knot of the issues related to basic military training could at least partially be untangled by increased investments in the training process. More specifically, by increasing the remuneration and service conditions for trainers, more servicemen can be attracted to take a trainer role. This, in turn, would help to alleviate the workload, freeing time for recovery, training planning, and pedagogical courses. The efforts could be reinforced by lowering the bureaucratic workload through digitalization and additional administrative personnel. Improving living conditions and outsourcing maintenance and upkeep tasks would increase the percentage of productive time used during the training process. Only once these issues have been addressed will the training process be able to fully benefit from better training programs.

Ukrainian partners could support this process by assisting in developing the infrastructure in the training centers and providing pedagogical guidance for Ukrainian instructors. But the foreign training missions, *focused on basic combat training*, have limited ability to compensate for the deficiencies of the Ukrainian system in its current form. Although basic foreign training usually offers better living conditions, security from Russian attacks, and more engaging pedagogical practices, their training programs tend to suffer from poor alignment with reality on the Ukrainian battlefield. Despite ongoing exchange of experience with the Ukrainian side, bureaucratic procedures,

⁷⁷ These and previous conclusions are based on unpublished field research of Come Back Alive Initiative Center on basic military training

an overly regulated training environment, and military conservatism prevent the introduction of relevant lessons into the training program, particularly in the context of rapid cycles of innovations and adaptation on the battlefield in Ukraine.

There is no perfect solution to this problem. On the one hand, deploying foreign instructors in Ukraine would allow them to operate in a far less restrictive environment, delivering realistic training and improving the information exchange process with the units on the frontline. This, however, would come with security risks. Moreover, underdeveloped infrastructure in the Ukrainian training centers would hinder the quality of training unless investments are made to improve material conditions.

On the other hand, Ukraine could benefit from using foreign training facilities if the training process could be deregulated, debureaucratized and allow for a larger role for Ukrainian instructors. This decision, however, would come with political risks in case of incidents, which become more likely as the restrictions are relaxed. The use of foreign facilities also imposes an additional logistical burden and slows down the speed of deployment. Nonetheless, despite the costs, both approaches have the potential to offer a visible improvement in the foreign training process as compared to the current situation.⁷⁸

Mitigate manpower shortage

The lack of manpower remains a paramount obstacle for the Ukrainian war efforts. This is not a result of depleting manpower. Rough calculations indicate that there are around 3.7 million people eligible for military service, excluding those already enlisted, disabled, abroad, or reserved as critical workers. Even without lowering the conscription age, Ukraine has sufficient human resources.⁷⁹

The primary reasons for the deficit of people at the frontline are draft evasion and desertion. These challenges are often cited as signs that Ukrainian society is exhausted and reluctant to continue the fight. To what extent this is true is difficult to measure, as polls on the matter can be speculative, with results varying significantly depending on how questions are framed. A common theme, however, is that support for a negotiated settlement and acceptance of compromise has increased compared to the early months of the war. Yet, not just any compromise would be acceptable. In their current form, Russian demands are widely deemed unacceptable, and most Ukrainians express willingness to further endure the war to avoid accepting Russia's maximalist demands.⁸⁰

⁷⁸ These and previous conclusions are based on unpublished field research of Come Back Alive Initiative Center on foreign training missions

⁷⁹ Ukraine needs 500,000 military recruits. Can it raise them?: <https://www.ft.com/content/d7e95021-df99-4e99-8105-5a8c3eb8d4ef>

⁸⁰ Skilky ukrainksi hotovy nesty tiahar viiny: <https://www.kiis.com.ua/?lang=ukr&cat=reports&id=1464&page=6>

Instead of demographic or political problems, the struggle of Ukrainian force generation efforts is better explained by institutional and material reasons. Potential recruits are concerned about insufficient equipment, inadequate training, incompetent commanders, and the uncertain length of military service, alongside the natural fears of death, injury, or captivity.⁸¹ While the risks that military actions entail cannot be eliminated entirely, nor is there a perfect solution to a free rider problem, some of the obstacles can be addressed.

Ukrainian partners could alleviate anxiety about insufficient equipment with uninterrupted military support. Reforms of the training process, improvements in the command and control system, and changes in leadership practices and organizational culture, built upon the scaling-up of successful units, could also help tackle key issues that discourage people from joining the ranks.

Military reforms are also likely to be effective in limiting desertion. Given the topic's sensitive nature, it is challenging to research the exact reasons that encourage soldiers to leave. However, limited available evidence points in the same direction: an undetermined length of military service, poor training, and incompetent leadership.⁸²

While resolving the issue of undetermined service length is problematic in the short term, improvements in training and leadership could address a significant portion of the problem. Well-led and well-trained units tend to experience noticeably lower levels of desertion. This suggests that by scaling up the most successful units, reforming the training and filtering out inadequate military organisms, the level of desertion can be reduced, further softening the pressure of manpower deficit.

To be clear, a complete solution to the manpower problem is unlikely. Yet, reforms that address key concerns could alleviate it, making it more likely to offset the remaining deficit through firepower, fortifications, and extensive use of barriers.

Boost firepower

Increased firepower can also alleviate part of Ukraine's manpower problem. Even now, some sections of the frontlines consistently repel advancing Russian forces through firepower, with little or no engagement of infantry.⁸³ While firepower is unlikely to completely replace the need for infantry, the correlation is clear: the stronger the firepower, the fewer soldiers are necessary to hold the line. Additionally, increased firepower can reduce casualties, which, in turn, limits the need for replacement.

⁸¹ Mobilizatsiya: shcho vidliakui i shcho motyvui: <https://texty.org.ua/articles/111848/mobilizaciya-sho-vidlyakuye-i-sho-motyvuye-opytuvannya-info-sapiens-na-zamovlennya-textyorgua/>

⁸² Kho y chomu pishov u SZCh i za yakykh umov povernetsia: <https://texty.org.ua/articles/114257/hto-i-chomu-pishov-u-szch-i-za-yakyh-umov-povernetsya-textyorgua-provely-doslidzhennya/>

⁸³ Tactical developments during the third year of the Russo-Ukrainian War: <https://static.rusi.org/tactical-developments-third-year-russo-ukrainian-war-february-2205.pdf>

The production of artillery shells has been a key method for increasing firepower during this conflict. Russia has so far led in the pace of artillery production, but strained supply chains and a lack of workforce will complicate any further increases.⁸⁴ Meanwhile, the growing production rates in the US and Europe, as well as Ukraine's production, will shrink the disparity and improve the situation for Ukrainian troops.⁸⁵ Additional purchases from third-party countries, such as those facilitated by the Czech munitions initiative, can enhance Ukraine's position.⁸⁶

Besides the artillery, Ukraine can plausibly gain an edge in UAVs. Last year, Ukraine produced 2.2 million FPV-drones, scaling up from just a few hundred thousand in 2023.⁸⁷ Unlike artillery shells, drone production requires minimal infrastructure, allowing for a rapid increase in production rates. According to estimates, Ukraine can produce up to 4 million FPV drones.⁸⁸ Given that drones are responsible for 60-70% of casualties and equipment losses, producing UAVs is one of the most effective ways of boosting firepower.⁸⁹

Long-range weapons are another crucial capability for strengthening Ukraine's military. By targeting key Russian infrastructure, such as defense production facilities, command and control centers, airfields, and fuel and ammunition depots, Ukraine can neutralize much of Russia's offensive potential before direct engagement occurs, thereby increasing its chances of repelling Russian attacks even with limited manpower.

Russia is likely to try to relocate critical infrastructure deeper into its rear to stay beyond the range of these weapons. However, not all assets can be moved. While aircraft can be relocated and ammunition depots dispersed, the defense industry has limited mobility. Additionally, the decision to withdraw infrastructure comes with significant costs. Increased distance would extend response times, complicate logistics, and reduce aircraft payload capacity due to longer flight distances, decreasing the intensity of airstrikes. This would have a detrimental effect on Russia's ability to conduct offensive operations.

Ukraine already produces 6000 long-range drones⁹⁰ and expects to scale up

⁸⁴ Russia's Year of Truth: The Missing Military Hardware: <https://cepa.org/article/russias-year-of-truth-the-missing-military-hardware/>

⁸⁵ The ratio of artillery shots between Russia and Ukraine has fallen to a record low: <https://militarnyi.com/en/news/ministry-of-defense-the-ratio-of-artillery-shots-between-russia-and-ukraine-has-fallen-to-a-record-low/>

⁸⁶ Czech initiative to deliver up to 1.8 million shells to Ukraine in 2025: <https://kyivindependent.com/czech-initiative-to-deliver-up-to-1-8-million-shells-to-ukraine-pavel-says/>

⁸⁷ Preskonferentsia Prezydenta Ukrayiny Volodymyra Zelenskoho: <https://www.youtube.com/watch?v=IOINkGiQQE4>

⁸⁸ Zavdyaki oboronnym industriam Ukraina maie staty odnym iz kliuchovykh hlobalnykh donoriv bezpeky: <https://www.president.gov.ua/news/zavdyaki-oboronnim-industriyam-ukrayina-maye-stati-odnim-iz-93617>

⁸⁹ Tactical developments during the third year of the Russo-Ukrainian War: <https://static.rusi.org/tactical-developments-third-year-russo-ukrainian-war-february-2205.pdf>

⁹⁰ In 2024, the Defense Forces received 6 thousand long-range drones: https://militarnyi.com/en/news/in-2024-the-defense-forces-received-6-thousand-long-range-drones/#google_vignette

the production rate to 30,000 drones, along with 3000 cruise missiles.⁹¹ While the figures are ambitious, Ukraine's previous successes in scaling up production make the target not entirely unattainable, if sufficient financial resources are available.

The lack of investments remains the primary obstacle to boosting production. In monetary terms, the Ukrainian industry is capable of producing \$35 billion-worth of defence equipment, with only \$10.5 billion presently available from Ukrainian funds and foreign investments.⁹² While the security assistance keeps floating to the congested Western defence industry with the delivery time measured in years due to excessive demand, there is \$25 billion worth of defence capabilities immediately available to boost the Ukrainian military in the shortest terms.

The model of direct funding for the Ukrainian defence industry – known as the Danish model by the name of its pioneer – has already been established and tested, attracting €587 million last year.⁹³ This is the approach that Ukrainian partners can build upon to leverage the Ukrainian defence industry and rapidly increase its firepower.

Fortify positions and make extensive use of barriers

Similarly, as in the case of firepower, the use of fortifications and barriers could partially compensate for the low tempo of force generation. Properly designed fortifications would allow Ukraine to protect an area with fewer soldiers, while also limiting the number of casualties. Simultaneously, extensive use of barriers could slow down Russian troops and vehicles, exposing them to Ukrainian fire for a more prolonged period, increasing the chances of disrupting an assault before Russian soldiers reach trenches.

Although belated, Ukraine has built an extensive fortification network. Their quality varies, however, with some adding little to Ukraine's defence potential or even undermining it. This is a result of several institutional and organizational deficiencies.

Firstly, Ukrainian military engineers were the first to face cuts during the post-Soviet military downsizing, leading to a significant loss of technical expertise and equipment. Lacking military engineers, Ukraine employed civilian contractors. While civilian firms may have construction experience, they often lack the specialized military tactical knowledge required to design effective fortifications. The lack of battlefield experience and tactical understanding can lead to fortifications that are structurally sound but strategically ineffective or

⁹¹ Ukraine plans to produce 30 thousand long-range drones in 2025: <https://militarnyi.com/en/news/ukraine-plans-to-produce-30-thousand-long-range-drones-in-2025/>

⁹² Production Capacity of Ukrainian Defense Industry Increased by 75%: <https://militarnyi.com/en/news/production-capacity-of-ukrainian-defense-industry-increased-by-75/>

⁹³ EUR 597 million in investment: How the 'Danish model' is strengthening Ukraine's defense industry: <https://mod.gov.ua/en/news/eur-597-million-in-investment-how-the-danish-model-is-strengthening-ukraine-s-defense-industry>

poorly placed, failing to maximize the defensive potential of the terrain.⁹⁴

Relevant technical requirements could mitigate the problem, but the existing standards are outdated. Given the significantly transformed nature of military actions, the fortification model under the current requirements tends to suffer from fatal deficiencies. One such problem, for example, is the lack of overhead protection, which is crucial for shielding troops from observation and attacks by UAVs.⁹⁵ Also, despite emerging techniques, such as net tunnels⁹⁶, the fortification system still rarely includes elements to protect key logistic routes from drone attacks, leading to a risk of isolation of the position.

The problem is exacerbated by the lack of a single responsible authority to oversee the process. Multiple distinct institutions, including military administrations, the Ministry of Defence, the State Special Transport Service, the General Staff, and military units, are responsible for the fortifications. Without an overarching entity, the coordination between the institutions proved to be inadequate, occasionally leading to poorly synchronized lines of defense and dangerous gaps that made it possible for the Russian troops to bypass the strong point. Moreover, the lack of a single responsible organization complicates the oversight process, increasing the risks of fraud and misuse of funds.⁹⁷

Purely material and military constraints also play their role. Ukraine lacks engineering equipment to quickly fortify the positions, and even when the heavy vehicles are deployed, they are forced to operate under the risk of Russian shelling and UAV strikes. Due to these risks, excavation equipment is rarely deployed closer than 7-10 km from the contact line, making the soldiers prepare the forward positions with manual equipment.⁹⁸

The long-term robust solution would require the regeneration of the engineering capabilities in the Ukrainian military. The first step toward this goal is to preserve qualified personnel and cease the practice of employing engineers as infantry. However, a clearly defined single authority that possesses military expertise and prepares positions in advance, guided by up-to-date technical documentation, would considerably mitigate the problem. Ukrainian foreign partners are capable of reinforcing these efforts through the provision of equipment as well as engineering training for Ukrainian recruits.

The Ukrainian defence could be further enhanced by the extensive use of physical barriers and mines. In particular, Ukraine should consider following

⁹⁴ No safety in retreat: Ukrainian soldiers say rear defensive lines barely exist amid Russian advance: <https://apnews.com/article/russia-ukraine-war-fortifications-8a72981dfdb755de6f8011b13f4d062e>

⁹⁵ Tactical Developments During the Third Year of the Russo–Ukrainian War: <https://static.rusi.org/tactical-developments-third-year-russo-ukrainian-war-february-2205.pdf>

⁹⁶ Net tunnels to protect logistics routes: <https://newsletter.counteroffensive.pro/p/net-tunnels-to-protect-logistics-routes-from-drones>

⁹⁷ Ukraine's patchy fortifications help Russia advance: <https://www.ft.com/content/18dd370b-e2cd-48c5-a182-4c21c5ae8870>

⁹⁸ Tactical Developments During the Third Year of the Russo–Ukrainian War: <https://static.rusi.org/tactical-developments-third-year-russo-ukrainian-war-february-2205.pdf>

Latvia's example by withdrawing from the Ottawa Treaty and deploying anti-personnel landmines.⁹⁹ As military actions are increasingly waged by dismounted infantry groups, which attempt to move rapidly from one shelter to another under the risk of UAV strikes, anti-personnel mines might have a disproportionate effect. By slowing down infantry groups on the highly transparent battlespace, saturated with strike capabilities, anti-personnel landmines could significantly increase the vulnerability of Russian assault groups.

To be effective, the landmines will need to be used in significant numbers, ideally to create a continuous line to cover the front. This would require from hundreds of thousands to several million landmines, depending on the density of mining. The number is not unattainable. There are 50 million mines in the stockpiles around the world. Although more than half is concentrated in Russia, there are still millions of mines, which could be potentially acquired by Ukraine.¹⁰⁰

Ukraine could also leverage its own defence production, particularly building on a practice of 3D printing, already used for anti-tank mines.¹⁰¹

The decision would undoubtedly come at a long-term humanitarian cost, but so does further Russian advance. As the Russian military pushes forward, new settlements are exposed to artillery and drone strikes, leading to civilian losses and increased displacement. While by no means a morally straightforward decision, the use of anti-personnel landmines might be a lesser evil under the current circumstances.

Improve air defence

Fortifications with overhead protection could decrease the casualties from drone strikes. These actions can be reinforced by both electronic warfare (EW) and automatic turrets. As Russia utilizes the growing number of fiber optic drones, which are resistant to EW, the physical destruction of drones becomes increasingly important. Automatic turrets reportedly demonstrate a high level of UAV interception, offering the ability to boost the protection of units both on positions and on the move.¹⁰² The growing effectiveness of drone interceptors¹⁰³ could provide a vital air defense capability, especially as they advance to intercept smaller, more maneuverable drones.

⁹⁹ The Latvian Parliament supported the country's withdrawal from the Convention on the Prohibition of Anti-Personnel Mines: <https://babel.ua/en/news/117201-the-latvian-parliament-supported-the-country-s-withdrawal-from-the-convention-on-the-prohibition-of-anti-personnel-mines>

¹⁰⁰ Landmine monitor: <https://backend.icblcmc.org/assets/reports/Landmine-Monitors/LMM2024/Downloads/Landmine-Monitor-2024-Final-Web.pdf>

¹⁰¹ How Ukrainian TM-2025 Mine Combines Innovation, 3D Printing to Counter Russian Armour: https://en.defence-ua.com/weapon_and_tech/how_ukrainian_tm_2025_mine_combines_innovation_3d_printing_to_counter_russian_armour-14363.html

¹⁰² Tactical Developments During the Third Year of the Russo-Ukrainian War: <https://www.rusi.org/explore-our-research/publications/special-resources/tactical-developments-during-third-year-russo-ukrainian-war>

¹⁰³ Drone-On-Drone War: <https://united24media.com/war-in-ukraine/drone-on-drone-war-how-ukraines-fpv-interceptors-are-beating-russia-in-the-sky-7770>

In addition to the threat from UAVs, Ukrainian frontline forces are also vulnerable to attacks by Russian gliding bombs. Although Ukraine has learned to jam the bombs' navigation system, decreasing their accuracy, Russia still manages to hit the targets, compensating for the loss of accuracy with quantity.¹⁰⁴ This is made possible by the high production rate of gliding bombs, which is expected to increase further, reaching up to 70,000 units by the end of 2025.¹⁰⁵ If Russia manages to adapt to the jamming, while continuing to increase the tempo of production, gliding bombs might become an even more significant threat.

The most straightforward way to address the threat is to destroy the bomb carriers, typically Su-30, Su-34, and Su-27. This can rarely be done with the help of air-defence systems, as Russian aircraft drop the bombs beyond the range of most Ukrainian systems, except for Patriot and SAMP-T.¹⁰⁶ However, Ukraine does not have a sufficient number of these systems to protect the front and rear. Moreover, saturation of the battlespace with reconnaissance drones, operating in pairs with short-range ballistic missile systems, endangers any air defence system deployed close enough to the frontline.¹⁰⁷

While F-16 armed with AMRAAM missiles could potentially threaten Russian bomb-carriers,¹⁰⁸ Ukraine has few F-16 yet, and their use so close to the frontline would expose them to the Russian air defence system. This makes them useful but with insufficient capability, which can be used only occasionally in the areas where Russian defence has been suppressed.

The alternative to the air defence system is a long-range weapon, capable of destroying Russian bomb-carriers on the ground at airports. Ukraine has previously successfully employed long-range capabilities to destroy Russian aircraft.¹⁰⁹ But although Russian production of combat aircraft is limited,¹¹⁰ it still possesses several hundred aircraft.¹¹¹ To exhaust the potential of Russian air forces, Ukraine would need to significantly boost its long-range capabilities. This would depend not only on the availability of weapons but also on timely intelligence, the ability to overcome Russian defensive measures, careful

¹⁰⁴ How Can Ukraine Defend Against Russia's Deadly Glide Bombs?: <https://united24media.com/war-in-ukraine/how-can-ukraine-defend-against-russias-deadly-glide-bombs-6214>

¹⁰⁵ Tactical Developments During the Third Year of the Russo-Ukrainian War: <https://www.rusi.org/explore-our-research/publications/special-resources/tactical-developments-during-third-year-russo-ukrainian-war>

¹⁰⁶ How Far Do Glide Bombs Fly: https://en.defence-ua.com/weapon_and_tech/how_far_do.glide_bombs_fly_and_can_russia_create_kabs_to_strike_at_a_distance_of_150_km-12035.html

¹⁰⁷ A Russian Drone Spotted A Ukrainian Patriot Air-Defense Crew Convoying Near The Front Line: <https://www.forbes.com/sites/davidaxe/2024/03/09/a-russian-drone-spotted-a-ukrainian-patriot-air-defense-crew-convoying-near-the-front-line-soon-a-russian-hypersonic-missile-streaked-down>

¹⁰⁸ How Ukraine Can Defeat Russian Glide Bombs: <https://www.rand.org/pubs/commentary/2024/06/how-ukraine-can-defeat-russian-glide-bombs.html>

¹⁰⁹ Ukrainian strike on Crimea airbase destroys three Russian warplanes, satellite firm says: <https://www.reuters.com/world/europe/ukrainian-strike-crimea-airbase-destroys-three-russian-warplanes-satellite-firm-2024-05-17/>

¹¹⁰ How Many Combat Aircraft Will Russia Manufacture in 2024: https://en.defence-ua.com/industries/how_many_combat_aircraft_will_russia_manufacture_in_2024_and_will_it_offset_its_losses-11278.html

¹¹¹ HUR povidomylo pro kilkist Su-34, Su-35 ta A-50U v rosiian: <https://armyinform.com.ua/2024/04/03/gur-povidomylo-kilkist-su-34-su-35-ta-a-50u-u-rosiyan/>

planning of operations, concentrated application of capabilities, and sufficient range to deny the Russian air fleet a safe haven in depth within its territory. Even in this case, although Ukraine might immediately benefit from the redeployment of Russian aircraft deeper into its territory, the process is likely to be slow.

A more robust approach might be offered by developing an ability to intercept gliding bombs, potentially based on C-RAM systems or drone interceptors. However, among the options immediately available, dispersion, entrenchment, jamming, and interception of Russian reconnaissance drones coupled with concealment to complicate the detection of targets, remain the primary avenues for mitigating the problem.

Even if Ukraine's position is reinforced at the frontline, Russia can expect to break the will of Ukrainian society by destroying the energy infrastructure and harassing the population with combined air attacks. The current dynamics of air defense indicate that Ukraine still lacks a sufficient number of systems to fully protect its airspace.¹¹² A growing concern is the increasing pace of Russian missile and drone production.¹¹³ If the output of interceptors does not keep up with this surge, Ukraine and its partners will need to explore alternative solutions.

The most promising option is the development of air-defense drones capable of intercepting Russian Shahed UAVs. Reports suggest that Ukraine has recently deployed preliminary versions of these drones, successfully intercepting more than 20 Russian Shaheds.¹¹⁴ While unlikely to assist Ukraine with intercepting ballistic missiles, the technology can significantly alleviate the pressure from the most numerous drone threats and potentially extend to intercepting cruise missiles in the future.

Whether Ukraine will be able to address the threat of ballistic missiles will, to a large extent, depend on the level of US support. Although the European countries can offset many capabilities provided by Washington, the US role in air defence and intelligence sharing is hard to replace.¹¹⁵ Ukraine primarily relies on the Patriot air defence system to intercept ballistic missiles. The only immediately available alternative is the French-Italian SAMP-T, which is significantly behind in terms of both the number of systems and the tempo of interceptor production.¹¹⁶ Intelligence is equally important. Ukraine relies on

¹¹² Ukraine Got Only Half of Patriot Systems It Asked For, Supply of Missiles is Even Worse: https://en.defence-ua.com/news/ukraine_got_only_half_of_patriot_systems_it_asked_for_supply_of_missiles_is_even_worse-14114.html

¹¹³ Ukrainian Intelligence Directorate shares data on Russia's stock of long-range missiles: <https://newsukraine.rbc.ua/news/ukrainian-intelligence-directorate-shares-1735347294.html>

¹¹⁴ Nad Kyivshchynou uspishno vyprobuvaly perekhopyuvach "Shakhediv": https://militarnyi.com/uk/news/nad-kyyivshhynoyu-uspishno-vyprobuvaly-perekhopyuvach-shahediv/#google_vignette

¹¹⁵ Ukraine Support: Europe could replace most of the US support: <https://www.ifw-kiel.de/publications/news/ukraine-support-europe-could-replace-most-of-the-us-support/>

¹¹⁶ SAMP/T missile shortage raises concerns about Ukraine's air defense effectiveness: <https://global.espresso.tv/russia-ukraine-war-samp-t-missile-shortage-raises-concerns-about-air-defense-effectiveness>

the US for early warning about ballistic attacks. Without the information from the US, the time for interception shrinks, making it more likely to miss the target.¹¹⁷

Even with US support, addressing ballistic missiles would remain a challenge. Ukraine lacks a sufficient number of systems to protect even its largest cities.¹¹⁸ Finding additional systems for Ukraine might be a challenge, particularly given that countries with relevant air defence systems hesitate to donate or lease them in a deteriorating security environment. Stockpiling a number of interceptors is also a challenge. In 2025, Russia is set to produce more than 750 ballistic missiles.¹¹⁹ North Korea has supplied 128 additional ballistic missiles.¹²⁰ Amid Russia's increasing production, Ukraine faces an interceptor shortage.¹²¹

As the production of missiles is unlikely to be increased rapidly enough, Ukraine needs to explore alternative measures. One of them is secondary sanctions. Production of Russian ballistic missiles depends on foreign components.¹²² Doubling down on secondary sanctions and closing loopholes, while not likely to entirely cut Russia off from critical components, will make their acquisition more difficult and increase the cost paid to intermediaries. This, in turn, could lower the tempo of Russian missile production.

Additionally, by targeting Russian launchers, production facilities, and storage sites for the ballistic missile, Ukraine can reduce the intensity of attacks. The effect will depend on the number of long-range weapons available, access to timely intelligence, and disciplined use of the capabilities, avoiding both wasting capabilities on secondary targets and excessive dispersion of attacks. Partly, this can be done by Ukrainian long-range weapons with Western intelligence support. Western cruise and ballistic missiles can reinforce these efforts if provided in numbers and without restriction on their application.

If these efforts turn out to be insufficient, Ukraine would need to boost its capabilities to absorb damage. The highly dispersed Ukrainian defence industry and the military already make a considerable number of targets to be economically unviable to attack. In case of larger objects, further expansion of underground facilities and dispersion of production would reinforce resilience.

¹¹⁷ Ukraine can't detect Russian ballistic launches without US intel data: <https://english.nv.ua/russian-war/ukraine-can-t-detect-russian-ballistic-launches-without-us-intel-data-zelenskyy-50501221.html>

¹¹⁸ Ukraine Got Only Half of Patriot Systems It Asked For, Supply of Missiles is Even Worse: https://en.defence-ua.com/news/ukraine_got_only_half_of_patriot_systems_it_asked_for_supply_of_missiles_is_even_worse-14114.html

¹¹⁹ Tactical Developments During the Third Year of the Russo-Ukrainian War: <https://www.rusi.org/explore-our-research/publications/special-resources/tactical-developments-during-third-year-russo-ukrainian-war>

¹²⁰ From ammunition to ballistic missiles: how North Korea arms Russia in the Ukraine war: <https://www.theguardian.com/world/2025/apr/25/how-north-korea-arms-russia-in-ukraine-war>

¹²¹ Amid missile shortage, Ukraine's air defenses are struggling under Russian ballistic attacks: <https://kyivindependent.com/kyivs-air-defense-increasingly-under-pressure-amid-missile-shortage/>

¹²² Rakety y bezpilotnyky RF mistiat komponenty z ponad 20 krain - Instytut sudekspertyzy: <https://www.ukrinform.ua/rubric-ato/3889287-raketi-i-bezpilotniki-rf-mistiat-komponenti-z-ponad-20-krain-institut-sudekspertiz.html>

The power grid is more vulnerable, but the package of measures can still support it. For example, thanks to the Energy Support Fund, Ukraine has restored 5 out of 10 GW of thermal and hydro generation, which it lost since the beginning of the invasion.¹²³ While the ability to restore capabilities is likely to diminish with each strike, impressive energy regeneration, which Ukraine demonstrated, implies that the extent of damage can be limited if sufficient funds and components are available. An additional, more robust generation, even if it is unlikely to be significant in the short term, could be secured by building decentralized generation.¹²⁴

Residential buildings and civilian infrastructure remain the most unprotected. The wide availability of objects and their geographical dispersion make it impossible to cover all the targets. Although additional systems to protect the largest urban centers can limit the number of casualties, many smaller cities are likely to remain exposed. Due to the high speed of ballistic missiles, the time for taking shelter is also limited, further increasing the risks of civilian losses.

Given the poor historical record of terror bombing in breaking a population's will to fight, it is unlikely that Russia can force Ukrainian capitulation through air attacks alone. However, the humanitarian costs of such attacks could be high. The impact could be mitigated by refining early warning systems to help the population distinguish incoming ballistic missiles from slower targets, communicating a dedicated set of civil defence measures for high-speed threats, and expanding the shelter network to ensure broad availability within easy reach.

¹²³ Ukraine loses 10 GW of power capacity during war, of which 5 GW restored – Energy Minister: <https://en.interfax.com.ua/news/economic/1050830.html>

¹²⁴ "Ochikuvaty yakohos polehshennia poky nemae zvidky": <https://texty.org.ua/fragments/112931/ochikuvaty-yakohos-polehshenna-poky-nemaye-zvidky-zerkal-pro-sytuaciyu-v-enerhetyci/>

Surge the economic costs of the Russian aggression

Despite the surprising durability that the Russian economy has demonstrated, the system it has designed to fight a full-scale war under severe external restrictions is not sustainable.

The significant increase in government spending for defense production and mobilization, unsupported by corresponding growth in the civilian economy, has unbalanced the system. While considerable salaries in defense companies and generous mobilization payments increased demand, the supply of goods and services grew marginally. The desynchronization of supply and demand drives inflation up.

The lack of workforce exacerbates the problem. Due to the mobilization and related massive exile, Russia lost about 1.7 million workers.¹²⁵ The Russian unemployment rate is historically low, 2.3%, and the economy lacks 1.4 million people.¹²⁶ Previously, the shortage was partially alleviated by immigration, but the rising level of xenophobia after the terrorist attack in Krokus City limited the inflow of migrant workers. Not only does the deficit of the workforce cap further growth of the Russian defence industry, but it also induces the private sector to raise wages in a tight competition for employees, further strengthening inflation.

Officially, the inflation rate reached 9.5% last year.¹²⁷ However, independent indexes recorded a 26% increase in prices for fast-moving consumer goods from the beginning of the year until August 2024, suggesting significant underreporting of official statistics.¹²⁸ To curb inflation, the Russian central bank increased the key interest rate to a record-high 21%.¹²⁹ Despite these efforts, according to the official calculations, the annual inflation rate exceeded 10% in March 2025, prompting Central Bank Governor Elvira Nabiullina to consider increasing the key rate even further.¹³⁰

So far, the effect of inflation has been balanced out by growing wages. As of December 2024, the average monthly salary increased by 21.9% year-on-year.¹³¹ However, the private sector's ability to increase wages is not unlimited. Moreover, the costs of increased wages will eventually be passed on to consumers, driving prices higher.

¹²⁵ The war in Ukraine has removed 1.7 million members of Russia's workforce: <https://novayagazeta.eu/articles/2024/07/19/the-war-in-ukraine-has-removed-1-7-million-members-of-russias-workforce-en-news>

¹²⁶ Eksperty otseňují uroven poter VVP Rossii yz-za defytsya kadrov: <https://www.rbc.ru/economics/04/12/2023/656c83409a79471d72124f2d>

¹²⁷ Russian inflation is too high. Does that matter?: <https://www.economist.com/finance-and-economics/2025/02/13/russian-inflation-is-too-high-does-that-matter>

¹²⁸ Deflator prybavil v avhuste 0,1%: <https://romir.ru/index/deflyator-pribavil-v-avguste-01>

¹²⁹ Bank of Russia increases the key rate by 200 bp to 21.00% p.a.: https://www.cbr.ru/eng/press/pr/?file=25102024_133000Key_eng.htm

¹³⁰ Russian Central Bank Holds Key Rate Steady Amid Soaring Inflation: <https://www.themoscowtimes.com/2025/03/21/russian-central-bank-holds-key-rate-steady-amid-soaring-inflation-a88437>

¹³¹ Russian Wage Growth Hits 16-Year High in December 2024: <https://www.themoscowtimes.com/2025/03/03/russian-wage-growth-hits-16-year-high-in-december-2024-a88227>

The Russian budget deficit is another source of concern for Moscow. The budget revenue is expected to decline as Russia's economic growth slows down due to the Central Bank's efforts to curtail inflation. Even in better years, the Kremlin had to consistently draw from the National Sovereign Wealth Fund (NSWF) – its financial reserves accumulated during the decade of high oil prices – to cover the deficit and finance the war. As of the end of 2024, the liquid part of the NSWF fell by 61%, down to approximately \$37.5 billion.¹³² At the current rate, and unless higher oil prices or alleviation of sanctions lower the pressure, Russia risks depleting the NSWF by the end of 2025. It will have to look for other ways to finance the war in 2026.

Under normal circumstances, a budget deficit can be balanced by foreign borrowing. Sanctions, however, prevent Russia from accessing foreign financial institutions. This leaves Russia with few options other than increasing taxes, cutting social expenses, or taking domestic loans at prohibitively high costs due to the interest rates.

To be clear, the Russian economy is struggling, but it is not on the brink of collapse. Domestic borrowing can cover the deficit for some time, even after the liquid part of the NSWF is depleted. The high cost of borrowing will be a problem for the future. Since taxes have already been increased and social spending cut for 2025, similar measures would be politically problematic but not entirely implausible.¹³³ Russia's most significant asset remains low protest potential, which allows it to continue redirecting resources to the war effort.

The dilemma for Russia, however, could be further exacerbated. A ban on Russian metal and gas exports, actions against Russia's shadow fleet, and a decrease in the oil price cap could further undermine oil revenues. Doubling down on secondary sanctions and closing loopholes will increase the expenses. This would significantly reduce the Russian federal budget's income, accelerating the depletion of the NSWF and widening the deficit.¹³⁴

If the pressure from sanctions keeps growing, shrinking welfare expenses, rising taxes, and increasing inflation risk will make the decline of standards of living too rapid and too noticeable. Rising poverty could accelerate mobilization in the short term, pushing more people into the ranks. However, in the medium term, rising prices and declining social support will increasingly become problematic. Rapid economic decline has long been recognized as a key driver of domestic instability. And if political issues are a protesting trigger for a narrow group within the Russian population, the economic concerns have far broader mobilization potential.

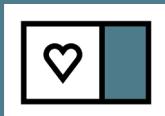
¹³² Large Budget Deficit In January Could Spell Trouble: <https://sanctions.kse.ua/en/large-budget-deficit-in-january-could-spell-trouble-underlying-vulnerabilities-may-surface/>

¹³³ Russia's budget for 2025: war above all: <https://www.osw.waw.pl/en/publikacje/osw-commentary/2024-11-22/russias-budget-2025-war-above-all>

¹³⁴ Strengthening Sanctions Against the Russian Federation: https://sanctions.kse.ua/wp-content/uploads/2024/05/actionplan_3.0_5-14-2024_final2.pdf

The Kremlin has traditionally been paranoid about domestic turmoil and desperately determined to avoid situations that might fuel the mood for protesting. If domestic dissatisfaction increases visibly, Moscow is highly likely to exaggerate the risks of instability. This would create incentives to seek immediate sanction relief through a negotiated solution to stabilize the situation.

After the peace



If Russia cannot expect to outlast the West or exhaust Ukraine, while the looming economic crisis sparks concerns about political stability, the conflict would be ripe for negotiations. This creates conditions under which an indefinite ceasefire can be realistically agreed in exchange for partial sanction relief. While this is not the best outcome, it is among the few feasible options given the strategic context.

In the long term, Moscow is unlikely to abandon its ambitions. Repression and the threat of mobilization have driven a significant portion of even the relatively liberal population out of the country.¹³⁵ The widespread propaganda, indoctrination, and militarization of children, often infused with an anti-Western narrative, would continue to bolster support for the current geopolitical course, even after Putin's death.¹³⁶ The war has also significantly rebalanced the Russian economy toward military production. Even if the intensity of military actions in Ukraine decreases, Russia will likely continue its high levels of production for fear of triggering an economic recession.¹³⁷ This could create a situation similar to the Soviet Union, where a large military-industrial complex became one of the main drivers of economic growth, with significant portions of military production accumulating in warehouses. The combination of a powerful military, a strong industrial base, and substantial reserves of military equipment may create incentives to prioritize military means of foreign policy.

Since Russia would remain the long-term threat, it is in the best interests of European security to offer Moscow nothing more than partial sanction relief. Not only would sanctions serve as a punishment for the continuous occupation of Ukrainian territories, signaling to other actors that annexation will not be normalized, they would hinder Russian military reconstitution, winning time for Europe to rearm and build a robust system of deterrence to prevent a new aggression.

The crucial question is what role Ukraine will play in this system. If Ukraine is left outside of the European security system, it risks becoming a target of new aggression. It is improbable that Ukraine, with its war-weary economy and shrunken demographic potential, will be able to support the necessary military capabilities to deter Russia without external support. Left in a security vacuum, it might also contemplate acquiring a nuclear weapon in a desperate attempt to protect itself. The stability of the European continent and preserving a non-proliferation regime are conditioned by the future of Ukrainian security.

The most cost-effective and reliable security arrangement remains NATO membership. Yet there is an apparent lack of political will to offer Ukraine

¹³⁵ Why are people leaving Russia, who are they, and where are they going?: <https://www.bbc.com/news/world-europe-65790759>

¹³⁶ Russia's new ideological battlefield: The militarization of young minds: <https://theconversation.com/russias-new-ideological-battlefield-the-militarization-of-young-minds-238715>

¹³⁷ Addicted to War: Undermining Russia's Economy: https://cepa.org/comprehensive-reports/addicted-to-war-undermining-russias-economy/#footnote_19_36717

membership.¹³⁸ Similarly, a series of bilateral agreements with similar security commitments would require a US buy-in. European security commitments would lack credibility without the US until European countries managed to rearm. Restricting security commitments to European countries would also risk creating an opportunity for Russia to draw Europe into the conflict without US backing by attacking Ukraine. Since Washington does not show any intention of making new security commitments,¹³⁹ financial and material support to turn Ukraine into a "porcupine" and deter Russia remains suboptimal, but the most feasible outcome.

A low-cost approach that makes Ukraine too expensive to attack is unlikely to succeed, given extreme tolerance for both economic and human losses,¹⁴⁰ which Russia has already demonstrated. A more reliable strategy would require a far costlier deterrence by denial. Given the need to sustain a significant portion of its current military personnel, train reserves, recover lost military equipment, expand air defence, and build a stockpile of ammunition, the annual cost of maintaining Ukraine's armed forces without NATO-like commitments would likely be comparable to the present level of support.

The economic reconstruction of Ukraine could reduce the necessary financial commitments in the long term. It is unlikely that Russia will be forced to pay for the destruction unless frozen assets are seized. However, if the frozen assets are used to support Ukraine militarily, the issue of financing its reconstruction remains unresolved. Part of the solution may be attracting private capital and extending multi-year loans. If Ukraine is to be integrated into the European Union, access to EU funds could become another significant source of financing for economic development and reconstruction. Over the long term, Ukrainian mineral resources might provide an additional source of revenue. However, the prospects of the international partnership and the economic feasibility of extraction in Ukraine remain unclear.¹⁴¹

Despite the challenges, the country's educated workforce, burgeoning defence sector, and agricultural potential could offer strong pillars for future economic development. These advantages, combined with strategic investments, could pave the way for a vibrant, self-sustaining economy integrated into broader European and global markets, eventually helping Ukraine to cover its defence and economic needs.

¹³⁸ Zelenskyy: U.S. not ready to discuss Ukraine's NATO membership: <https://english.nv.ua/nation/u-s-not-ready-to-discuss-ukraine-s-nato-membership-citing-risk-of-escalation-50490121.html>

¹³⁹ Trump says no significant security guarantees in Ukraine minerals deal: <https://www.theguardian.com/world/2025/feb/26/trump-no-significant-security-guarantees-ukraine-minerals-deal>

¹⁴⁰ Russian Troops Know How Little They Mean to Putin: <https://www.rand.org/pubs/commentary/2023/02/russian-troops-know-how-little-they-mean-to-putin.html>

¹⁴¹ Why Trump's Ukraine resources deal won't show results for a decade: <https://www.ft.com/content/cccc103e-d07d-45f7-aa47-c0e34043a024>