



**Australian Army
Research Centre**

Spotlight Brief

No. 2, 2022

**An Operational Overview of the Russian
Invasion of Ukraine February - June 2022**



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An Operational Overview of the Russian Invasion of Ukraine February-June 2022

Abstract

This Spotlight brief describes the events of the 2022 Russian invasion of Ukraine, part of the ongoing Russo-Ukrainian War. This analysis is in three parts: first, it examines the broad composition of the Russian and Ukrainian Armed Forces; second, it discusses the first phase of the invasion from February-April outlining the major operational level actions; and third, it discusses the invasion's second phase covering the April-June period.

Introduction

Shortly before 6am Moscow time on 24 February 2022, President Vladimir Putin of the Russian Federation announced a 'special military operation' in Ukraine. The purported goals of this were to:

*'...protect people who have been subject to bullying and genocide by the Kiev regime for eight years...the demilitarisation and denazification of Ukraine...bringing to justice those who committed numerous, bloody crimes against civilians, including civilians of the Russian Federation.'*¹

This announcement was swiftly followed by the Russian Armed Forces invading Ukraine in a major escalation of the ongoing conflict between the two countries. Missile strikes on airfields, and on headquarters and military depots spanning the depth of Ukraine, preceded a series of ground and air assaults across multiple fronts. Consequently, Ukraine enacted martial law, commenced mobilisation and deployed its own armed forces to respond. The invasion has since been categorised into two distinct phases. The first phase encompasses the initial efforts to seize Kyiv and other key locations which ended in early April; the second, which is ongoing, has focussed on the Donbas region in the country's east.

This Spotlight Brief is the second in a series which examines the ongoing Russo-Ukrainian War. Spotlight Brief 1/22 examined Ukraine's strategic circumstances which provided context to the current conflict. This second Brief aims to provide the reader with a broad operational level overview of how the invasion has unfolded to date. It is structured in three parts. First, it examines the broad composition of the Russian and Ukrainian Armed Forces to illustrate important similarities and differences between the two. Second, it discusses the first phase of the invasion from February-April, outlining the strategic and operational objectives of the campaign and explaining the broad operational level movements during it. Third, it discusses the second phase of the invasion which refocussed on eastern Ukraine over the April-June period.

It is important to note that this conflict is ongoing and the information available is incomplete. Thus, it is likely that certain events described here will be better understood given the benefits of time and access to information that is currently unavailable. Accordingly, this paper aims to provide the reader with a broad overview of operational events and necessarily omits discussion on minor tactical actions, battles and engagements. This Brief primarily focusses on the application of land power by the Russian Ground Forces and the Ukrainian Land Forces. A subsequent Brief will examine a range of lessons that may be derived from this conflict.

Russian Armed Forces

During the Cold War, the *Union of Soviet Socialist Republics* maintained enormous conventional forces and the world's largest nuclear arsenal. The *Armed Forces of the Russian Federation* (or put simply, the Russian Armed Forces) which emerged from the collapse of the Soviet Union was a much smaller force with a different role and focus than its predecessor. The Russian Armed Forces have undergone a significant and protracted transformation to professionalise and modernise; annealed by lessons learnt from Chechnya, Dagestan, Georgia, Syria, the Caucasus and Ukraine.² The contemporary Russian Armed Forces consists of three services and three arms under the command of the *National Defense Management Center*. The services are the *Russian Ground Forces*, *Russian Navy* and the *Aerospace Forces*. These are complemented by three independent arms of service; the nuclear weapon equipped *Strategic Missile Forces*, *Airborne Troops* and the *Special Operations Forces*.³

The composition of these organisations is: 300,000 personnel within the Ground Forces, 150,000 in the Navy (which includes a sizeable Naval Infantry component), 160,000 in the Aerospace Forces, 70,000 in the Missile Forces, 40,000 Airborne Troops and 20,000 Special Operations Forces. With additional personnel in command and control, cyber-warfare, support, logistics and security areas, the Russian Armed Forces have around 850,000-1,000,000 full time personnel, themselves a mixture of contracted and conscripted members, with the ability to draw upon a national guard and reserves estimated at around 2,000,000.⁴

During war, command and control of the Russian Armed Forces is exercised via five military districts, or joint *Operational Strategic Commands* (OSK): Eastern, Central, Northern, Southern and Western. Each command includes elements of each of the services and independent arms. Western Command, which abuts Ukraine, also includes the forces in the Russian exclave of Kaliningrad and the *Operational Group of Russian Forces* (OGRF) in Transnistria. The OGRF provides Russian influence in Moldova and poses a threat to the south-western Ukrainian border. Likewise, the presence in Kaliningrad includes strategic air and sea capabilities which allow Russia to strike deep into the Baltic region, as well as land forces capable of defending the exclave.⁵

Over the past 14 years under the *Serdyukov-Shoigu* reforms triggered by the 2008 Georgian War, Russian Ground Forces have undergone a significant modernisation effort. While the branches of service remain intact (including motorised rifles, tanks, artillery, air defence, special and logistic troops), organisationally they were restructured into around 40 active combat brigades. Brigades, based on tank or motorised rifles combat units, became the primary tactical formation reporting directly to a *Combined Arms Army*, which largely replaced regimental, divisional and corps groupings. Within the brigades of the Ground Forces, as well as those of the Airborne Troops and Naval Infantry, the *Battalion Tactical Group* (BTG) is the key tactical unit of action. These battalion sized combined-arms groups, analogous to the Australian Battle Group or US Task Force, are the most useful measure of the combat power of these formations. It has been assessed that, as of mid-2021, Russia has maintained around 170 BTG across its various commands.⁶ While numbers of BTGs are discussed broadly below, the employment of BTGs will be examined in more detail in a subsequent Brief. Within the limitations of available information, **Figure 1** shows a broad organisation of combat formations of the Russian Ground Forces, with the reserve formations omitted.



Russian Ground Forces



Western Military District				
1 st Guards Tank Army 2 nd Guards Motor Rifle Division 4 th Guards Tank Division 47 th Guards Tank Division 27 th Guards Motor Rifle Brigade	6 th Guards Combined Arms Army 25 th Separate Guards Motor Rifle Brigade 138 th Separate Guards Motor Rifle Brigade	20 th Guards Combined Arms Army 3 rd Motor Rifle Division 144 th Guards Motor Rifle Division	11 th Army Corps 18 th Guards Motor Rifle Division 7 th Guards Motor Rifle Regiment	
Southern Military District				
8 th Combined Arms Army 20 th Guards Motor Rifle Division 150 th Motor Rifle Division	49 th Combined Arms Army 205 th Motor Rifle Brigade 34 th Separate Motor Rile Brigade	58 th Combined Arms Army 42 nd Motor Rifle Division 19 th Motor Rifle Brigade 136 th Guards Motor Rifle Brigade	22 nd Army Corps 127 th Reconnaissance Brigade 126 th Guards Brigade	
Central Military District				
2 nd Guards Tank Army 15 th Separate Motor Rifle Brigade 21 st Guards Motor Rifle Brigade 30 th Motor Rifle Brigade		41 st Combined Arms Army 90 th Guards Tank Division 35 th Separate Guards Motor Rifle Brigade 55 th Separate Motor Rifle Brigade 74 th Separate Guards Motor Rifle Brigade		
Eastern Military District				
5 th Combined Arms Army 127 th Motor Rifle Division 57 th Separate Guards Motor Rifle Brigade 70 th Separate Motor Rifle Brigade	29 th Combined Arms Army 36 th Separate Guards Motor Rifle Brigade	35 th Combined Arms Army 38 th Separate Guards Motor Rifle Brigade 64 th Separate Guards Motor Rifle Brigade	36 th Combined Arms Army 5 th Separate Guards Tank Brigade 37 th Guards Motor Rifle Brigade	68 th Army Corps 39 th Separate Motor Rifle Brigade
Northern Military District				
14 th Army Corps 200 th Separate Motor Rifle Brigade 80 th Separate Arctic Motor Rifle Brigade				
Naval Infantry 40 th Independent Naval Infantry Brigade 61 st Separate Naval Infantry Brigade 155 th Separate Guards Naval Infantry Brigade 336 th Independent Guards Naval Infantry Brigade 810 th Separate Naval Infantry Brigade 177 th Naval Infantry Regiment		Airborne Troops 7 th Guards Air Assault Division 76 th Guards Air Assault Division 98 th Guards Airborne Division 106 th Guards Airborne Division 11 th Guards Airborne Brigade 31 st Guards Airborne Brigade 56 th Guards Airborne Brigade 83 rd Guards Airborne Brigade		Special Operations Forces 8 Spetsnaz Brigades 1 Spetsnaz Regiment

Figure 1. Russian Ground Forces by Military District.⁷

Ukrainian Armed Forces

The Ukrainian Armed Forces were established in 1991 at the time of Ukraine's independence from the Soviet Union. As a result, they inherited the legacy of Soviet era organisations, equipment and approaches. Ukraine also gained ownership of a large defence industry which had the capability to manufacture, maintain and upgrade Soviet-era vehicles, weapons and equipment. However, Ukraine's Armed Forces were weakened by decades of neglect, corruption and underfunding which eroded the capacity for Ukraine to conduct and sustain major combat operations. Consequently, the invasion of the Donbas and annexation of Crimea in 2014 provided the impetus to reform Ukraine's armed forces.

Ukraine suffered a number of major defeats during the protracted Donbas War, which commenced in March 2014 and coalescing into the 2022 invasion, exposing the vulnerabilities of its forces. The lack of modern and standardised weaponry, including anti-armour, air-defence and aircraft, as well as cumbersome Soviet-era structures and doctrine, hindered the Ukrainian response to Russian and separatist forces. Russia's prolific use of artillery, in concert with heavy armour and electronic warfare, demonstrated that Ukraine's land forces were highly vulnerable to conventional military attacks. Likewise, the Ukrainian Air Force suffered significant losses and the threat of Russian air-defence curtailed its use during the conflict. Most affected was the Ukrainian Navy which was severely depleted by this conflict, losing its bases in the Crimea along with most of its ships to the Russian Black Sea Fleet. In spite of these initial setbacks, the Ukrainian Armed Forces, in concert with volunteer territorial defence organisations, stopped the Russian advance and even recaptured some of the territory lost. However, the Donbas War devolved into a 'frozen conflict' with a reduction in fighting but no resolution for either party.⁸

In response to this conflict and in order to achieve the government's aim of joining the North Atlantic Treaty Organisation (NATO) alliance, the Ukraine Armed Forces have undergone a series of reforms since 2014. Guiding these is a NATO Comprehensive Assistance Package to assist Ukraine to implement security and defence sector reforms to conform to NATO standards. This includes a revised command and control structure to increase transparency, counter corruption and ensure civilian control over the military. This structural reform is complemented by increasing professionalisation of the force and the injection of modern equipment and weapons. While Ukraine has subsequently moved closer to a Western

military model, it continues to face challenges due to the legacy of the Soviet era in regard to culture, training and education.⁹

Ukraine, like Russia, combines both contract service soldiers as well as conscripts. As of January 2022, Ukraine had a total active force of around 196,000. Of this, the Ukrainian *Land Forces* comprise 125,000, *Naval Forces* 15,000, *Air Forces* 35,000, *Air Assault Forces* 20,000 and *Special Operations Forces* 4,000. Ukraine also has the ability to draw upon a Reserve Corps (50,000), Territorial Defence Forces (100,000 or more volunteers) and a National Guard (33,000). The Ukraine Armed Forces are commanded in war by the *Joint Operations Headquarters* and four *Operational Commands*; North, East, West and South.¹⁰ Ukraine's Land Forces include infantry, armour, missile, artillery, aviation and air defence formations as well as a comprehensive logistic and support apparatus. The primary combat formations are tank, mechanized and motorised rifle brigades. The combat formations of the Ukrainian Land Forces are shown in **Figure 2**.

From this broad overview, three salient points are evident. First, the Russian and Ukrainian armies are broadly similar in terms of major weapons and equipment, with the combined arms brigade the centrepiece of their conventional combat power. Second, Ukraine's military power is dwarfed by the larger Russian Armed Forces, with Ukrainian air and naval power significantly weakened in 2014 and the subsequent 'frozen war' period. Russia thus possesses a significant advantage in net combat power as it has much greater numerical strength both in terms of active and reserve forces. Yet the ability to activate and employ reserves in a situation short of a declared war may complicate, if not prevent, Russia ability to reinforce. Conversely, Ukraine's ability to call upon and quickly mobilise its reserves, in response to a breach of its sovereign territory, means that any invader would need to account for a large number of highly motivated, if less well equipped, volunteer Territorial Defence Forces. Third, as a result of the 2014 conflict, the Ukraine Armed Forces commenced a comprehensive process of reform towards the path of NATO membership, including major organisational, command and control and training changes. While Ukraine has benefited from NATO's support, reform is a lengthy and ongoing process which has been disrupted by the current conflict. Russia has also undertaken modernisation efforts in recent years, however this process has been challenged by a range of economic and political pressures which have slowed its progress toward a more professional armed force.



Land Forces of Ukraine



Operational Command North (Chernihiv)		
1 st Tank Brigade 30 th Mechanized Brigade 58 th Motorized Infantry Brigade 61 st Jager Infantry Brigade 72 nd Mechanized Brigade		
Operational Command East (Dnipropetrovsk)		
17 th Tank Brigade 53 rd Mechanized Brigade 54 th Mechanized Brigade 92 nd Mechanized Brigade 93 rd Mechanized Brigade		
Operational Command West (Rivne)		
10 th Mountain-Assault Brigade 14 th Mechanized Brigade 24 th Mechanized Brigade 128 th Mountain Infantry Brigade		
Operational Command South (Odessa)		
28 th Mechanized Brigade 56 th Motorized Infantry Brigade 57 th Motorized Infantry Brigade 59 th Motorized Infantry Brigade		
Reserve Corps		
3 rd Tank Brigade 4 th Tank Brigade 5 th Tank Brigade 14 th Tank Brigade	15 th Mechanized Brigade 30 th Mechanized Brigade 45 th Mechanized Brigade	60 th Mechanized Brigade 62 nd Mechanized Brigade 63 rd Mechanized Brigade
Naval Infantry 35 th Naval Infantry Brigade 36 th Marine Brigade	Airborne Assault Forces 25 th Airborne Brigade 45 th Airmobile Brigade 46 th Air Assault Brigade 79 th Air Assault Brigade 80 th Air Assault Brigade 81 st Airmobile Brigade 95 th Air Assault Brigade	Special Operations Forces 3 rd Special Forces Regiment 8 th Special Forces Regiment

Figure 2. Ukrainian Land Forces by Operational Command.¹¹

Phase One of the Invasion: 24 February-7 April 2022

This section examines Phase One of the Russian invasion of Ukraine. It outlines the assessed strategic and operational level objectives and offers a broad overview of the campaign and major operations conducted. The Russian endstate for the invasion is assessed to be based on four conditions expressed by Putin at its outset, these are: the political alignment of Ukraine with Russia, including the recognition of its sovereignty over Crimea; strengthening its national security by the neutralisation of Ukraine's military power; recognition of the *Luhansk People's Republic* (LPR) and the *Donetsk People's Republic* (DPR); and the integration of Ukraine, economically and culturally into the Eurasian Economic Union.¹²

Strategic Objectives

To achieve its security aims within this broader political framework, the likely Russian military strategic objectives¹³ for the initial invasion are assessed as:

Primary Strategic Objectives

- Seize Kyiv to remove the Ukrainian government and military command.
- Consolidate Luhansk and Donetsk Oblasts (provinces) as part of the LPR and DPR.
- Establish a Crimea-Donetsk land bridge across Kherson and Zaporizhia Oblasts.
- Reduce the military power of the Ukraine Armed Forces.

Secondary Strategic Objectives (once conditions are set)

- Control 'Right Bank' Ukraine east of the Dnipro River including Kyiv, Chernihiv, Sumy, Kharkiv, Poltava, Cherkasy and Dnipropetrovsk Oblasts.
- Establish an Odessa-Donetsk land bridge across the Mykolaiv and Odessa oblasts to deny Ukraine access to the Black Sea.
- Link-up with the OGRF and Russian aligned forces in Transnistria.¹⁴

Operational Objectives

The following operational objectives were assessed as necessary to set the conditions for the strategic objectives during Phase One.

Primary Operational Objectives

- Seize Kyiv city, kill/capture strategic leadership and control the northern and western approaches to the city in Kyiv Oblast, (Main Effort)
- Seize Chernihiv and control the northern and north-eastern approaches to Kyiv and crossings over the Desna River in Chernihiv Oblast, (Supporting Effort)
- Seize Sumy and control eastern approaches to Kyiv and crossings over the Sejm and Psel Rivers in Sumy Oblast, (Supporting Effort)
- Seize Kharkiv Oblast to control arterial highways and roads as well as crossings over the Seversky Donets River, (Supporting Effort)
- Seize Luhansk and Donetsk Oblasts (Supporting Effort)
- Seize Kherson and Zaporizhia Oblasts (Supporting Effort)
- Seize Mykolaiv city and key infrastructure in Mykolaiv Oblast, and control the Southern Bug River crossing points (Supporting Effort).
- Seize Zmiinyi (Snake) Island in the Black Sea to extend control over Odessa and the south-west coast of Ukraine (Supporting Effort).
- Disrupt Ukrainian supplies and support in West Ukraine.

Secondary Objectives (once conditions are set)

- Seize Poltava and Dnipropetrovsk Oblasts, and
- Seize Odessa Oblast.

These objectives are shown in **Figure 3**.



Figure 3. Operational Objectives of the Russian Invasion.¹⁵

Phase One commenced in the early morning of 24 February 2022. Prior to this, Russia had deployed troops to the occupied Donbas Region in support of Putin's recognition of the LPR and DPR, which laid claim to the entirety of the oblasts within which they resided. Equally, it had massed troops on Ukraine's borders with Belarus and Russia. The campaign to invade Russia was executed across four major fronts: Northern, North-Eastern, Eastern and Southern, these and the estimated formations involved are shown in **Figure 4**. These assaults were preceded by a range of strikes across Ukraine that targeted air defences, airfields, ports and equipment depots across the country. These strikes were delivered by ballistic and cruise missiles launched from sea, air and land platforms, as well as naval shelling. This effort was complemented by the use of electronic warfare to disrupt command, control and communications mechanisms and to jam unmanned aerial vehicle teleoperations. Cyber-attacks were also conducted on satellite communications providers. However, these efforts failed to destroy Ukraine's air force on the ground nor did they prevent the mobilisation of its land forces.¹⁶ Additionally, both sides have sought to gain advantage by waging an information campaign to discredit the activities of the other and enhance their own legitimacy and actions. This has resulted in wide spread misinformation and propaganda efforts across social media platforms, targeting audiences in Ukraine, Russia and globally.

Initial assessments were that Russia had committed between 150,000-200,000 troops, with between 90-120 BTGs deployed.¹⁷ In comparison, Ukraine deployed around 20 active tank and infantry brigades, fielding between 40-60 battalion size units. Further, Ukraine's mobilisation enabled it to progressively augment its armed forces with thousands of Reserves and Territorial Defence Forces across the four operational commands. These commands had well-defined territorial command and control arrangements with overall command carried by the Joint Operations Headquarters at Kyiv. In comparison, command of the invasion was split between the headquarters of Russia's four military districts. These each coordinated the contributions of the services and arms of its major formations on one or more fronts, with overall strategic command vested in the National Defense Control Center in Moscow.

Northern Front

This front contained those forces which crossed the Ukraine-Belarus border through the central northern oblasts of Kyiv and Chernihiv. The Russian forces were largely drawn from the Eastern Military District and the Ukrainian from Operational Command North. These likely included elements of the following:

Russian Ground Forces	Ukrainian Land Forces
<ul style="list-style-type: none">• 29th Combined Arms Army• 35th Combined Arms Army• 36th Combined Arms Army• Russian Airborne Forces• Special Operations Forces	<ul style="list-style-type: none">• 72nd Mechanised Brigade• 95th Airborne Brigade• Territorial Defense Forces• National Guard of Ukraine

Strong ground forces, based on tank/motor rifle brigades, initially penetrated south along the banks of the Dnipro River towards the Ukrainian capital of Kyiv and south towards the city of Chernihiv. This occurred in conjunction with efforts on the north-eastern front which sought to advance towards Kyiv from the eastern bank of the Dnipro through southern Chernihiv and Sumy Oblasts. The ground assault was conducted in concert with airborne assaults. These aimed to quickly seize Hostomel Airport to establish an air bridge to enable operations west of Kyiv. Further, special forces were allegedly employed to infiltrate Kyiv itself in order to sabotage infrastructure and attack security forces. These actions sought to encircle Kyiv from west, north and east, thereby neutralising its national military command and forcing a rapid capitulation of the government.¹⁸

However, while the initial progress to the north yielded terrain to the Russians, including the Chernobyl Exclusion Zone, they faced mounting resistance around the capital. Similarly, the seizure of Hostomel Airport was strongly contested preventing Russia from using it to airlift large numbers of troops to then quickly seize Kyiv. Reportedly, eighteen Il-76 aircraft were turned back as a result of the airfield being rendered inoperative.¹⁹ A subsequent attempt to take Vasylykiv Air Base south of Kyiv also failed. Kyiv then became the target of a protracted period of bombardment by air, artillery and missile strikes throughout March. Clashes between ground forces on its periphery also intensified as Russian forces attempted to encircle Kyiv, with heavy fighting in the north around Hostomel-Bucha-Irpin, Vyshneve in its west and Brovary-Boryspil in the east.

An attempt to resupply and reinforce these elements by road, in preparation for an assault on the city itself, resulted in a very large convoy being checked north of Kyiv.²⁰ Ukrainian forces launched a counter-offensive on 16 March, driving those forces around Kyiv northwards and progressively recapturing much of the territory previously lost. By early April, most of the Russian forces on the northern front had withdrawn to Belarus for repair, refit and redeployment. The battle for Kyiv is therefore important as it signified Russia's failure to achieve its primary strategic objective.

North-Eastern Front

Russian forces from the Central Military District crossed the Ukraine-Russia border on two axes through the Chernihiv and Sumy Oblasts. They were opposed by elements of Operational Command North, as shown below:

Russian Ground Forces	Ukrainian Land Forces
<ul style="list-style-type: none">• 41st Combined Arms Army• 2nd Guards Tank Army• 6th Combined Arms Army• Naval Infantry• Russian Airborne Forces	<ul style="list-style-type: none">• 1st Tank Brigade• 93rd Mechanised Brigade• 58th Motor Rifle Brigade• 81st Airmobile Brigade• Territorial Defense Forces

The northern axis aimed for Chernihiv, control of which allowed the Russians to gain access over the arterial highways heading south-west towards Kyiv.²¹ However, advancing Russian armoured and mechanised forces met strong resistance at the city of Chernihiv. To continue the advance south-west and support efforts to encircle Kyiv, Chernihiv was bypassed. While the Russian forces advanced to the east bank of the Dnipro to isolate the city, follow-on forces captured the city of Konotop and then laid siege to Chernihiv. The siege lasted for over five weeks, featuring clashes between armoured forces and the destruction of much of the city by artillery and air strikes. Simultaneously on the southern axis, a separate Russian force attacked Sumy with similar results. The city suffered the effects of heavy fighting with the Russians forced to withdraw on the 26th of February, only to return again in March to lay siege. While elements bypassed and pushed west, Sumy was subject to concentrated air and artillery attacks throughout March in preparation for a ground offensive against the city.

Across both oblasts, Ukrainian efforts were focussed on interdicting Russian lines-of-communication running from the border through Chernihiv-Sumy to Kyiv. These were needed to support the advance west and the subsequent encirclement of Kyiv. While Russian forces pushed to the outskirts of Kyiv, this advance extended their supply lines and left them exposed due to a lack of forces to secure them. They suffered frequent harassing attacks by the Ukrainians, which resulted in the diversion of additional troops to secure supply routes and concentration areas. However, the disruption of support and gradual attrition of their forces on the north-eastern front forced the Russian forces to adopt a defensive posture. While the Russians probably aimed to regroup, reinforce and resupply themselves to then renew operations, this was hampered by inadequate and poorly coordinated logistics and lowering morale.²² Consequently, Russian efforts on the north-eastern front stagnated.

Subsequent Ukrainian counter-attacks throughout late-March began to recapture the territory east of Kyiv as well as parts of Sumy and Chernihiv Oblasts. The Russians progressively retracted eastwards ceding ground to the Ukrainians. The siege of Chernihiv was finally lifted on 31 March with the recapture of the highway connecting it to Kyiv by elements of the 1st Tank Brigade and Territorial Defence forces. By 6 April, the Sumy and Chernihiv Oblasts were reportedly almost entirely recaptured by Ukrainian forces.²³ Hence, with the attempt to encircle Kyiv having failed, and in the face of increasing resistance in the area east of the Dnipro, Russia began to redeploy its forces out of this front and rest them for employment elsewhere.

Eastern Front

Eastern Ukraine endured some of the most intense combat during the campaign. This front was fought across four major axes, Kharkiv in the north-east, Luhansk and Donetsk in the east and Mariupol in the south east. The nature of operations on this front evolved over the course of the phase, with the initial offensive centred on seizing major cities and extending the line of contact westwards. The 400 kilometre long front-line or 'line of contact' was a product of the fighting during the 2014 period and spanned both Luhansk and Donetsk Oblasts in the east (shown in **Figure 4**). As the situation on the north and north-eastern fronts changed for the Russians, their focus shifted to linking-up the Kharkiv forces with those of

the Luhansk and Donetsk Peoples Republics. The initial Russian force in the east included formations from the Western, Southern and Eastern Military Districts, and they faced off against Ukrainian forces largely drawn from Operational Commands East and West. The major formations committed to this front are shown below:

Russian Ground Forces	Ukrainian Land Forces
<ul style="list-style-type: none"> • 1st Guards Tank Army • 5th Combined Arms Army • 6th Combined Arms Army • 8th Combined Arms Army • 20th Combined Arms Army • Russian Airborne Forces • Russian Naval Infantry • Special Operations Forces • 1st Army Corps Donetsk Peoples Republic (DPR) Armed Forces • 2nd Army Corps Luhansk Peoples Republic (LPR) Armed Forces • Paramilitaries (Wagner Group) 	<ul style="list-style-type: none"> • 17th, 3rd and 4th Tank Brigades • 24th, 53rd, 54th, 92nd, 93rd Mechanized Brigades • 56th Motorised Brigade • 25th Airborne Brigade • 81st Airmobile Brigade • 95th Air Assault Brigade • 10th and 128th Mountain Assault Brigades • 36th Marine Brigade • National Guard • Territorial Defense Forces • Paramilitaries (Azov, Donbas and Sich Battalions)

The attack on Kharkiv was launched from Belgorod, just inside the Russian border, with additional forces securing the east of the oblast. The initial Russian frontal attack on Kharkiv city, Ukraine's second largest at over a million people, was repulsed by well-organised resistance, preventing its capture and disrupting Russian plans to penetrate further west. In response, Russian forces waged a sustained bombardment of the city by heavy artillery, air strikes, ballistic and naval cruise missiles. This resulted in numerous civilian casualties and widespread damage to the city's infrastructure.²⁴ While this action could have prepared the way for a large scale ground assault by mechanised forces, the potential risk of a long drawn out siege appears to have triggered a decision to bypass the city. Ground forces around Kharkiv were split; while some remained within the city to fix the defenders there in preparation for a subsequent attack, other elements were tasked to bypass it and penetrate south to link-up with

forces near Izium. Izium was key to enabling penetrations into the interior of Ukraine as it provided crossing points over the Severskyi Donets River. The Severskyi Donets is of critical importance in the east as it provides a natural defensive barrier, impeding the westward progress of any attacker.

The forces around Kharkiv were further depleted in mid-March by the need to support the north-eastern front which had by then begun to falter, with more troops diverted to Sumy. This redistribution of Russian troops was coupled with Ukrainian forces mounting limited counter-attacks around Kharkiv and its west, recapturing much of the territory lost. Consequently, prolonged combat action, and the diffusion of effort, resulted in the reduction of available Russian combat power, again worsened by supply shortages.²⁵ As a result, by the end of March, the Russian forces around Kharkiv had abandoned efforts to capture the city, instead aiming to fix the Ukrainian defenders there, capturing Izium (achieved on 1 April) and renewing efforts to link-up with LPR forces in Luhansk Oblast.²⁶

Due to previous fighting in the 2014 Donbas War, Ukrainian and separatist forces of the LPR and DPR were arrayed along, and separated by, the line of contact. On the day of the invasion, Russian and separatist forces advanced into both oblasts attempting to gain full territorial control over them. This occurred in concert with attacks along the line of contact which aimed to pin those Ukrainian forces deployed there, enabling forces advancing from the south and north to isolate them.²⁷ This advance resulted in heavy fighting around Popasna, Rubizhne, Horlivka, Karlivka and Donetsk throughout February and March. While the Russians did succeed in linking up Luhansk and Kharkiv oblasts in late March, the invaders were repeatedly checked in their attempts to extend control along the line of contact. Both sides incurred combat losses with fighting slowing at the end of March. By early April, an injection of additional forces allowing Russia to renew frontal attacks across the line of contact, however these failed to achieve the breakthrough sought.²⁸

In the south of Donetsk, the port city of Mariupol would also prove difficult for the Russians to capture. Mariupol provided Russia with access to a vast industrial centre, control of a major port on the Sea of Azov, and was necessary to establish the land bridge between Russia and the Crimea. Attacks began on 24 February; however, resistance in and around Mariupol led to its encirclement and then, on 1 March, it was laid siege to.

This was achieved by Russian forces from Donetsk in the east and by others advancing from Berdiansk to its west. The latter force included elements from the southern front advancing along the coastline. Upon its encirclement, Mariupol was subject to a massive 15 hour bombardment which targeted critical civilian infrastructure to trigger the swift surrender of the city. This effort did not have the desired effect and the siege continued into late May.

Southern Front

The southern front of the invasion was undertaken by Russian forces advancing from the Crimea. These attacked the Kherson, Mykolaiv and Zaporizhia Oblasts in southern Ukraine. Given the littoral geography of this front, the operations conducted are notable for their combination of air, ground and naval forces. The Ukrainian forces were drawn from Operational Command South and West and fought Russian forces predominantly from the Southern Military District. The major formations identified on this front are shown below:

Russian Ground Forces	Ukrainian Land Forces
<ul style="list-style-type: none">• 49th Combined Arms Army• 58th Combined Arms Army• 22nd Army Corps• Russian Airborne Forces• Russian Naval Infantry• Special Operations Forces• 1st Army Corps Donetsk Peoples Republic (DPR) Armed Forces• Paramilitaries (Wagner Group)	<ul style="list-style-type: none">• 28th Mechanized Brigade• 59th Motorised Brigade• 128th Mountain Assault Brigade• 5th Tank Brigade• 45th Air Assault Brigade• Territorial Defense Forces• Ukraine Naval Infantry• Territorial Defence Forces

Russian activity on this front commenced on 24 February with attacks by cruise and ballistic missiles against cities in the Kherson Oblast. Russia was quick to establish a naval blockade of Ukraine’s coastline, primarily through the deployment of two naval task forces. One of these closed the Kerch Strait, thereby achieving control over the Sea of Azov. The other blockaded Odessa and other ports on the Black Sea coast and

seized Zmiinyi Island near the Danube delta. This blockade cut-off Ukraine from sea trade. As Odessa's port accounts for 80 percent of the country's maritime commerce, it has now been left heavily reliant on financial support from other countries. Equally, the blockade has removed Ukraine's ability to resupply and transport its military via the sea, increasing its reliance on ground lines-of-communication.²⁹ These attacks were conducted in conjunction with a ground advance on two axes towards the major cities in Kherson and Zaporizhia oblasts.

The eastern axis of the Russian offensive took Melitopol, Berdiansk and Enerhodar, and later attacked Mariupol. Melitopol and Berdiansk fell after heavy fighting in early March, with the capture of Enerhodar only days later. The seizure of Enerhodar was of strategic importance as it also netted the Russians the Zaporizhia Nuclear Power Plant and Zaporizhia Thermal Power Station. This infrastructure generates a significant proportion of Ukraine's electricity and provide Russia an important lever with the Ukrainian government. Likewise, the capture of Berdiansk yielded to Russia about a dozen ships from the Ukrainian fleet. It also provided a major port to support Russia's invasion and control the flow of exports from eastern Ukraine, particularly vital food stuffs. Ukraine later retaliated by attacking the Russian ships moored at Berdiansk with a ballistic missile, damaging and eventually sinking the *Saratov*.³⁰ Southern front forces also participated in the siege of Mariupol. As part of the naval task force in the Sea of Azov, the 810th Naval Infantry Brigade conducted an amphibious lodgement west of Mariupol on the night of 25 February, which - in conjunction with other elements of the southern front - helped encircle and then besiege Mariupol from the west.

The western axis captured the North Crimea Canal, Kherson and Nova Kakhovka. The capture of the canal enabled Russia to restore water supplies to the Crimean Peninsula which had been cut since 2014. Russian forces also attempted take Mykolaiv in Mykolaiv oblast. Mykolaiv serves as the main shipbuilding hub in the Black Sea, containing ship building yards, providing and maritime research centres. It also commands a number of crossing points over the Southern Bug River. Given its importance, airborne and ground elements made several attempts to take Mykolaiv during March and April, with parts of the city captured. As the likelihood of its capture grew, the Ukrainian's scuttled their naval flagship the *Hetman Sahaidachny* in Mykolaiv's port, a further blow to

its Navy. Further to Mykolaiv's north, the Russians also attempted to capture the city of Voznesensk. Its seizure would have enabled access to the South Ukraine Nuclear Power Plant, the capture of which would have given Russia even greater control over Ukraine's energy supply. Given the importance of these cities, they were strongly contested by Ukrainian forces that defeated numerous attempts to take them. As part of a wider general counter-offensive, Ukraine mounted a number of attacks from 16 March. As a result, Russian advances further west and north into Mykolaiv were stopped. By early-April, control of Mykolaiv was restored to Ukraine, although its approaches remained contested.³¹

Summary

This overview has discussed the major events across the four fronts of the Russian invasion of Ukraine during Phase One. The focus of the northern front was the seizure of Kyiv, an objective of strategic importance. This was to be supported on the north-eastern front by the seizure of the cities of Chernihiv and Sumy in conjunction with securing the north-eastern approaches to Kyiv. In the east, the key objectives were the seizure of the cities of Kharkiv and Mariupol, fixing Ukrainian forces in the centre and consolidating Russia's hold on Luhansk and Donetsk Oblasts. In the south, the seizure and occupation of Kherson and Zaporizhia Oblasts aimed to establish a Crimea-Donetsk land bridge. However, the Ukrainians strongly defended their major cities which, coupled with efforts to interdict lines-of-communication, drained the momentum of the Russian invasion. By mid-March, Ukraine had mounted a widespread counter-offensive, initially focussed on the north and north-east, which led to the recapture of much of the territory lost, and the withdrawal of Russian forces on these fronts.

Analysis indicates that by mid-March, Russia's Phase One objectives were largely unattainable. The failure to quickly capture Kyiv – the campaign's main effort – meant that the strategic objective to remove Ukraine's government and military command could not be achieved. While there are numerous contributing factors to this and the wider failure of Phase One, four stand out:

- The actions around Hostomel, and wider Kyiv, significantly contributed to this failure by dislocating Russian plans.
- Russia's inability to neutralise the Ukrainian air defence network, or to destroy its air force on the ground, denied it air superiority and increased its dependency on long-range strike capabilities, which in turn depleted their stocks of precision strike munitions. This failure enabled Ukraine to maintain sorties of attack aircraft, helicopters and drones in support of its own ground forces and to inflict damage across the breadth and depth of the invasion.
- Ukrainian interdiction of the Russian lines-of-communication, from north and east of Kyiv to the Russian border, was also important in disrupting Russian attempts to concentrate and sustain sufficient combat power to attack the capital.³²
- Russia's inability to quickly seize major cities and to penetrate the line of contact in the east meant that much of Russia's combat power was absorbed with little gain. Consequently, Russia failed to achieve most of its operational objectives in Phase One, particularly in Ukraine's North, resulting in the initial campaign plan becoming untenable.³³

An overview of Phase One is shown in **Figure 4**.



Figure 4. Overview of Phase One operations February-April 2022.³⁴

Phase Two of the Invasion: 8 April-5 June 2022

Phase Two was marked by the Russian government's announcement that troops fighting in Ukraine would be regrouped under one commander. On 8 April, General Aleksandr Dvornikov, Commander of the Southern Military District, was appointed to command all forces on the eastern and southern fronts. The endstate for this phase is more limited than the initial phase and is based on three conditions:

- a. recognition of LPR and DPR as separate nation-states,
- b. recognition of Russian sovereignty over the occupied territories in Eastern-Southern Ukraine c) and the neutralisation of Ukraine's military as an immediate threat to the above conditions.

Thus far, Phase Two has been focussed on a renewed offensive in the Eastern Donbas region which commenced on 18 April.

Strategic Objectives

To achieve the security aims within this broader political framework, the revised Russian military strategic objectives for the invasion are assessed as:

Primary Strategic Objectives

- Consolidate Luhansk and Donetsk Oblasts as part of the LPR and DPR.
- Defend the Crimea-Donetsk land bridge across Kherson and Zaporizhia Oblasts.
- Reduce the military power of the Ukraine Armed Forces.

Secondary Strategic Objectives

- Retain territorial gains in the Mykolaiv Oblast for subsequent operations.

Operational Objectives

To set the conditions for these revised strategic objectives, it is assessed that these operational objectives are necessary during Phase Two.

Primary Operational Objectives

- Seize Luhansk and Donetsk Oblasts (Main Effort)
- Defend territory in Kharkiv Oblast (Supporting Effort)
- Defend territory in Kherson and Zaporizhia Oblasts (Supporting Effort)

Secondary Objectives

- Defend territory in Mykolaiv Oblast in preparation for subsequent operations.

Eastern Front

The eastern front encompasses the territory that Russia gained in Kharkiv, Luhansk and Donetsk oblasts during Phase One. This extends to a new line of contact running broadly through Kharkiv to Izium along the Severskyi Donets River and proceeds along the existing line of contact through the Luhansk and Donetsk oblasts (see **Figure 5**). In order to develop advantageous force ratios to penetrate these defences, throughout late March and April Russia redeployed thousands of troops from the former northern and north-eastern fronts. Likewise, Ukraine redeployed forces in preparation for this offensive. Combat in the Donbas Offensive has likely involved elements from the following formations:

Russian Ground Forces	Ukrainian Land Forces
<ul style="list-style-type: none"> • 1st Guards Tank Army • 2nd Guards Tank Army • 5th Combined Arms Army • 6th Combined Arms Army • 8th Combined Arms Army • 20th Combined Arms Army • 35th Combined Arms Army • 41st Combined Arms Army • 11th Army Corps • 14th Army Corps • 68th Army Corps • Russian Airborne Forces • Russian Naval Infantry • 1st Army Corps Donetsk Peoples Republic (DPR) Armed Forces • 2nd Army Corps Luhansk Peoples Republic (LPR) Armed Forces • Paramilitaries (Wagner Group) 	<ul style="list-style-type: none"> • 17th Tank Brigade • 3rd Tank Brigade • 4th Tank Brigade • 24th, 30th, 53rd, 54th, 72nd, 92nd, 93rd Mechanized Brigades • 56th, 57th and 58th Motorised Brigades • 25th Airborne Brigade • 81st Airmobile Brigade • 46th, 79th and 95th Air Assault Brigades • 128th Mountain Assault Brigades • 36th Marine Brigade • National Guard & Territorial Defense Brigades • Paramilitaries (Azov, Donbas Sich Battalions)

The Donbas offensive's broad aims were to encircle Ukrainian forces fighting in the eastern front via enveloping attacks from the Kharkiv oblast in the north and from the Donetsk oblast in the south. This action has been combined with efforts to seize the remaining territory of Donetsk and Luhansk oblasts, with the completion of the siege of Mariupol and capture of the twin cities of Lysychansk and Sievierodonetsk key to this. The offensive commenced on 18 April with extremely heavy artillery and air bombardments along the line of contact. This preceded ground assaults by concentrated mechanised forces against Rubizhne and Popasna in the north, as a prelude to closing the Lysychansk and Sievierodonetsk salient. Further south, intense fighting occurred along the line of contact, resulting in only minimal progress and a growing number of casualties.

Notably, during an attempt to cross the Seversky-Donets River in the vicinity of Bilohorivka, Russia is reported to have lost an entire battalion on 11 May. As these troops were preparing to make their crossing over a pontoon bridge to encircle Sievierodonetsk, they were struck by an intense artillery barrage, reportedly resulting in around 500 casualties and the loss of 80 vehicles.³⁵ While Popasna and Rubizhne fell to Russian forces in the days following this, attempts to complete the encirclement stalled. Consequently, on 27 May Russian forces commenced a frontal assault to capture Sievierodonetsk.³⁶ While it remains contested, should Sievierodonetsk fall, it would leave Lysychansk as the last remaining city in the Luhansk Oblast under Ukrainian control.

In conjunction with the fighting in the east, the siege of Mariupol continued throughout April. Following its encirclement in early March, Mariupol was subject to heavy artillery, air and missile strikes throughout the siege, resulting in severe damage to the city, its port and surrounds. Ukrainian forces fought hard; however, as they ran out of supplies, ammunition and food, their resistance dwindled into smaller pockets centred on the sea port and the Illich and Azovstal steel plants. The Ukrainian forces in Mariupol, reportedly the 36th Marine Brigade and the Azov Regiment, held out until 20 May when the last of these elements finally surrendered. While casualty figures and the numbers of prisoners taken remain in dispute, it is evident that most of Mariupol was destroyed during the siege.³⁷

In contrast, the Russian position around Kharkiv weakened throughout April and its forces withdrew by mid-May. Throughout April, the position at Kharkiv changed little with Russian forces continuing to shell the city, but lacking the combat power to launch an attack to capture it. In addition to fixing Ukrainian forces in the city, these Russian forces became stretched as they attempted to defend the territory captured in eastern Kharkiv Oblast and maintain the lines-of-communication to the forces around Izium. However, a Ukrainian counter-attack commencing on 3 May began the processes of prising the Russians from their positions around the city itself. By 13 May, Russian forces had been pushed back to the border north and east of Kharkiv. Russian forces then established defensive positions to repel further Ukrainian counter-attacks from reaching the Russian border and to deny them the ability to shell Belgorad. Russian forces also continued to shell Kharkiv with long range missile artillery, probably to fix Ukrainian forces there in order to gain time to reinforce their own forces along the border.

In summary, the Donbas Offensive has met with mixed results to date. It encountered stiff resistance along the line of contact, which prevented the encirclement of those forces across this front as intended and soaked up substantial Russian combat power. While the end of the siege of Mariupol likely freed up additional Russian forces for use elsewhere, the battle for Sievierodonetsk is drawing heavily upon Russian resources in the east. Further, the reverses at Kharkiv now pose a threat to Russian territory. Consequently, the incremental progress across the front, coupled with mounting casualties and recent reports that the Russians are drawing upon reserve stocks of obsolete tanks, suggests that the offensive has likely absorbed a significant amount of the invading force's residual combat power. It is therefore unlikely in the short term that Russia has the ability to expand upon the limited gains it has made on the eastern front without considerably reinforcing its combat power. Conversely, the longer that this campaign continues, Ukraine's combat power is likely to grow stronger with the benefit of mobilisation and inflow of vehicles, weapons and equipment from the West.

Southern Front

The southern front now encompasses the Odessa, Mykolaiv, Kherson, Zaporizhia and western Dnipropetrovsk oblasts. This front was arguably Russia's most successful during Phase One as it established the Crimea-Donbas land bridge. Russian advances established a forward line which encompassed almost all of Kherson Oblast and a large portion of Zaporizhia Oblast. Fighting is now concentrated on two axes: Mykolaiv-Kherson and Zaporizhia-Dnipro. Available information indicates that the forces engaged on these axes are generally those originally drawn from Ukraine's Operational Commands South and West and the Russian Southern Military District. The major formations committed to this front are shown below:

Russian Ground Forces	Ukrainian Land Forces
<ul style="list-style-type: none"> • 49th Combined Arms Army • 58th Combined Arms Army • 22nd Army Corps • Russian Airborne Forces • Russian Naval Infantry • Special Operations Forces • 1ST Army Corps Donetsk Peoples Republic (DPR) Armed Forces • Paramilitaries (Wagner Group) 	<ul style="list-style-type: none"> • 5th Tank Brigade • 14th, 28th, 54th, 60th and 63rd Mechanized Brigades • 59th Motorised Brigade • 45th Air Assault Brigade • 80st Air Assault Brigade • Territorial Defense Forces • Ukraine Naval Infantry • Territorial Defence Forces

Early in Phase Two, Ukraine landed a significant blow on Russian sea power in the Black Sea. While one Russian naval task force had been operating in the Sea of Azov, another had been operating in the Black Sea. Over the course of the conflict, the Black Sea task force has launched missile attacks and shelled coastal cities. Most potent among these vessels was the Russian cruiser *Moskva*, the flagship of the Black Sea Fleet. On April 13 in response to these ongoing attacks, Ukraine attacked *Moskva* with two land based Neptune anti-ship missiles, damaging it severely. *Moskva* was reportedly under tow when she sank the following day.³⁸ This triggered the task force off the coast of Odessa to steam further out into the Black Sea to avoid further strikes, shortly followed by elements of the landing force stationed at Sevastopol.³⁹ While the loss of *Moskva* is arguably more a psychological loss for Russia than a decisive blow to its sea power or to land operations on the southern front, it is nonetheless a significant example of the ability to project land power in the littoral.

In response to Ukrainian activity in April on the Mykolaiv-Kherson axis, the Russian armed forces undertook efforts to strengthen their defensive positions there. This included fortifying first line defences north and west of Kherson and establishing second and third lines of defence in preparation for stronger Ukrainian counter-attacks. Some analysts have also speculated that Russian forces are preparing to renew the offensive westwards toward Mykolaiv and Odessa.⁴⁰ If so, retention of the left bank of the Dnipro River in Kherson Oblast is important to provide the Russians with a position to recommence a westward advance along the Black Sea coast towards Odessa. An offensive in the south that captures Odessa could facilitate a land bridge from Transnistria to the Donbas, and this would have significant ramifications for Ukraine. Given that the Sea of Azov and its ports are now Russian controlled, and that the Crimea has been under Russian control since 2014, blocking access to the Black Sea completely would make Ukraine a land locked country. This would severely impact its export economy and potentially be the catalyst for Ukraine to accept peace on Russian terms. Perhaps in recognition of the threat that the force in Kherson Oblast poses, on 28 May Ukrainian forces began a counter-offensive north-east of Kherson city.⁴¹ Similarly, there has been little progress on the Zaporizhia-Dnipro axis, with Russian forces maintaining a defensive line running east from the Dnipro to the line of contact in Donetsk oblast. While fighting continues, little if any progress has been made on objectives further to the north such as Zaporizhia city, with Russian forces resorting to missile strikes and shelling of the city and surrounding military installations. Given the relatively limited activity and fewer troops on the Zaporizhia-Dnipro axis, it is likely that Russia aims to consolidate its gains here prior to further offensive action.

Summary

Phase Two of the Russian invasion of Ukraine commenced on 8 April with the regrouping of forces under the Southern Military District Commander. To date, the major action of this phase has been the Donbass Offensive. This commenced on 18 April with the primary objective to secure the remaining territories within the Luhansk and Donetsk Oblasts on the eastern front. To achieve this, Russian forces made efforts to cut-off the Ukrainian elements in the east of the country in a double envelopment. One axis of the envelopment advanced from Izium in the north and the other from the south in the Donetsk area. However, these advances have been checked by stiff Ukrainian resistance slowing, if not stalling, the offensive. Ukrainian counter-attacks later recovered territory extending to the Russian border in north-east Kharkiv Oblast, and limited the Russians to incremental progress along the line of contact. Consequently, it appears that the Russians have now switched to the more limited objective of seizing the remaining territory of Luhansk Oblast. This effort is centred on a small salient of territory extending eastwards into the oblast encompassing the cities of Lysychansk and Sievierodonetsk astride the Seversky Donets River. Closing this salient would provide the Russians a psychological victory in the sense that control of Luhansk Oblast would be complete. Such an achievement, however, would likely be achieved at a disproportionate cost to the gains made.

The southern front is divided into the Kherson-Mykolaiv and the Zaporizhia-Dnipro axes. Russian forces on these axes are generally consolidating their positions in order to defend them against renewed Ukrainian counter-offensives. The Russian forces in Kherson remain a threat to Ukraine. If they are able to advance westwards to Odessa, and extend the land bridge from the Donbas beyond the Crimea, this could render Ukraine land-locked which would have significant consequences. However, given the Russian main effort remains the Donbas, and in light of the limited available combat power, it is not anticipated that a renewed offensive on the southern front is possible in the short-term. An overview of Phase Two is shown in **Figure 5**.



Figure 5. Overview of Phase Two at the end of May 2022.⁴²

Conclusion

This Spotlight Brief has examined the Russian invasion of Ukraine. For the purpose of analysis, the campaign has been divided into two phases. Phase One, which began on 24 February 2022, witnessed a major escalation of the ongoing Russo-Ukrainian War. Russian incursions into Ukraine occurred across four fronts: north, north-eastern, eastern and southern. However, Phase One was unhinged by Russia's failure to capture Kyiv early in the campaign. Further, Russia's inability to decapitate Ukraine's political and military leadership has meant that the Ukrainian government has remained able to direct its national war effort, including exercising command and control over its armed forces, mobilising its people and sourcing international support. In the broadest sense, the combination of strong Ukrainian resistance in urban centres across all fronts, combined with the interdiction of lines-of-communication (particularly in the north and north-east), has cost the Russians combat power, logistics to sustain the invasion, and importantly time. As a result, by early March the invasion had stalled. Consequently, Russia lost its ability to achieve planned operational level objectives and to set the conditions for strategic success.

Phase Two of the invasion was marked by the regrouping of Russian forces under a single commander, General Aleksandr Dvornikov. He commands the combined Russian forces that are now reduced to the eastern and southern fronts. The eastern front, reinforced by elements drawn from the north and north-eastern fronts, became the campaign's focus. The main effort was to secure the remaining territories within the Luhansk and Donetsk oblasts. The Donbas Offensive launched in mid-April sought to achieve this outcome through the envelopment of Ukrainian forces in the east. However, the offensive slowed, then stalled in May with the objective now likely reduced to closing the Sievierodonetsk-Lysychansk salient to complete the occupation of Luhansk Oblast. Furthermore, Russian forces are fighting to hold onto the territorial gains made in Phase One in the face of limited Ukrainian counter-offensives near Kharkiv and Kherson on the southern front. While a myriad of factors contributed to tactical successes and failures, and will be the subject of a subsequent Spotlight Brief, it is relevant to note three factors which appear to have significantly contributed to the outcomes of the campaign thus far. These are: planning and preparation, the execution of command and control, and the application of logistics support.

Planning and Preparation

Analysis indicates that Russia's planning and preparation for the invasion was poorly informed and incomplete. Some have suggested that the information gathered to support planning, and analysis of that information, was based on inaccurate and unrealistic intelligence.⁴³ This faulty intelligence led to overly optimistic timelines and erroneous assumptions of a rapid Ukrainian capitulation. Equally, the minimal time between the decision to invade and the invasion itself curtailed the ability for the Russian Armed Forces to plan how they would invade, disseminate plans to the breadth and depth of the force, and to conduct the necessary preparation to enable the campaign's successful execution.⁴⁴ This defect appears to have impacted Russia's ability to stockpile munitions (particularly precision guided weapons), to pre-position reserves of personnel and equipment, and to coordinate the movement of these elements forward. The accuracy of these reports is borne-out by the limited number of BTGs deployed to Ukraine which have proven insufficient to generate, and maintain, the combat power required to force a quick outcome. Deficiencies in Russian planning and preparation have been compounded by the unexpected strength of the Ukrainian military whose means to resist appears to have qualitatively improved (in terms of weapons and training) and quantitatively grown since 2014. Consequently, it appears Russian planning grossly underestimated the will and ability of Ukraine to resist the invasion. At the risk of over simplification, Russia spread its forces too thinly, across too many fronts, with too many objectives to achieve, in too little time.

Command and Control

Another contributing factor to Russia's difficulties has been the impact of operational level command and control on the execution of the campaign. While strategic command has continually been exercised from Moscow, during Phase One the OSK (or military district commands) have been simultaneously attempting to run the campaign across four fronts. These commands have incorporated, to varying degrees, elements of aerospace, naval, ground, special, missile and airborne force elements. Unsurprisingly, these headquarters have been unable to fulfil concurrently the complex tasks of: command, control and coordinate multiple tactical level operations across multiple axes; integration of the various services and arms, as well as forces from the LPR, DPR and mercenaries; and to coordinate these activities with other OSK. Hence the orchestration of actions across multiple fronts during the campaign, and synchronisation of effects from ground, sea, aerospace and informational domains, has been disjointed.

Similarly, the shortcomings of the linkages between operational and tactical commands within the combined arms and tank armies may also have contributed to the campaign's failures. The last ten years has seen the removal of intermediate corps and division headquarters in most of these armies with the effect of both increasing their span of command and growing the complexity of control and support requirements. Headquarters of armies were capable of commanding, controlling and supporting one or two corps or divisions. However, when large numbers of brigades fell under their direct command, the sheer scale of coordination issues may have overwhelmed the command and control apparatus. The friction that has ensued has hindered the Russian forces' ability to orchestrate coherent operations, which has likely contributed to slow troop movement, sporadic resupply and jumbled coordination between different services, arms and branches.⁴⁵ The appointment of a single theatre commander for Phase Two attests to the depth of the command and control issues experienced during Phase One, with one headquarters now commanding the combined joint forces in the theatre. While the success of this new approach warrants future scrutiny, the opening phase of the war was clearly inhibited by Russia's failure to exercise coherent theatre command and control.

Logistic Support

Closely tied to the previous point, the execution of theatre logistics support was inadequate. Part of the reason for this stems from the existence in the planning phase of an immature concept for the campaign. The expectation of a short conflict, the lack of preparation time and greater than expected combat losses, have all contributed to the operational level failings of logistic support. Perhaps most notably is the disconnection between the desired way to fight and the means to support it. In mobile offensive combined arms operations, which is fundamental to an invasion of this kind, the ability to deliver supplies forward to troops is critical, made more difficult as the advance extends the lines-of-communication. Yet, Russia is heavily reliant on rail to support its military forces both inside Russia and beyond. Knowing this, Ukraine destroyed the railway lines between the two countries early in the campaign, leaving Russia dependent on trucks to move supplies forward. However, Russia has insufficient logistics brigades to support all of its combined arms armies, and these brigades lack the trucks to cross-load, distribute and to stock pile the quantities of supplies needed to support forces conducting mobile operations.⁴⁶ Without access to rail transport, roads became congested with vehicles carrying fuel, munitions, repair parts, food and other supplies. As a result, Russia's ability to logistically support the invasion has proven to be grossly inadequate.

This has been greatly compounded during Phase One by Ukraine's successful interdiction of Russian ground lines-of-communication on the northern and north-eastern fronts. Logistics convoys, which were not well protected, became targets for Ukrainian attacks. These attacks slowed the rate of advance and led to critical supply shortages. They also sapped the strength of the invading force as they absorbed more troops to counter them and secure supply dumps and routes.⁴⁷ This situation led to instances in which troops that had advanced well forward of the main body ran out of fuel, ammunition and food and were unable to recover equipment rearward. These troops became isolated, without the ability to fight, and likely resulted in the abandonment of vehicles and equipment. Furthermore, the degeneration of the invasion in Phase Two, into relatively static attritional warfare on the eastern front, poses similar dilemmas given the continued high consumption rates for ammunition and the sustained combat losses. The failure of logistics planning and execution,

particularly the inability to secure lines-of-communication, was a significant contributing factor to the Russian failure.

In conclusion, it is evident that Russia is not fighting the type of war it envisaged in Ukraine. Rather than the swift decapitation of the Ukrainian government and national capitulation, it instead faces a protracted, bloody attritional war. Analysis of the campaign to date has demonstrated that the assessed initial strategic and operational objectives were generally not achieved in Phase One. Despite a reorientation in Phase Two, Russia has made only incremental gains in the Donbas. Russia has nevertheless secured important strips of territory in the south which will pose a significant challenge to Ukraine should it seek to recover them. The influx of Western weapons, support and finances may enable Ukraine to generate the combat power to do this – in time. Equally, faced with the reality of its mistakes, Russia will likely learn from them and adapt its approach to subsequent phases of this campaign. In either case, it is unlikely that Russia or Ukraine will accept the new status quo, which may result in an extended, damaging conflict between the two nations.

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