

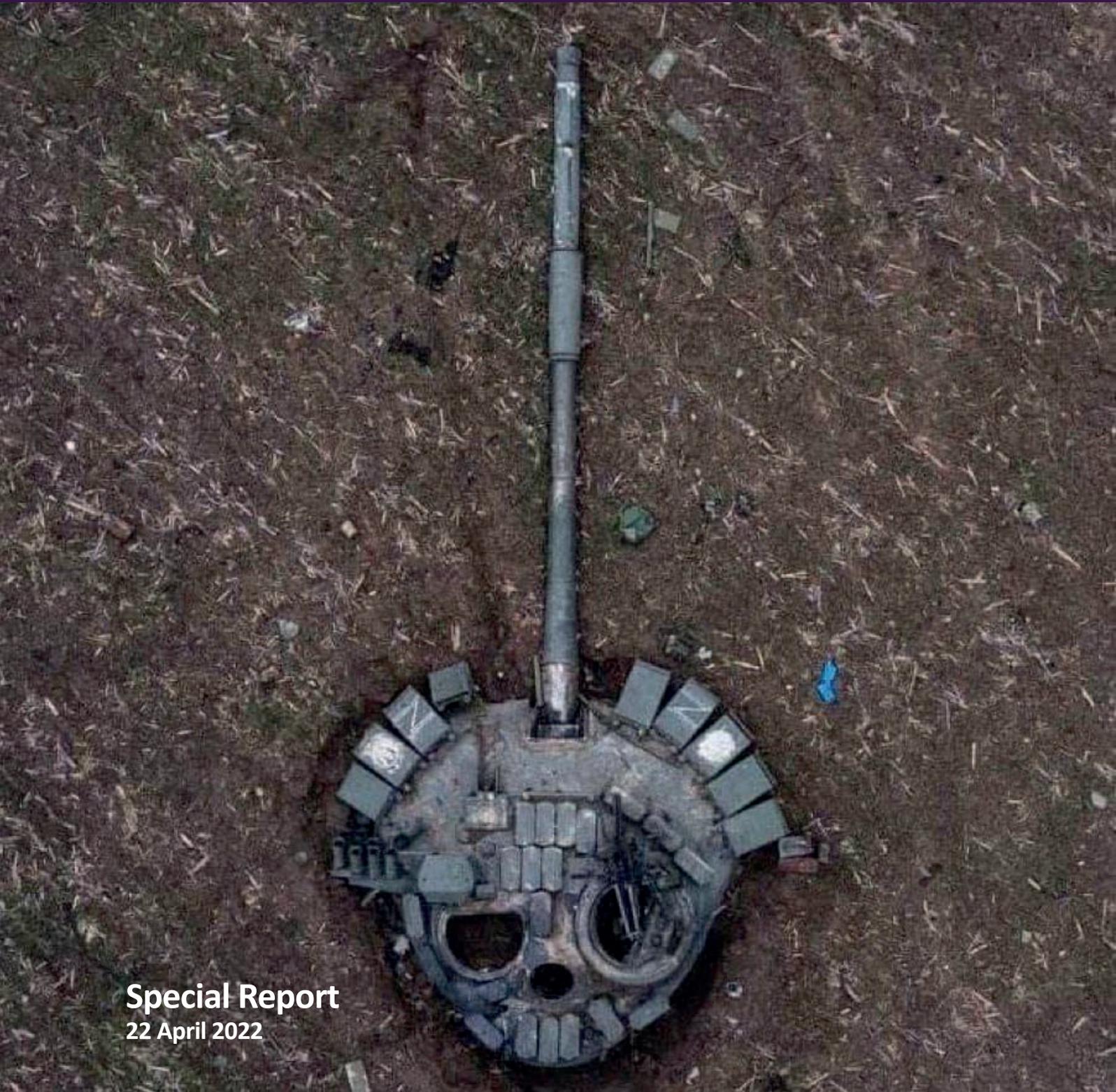


Royal United Services Institute
for Defence and Security Studies

Operation Z

The Death Throes of an Imperial Delusion

Jack Watling and Nick Reynolds



Special Report
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Operation Z: The Death Throes of an Imperial Delusion

WHEN RUSSIAN FORCES began to roll towards the Ukrainian border on the evening of Defender of the Fatherland Day, 23 February, Moscow was anticipating the capture of Kyiv within three days. Many outside observers – including the authors of this report – feared the destruction of the conventional Ukrainian military, even if they expected the fighting to last longer than Moscow had hoped.¹ Moscow’s plan was for repressive measures to have stabilised control of Ukraine by Victory Day on 9 May. Instead, the Russian military was repulsed, suffering heavy losses, and is now embarking upon a limited offensive to try to secure Donetsk and Luhansk.

The war in Ukraine has generated a considerable volume of highly detailed analysis relating to the military progress of the campaign,² the struggle for information, the cascading economic effects of high energy prices and supply chain disruption,³ and the geopolitical fallout as countries are increasingly called upon to pick a side.⁴ However, despite an emphasis in Western security concepts on the need for a whole-of-government approach,⁵ much of the analysis on the war in Ukraine has focused on narrow silos. This Special Report seeks to examine how the interconnected challenges confronting Moscow are reshaping Russian policy, and the risks Moscow’s potential courses of action pose as the war enters a new phase. The foremost conclusion is that Russia is now preparing, diplomatically, militarily and economically, for a protracted conflict.

This report is based on a wide range of sources. On the military front, the report draws upon sustained though periodic engagements with Ukrainian combatants in the conflict and independent reporters observing the fighting on the ground, continual analysis of open source information from the war, and intermittent interviews with senior Ukrainian officials and officers during fieldwork in March and April. The diplomatic and economic analysis draws upon

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1. Jack Watling and Nick Reynolds, ‘Ukraine Balances Readiness for a Short and Long War’, *RUSI Commentary*, 10 February 2022.
 2. Ukraine Project, ‘Russian Offensive Campaign Assessment’, Institute for the Study of War, 20 April 2022, <<https://www.understandingwar.org/project/ukraine-project>>, accessed 18 April 2022.
 3. UN, ‘Global Impact of War in Ukraine on Food, Energy and Finance Systems’, Brief No. 1, 13 April 2022, <<https://news.un.org/pages/wp-content/uploads/2022/04/UN-GCRG-Brief-1.pdf>>, accessed 18 April 2022.
 4. Meia Nouwens, ‘China’s Difficult Balancing Act in Russia–Ukraine Crisis’, IISS Analysis, 4 March 2022, <<https://www.iiss.org/blogs/analysis/2022/03/chinas-difficult-balancing-act-in-russia-ukraine-crisis>>, accessed 18 April 2022.
 5. William McKeran, ‘Fusion Doctrine: One Year On’, *RUSI Commentary*, 8 March 2019.



interviews with Ukrainian and Western intelligence officials, energy experts including former employees in Russia's strategic industries, and diplomats and national security representatives from several NATO and non-NATO member states that have maintained links with Russia. The report also draws upon inspections by the authors of Russian military equipment recovered from the battlefield during fieldwork in April, and an extensive set of documents from inside the Russian government. Owing to the sensitivity of the methods by which these documents were obtained their sourcing is largely withheld, though the authors took steps to establish their veracity.

Debacle: Russia's Failure to Seize Kyiv

In the early hours of 24 February, Ukrainian air-defence radar began to experience severe jamming across all frequency bands.⁶ Radar further inside Ukraine meanwhile began to be harassed by E95M Target UAVs simulating Russian aircraft.⁷ When the air defences lit up to engage, they came under attack. 'We thought we were going to be denied the entire electromagnetic spectrum around Kyiv', noted a Ukrainian electronic warfare (EW) specialist.⁸ The initial wave of cruise and ballistic missile strikes and electronic attacks caused enough disruption for an airborne raid to penetrate the Ukrainian defences north of the capital and land at Hostomel airfield, where Russian paratroopers hoped to establish an airhead to rapidly move forces into Kyiv. Follow-on

6. Author interview with A – a senior Ukrainian air-defence specialist – during fieldwork, April 2022.

7. Author interview with B – a Ukrainian technical assessment unit commander – during fieldwork, April 2022.

8. Author interview with C – a Ukrainian electronic warfare specialist – during fieldwork, April 2022.

forces meanwhile began to move south from Belarus along two main supply routes flanked by dense forest and marshes.

The VDV – Russia’s airborne forces – spearheaded the invasion. In December, specialist units of the VDV had wargamed out their role in the repression of Ukrainian civil society alongside the 9th Directorate of the Fifth Service of Russia’s Federal Security Service (FSB).⁹ The VDV assault units received the plan three days before the invasion and started excitedly talking in anticipation of their daring operation. VDV commanders started discussing their primary objective at Hostomel in clear. When they landed, therefore, they were met with Ukrainian artillery and a coordinated counterattack, quickly being driven from the airport. Meanwhile, to the north, Ukrainian units fought a delaying action with considerable success. The Russian motor rifle and Rosgvardia troops had received their orders less than 24 hours before the invasion. As a consequence, they did not fight a methodical campaign of breakthrough and exploitation by successive echelons as their doctrine dictated, nor were they supported by sufficient artillery as is considered essential. Instead, they were pushed forwards along two main resupply routes (MSRs) towards distant objectives without reconnaissance or screening to their flanks.¹⁰ The Rosgvardia, intended to provide rear-area security,¹¹ sometimes ended up advancing ahead of combat units.¹² The speed of some armoured units allowed them to drive into Kyiv’s suburbs only 48 hours into the war, but, as they were miles ahead of the main body of Russian ground forces, all this achieved was their isolation and destruction.¹³ With little opportunity to prepare, psychologically or practically, many Russian units broke when they met serious resistance.

As the situation in Hostomel deteriorated and the drive south stalled, Russian commanders pushed more reserves forward and began to bring up artillery, forcing the Ukrainian defenders to cede ground. But, as the Russians advanced, they faced a new challenge. Constrained by marsh and woodland, they were largely confined to the roads. While the sheer weight of numbers, artillery and 30-mm cannon fire they could bring to bear allowed the Russians to keep advancing, the Ukrainians continued to inflict attrition using anti-tank ambushes to break up Russian elements that tried to shake out. As the Russians moved through towns, local residents began to report on their movements,¹⁴ while Ukrainian special forces and UAVs marked targets for artillery. Although the Russians had heavier artillery, they lacked a good picture of where the dispersed Ukrainian positions were. The congestion on the roads, meanwhile, meant that Russian guns were often out of range of Ukrainian batteries, even while the Ukrainians were in range of the forward Russian positions. As a senior adviser to General Valerii Zaluzhnyi,

9. Jack Watling and Nick Reynolds, ‘The Plot to Destroy Ukraine’, RUSI Special Report, 15 February 2022.

10. Can Kasapoğlu, ‘A Winning Strategy in Ukraine’, Hudson Institute, 7 March 2022, <<https://www.hudson.org/research/17637-a-winning-strategy-in-ukraine>>, accessed 10 April 2022.

11. *Ibid.*

12. *Financial Times*, ‘How Russia’s Mistakes and Ukrainian Resistance Altered Putin’s War’, 18 March 2022.

13. *Reuters*, ‘Ukraine Military Says It Repels Russian Troops’ Attack on Kyiv Base’, 26 February 2022; Anjali Singhvi et al., ‘How Kyiv Has Withstood Russia’s Attacks’, *New York Times*, 2 April 2022.

14. Shaun Walker, ‘“Barbarians”: Russian Troops Leave Grisly Mark on Town of Trostianets’, *The Guardian*, 5 April 2022.

commander of the Armed Forces of Ukraine, noted, ‘anti-tank missiles slowed the Russians down, but what killed them was our artillery. That was what broke their units’.¹⁵

The Russians found themselves facing another challenge: resupply. Without access to rail transport that usually moves Russian heavy equipment, and the few roads available clogged with traffic, it became increasingly difficult to move supplies forward. Attacks throughout the depth of the advance¹⁶ also made the Russians unwilling to push sensitive EW and air-defence systems into Ukraine in case they were captured. So long as these systems were across the Ukrainian border, they could not jam the EMS on bearings to suppress the Ukrainians without also severing access to Russian forward elements. This was highly problematic at a time when Russian commanders were trying to unscramble the confusion that was engulfing their forward units. This had two consequences: the electronic suppression of Ukrainian radar and communications lifted after the first week, and senior Russian officers began to be drawn forwards, where like everything else in the Russian Army they became targets for snipers and artillery strikes.¹⁷ The Russians continued to advance, but at an increasingly heavy price,¹⁸ so that by the time they had secured Hostomel and were in place to launch an attack on Kyiv, it was clear that they lacked the combat power to successfully seize the city. Instead, the Russians moved to encircle the capital, but in doing so came into range of more and more Ukrainian artillery units and exposed more of their depth to raiding.

That the Russian military had embarked upon a bad plan which it had executed poorly should not overshadow the intensity of the fighting for the Ukrainians. The Ukrainian military had concluded that its centre of gravity was the capital and had prioritised its defence for artillery systems, air defences, anti-tank weapons and reserves.¹⁹ Even in this it had been forced to reinforce the west bank of the Dnipro River at the expense of the east. Troops in Donbas and Mariupol were ordered to buy time but found themselves short of key munitions. In the south, the Ukrainians knew they were vulnerable. As a senior Ukrainian planner noted before the invasion, ‘we just don’t have anything there to stop them. They’ll take a lot of ground’.²⁰ Mariupol’s defenders far exceeded the expectations of the Ukrainian General Staff in their resistance, refusing to surrender or evacuate, and fighting desperately to get supplies of ammunition and food into the

15. Author interview with D – a senior adviser to the commander of the armed forces of Ukraine – during fieldwork, April 2022.

16. Yaroslav Trofimov, ‘Ukraine’s Special Forces Hold Off Russian Offensive on Kyiv’s Front Lines’, *Wall Street Journal*, 4 March 2022.

17. *The Economist*, ‘Why Are So Many Russian Generals Dying in Ukraine?’, 31 March 2022; Maryan Kushnir, ‘“Truth Is On Our Side”: Ukrainian Artillery Unit Targets Russian Forces’, *Radio Free Europe/Radio Liberty*, 7 March 2022.

18. Mark Urban, ‘The Heavy Losses of an Elite Russian Regiment in Ukraine’, *BBC News*, 2 April 2022.

19. Author interview with E – a senior Ukrainian military commander – in Kyiv, February 2022.

20. Author interview with F – a senior plans officer in the Ukrainian Army – in Kyiv, February 2022.



A Russian soldier walks amid the rubble in Mariupol's eastern side, 15 April 2022. Courtesy of SOPA Images / Alamy

city and preserve water.²¹ Eventually the Russians isolated the defence and have since conducted a systematic shelling that has devastated vast swathes of the urban environment.

Across northeastern Ukraine the fighting was intense. Ukrainian stay-behind units fought with determination but were eventually cleared out of occupied towns. Shelling inflicted heavy casualties on Ukrainian units while the volume of 30-mm cannon fire proved devastating in the close fight.²² As a Ukrainian General Officer noted, 'the Russian equipment works as effectively as we feared, but it was incompetently employed'.²³ Several of Ukraine's most experienced special forces personnel were killed or wounded in the fighting. While these units galvanised the defence of urban strong points, or infiltrated northwards to attack Russian logistics convoys, at times the Ukrainians had to rely on the sheer mass of mobilised volunteers to stem the Russian advance. Eventually the Kremlin realised that pushing more forces south would not lead to progress. So long as they were moving along the same MSR they would suffer heavily from artillery. Nor did the units in place have the combat power to break into the Ukrainian capital. The decision was therefore taken to withdraw and to refocus efforts on Donbas.²⁴ Russian units retreating from Kyiv on the Belarus axis were put under a withering and sustained barrage as Ukrainian artillery followed their retreat northwards. Ukraine emerged from the assault on Kyiv

21. David L Stern and Paulina Villegas, 'Surrounded by Russians, Commander Describes Life Inside Mariupol Plant', *Washington Post*, 20 April 2022.

22. Author discussions with a number of Ukrainian and international volunteers engaged in combat in several parts of Ukraine.

23. Author interview with G – a Ukrainian General Officer – during fieldwork, April 2022.

24. Mark Trevelyan and Alexander Winning, 'Russia States More Limited War Goal to "Liberate" Donbass', *Reuters*, 25 March 2022.

with its government still in possession of the capital, but with a battered and weary army facing a slowly deteriorating position in the south.

The announcement of the reorientation of Russian operations to Donbas left a number of Western analysts bemused by the gap between Russia's aspirations and its capabilities.²⁵ Some analysts²⁶ – including one of the authors of this report²⁷ – assumed that the initial intent to announce a success on 9 May would force this offensive to be launched early, and there was a general consensus among Western observers that the Russian military lacked the combat power in the region to execute the operation. In the meantime, however, it was evident that thinking in the Kremlin had evolved. The appointment of a single military commander for operations in Ukraine in early April – General Alexander Dvornikov²⁸ – signalled the assertion of primacy for the Ministry of Defence in planning, wresting the direction of the war from Russia's FSB. The Russian military appears to have concluded that it needed time, and that the seizure of the south would in any case require more troops in the summer, which it began to muster.²⁹ 9 May therefore appears to have moved from a deadline to an inflection point to galvanise a wider mobilisation.

Despite the need to build up sufficient forces for Russia's revised objective in Donbas, delay also posed risks. As Western aid stepped up and began to flow into Ukraine, the longer the offensive was withheld the harder the fight would be for the Russians.³⁰ Compounding this threat was that limited Ukrainian thrusts risked seeing Russian gains around Kharkiv deteriorate unless they expended increasingly limited frontline supplies of artillery ammunition to stave off attacks.³¹ Russia has sought to pin down Ukrainian air defences around the country by continuing to conduct ballistic and cruise missile strikes on cities,³² but – unwilling to see its position progressively deteriorate – Russia has now had to start the operation.³³

However, the operation in Donbas cannot be decisive. Russia may seize Donbas, but Ukraine cannot accept a ceasefire on these terms, as this would enable a consolidation of Russian

25. Phillips O'Brien, 'The Russian Army is Running Out of Options', *The Spectator*, 9 April 2022.

26. Lawrence Freedman, 'Putin is in a Hurry to End the War in Ukraine but His Demoralised Army is Scrambling for Reserves', *Sunday Times*, 9 April 2022.

27. Jack Watling, 'Why the Battle for Donbas Will Be Very Different from the Assault on Kyiv', *The Guardian*, 9 April 2022.

28. *Reuters*, 'UK Says Russia Attempting to Centralise Command by Appointing Army General', 13 April 2022.

29. Felix Light, 'Moscow to Call Up Discharged Soldiers as Losses Mount', *The Times*, 10 April 2022.

30. *Reuters*, 'Biden to Announce Another Large Military Aid Package for Ukraine, Sources Say', 19 April 2022.

31. Joe Barnes, 'Ukraine Launches Counterattacks to Cut Off Russian Supply Lines in the East', *The Telegraph*, 18 April 2022.

32. *Reuters*, 'Russia Pledges More Strikes on Kyiv After Missile Attack', 15 April 2022; Hannah Allam, Annabelle Timsit and David L Stern, 'Lviv Sees First Wartime Deaths Amid Strikes, Ukrainian Officials Say', *Washington Post*, 20 April 2022.

33. *DW*, 'West Pledges Weapons for Ukraine as Russia Hits Donbas – As It Happened', 19 April 2022.

gains that would offer Russia the opportunity to annex Ukraine piece by piece.³⁴ For Ukraine, meanwhile, its objective is to liberate its lost territories, an operation that can only be mounted if the Russian offensive is blunted. The question for the Donbas campaign therefore is not where the exact frontline ends up by the end of May, but instead how this sets the conditions for subsequent rounds of operations over the summer. For the Ukrainians, there is the question of reconstitution and staving off exhaustion among their combat units. For the Russians, there is the challenge of ensuring there are sufficient units in reserve. Both countries are therefore now preparing for a more protracted fight. In Russia, this preparation has been visible in a steady shift in rhetoric, which has been paving the way for the continuation of the struggle.

Mobilising for an Ideological Struggle

One of the most curious aspects of the Russian ‘special operation’ in Ukraine was how little effort the Kremlin had put into preparing its own population for what was about to be undertaken. The justification for the operation was made suddenly, over the course of about 10 days. In this it resembled the annexation of Crimea, despite being a much greater endeavour, suggesting that the Russian government wished to present it to the Russian public as a *fait accompli*. The lack of preparation of the information environment seemed encouraging for the Ukrainians. Protests began in Moscow, St Petersburg and further afield.³⁵ In the first two weeks of the conflict, as the Russian war effort began to unravel, the Ukrainian government maintained hundreds of thousands of connections into Russian social media, distributing information about the war to swathes of the Russian population.³⁶

This window of opportunity was short lived. The Russian government moved rapidly to shut down independent media,³⁷ threaten a 15-year prison sentence on anyone sharing non-official narratives on the conflict,³⁸ and closed access to non-Russian social media.³⁹ The results were highly effective. Although people in Russia can access external information sources through the use of VPNs, the measures meant that only those who actively searched for information would find it. This radically cut the number of people who were accessing non-Russian controlled media and also reduced the number of people who needed to be monitored by the FSB. Given close monitoring and the threat of imprisonment, these measures also reduced the internal circulation of information to circles of trust between likeminded individuals.⁴⁰ Ukrainians

34. Author interview with D.

35. *Reuters*, ‘More Than 4,300 Detained at Anti-War Protests in Russia’, 6 March 2022.

36. Sebastian Shukla, Alex Marquardt and Christian Streib, “‘He Said He Was Going Towards Kyiv.’ Russian Families Turn to Ukrainian Hotline in Desperate Search for Lost Soldiers’, *CNN*, 8 March 2022.

37. Andrew Roth, ‘Russian News Outlet Novaya Gazeta to Close Until End of Ukraine War’, *The Guardian*, 28 March 2022.

38. *Reuters*, ‘Russia Fights Back in Information War With Jail Warning’, 4 March 2022.

39. Shannon Bond and Bobby Allyn, ‘Russia is Restricting Social Media. Here’s What We Know’, *NPR*, 21 March 2022.

40. Valerie Hopkins, ‘Ukrainians Find That Relatives in Russia Don’t Believe It’s a War’, *New York Times*, 7 March 2022.

reported that their families in Russia would deny that any military operation was taking place; probably as much a reflection of the threat of arrest as of the impact of propaganda. Ukrainian officials noticed that the breadth of their access to Russian audiences was cut ten-fold,⁴¹ and that once in the Russian information sphere their messages often remained with the recipient rather than being distributed more widely.

Having secured the information environment, the Russian government faced a decision point. It had not yet clearly articulated a case for war. Indeed, public discussion of war was prohibited. It could reduce the scale of its ambition and thereby prepare the population to accept de-escalation. Instead, the decision was made to not only continue with the narrative of a struggle against Nazism in Ukraine, but to expand the scope of ambition to one of systems confrontation. Examining internal Russian government documents from mid-March shows that the decision to ideologically mobilise the Russian public for war with the use of increasingly radicalising language was not a nationalistic response to events but was instead directed centrally and accompanied by practical, organisational steps to put Russia on a war footing. On 24 March, for example, the Governor of Bryansk, Alexander Bogomaz, issued instructions to all local authorities declaring that ‘the Armed Forces of the Russian Federation, despite significant human losses, continue to restore order in Ukraine, repeating the feat of the Heroes of the Great Patriotic War’.⁴² He ordered that local authorities prepare to ‘conduct briefings in educational institutions on the procedure for the actions of students, as well as employees in the event of artillery shelling or air strikes’ and that local authorities must ‘carry out, together with patriotic organizations, preparatory work on the formation of public local defense detachments’.⁴³ Businesses were also instructed to prepare anti-tank defences, along with a range of additional measures. Most importantly, officials were to report back on the measures they were taking and would be held accountable for implementation. There was, at the time, no threat of Ukrainian incursions into Russia. These orders therefore show how the sense of a territorial threat to the country was being cultivated to justify the war.

The direct comparison between a war in Ukraine and the Great Patriotic War in internal official instructions is important because it preceded a transition in the message pervading Russian media and public official announcements, from presenting the war in Ukraine as a limited struggle for Donbas to a systemic struggle with NATO in which Ukraine was merely the military battlefield. This transition in rhetoric ironically developed just as the actual objectives of the Russian military on the ground were curtailed. On 3 April, Patriarch Kirill gave a sermon at the Cathedral of the Russian Armed Forces in which he said that: ‘We have broken the back of fascism once; we will do it again’.⁴⁴ On 4 April, Timofei Sergeitsev wrote in *RIA Novosti* that:

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41. Author interview with H – a Ukrainian intelligence official working on information operations targeting Russia – during fieldwork, March 2022.
 42. Instructions issued to local authorities by Alexander Bogomaz, Governor of Bryansk Region, on 24 March 2022.
 43. *Ibid.*
 44. Patriarch Kirill, ‘Slava svyateishevo Patriarkha Kirila v Nedeliou 4-iou Velikovo posta posle Litirgii v glavnom khrame Voorezhennukh sil RF’ [‘The Word of His Holiness Patriarch Kirill on the 4th Week

Denazification is a set of measures aimed at the nazified population [of Ukraine], which technically cannot be subjected to direct punishment like war criminals ... a significant part of the masses of the people ... are passive Nazis ... Denazification is inevitably also de-Ukrainisation: a rejection of the artificial inflation of the ethnic self-identification of the population.⁴⁵

Suddenly framing the ‘special operation’ as a war was acceptable, and Russian television has been flooded with statements urging escalation as part of an existential struggle. A typical example is Vyacheslav Nikonov, Deputy Head of the State Duma, who declared on 18 April that ‘This is a metaphysical clash between the forces of good and evil ... This is truly a holy war we’re waging and we must win’.⁴⁶ The letter ‘Z’, which does not appear in the Cyrillic alphabet and was used by Russian tanks to mark friendly forces on one axis in the initial offensive, has been reframed in Russian media as representing 77 years since the Great Patriotic War.⁴⁷ Of course, victory in the Great Patriotic War was not brought about by a negotiated settlement. Having doubled down on calling the Ukrainian government Nazis, the Kremlin is doing little to justify an end state that does not involve the capture of Kyiv. The narrative appears to be not only laying the groundwork to explain why the losses in Ukraine are justified, but also to prepare the population for further sacrifices to come.

The narrative for domestic consumption is that Russia’s military setbacks are the product of NATO’s instrumentalisation of Nazis as a means of breaking Russia. This narrative also has an international dimension. On 18 March, Russian Foreign Minister Sergei Lavrov declared that ‘What the Americans want is a unipolar world which would not be like a global village but like an American village ... We will now have to rely only on ourselves and on our allies who stay with us ... We are not closing the door on the West – they are doing so’.⁴⁸ This message has been pushed hard by Russian diplomats across the world,⁴⁹ reinforced by expanding information operations internationally. The aim is not to convince non-NATO states to support Russia’s war in Ukraine. The aim is to convince them that just as the US has instrumentalised Ukraine to undermine Russian interests, so too will the US pursue this policy against other countries who disobey its dictates. Russia is essentially arguing that if states wish to maintain the capacity for an independent foreign policy in their own regions, they should not help to constrain Russia’s ability to pursue its interests within its sphere of influence.

of Lent After the Liturgy in the Main Church of the Armed Forces of the Russian Federation’], 3 April 2022, <http://www.patriarchia.ru/db/text/5914188.html?fbclid=IwAR37VW4l-JKWsxj16Mh epsDIU2K0kIRX__18KQNoA9IJRoJ78Ja8PjIkFP8>, accessed 18 April 2022.

45. Timofei Sergeitsev, ‘What Russia Should Do With Ukraine’, *RIA Novosti*, 3 April 2022.

46. Julia Davis (@JuliaDavisNews), ‘Deputy of the State Duma Vyacheslav Nikonov (a grandson of Vyacheslav Molotov) claimed: “In the modern world, we are the embodiment of the forces of good. This is a metaphysical clash between the forces of good and evil... This is truly a holy war we’re waging and we must win.”’, Twitter post, 17 April 2022, <<https://twitter.com/JuliaDavisNews/status/1515786811825700872>>, accessed 18 April 2022.

47. Brendan Cole, ‘True Meaning Behind Russian “Z” Symbol Finally Revealed’, *Newsweek*, 19 April 2022.

48. Guy Faulconbridge, ‘Russia Says Post-1991 “Illusions” About the West Are Over’, *Reuters*, 18 March 2022.

49. Mark Scott, ‘Russia Turns Its Diplomats Into Disinformation Warriors’, *Politico*, 7 April 2022.

The Russian diplomatic and informational outreach to non-NATO states has some traction. With the price of food and energy soaring, Russia is arguing that Western sanctions are imposing real hardship on many of the world's poorest, demonstrating how the West will prioritise its own interests at the expense of others. For much of the world's population Ukraine is a little-known country, a long way away, and Russia's operations do not pose the sense of immediate threat that has been felt across NATO. Russia does not need non-NATO states to support its war. It does need them to help it to evade Western sanctions.

So far, Russia's attempts to expand its available military manpower has rested on pressuring conscripts to sign contracts of service and reducing the requirements for people to join without prior military service. For Russia to significantly increase its numbers it would need to retain its last round of conscripts and call up reserves. Both of these are politically contentious in Russia. Nevertheless, the propaganda narrative and local initiatives to rally support appear to be creating an environment in which 9 May can be used as a fulcrum to mobilise a much larger force. It appears increasingly likely that rather than use it to announce victory, the Russian government will instead use 9 May as the day on which the 'special military operation' is officially framed as a 'war'. The shift towards mobilisation also points to the preparation for a longer struggle. Perhaps the best demonstration of this is that, parallel to the transition in rhetoric about the war, the Russian government also embarked upon a process of transitioning its economy on to a war footing to ensure the long-term supply of critical armaments.

Replenishing the Arsenal: Russia's Economic Front

Russia's war in Ukraine has made extensive use of cruise and ballistic missiles to hit targets of military, political and economic importance. Given the underperformance of the Russian Air Force,⁵⁰ these weapons are vital to the ongoing war effort. Exact stockpiles of these weapons are not available but as the war has progressed Ukrainian officials have noted a downgrading of the weapons systems employed for a range of mission sets, including a reversion to Grad-1 systems off the main axis.⁵¹ US assessments note that the Russian military appears to be running low on precision-guided weapons.⁵² When it comes to prestige weapons systems like the Iskander-M short-range ballistic missile, there is a limit to the proportion of the stockpile Russia can expend against Ukraine without undermining its defence plans against NATO, China and others. Without an assured supply chain to manufacture more, the Russians are having to retain a large proportion of the stockpile, which would restrict their ability to strike Ukraine in the coming months. But here the Russian military industries face a problem, for Russia's latest weapons are heavily dependent upon critical specialist components manufactured abroad.

50. Justin Bronk, 'The Mysterious Case of the Missing Russian Air Force', *RUSI Commentary*, 28 February 2022.

51. Author interview with D.

52. US Department of Defense, 'Senior Defense Official Holds a Background Briefing', transcript, 21 March 2022, <<https://www.defense.gov/News/Transcripts/Transcript/Article/2973395/senior-defense-official-holds-a-background-briefing/>>, accessed 18 April 2022.

The 9M727 cruise missile – fired from the Iskander-K – is an example of one of Russia’s most advanced weapons systems, able to manoeuvre at low altitude to a target and strike with considerable precision. In order to achieve this the missile must carry a computer able to ingest data from various inertial and active sensors and command links and translate these into instructions to manipulate the missile’s control surfaces. The authors physically inspected one of these computers recovered from a crashed 9M727 during fieldwork in April. This computer is roughly the size of an A4 sheet of paper and sits inside a heat shield able to withstand the pressure as the missile accelerates and the heat that engulfs the system. The computer must be remarkably robust, its components able to continue to function even as the structure around it is warped by temperature changes. This requires highly specialised materials and components. Of the seven socket attachment points allowing data to be moved through the heat shield, one is of Soviet-era design and manufactured in Russia. The remaining six are all products of US companies. The rails connecting the circuit boards to the computer housing, which must maintain the alignment of the components under immense forces, are similarly of US manufacture. The circuit boards themselves are sourced from the US.⁵³

The 9M727 is not unique in its dependence upon foreign manufactured components. Technical inspection of Russian weapons and vehicles, conducted by the Central Scientific Research Institute for Armaments of the Armed Forces of Ukraine, reveals that there is a consistent pattern across all major Russian weapons systems recovered from the battlefield. The 9M949 guided 300-mm rocket that forms the backbone of Russian precision artillery as a munition for the Tornado-S multiple launch rocket system uses a US-made fibre-optic gyroscope for its inertial navigation.⁵⁴ The Russian TOR-M2 air-defence system – one of the most potent short-ranged air-defence systems in the world – relies on a British-designed oscillator in the computer controlling the platform’s radar.⁵⁵ This pattern is true in the Iskander-M, the Kalibr cruise missile, the Kh-101 air-launched cruise missile, and many more besides. It is also true of much tactical battlefield equipment. An examination by the technical labs of the Ukrainian intelligence community of the Aqueduct family of Russian military radios (R-168-5UN-2, R-168-5UN-1 and R-168-5UT-2), which form the backbone of the Russian military’s tactical communications, for instance, reveals critical electronic components manufactured in the US, Germany, the Netherlands, South Korea and Japan.⁵⁶ The pattern is universal. Almost all of Russia’s modern military hardware is dependent upon complex electronics imported from the US, the UK, Germany, the Netherlands, Japan, Israel, China and further afield.⁵⁷ In some instances these components are civilian

53. Inspection of a recovered 9M727 ballistic computer by the authors during fieldwork in April 2022.

54. Inspection of a recovered 9M949 gyroscope by the authors during fieldwork in April 2022.

55. Technical report from the Central Scientific Research Institute for Armaments of the Armed Forces of Ukraine, reviewed by the authors during fieldwork, April 2022.

56. Technical report by the defence technical laboratory of the Ukrainian intelligence community, reviewed by the authors during fieldwork, April 2022.

57. The authors reviewed comprehensive technical reports during fieldwork in 2022, from the deconstruction of all types of captured Russian equipment, compiled separately by the Ukrainian military and intelligence communities. The authors verified the accuracy of a selection of these technical reports by comparing the specifications listed with the physical components.

dual-use electronics that can be procured commercially. In many more, however, they are pieces of military or specialised technologies for which there are a small number of regulated suppliers.

Prior to the Russian invasion, Western officials had emphasised the extent of sanctions that would be imposed in an attempt to deter Russia through the threat of punishment. This failed for two reasons. First, Russian tactical-operational assessments of the correlation of forces in Ukraine, combined with poor intelligence assessments of Ukraine's will to resist,⁵⁸ made the Russian government confident that the war would be short, so that sanctions would pose an economic but not a military threat. Second, Russian officials were confident that the economic impact would be manageable. The latter assumption was more robust than the first. Germany, for instance, was and will remain for at least the next three years dependent upon Russian gas.⁵⁹ There is not a viable short-term alternative supplier given the available infrastructure. Diversification of supply is possible, but will be slow, while reductions in consumption of gas during the summer will adversely affect German industry. If Germany cuts the gas it will go into a deep recession. The risk is that the economic impact of the price of oil will combine with rising costs for heating in the autumn to severely test German, and European, resolve in supporting Ukraine.⁶⁰

So long as Russia continues to export gas to Europe it has a reliable supply of large quantities of foreign currency. Gas prices tend to be pegged to the price of oil, and Russia was also confident that the war would significantly increase the price of oil.⁶¹ The high oil price reflects, first of all, rising demand as travel and industry accelerates as the coronavirus pandemic eases. This is compounded by significant uncertainty in the market over Russian supply. The latter is an issue the Russians can exacerbate. Furthermore, for years oil prices have often fallen below \$60 per barrel, posing significant financial problems across the Middle East and limiting returns on investment for shale producers in the US.⁶² The current high price of oil offers an opportunity for these states to balance their books, and shale investors to get a return on their investment. Western attempts to expand supply to reduce the price of oil therefore are being actively resisted by Western companies and by petrostates, suggesting that energy prices will remain high over the next year covering the critical period of the war. If the West tries to bring leverage to bear, it will strengthen the Russian narrative that the West is prepared to inflict economic pain on non-NATO members to support its own interests. Russia was therefore confident that high oil prices and assured gas exports would keep its economy alive for the next couple of years

58. Nick Reynolds and Jack Watling, 'Ukraine Through Russia's Eyes', *RUSI Commentary*, 25 February 2022.

59. Author interviews with I, an American expert on LNG trading; J, an expert on EU energy markets; K, a recently departed senior employee of Gazprom, during fieldwork, March–April 2022.

60. Tony Diver, 'Public Support for Russian Sanctions Dwindles as Cost of Living Crisis Takes Its Toll', *The Telegraph*, 16 April 2022.

61. Author interview with K.

62. Mark Stocker, John Baffes and Dana Vorisek, 'What Triggered the Oil Price Plunge in 2014-16 and Why It Failed to Deliver An Economic Impetus in Eight Charts', World Bank Blogs, 18 January 2018, <<https://blogs.worldbank.org/developmenttalk/what-triggered-oil-price-plunge-2014-2016-and-why-it-failed-deliver-economic-impetus-eight-charts>>, accessed 18 April 2022.



while it transitioned to a new isolation. Russia also hopes to maintain the offer of exporting nuclear reactors from ROSATOM to non-NATO states as a means of showing that maintaining economic ties to Russia also offers a route to evade the high energy prices brought about – in Moscow’s narrative – by Western hostility.⁶³ Developing nuclear energy in countries such as Nigeria will likely take longer than the current dynamics in the energy market persist, but the current conditions may set the political context for more protracted Russian cooperation.⁶⁴

The prospect of a long war, however, poses a much wider set of challenges to Russia than the short war it had envisaged. With Russia’s competitive munitions reliant on imports and sanctions closing in, the Russian presidential administration established an interdepartmental committee in mid-March to survey Russian defence equipment to establish what could be produced domestically, what could be sourced from ‘friendly’ countries (defined as those not compliant with or less vigilant in enforcing US sanctions), and finally the development of covert means to obtain critical components. This committee is overseen by Deputy Russian Defence Minister Aleksei Krivoruchko. What followed were a series of legal measures to facilitate the pursuit of these goals. On 17 March, Russian Minister of Defence Sergei Shoigu and Minister for Trade and Industry Denis Manturov signed regulations streamlining the acceptance of materials into military production while shifting the burden of risk to the contractors supplying the components.⁶⁵ On 30 March, Russian Prime Minister Mikhail Mishustin announced that Russia would accept parallel imports, allowing

63. Author interview with L – a former Russian energy official – during fieldwork, April 2022.

64. ROSATOM, ‘Rosatom: Nigeria’s Nuclear Technologies Pact with Russia Comprehensive’, 10 January 2019, <<http://www.rusatom-overseas.com/media/mass-media-about-us/rosatom-nuclear-technologies-nigeria-s-pact-with-russia-comprehensive.html>>, accessed 18 April 2022.

65. Author interviews with M – a senior Ukrainian intelligence analyst – during fieldwork, April 2022.

material to be brought into Russia without the permission of the owner of the relevant intellectual property.⁶⁶ Reports in Western media of Russian requests for Chinese military equipment related to two things: ammunition; and, more importantly, micro-electronic components necessary for the continued manufacture of complex weapons.⁶⁷

Although it will be possible to manufacture some components in Russia – albeit at greater cost and potentially with reduced reliability – many components of Russia’s complex weapons cannot be replaced. For example, the Institute of Radio-Engineering and Electronics within the Russian Academy of Sciences conducted an examination of communications architectures in Russian military vehicles including for the Il-76 transport aircraft. In this aircraft’s communications suite alone it identified 80 components that could not be replaced with manufactured parts in Russia.⁶⁸ There is, therefore, a strategic imperative for Russia to assure its supply chains. In the Soviet Union, the task of obtaining Western technology for Soviet industry was managed by Directorate-T of the First Chief Directorate of the KGB. Vladimir Putin, when based in Dresden, was responsible for some of this work targeting West German companies.⁶⁹ Indeed, access to Western technologies and the lifting of sanctions on their export to Russia was one of Soviet Premier Mikhail Gorbachev’s foremost priorities in his economic policy during the late 1980s.⁷⁰ Gorbachev’s success has made Russian procurement of these systems much easier, but also consequently much more exposed to sanction and disruption. The Russian Special Services are thus scrambling to rebuild covert supply chains to continue to obtain critical components for Russia’s defence industries.

It is certainly reasonable to assume that the West will have some difficulty in restricting access to some sensitive components of Russia’s weaponry. Although Russian weapons are full of Western manufactured components, it is not clear that the companies manufacturing them knew that the Russian military was the end-user. Many components are dual-use technologies. Meanwhile, Russia has established mechanisms for laundering these items through third countries. Restricting access, therefore, likely means preventing export to countries such as India of goods that are in some instances used for civilian purposes. This would, unfortunately, strengthen the Russian argument that the West is prepared to inflict economic pain around the world for the sake of punishing Russia and, in doing so, reduce compliance with Western sanctions. Russia is also prepared to use blackmail to keep these channels open. For example, many of the computer components in Russian cruise and ballistic missiles are purchased ostensibly for civilian use in Russia’s space programme. This, therefore, explains why Dmitri Rogozin – head of Russia’s space agency ROSCOSMOS – warned that sanctions against his organisation could lead to satellites

66. *Reuters*, ‘Russia Approves “Parallel Imports” After Top Brands Halt Sales’, 30 March 2022.

67. Demetri Sevastopulo, ‘Russia Has Asked China for Military Help in Ukraine, US Officials Say’, *Financial Times*, 14 March 2022.

68. Report of the IRE obtained by the Ukrainian intelligence community and shared with the authors during fieldwork, April 2022.

69. Catherine Belton, *Putin’s People: How the KGB Took Back Russia and Then Took on the West* (London: Harper Collins, 2020), pp. 19–49.

70. Vladislav M Zubok, *Collapse: The Fall of the Soviet Union* (New Haven, CT: Yale University Press, 2021).

and even the International Space Station de-orbiting and causing damage outside of Russia.⁷¹ ROSCOSMOS had been a means for Russia to obtain dual-use technologies for the military. This channel is now increasingly constrained. But there are many others. Moreover, there are myriad companies based around the world, including in the Czech Republic, Serbia, Armenia, Kazakhstan, Turkey, India and China, who will take considerable risks to meet Russian supply requirements. Constraining these supply routes without alienating the governments in these states will be a delicate policy needle to thread. It likely requires a systematic targeting of Russia's special services tasked with orchestrating these supply chain operations.

Broadening the Front: The FSB in Moldova

Russia's special services have suffered heavily in the war in Ukraine. In particular, the credibility of the FSB's Fifth Service – responsible for intelligence activities targeting former Soviet republics – has been tarnished by poor assessments of Ukrainian resolve and the collapse of their networks in the country following the outbreak of hostilities. The FSB was managing large-scale penetrations of the Ukrainian government prior to the invasion. Before the conflict, Ukraine's domestic counterintelligence agency, the SBU, was constrained in what it could do to counter these activities, neither wanting to fracture Ukrainian politics by targeting political parties, nor being confident that it could ensure prosecution through a compromised courts system. As soon as Russian forces crossed the border and martial law was declared, things became simpler. In a series of raids the SBU rapidly closed down the most dangerous elements of Russia's networks on Ukrainian soil. Many of Russia's potential collaborators were left free, since the poor performance of Russian arms saw their enthusiasm to cooperate with the losing side severely curtailed. Many took their money and severed communications with their erstwhile handlers. The blame game between the FSB and the Russian military has been intense.⁷² The military was not the lead agency in planning operations in Ukraine and allege that it was forced to implement a badly conceived operation premised upon poor intelligence. The FSB argues that the failure of Russian combat units, whose capabilities were exaggerated by the General Staff, has unravelled a workable strategy. Nevertheless, the FSB Fifth Service is keen to demonstrate successes.

When President Putin set out his reasons for invading Ukraine in a televised address, he described how the Soviet Union had been broken up by 'a truly fatal document, the so-called ethnic policy of the party in modern conditions'. Putin described how by empowering the constituent nationalities of the USSR, 'It is now that radicals and nationalists, including and primarily those in Ukraine, are taking credit for having gained independence. As we can see, this is absolutely wrong. The disintegration of our united country was brought about by the historic, strategic mistakes on the part of the Bolshevik leaders and the CPSU leadership, mistakes committed

71. Juliana Suess, 'The Impact of the War in Ukraine on Space Programmes', *RUSI Defence Systems* (Vol. 24, 16 March 2022).

72. Warren P Strobel and Michael R Gordon, 'Reported Detention of Russian Spy Boss Shows Tension Over Stalled Ukraine Invasion, U.S. Officials Say', *Wall Street Journal*, 19 March 2022.

at different times in state-building and in economic and ethnic policies'.⁷³ As hinted at here by Putin, the consequence of this mistake – which his policy in Ukraine aimed to correct – was not restricted to Ukraine but also encompassed Belarus, Moldova and the Baltic states. The situation in the Baltic states is slightly different because of their NATO membership. But the increasing Western influence that Putin described as a threat in Ukraine driving him to act was equally true of Moldova. The year before, Russia had successfully subjugated Belarus. But the situation in Moldova, from Moscow's viewpoint, was deteriorating.

While the 9th Directorate of the FSB's Fifth Service Department for Operational Information prepared for the occupation of Ukraine from July 2021, the 11th Unit of the Department for Operational Information, responsible for Moldova, was assessing plans for the next round of operations under the direction of Major General Dmitry Milyutin. In November 2020, the FSB's strategic objective in Moldova was to bring about 'The full restoration of the strategic partnership between Moldova and the Russian Federation'.⁷⁴ This ambition was upset in December when the pro-European politician Maia Sandu replaced long-time Russian ally Igor Dodon as Moldova's president. At first, the FSB saw this as a setback, but when parliamentary elections in Moldova in 2021 also saw a tilt away from Russophile parties, suspicion set in.

As had been the case in Ukraine,⁷⁵ the FSB conducted extensive social surveys of Moldovan society for over a decade, carried out by consultants, commissioned by undeclared intelligence officers in the country. Their conclusions as to why Russia's influence in Moldova was deteriorating were sinister. An assessment of Moldova's political trajectory produced for the 11th Unit of the Department for Operational Information in September 2021 argued that 'The totality of available data on Moldova shows that ... the left forces should prepare to be in opposition for some time ... the defeat of I. Dodon in the presidential elections was not an accidental episode, but the result of a systemic crisis of the left forces against the backdrop of the successful development of the right-wing Maia Sandu project'.⁷⁶ The report warned that Russia's allies in Moldova would not recover politically without a restructuring of leftist parties and that if Russia did not actively encourage this development, 'Russia may not have any authoritative and capable partners left in Moldova at all, but only disunited outsiders who are unable to seriously fight for power'. The upset of Russian political influence in Moldova was ascribed to votes from the Moldovan diaspora in Europe, and the FSB feared that this was the product of malign foreign activity. The report noted that 'At some point, the Moldovan right and/or their curators engaged in the mobilization of the Euro-diaspora electorate ... The project was launched, successfully – with the active support of Western consultants and, most likely, the political circles of the EU countries that accepted migrants from Moldova'.⁷⁷ The FSB was therefore contemplating a hostile block that was neither likely to change its political alignment nor be susceptible to political influence.

73. President of Russia, 'Address by the President of the Russian Federation', transcript, 21 February 2022, <<http://en.kremlin.ru/events/president/transcripts/67828>>, accessed 18 April 2022.

74. FSB Outline of Operational Aims and Means, 21 November 2021.

75. Reynolds and Watling, 'Ukraine Through Russia's Eyes'.

76. FSB Analytical Note, 'On the Left Flank of Moldovan Politics', September 2021.

77. *Ibid.*

Over the winter, further social surveys suggested that there was an opportunity in Moldova to put forward an alternative. An analytical report provided to the FSB in early February 2022 noted that there had been ‘A sharp decrease in the level of sympathy and approval of the authorities, caused by the fall in living standards that occurred in October-December 2021. Focus group respondents talked a lot and emotionally about the increase in prices and tariffs, which has dramatically increased the number of poor and very poor citizens and families’.⁷⁸ By then, the Russian operation in Ukraine was imminent and the field in Moldova seemed ripe for subsequent destabilisation, even if the political alternatives within Moldovan politics were viewed as non-viable. Under the direction of Dmitry Kozak’s Committee for Transborder Cooperation, which had cohered Russian operations in Belarus and Ukraine, the Russian presidential administration set about planning for an intervention in Moldova to follow Ukraine’s subjugation.

Russia’s setbacks in Ukraine have posed a serious quandary for the Russian government as to what to do in Moldova. Russia has a brigade of troops in the breakaway region of Transnistria, which have been showing invasion symbols on their vehicles to try and pin down Ukrainian forces in the south. Alongside the Transnistrian brigades these forces also pose a threat to the Moldovan government in the event of the political destabilisation of the country. But without a land bridge to Moldova through Ukraine, the Russians would struggle to reinforce these units. At a time when the Russian military is desperate to draw Ukrainian forces away from Donbas, therefore, it has units fixed in Moldova that it will struggle to use.

The potential for a military occupation of Moldova in the immediate future seems remote, and as time passes Russia fears the deterioration of its position politically. At the same time, while a Russian victory in Ukraine is still Russian policy, burning Russia’s position in Moldova would seem contrary to the Kremlin’s broader objectives. The FSB is concerned that Western adversaries will capitalise upon Russia’s being fixed in Ukraine to weaken Russia’s position in Moldova. Here, the decision on 7 April by Sandu’s government to ban the display of the Ribbon of St George – along with Russian military symbols – in the face of a boycott by the opposition has been interpreted in Moscow as a sign that the Moldovan government is moving against Russian influence in the country.⁷⁹ Framed against the backdrop of conspiracy theories about Western political manipulation, therefore, the FSB Fifth Service finds itself being asked what it can do to turn around the situation in Moldova.

The current debate within the FSB is whether to destabilise Moldova to tie down Ukrainian forces on the southern border, to counter growing pro-European sentiment in the country, and to show the West that support for Ukraine risks wider consequences, including in the Balkans. After the ban of Russian military symbols, Ukrainian intelligence began to receive reports that Major General Dmitry Milyutin of the FSB Fifth Service was discussing the organisation of a protest movement in Moldova that would intentionally use the banned symbols en masse, encouraging the authorities to fine large numbers of poor protesters, and creating a basis for allegations that the government

78. FSB Analytical Note, ‘Public Opinion of the Republic of Moldova Six Months After the Formation of the M. Sandu Regime’, February 2022.

79. Alexander Tanas, ‘Moldova Parliament Bans Pro-Russian Ribbon Despite Opposition Walk-Out’, *Reuters*, 8 April 2022.

was clamping down on political expression and free speech.⁸⁰ These protests have since started to materialise.⁸¹ The intention is to build them towards a climax on 9 May, premised on the argument that President Sandu is preventing the country from celebrating its own role in the Great Patriotic War. If a process of protest and repression, provocation and response, can be established, the hope is to foment political crisis. This may or may not succeed; it depends on how the Moldovan authorities behave. Tragically – as in Ukraine – the perception of declining influence appears to be pushing the Russians to take greater risks. The FSB’s activities in Moldova highlight how the Russian government’s ambitions for its wider imperial project have not yet been diminished, even as its hopes for a rapid victory in Ukraine dissipate. And even if Russia loses the offensive in Donbas, it is actively exploring avenues for destabilisation and the broadening of the front to protect and expand the economic and political costs on the West.

Conclusions

The initial euphoria at Ukraine’s withstanding the onslaught of the Russian Army has in some parts of Europe brought about a belief that Ukraine’s victory is now assured, or that an exhausted Russia may soon come to the negotiating table. Ukrainian victory is possible, but will demand hard fighting for some time to come. Having first done little to set a narrative about the war, the Russian government had an opportunity to lay the groundwork for de-escalation in mid-March. It made a deliberate decision to escalate its rhetoric and ideologically mobilise its society. By banning dissent, and by holding local officials accountable for the organisation of patriotic mobilisation, the Russian government is in the process of radicalising its public. Even as the cost of living in Russia rises, therefore, the intent in Moscow is to prolong the fighting. In the short term, this means a major offensive in Donbas. In the medium term, there is an intention to bring about a summer offensive to finish Ukraine off. Given that the Russian government has not yet curtailed its wider ambitions – as demonstrated by its designs on Moldova – it is critical that NATO remains firmly determined to not just support Ukraine to hold Donbas but to prepare for a renewed offensive after.

At the same time, a protracted conflict poses dangers for the West. As Europe enters summer, high energy costs will harm businesses, but there will be a delay between this and job losses. By autumn, there is a risk that recession will coincide with cooling temperatures while citizens will struggle to heat their homes. In this context, support for Ukraine may wither, engagement with Russian disinformation may rise, and Russia’s diplomatic efforts to evade sanctions may gain traction through Western disunity. Limiting Russia’s ability to protract fighting beyond the summer could be effectively enabled by reducing its access to modern armaments. To achieve this, Western countries must conduct a thorough assessment of where their companies are knowingly or inadvertently supplying Russia and cut off these channels. The severing of these channels will not

80. Author interviews with N – an operations officer in one of Ukraine’s intelligence services – during fieldwork, April 2022.

81. *Peoples Dispatch*, ‘Moldovan Left Protests Law Banning St. George Ribbons and Other Soviet Symbols’, 18 April 2022, <<https://peoplesdispatch.org/2022/04/18/moldovan-left-protests-law-banning-st-george-ribbons-and-other-soviet-symbols/>>, accessed 18 April 2022.

alter the volume of munitions physically stockpiled by Russia for operations in the summer. But the expectations of future manufacture will both shape how much of the stockpile can be expended in Ukraine and the Kremlin's confidence in the long-term security implications of continuing the war. Reducing dependence on Russian gas must also be a medium-term objective of European policy, even if it will not have an immediate effect. At the same time, NATO must be more engaged in the information struggle beyond its borders; Western efforts to manage their own energy crisis risk being perceived as imposing costs on the very states whose cooperation will be critical in bringing about Russia's military and political isolation.

Although Russia has clearly been weakened by its battlefield setbacks in Ukraine, the combination of its imperial ambitions and significant coercive power risks destabilisation further afield. Moldova is the most prominent example, but as the conflict protracts, Russian operations could pose threats in Serbia and beyond. Coordinated efforts to curtail Russian malign influence in these states – and further afield – will be critical if the crisis in Ukraine is to be contained. Further crises, risking further economic disruption, will prove politically difficult to bear.

Finally, the Russian decision to double down is a high-stakes gamble. If Russia mobilises and eventually overcomes Ukrainian resistance then NATO will face an aggressive, isolated and militarised state. If Russia loses then President Putin has now begun radicalising the population in the pursuit of policies that he will struggle to deliver. Failure to defeat the Ukrainian state after relentlessly comparing it to the Nazi regime may have serious consequences for Putin and those around him. To frame a conflict as existential and to lose must necessarily call the suitability of a leader into question among Russia's political elites. NATO states therefore need to consider how to manage escalation pathways that follow if Russia is not only defeated in Donbas but finds its newly mobilised and poorly trained troops, with few remaining stocks of precision munitions, unable to deliver a victory in the summer. The death of Putin's political project is plausible, but it has already inflicted immense damage internationally and risks doing considerably more.

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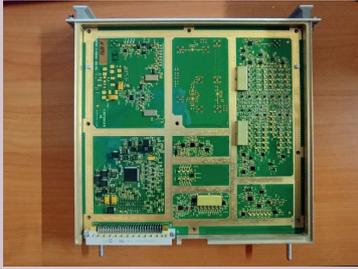
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Annex: An Example of Foreign-Made Components Inside Russian Military Equipment

Figure 1: Automated Radio Interference Station Borisoglebsk-2



Table 1: Sample of Western-Manufactured Electronic Components in the System

Subsystem	Element Type	Place of Origin
	UHF filter (up to 70 MHz) (SAWTEK 854664)	US
	Highly integrated 8-bit microcontroller (C8051F120)	
	Frequency synthesiser (AD9910BSVZ)	
	Clock frequency distribution integrated circuit (AD9510/PCBZ)	
	PLIS (EPM7512AEQI208-10N)	US
	Highly integrated 8-bit microcontroller (C8051F120)	
	Dual-channel high-speed transceiver (ADM3202 ARN)	
	Full duplex transceiver (DL179)	
	Microcontroller (C8051F120)	US
	DC voltage converter (UIE48T2-NDA0G)	
	Schottky diode (MBR6045WT)	
	Octocoupler (SFH6165-1)	

Subsystem	Element Type	Place of Origin
	Analogue-to-digital converter (AD9461)	US
	Built-in processor (ADSP-TS201S)	
	Pulse voltage regulators (LTC3414EFE)	
	Voltage-controlled oscillator (ROS 615)	
	Broadband, digital step-down converter (AD6636CBCZ)	
	Programmed logical integrated circuit (EPICAF32417N)	
	Trigger (LVC574A)	
	Controller module (JG82870P2 SL8AM)	US
	Processor (LE80536)	
	Gigabit Ethernet controller (NH825466B)	
	Microcontroller (NH82801DB)	
	Graphics processor (Mobility Radeon 9000)	US
	DC/DC controller (LTC3735EG)	US
	DC/DC controller (LT1537CG)	
	Telecommunication transformer (S05100111)	Germany
	The interface specialised board (CA91C142D-33CEV)	US
	RAM chip DDR1, 512 Mb (K4H510838J-LCCC)	South Korea
	Digital potentiometer (87417F2-D/L1)	Taiwan
	Flash memory for the boot sector (AM29L)	US
	Flash memory 8Gb (INDUSTRIAL CF6)	Taiwan
	Voltage regulator generator (RFMD UMX-235-B14-G)	US
	Microcontroller (HC 595A PFDG)	
	Radio frequency synthesiser (ADF 4350)	

Subsystem	Element Type	Place of Origin
	Universal tire PCI (XR17D158IV-F)	US
	Full duplex transceivers (SP491E)	
	High-speed CMOS switch (QS3253)	
	High-speed intelligent transceivers RS-232 (SP3243EUEA)	
	Digital clock (9LPRS501SKL)	
	I/O controller (AM82801IUX)	
	Controller interface (SCH31141-NU)	Taiwan
	RAM chip DDR3, 512 Mb (SEC 422 HYKO)	
	SSD memory (Industrial)	Germany
	Pulse transformer (WE749020023)	Netherlands
	Broadband RF transistor (BLF647P)	Netherlands
	HF transistor (D2002UK)	UK
	Operational amplifier (OP292)	US
	Digital signal processor (ADSP-2185)	US
	Digital-to-analogue converter (AD7302BR)	
Microprocessor (ADM 696ARZ)		
	Broadband HF transistor (D1020UK)	UK
	Broadband HF transistor (D1008UK)	UK
	Broadband HF transistor (D2003UK)	
	Digital signal processor (ADSP-2185)	
	Analogue multiplexer (ADG406BPZ)	US
	Power-management microprocessor (ADM696AR)	US
	Digital-to-analogue converter (AD7302BR)	
	Broadband HF transistor (D1020UK)	UK
	Output resistor (RFP 250-50)	US
	Operational amplifier (OP-26)	

Subsystem	Element Type	Place of Origin
	Broadband RF transistor (D1028UK)	UK
	HF transistor (D2003UK)	

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Cover image: The turret of a destroyed Russian T72B3 main battle tank. *Courtesy of 93rd Mechanized Brigade of the Armed Forces of Ukraine*

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