Alexandr Osipian

Straits, Bridges, and Canals: The Black Sea Region and Russo-Ukrainian Conflict 2014 – 22

Russia's annexation of Crimea in 2014 has stimulated new wave of interest in the peninsula. However, most of the publications on the annexation are focused on the military issues, identity, and domestic politics.¹ At the same time, the broader context of the annexation and its aftermath for the whole Black Sea region, including the issues of logistics, infrastructure, and global food security have been left unexplored. Russia's full-scale invasion of Ukraine on February 24, 2022 revealed how important these issues are not only for the Black Sea littoral states but for many faraway countries too.

After the annexation of Crimea in March 2014 Russia faced three main problems in sustaining the peninsula: transport connections, electricity, and water supply. Crimea was heavily dependent on mainland Ukraine for food, and totally dependent on gas, electricity, and water supplies.

In order to supply Crimea by land, Russia needed to establish its control over a large portion of eastern Ukraine with the Kharkiv–Lozova–Dzhankoi–Simferopol railway line and the M-18 Kharkiv–Zaporizhzhia–Melitopol–Simferopol highway. In early April 2014, Russia attempted to trigger the series of secessionist insurgencies in southeastern Ukraine. In this part of Ukraine, the Party of Regions—the party of the ousted

Created within the framework of the DFG SPP 1981: Transottomanica: Eastern European-Ottoman-Persian Mobility Dynamics (project number 313079038), accessed February 2, 2024, www.transottomanica.de. This chapter covers the war up to September 1, 2022.

1 Tor Bukkvoll, "Russian Special Operations Forces in the War in Ukraine - Crimea and Donbas," Russia and Hybrid Warfare - Going Beyond the Label, Aleksanteri Papers 1 (2016): 25-32; Tor Bukkvoll, "Why Putin Went to War: Ideology, Interests and Decision-making in the Russian Use of Force in Crimea and Donbas," Contemporary Politics 22, no. 3 (2016): 267-82; Kent DeBenedictis, Russian 'Hybrid Warfare' and the Annexation of Crimea: The Modern Application of Soviet Political Warfare (London: I.B. Tauris, 2022); Kerstin S. Jobst, Geschichte der Krim: Iphigenie und Putin auf Tauris (Berlin: De Gruyter, 2020), 313-24; Eleanor Knott, "Generating Data: Studying Identity Politics from a Bottom-Up Approach in Crimea and Moldova," East European Politics and Societies 29, no. 2 (2015): 467-86; Eleanor Knott, "Identity in Crimea before Annexation: A Bottom-up Perspective," in Russia Before and After Crimea: Nationalism and Identity, 2010-2017, ed. Pål Kolstø and Helge Blakkisrud (Edinburgh: Edinburgh University Press, 2018), 282-305; Pål Kolstø, "Crimea vs. Donbass: How Putin won Russian Nationalist Support - and Lost it Again," Slavic Review 75, no. 3 (2016): 702-25; Adam Charles Lenton, "Why Didn't Ukraine Fight for Crimea? Evidence from Declassified National Security and Defense Council Proceedings," Problems of Post-Communism 69, no. 2 (2022): 145-54; Jeffrey Mankoff, "Russia's Latest Land Grab: How Putin Won Crimea and Lost Ukraine," Foreign Affairs, May/June 2014, https://www.foreignaffairs.com/articles/ russian-federation/2014-04-17/russias-latest-land-grab; Kimitaka Matsuzato, "Domestic Politics in Crimea, 2009 - 2015," Demokratizatsiya: The Journal of Post-Soviet Democratization 24, no. 2 (2016): 225 - 56; Andrew Wilson, "The Crimean Tatar Question after Annexation: A Prism for Changing Nationalisms and Rival Versions of Eurasianism," Journal of Soviet and Post-Soviet Politics and Society 3, no. 2 (2017): 1-45.

president Viktor Ianukovych (2010 – 14)—dominated the regional and municipal councils. On April 17, 2014, President Putin, in a question-and-answer session with Russians in a TV broadcast, referred to southeastern Ukraine as "Novorossiia" ("New Russia") a term that had been out of use for almost a hundred years. Putin claimed that these territories had never belonged to Ukraine and had been incorporated into it by the Soviet authorities in the 1920s.2

Russian leadership and mass media demanded a federalization of Ukraine with more autonomy for southeastern Ukraine—Odesa, Mykolaiv, Kherson, Zaporizhzhia, Dnipropetrovsk, Donetsk, Luhansk, and Kharkiv, regions constituting the industrial powerhouse of Ukraine. Of particular importance for Russia are the military and aerospace industries in Dnipropetrovsk and Kharkiv. Connecting Crimea with mainland Russia via the areas of a "Novorossiia" protectorate would make it much easier for Russia to move goods and people to and from Crimea. Furthermore, turning these areas into Russia's protectorate would allow Russia to establish control over all coastal lines with sea ports and to reduce Ukraine to a landlocked agrarian country. The main aim of this plan was to turn Ukraine into a fragile confederation of Ukraine proper and "Novorossiia" without annexed Crimea. Russia's plan was modeled on Bosnia and Herzegovina, which was reshaped in accordance with the Dayton Agreement of $1995.^{3}$

The pro-Russian insurgency—the so-called "Russian spring," inspired and backed by Russia in southeastern Ukraine—had mainly failed by the late spring of 2014. Local political and business elites did not support the insurgency, while local pro-Russian groups were not numerous and entirely marginal. It was only in the Donetsk and Luhansk regions that the insurgents succeeded in taking some administrative buildings and police stations, thereby obtaining arms and establishing their militia and quasimayors, who co-existed with local authorities responsible for municipal issues. However, in the Donetsk and Luhansk regions, the local political and business elites did not take part in the insurgency, and instead preferred to escape to Kyiv. Local pro-Russian secessionist groups were marginal and unpopular prior to the 2014 turmoil. The main reason for the initial success of the insurgency was the mass infiltration of Russian commandos, Cossacks, nationalists, and adventurers conducting Russia's proxy war in the Donbas and pretending to speak on behalf of local residents. Nevertheless,

^{2 &}quot;Transcript: Vladimir Putin's April 17 Q&A," Washington Post, April 19, 2014, https://www.wash ingtonpost.com/world/transcript-vladimir-putins-april-17-qanda/2014/04/17/ff77b4a2-c635-11e3-8b9a-8e0977a24aeb_story.html.

³ Richard Caplan, "Assessing the Dayton Accord: The Structural Weaknesses of the General Framework Agreement for Peace in Bosnia and Herzegovina," Diplomacy and Statecraft 11, no 2 (2000): 213-32; Derek Chollet, The Road to the Dayton Accords (New York: Palgrave Macmillan, 2005); Matthew Parish, "The Demise of the Dayton Protectorate: Inside the Bosnian Crisis. Documents and Analysis," Journal of Intervention and Statebuilding 1 (2007): 11-23; Susan L. Woodward, Implementing Peace in Bosnia and Herzegovina: A Post-Dayton Primer and Memorandum of Warning (Washington, DC: Brookings Institution. Foreign Policy Studies Program, 1996).

due to the advance by the Ukrainian armed forces in early July, the military defeat of the insurgents was unavoidable. In order to save the remnants of the defeated insurgents, the regular detachments of the Russian Army invaded Ukraine's east in mid-July and late August 2014.

Thus, Russia established two statelets there—the "Donetsk and Luhansk People's Republics"—which occupied about 30 percent of the Donetsk and Luhansk regions. The statelets were totally dependent on Russia's military, financial, and economic support, and their purpose was to act as a smokescreen for Russia's covert military presence in the Donbas. Furthermore, Russia's plan was to use the statelets as a "Trojan horse" for causing permanent trouble in Ukraine in order to prevent its development as a pro-Western democracy. Finally, defense of the statelets from alleged Ukrainian aggression could be used as a pretext for Russia's further political and military interference in Ukraine's foreign and domestic politics. Russia had already employed the same model in Moldova and Georgia via military and political support for the respective breakaway regions of Transnistria and Abkhazia and South Ossetia.

1 The Power Bridge: Electricity Supply to Crimea after the Annexation

After the annexation of Crimea by Russia, Ukraine continued to supply the peninsula with food and electricity. Meanwhile, Russian authorities in Crimea persecuted numerous pro-Ukrainian activists and those who were found not to be loyal to the Russian occupational administration. Many were imprisoned while others were forced to leave the peninsula for mainland Ukraine. The well-organized community of the Crimean Tatars became the main target of the Russian security service (FSB). Some Crimean Tatar activists escaped from Crimea and demanded from the Ukrainian authorities more radical measures to raise the costs of annexation to Russia. However, the Ukrainian government was reluctant to undertake a more radical blockade of Crimea because in that case Russia would definitely have escalated the military conflict in the Donbas, partly frozen in March 2015 due to the Minsk 2 agreement (February 12, 2015).

On September 20, 2015 Crimean Tatar activists began blocking the roads and suspending reciprocal cargo transport between Crimea and mainland Ukraine. On November 20 and 21, 2015, four pylons were damaged and downed, grounding a transmission cable and completely cutting off the power lines sending electricity to Crimea. The Crimean Tatar activists denied responsibility, though they did not distance themselves from the act either. In the following days they prevented Ukrainian workers and policemen from accessing and repairing the pylons. The Ukrainian authorities showed lit-

⁴ Anna Shamanska, "Why Ukraine Supplies Electricity to Crimea, and Why it Stopped," Radio Free Europe/Radio Liberty (RFE/RL), November 24, 2015, https://www.rferl.org/a/ukraine-crimea-power-supplyelectricity-explainer/27384812.html.

tle urgency in restoring the power supplies. In early December, Ukraine restored the electricity flow to Crimea through only one of the four power lines. Russia-backed insurgents in the Donbas area stopped coal deliveries to Ukrainian power plants in response, but Ukraine had already managed to store enough coal for the winter. Vladimir Putin instructed the Russian government not to sign a new power contract in Crimea with Ukraine, while the previous one would expire on December 31, 2015.⁵

On December 2, 2015 Putin visited Crimea and launched the "power bridge" construction. Russia hired a Chinese firm, Hengtong, to supply the power cables to be laid across the Kerch Strait.⁶ The power bridge was built from the Rostov nuclear power station (built in 1979–2018) in Volgodonsk, Russia to Simferopol, Crimea. An electricity cable was laid along the bottom of the Kerch Strait to connect Crimea with Russia's southern Krasnodar region. Construction works were finished on May 11, 2016.

The German company Siemens sold seven gas turbines to Russia in 2015 and 2016, but four of them were installed in new gas-fired power plants in Russian-annexed Crimea, violating the EU sanctions. Two new power stations were built by October 2018: Balaklavskaia (Sevastopol) and Tavricheskaia (Simferopol). Along with the modernized Sakskaia power station (Saky), they contributed to the full supply of electricity to Crimea.

2 The Crimean Bridge

After the annexation of Crimea, Russia could not use Ukrainian railways and highways (Kharkiv–Simferopol) for transit of cargoes and passengers, not to mention troops and military equipment. Ukrainian trains have not gone to Crimea since December 27, 2014. On the other hand, using the Kerch Strait ferry line had its limitations: Ferry traffic was often halted due to bad weather. Following the failure of Putin's "Novorossiia" project in the summer of 2014, the construction of a bridge across the Kerch Strait became the top priority for Russia.

The idea of an international bridge had been considered by the governments of Russia and Ukraine long before the annexation. Presidents Ianukovych and Medvedev signed a memorandum of mutual understanding on the construction of the bridge on

⁵ Oleg Varfolomeyev, "Ukraine Stops Power Supply to Russian-Annexed Crimea," Eurasia Daily Monitor 13, no. 3, January 6, 2016, https://jamestown.org/program/ukraine-stops-power-supply-to-russian-an nexed-crimea/#.VgeVF_krKUk.

⁶ Anastasia Lyrchikova and Alexander Winning, "Russia-annexed Crimea Faces Long Road to Power Security," Reuters, December 13, 2015, https://www.reuters.com/article/us-ukraine-crisis-crimea-powerinsight-idUSKBN0TW06G20151213.

⁷ Alexander Hübner, Gleb Stolyarov, and Arno Schuetze, "Three Siemens Employees Investigated over Turbines in Crimea," Reuters, November 29, 2018, https://www.reuters.com/article/us-siemens-ukrainesanctions-idUSKCN1NY1JB.

November 26, 2010, and an agreement on its construction was signed as part of the Ukrainian-Russian action plan of December 17, 2013. In April 2014, the Ukrainian government gave Russia six months notice of its withdrawal from the now-defunct bilateral Kerch Bridge agreement. Since then, the Ukrainian government has actively condemned the Russian construction of the bridge as illegal because Ukraine, as a coastal state with regard to the Crimean Peninsula, did not give its consent to such an undertaking.8 In January 2015, the multibillion-dollar contract for the construction of the bridge was awarded to the Russian company Stroigazmontazh, owned by Putin's close confidant Arkadii Rotenberg. The initial cost of construction was estimated at 228.3 billion Russian rubles. However, the costs ultimately ran higher than anticipated, coming in at more than 4 billion US dollars.10

The construction of the bridge commenced in February 2016. The road bridge was inaugurated by Russian President Vladimir Putin on May 15, 2018 and opened for cars on May 16 and for trucks on October 1. The rail bridge was inaugurated on December 23, 2019 and the first scheduled passenger train crossed on December 25, 2019. The bridge was opened for freight trains on June 30, 2020.

The Crimean Bridge, also called the Kerch Bridge, is a pair of parallel bridges, one road, one rail, spanning the Kerch Strait between the Taman Peninsula of Krasnodar Krai in mainland Russia and the Kerch Peninsula of Crimea.

Just as the bridge connects the Russian mainland and Crimea, it also divides the Sea of Azov from the Black Sea, arching over the very narrow Strait of Kerch. The construction of the Crimean Bridge led to the partial blockade of the Sea of Azov and has given Russia means for a further strangulation of the Ukrainian economy.

Ukraine has two major ports on the Sea of Azov through which it exports steel and agricultural products—wheat and sunflower seeds. The Mariupol Sea Port is the main export hub for the industrial region of the Donbas. The sea port is also used for export from Mariupol's two huge iron and steel works—Azovstal and Illicha. The Mariupol Sea Port had a capacity of 18.8 million metric tons (20.7 million short tons) per year, and its cargo turnover in 2016 amounted to 7.6 million metric tons (8.4 million short tons). Berdiansk Sea Port is a hub for agriculture export from southern Ukraine.

The technical parameters of the Crimean Bridge prohibits Panamax class vessels from entering the Kerch Strait and shipping cargoes to and from Mariupol and Berdiansk—Ukraine's main ports on the Sea of Azov. The main span of the bridge is 33 to 35 meters (108 to 115 feet) above sea level, while an average Panamax class vessel has an overall height of up to 45.87 meters (150.5 feet). Panamax is the term for the size limit for ships travelling through the Panama Canal. These vessels have an average

^{8 &}quot;Kiev schitaet protivopravnym vvedenie RF zapreta na sudokhodstvo cherez Kerchenskii proliv," Interfax-Ukraina, August 11, 2017, https://interfax.com.ua/news/general/441850.html.

^{9 &}quot;Doroga k Krymu: Kak izmenilos transportnoe soobshchenie s poluostrovom," Kommersant, March 18, 2015, https://www.kommersant.ru/doc/2688702.

¹⁰ Richard Lourie, "Putin's Bridge over Troubled Waters," The Globe and Mail, October 26, 2018, https:// www.theglobeandmail.com/opinion/article-putins-bridge-over-troubled-waters/.

capacity of 65,000 deadweight tonnage (DWT), and are primarily used in transporting coal, crude oil, and petroleum products. Subsequently, Ukrainian Azov ports have lost 30 percent of their maritime cargo due to lower bridge clearances. 11

Control of the Kerch Strait has enabled Russia to slow maritime trade and impede international shipping. Since the end of May 2018, Russian naval patrols have been halting and harassing Ukrainian (as well as third-party) state cargo vessels. Shippers, delayed by inspection, are losing between 5,000-15,000 US dollars per hour as a result of the Russian checks. The Russian strategy is to make imports and exports from both ports economically unprofitable. 12 By October 2018, the bridge had reduced Ukrainian shipping from its Sea of Azov ports by about 25 percent.¹³

3 Incident in the Strait of Kerch

According to a 2003 agreement between Ukraine and Russia, Ukrainian- and Russianflagged ships, both merchant ships and state non-commercial vessels, have a right to free navigation in the Strait of Kerch and Sea of Azov, which both sides consider their own internal waters. However, after the construction of the Crimean Bridge, Russia tried to establish unilateral control over passage through the Kerch Strait and the Sea of Azov.

On November 25, 2018, in the Kerch Strait the Russian Federal Security Service (FSB) coast guard fired upon and captured three Ukrainian navy vessels—a tug and two small gunboats—after they attempted to transit from the Black Sea into the Sea of Azov through the strait on their way to the port of Mariupol. The attack took place in the Black Sea more than 12 nautical miles off the coast of Russian-occupied Crimea—that is, in international waters. The Russian action was indefensible, particularly as the Ukrainian ships clearly were heading away from the Kerch Strait when attacked.14

Russia's November 25 attack on the Ukrainian ships was a test of how the West would respond. Foreign ministers of many NATO members had expressed their deep concern. According to Steven Pifer, the former US ambassador to Ukraine (1998 – 2000), "Washington had nothing to say on the 25th. The next day, Ambassador to the U.N. Nikki Haley and Secretary of State Mike Pompeo made strong statements, but Pres-

¹¹ Roger Hilton, "Russia's Strategic Miscalculation in Blockading the Sea of Azov," European Leadership Network, November 27, 2018, https://www.europeanleadershipnetwork.org/commentary/russias-strategicmiscalculation-in-blockading-the-sea-of-azov/.

¹² Yuri Zoria, "Is Russia Preparing to Attack Mariupol by Blockading Ukrainian Azov Sea Ports?," Euromaidanpress, July 18, 2018, https://euromaidanpress.com/2018/07/18/is-russian-blockade-of-ukrainianazov-ports-preparation-for-attack-on-mariupol/.

¹³ Lourie, "Putin's Bridge over Troubled Waters."

¹⁴ Michael Cruickshank, "Investigating the Kerch Strait Incident," Bellingcat, November 30, 2018, https:// www.bellingcat.com/news/uk-and-europe/2018/11/30/investigating-the-kerch-strait-incident/.

ident Donald Trump almost immediately undercut them when he seemed to take a neutral position."15

Russian President Vladimir Putin accused Ukraine's president, Petro Poroshenko, of trying to boost his ratings ahead of presidential elections in March 2019 with a naval confrontation off Crimea.16

Ukrainian vessels, the Yani Kapu, Berdiansk, and Nikipol, were impounded at a Russian facility in Kerch and the ships' crews imprisoned in Lefortovo Prison in Moscow. On May 25, 2019, the International Tribunal for the Law of the Sea decided that Russia immediately release the three captured ships and twenty-four captured Ukrainian servicemen.¹⁷ However, Russia defied that decision. It was not until September 7. 2019 that all twenty-four sailors were returned to Ukraine during a mutual exchange of prisoners with Russia. On November 18, 2019, the captured ships were returned to Ukraine.18

4 The North Crimean Canal and Water Supply

The North Crimean Canal was constructed in 1957–71 to supply water from the Dnipro River to the Crimean Peninsula via the Kherson region in southern Ukraine. The canal provided Crimea with 85 percent of its water supply. Crimean agriculture was thus heavily dependent on irrigation. After the Russian annexation of Crimea in 2014, a dam was built in Ukraine across the entire canal south of Kalanchak, about 16 kilometers (10 miles) north of the Crimean border. The dam caused a massive shrinkage in the area under cultivation in Crimea, from 130,000 hectares in 2013 to just 14,000 in 2017. An empty canal and an almost dry reservoir resulted in widespread water shortages, with water only being available for three to five hours a day in 2021.

Russia launched a 50-billion-ruble (680-million-dollar) program to bolster Crimea's supplies, repairing crumbling infrastructure, drilling wells, and adding storage and desalination capacity—with limited impact, however. The water shortages threaten to undermine President Vladimir Putin's promise of a better life for Crimeans under Russian rule. In the spring of 2021, Russia deployed tens of thousands of troops and advanced weapons to Crimea. It became evident to diligent observers that Russia is

¹⁵ Steven Pifer, "The Battle for Azov: Round 1 Goes to Russia," Brookings, December 3, 2018, https://www. brookings.edu/blog/order-from-chaos/2018/12/03/the-battle-for-azov-round-1-goes-to-russia/.

^{16 &}quot;Ukraine-Russia Sea Clash Staged, Says Putin," BBC, November 28, 2018, https://www.bbc.com/news/ world-europe-46370619.

^{17 &}quot;Russia Ordered to Release Ukraine Sailors," BBC, May 29, 2019, https://www.bbc.com/news/worldeurope-48409370.

^{18 &}quot;Russia Returns Navy Vessels Seized from Ukraine," Deutsche Welle, November 18, 2019, https://www. dw.com/en/russia-returns-navy-vessels-seized-from-ukraine/a-51286196.

looking to seize the canal as well as adjacent territory to connect Crimea with the breakaway regions of Donetsk and Luhansk.¹⁹

On February 24, 2022 Russian troops advancing from Crimea occupied the town of Tavriisk and established control over the North Crimean Canal.²⁰ Two days later, Russian forces used explosives to destroy the dam that had been blocking the flow since 2014. The flow of water to Crimea was restored by the end of March 2022.

5 Military Operations in the Black Sea and Sea of Azov in Spring-Summer 2022

In the first week of the full-scale invasion in 2022, the Russian army occupied the Ukrainian port cities of Kherson (March 2) and Skadovsk (March 9) on the Black Sea. It also occupied Berdiansk (February 27) and besieged Mariupol, both on the Sea of Azov.

The siege of Mariupol became the most devastating and fierce battle of the ongoing war. Russian forces constantly and deliberately shelled critical civilian infrastructure in the city, leaving it without water, heating, or power and preventing bringing supplies or evacuating people. This kind of warfare has its origins in the Warsaw Uprising and the Warsaw Ghetto fight, where the German army sought to literally crush the defenders under the collapsing city rather than wage a military battle.²¹ On March 9, Russian planes dropped several bombs on Mariupol's maternity hospital number 3, destroying the building. On March 11, the Russian troops destroyed and captured the town of Volnovakha, cutting off Mariupol from any relief by the Ukrainian forces. On March 16, the Russian air forces bombed the Dramatic Theater in Mariupol, where a large number of civilians had taken their shelter. Estimates of civilian deaths vary. On 25 March, Mariupol City Council estimated that about three hundred people had been killed as a result of the airstrike. By March 18, Mariupol had been completely encircled and fighting reached the city center, hampering efforts to evacuate civilians. On March 20, an art school in the city, sheltering around four hundred people, was destroyed by Russian bombs. On March 24, Russian forces entered central Mariupol. On April 21, 2022, Russian president Vladimir Putin stated that the city of Mariupol was under Russian control. On May 16, 2022, the last remaining Ukrainian troops in the Azovstal steelworks

¹⁹ Roman Olearchyk and Max Seddon, "Crimea 'Water War' Opens New Front in Russia-Ukraine Conflict," Financial Times, July 29, 2021, https://www.ft.com/content/5eda71fc-d678-41cd-ac5a-d7f324e19441; Max Seddon, Henry Foy, and Roman Olearchyk, "Russian Brinkmanship Leaves Clear Message for Ukraine and Allies," Financial Times, April 23, 2021, https://www.ft.com/content/65e2bdb6-6c1d-4033-b677a07bb34716ae.

^{20 &}quot;Russian Forces Unblock Water Flow for Canal to Annexed Crimea, Moscow Says," Reuters, February 24, 2022, https://www.reuters.com/world/europe/russian-forces-unblock-water-flow-canal-annexed-cri mea-moscow-says-2022-02-24/.

²¹ Tomasz Kamusella, "Mariupol and the Warsaw Ghetto," New Eastern Europe, August 9, 2022, https:// neweasterneurope.eu/2022/08/09/mariupol-and-the-warsaw-ghetto/.

surrendered as Russia secured complete control over the city. Ukrainian authorities stated that about 90 percent of buildings in Mariupol had been damaged or destroyed. Azovstal, Ukraine's biggest steelworks, was totally destroyed by Russia's airstrikes. The number of civilian casualties is estimated at 22,000 residents.²² Mariupol's population was estimated to be 431.859 in 2021. Following its capture, the population is now estimated to be less than 100,000. Malnourished and traumatized civilians keep dying due to a lack of even basic life-saving medicines.

On March 4, Russian troops entered the suburbs of Mykolaiv but were forced to withdraw shortly after. In early June, Russians established control over the Kinburn Peninsula and launched an unsuccessful offensive on a small port city of Ochakiv on the opposite shore of the Dnipro-Bug Estuary.

On February 24, 2022, the Russian navy had seized Zmiinyi (Snake) Island, defended by thirteen Ukrainian border guards. The island is situated 37 kilometers (23 miles) to the east of the Danube Delta and 120 kilometers (75 miles) to the south of Odesa. The rocky island has strategic significance for traffic in the northwestern part of the Black Sea, overlooking sea lanes to the main Ukrainian ports of Odesa, Chornomorsk (formerly Ilichevsk), and Pivdennyi (formerly Iuzhnyi) as well as the Danube Estuary.²³ Russian forces had installed multiple rocket launchers on the island. As an outcome of a series of devastating artillery and missile attacks between June 20-30, Russian troops were forced to abandon the island.24

On June 20 and 26, 2022, Ukraine fired on the gas drilling platforms in the Black Sea between Crimea and Snake Island.²⁵ Ukraine had built the platforms in 2012. However, in March 2014 Russia seized the platforms and established its soldiers and radar systems there. The strikes took out several modern air defense and radar systems, essentially ending Russia's dominance of the sea and air in the northwestern part of the Black Sea.

As of September 1, 2022 Russia controls the entire Ukrainian shore of the Sea of Azov, and most of the Ukrainian Black Sea littoral. However, Ukraine maintains its control over the main Black Sea ports in Odesa, Chornomorsk, and Pivdennyi as well as a port in Bilhorod-Dnistrovskyi in the Dniester Estuary, and the ports of Izmail and Reni

^{22 &}quot;At Least 22,000 Civilians Killed in Mariupol – Mayor's Adviser," Interfax-Ukraine, May 25, 2022, https://en.interfax.com.ua/news/general/834794.html.

²³ For more details on the territorial disputes over Snake Island between the USSR and Romania and between Ukraine and Romania, see Constantin Ardeleanu, "The Making of the Romanian-Ukrainian-Moldovan Border at the Maritime Danube in the Nineteenth and Twentieth Centuries," in Making Ukraine: Negotiating, Contesting, and Drawing the Borders in the Twentieth Century, ed. Olena Palko and Constantin Ardeleanu (Montreal: McGill-Queen's University Press, 2022), 320-22.

²⁴ Max Hunder and Tom Balmforth, "Russia Abandons Black Sea Outpost of Snake Island in Victory for Ukraine," Reuters, July 1, 2022, https://www.reuters.com/world/europe/russia-steps-up-attacks-ukraineafter-landmark-nato-summit-2022-06-30/.

²⁵ David Axe, "Ukraine is Blasting Russia's Offshore Platforms on the Black Sea," Forbes, July 13, 2022, https://www.forbes.com/sites/davidaxe/2022/07/13/the-ukrainians-are-blasting-russias-offshore-platformsin-the-black-sea/.

in the Danube Delta. The port of Mykolaiv is under Ukrainian control, though it can't be operated due to the Russian troops on the Kinburn Peninsula.

6 Ukrainian and Russian Navy Losses in Spring-Summer 2022

One of many reasons behind Russia's initial success in the southern theater and failure in the north of Ukraine could be considered to be the Russian Black Sea Fleet, enforced by many warships sent from the Baltic and North Fleets just before the invasion. When Russia launched its full-scale invasion of Ukraine on February 24, 2022, the Crimeabased fleet was at the center of the action, launching Kalibr cruise missiles at military and civilian targets deep in the country, blocking access to the country's ports, and threatening an amphibious landing at Odesa.

In March 2014, all of the larger ships of the Ukrainian navy were captured by the Russian forces in Sevastopol harbor and Donuzlay Bay, Crimea. Thus, the Russian Black Sea Fleet has been strong enough to hold the outnumbered and outgunned Ukrainian navy at bay.

In the early weeks of the full-scale Russian invasion of 2022, the Ukrainian navy lost most of its high-profile warships. On March 7, 2022, the Ukrainian flagship the Hetman Sahaidachny, the only frigate possessed by the Ukraine navy, was scuttled by its crew in the port of Mykolaiv to prevent its capture by the advancing Russian troops.²⁶ On June 10, 2022, the Ukrainian anti-submarine corvette Vinnytsia was sunk in the port of Ochakiv.²⁷ Some cutters and patrol boats were destroyed by Russian airstrikes.²⁸

However, the Russian navy has suffered much heavier losses. Despite the absence of its own navy, the Ukrainian forces were able to destroy Russian warships with missile strikes. On March 24, 2022 Russian large landing ships—the Saratov, the Novocherkassk, and the Tsesar Kunikov—were targeted by Ukrainian missiles in the port of Berdiansk. The ships delivered ammunition, armored vehicles, and military equipment from Crimea to the Russian forces besieging Mariupol. Due to the numerous explosions on board, the Saratov sunk in a few hours while two other ships suffered less severe damage.²⁹ Russian officials and media have hushed up these losses. Only on July 1, 2022

²⁶ Liam James, "Ukrainian Navy Scuttles Flagship as Russia Advances on Mykolaiv," Independent, March 7, 2022, https://www.independent.co.uk/news/world/europe/ukraine-navy-frigate-sunk-mykolaivb2029108.html.

^{27 &}quot;Ukrainian Forces Sink Their Own Anti-Submarine Corvette Vinnytsia," World Defence News, June 10, 2022, http://worlddefencenews.blogspot.com/2022/06/ukrainian-forces-sink-their-own-anti.html.

²⁸ Patricia Kime, "Russia Reportedly Sinks Former US Coast Guard Patrol Boat Donated to Ukraine," Military.com, March 7, 2022, https://www.military.com/daily-news/2022/03/07/russia-reportedly-sinks-for mer-us-coast-guard-patrol-boat-donated-ukraine.html.

^{29 &}quot;Russian Warship Destroyed in Occupied Port of Berdyansk, Says Ukraine," BBC, March, 24, 2022, https://www.bbc.com/news/world-europe-60859337.

did Russian media report the salvage of the Saratov in Berdiansk.³⁰ Finally, on August 19, 2022 some secondary local media reported that in the sea port of Berdiansk a memorial plaque had been erected to commemorate four Russian sailors of the Saratov who had been killed.31

Russia's flagship Black Sea missile cruiser, the Moskva, was targeted by two Ukrainian Neptune anti-ship missiles on April 13, 2022. The next day the Moskva sank in the Black Sea. The Russian defense ministry said ammunition on board exploded in an unexplained fire. Russian officials and media suppressed the losses among the five-hundred-strong crew.³² In the course of the war, the *Moskva* had provided anti-aircraft support to the Russian warships launching missiles to destroy numerous targets in Ukrainian cities. Thus, the sinking of the Moskva made the Russian navy more vulnerable and less effective. Two weeks later, on April 30, a Russian missile strike knocked out the newly-constructed runway at Odesa's airport, 33 making it impossible for Russian military aircraft to land at Odesa airport. One can therefore suppose that after the sinking of the Moskva, the Russian military leadership finally abandoned its initial plan to seize Odesa from the sea by naval and airborne assault.

These losses have forced the Black Sea fleet to stay well offshore, and out of the fight, for months and, in a way, helped to break the blockade of Ukrainian ports in late July and ease the global food crisis.

7 Ukrainian Missile and/or Drone Attacks on Crimea in July-August 2022

Since early July 2022, Ukrainian forces have pursued a new strategy for attacking key military targets deep inside Russian-occupied territory in southern Ukraine. This became possible due to the shipment of US drones and missiles.

On June 1, 2022 the administration of the US president declared its plans to offer to Ukraine the General Atomics MQ-1C Gray Eagle drones with Hellfire missiles.³⁴ The

^{30 &}quot;Russia Salvages Landing Ship Hit by Ukraine Missile Fire," BBC, July 2, 2022, https://www.bbc.com/ news/world-europe-62022476.

^{31 &}quot;Ekipazh BDK 'Saratov' pochtil pamiat pogibshikh," Morpolit, August 19, 2022, http://morpolit.mil portal.ru/ekipazh-bdk-saratov-pochtil-pamyat-pogibshix/.

³² Leo Sands, "Sunken Russian Warship Moskva: What Do We Know?," BBC, April 18, 2022, https://www. bbc.com/news/world-europe-61103927.

^{33 &}quot;Russia Knocks out Odesa Runway, Zelenskiy Says it Will be Rebuilt," Reuters, May 1, 2022, https:// www.reuters.com/world/europe/russian-strike-odesa-airport-knocks-out-runway-ukraine-military-2022-04-30/.

³⁴ Mike Stone, "Exclusive U.S. Plans to Sell Armed Drones to Ukraine in Coming Days – Sources," Reuters, June 1, 2022, https://www.reuters.com/business/aerospace-defense/exclusive-us-plans-sell-armeddrones-ukraine-coming-days-sources-2022-06-01/; David Axe, "Ukraine Isn't Just Getting American-Made Killer Drones. It's Getting a Whole System for Remote Warfare," Forbes, June 2, 2022, https://www.forbes. com/sites/davidaxe/2022/06/02/ukraine-isnt-just-getting-american-made-killer-drones-its-getting-a-whole-

drones and M142 High Mobility Artillery Rocket Systems, or HIMARS, are part of the sixteenth package of military equipment sent to Ukraine by the United States.³⁵

In July and August 2022, the Ukrainian forces used US HIMARS multiple rocket launchers to hit as many as fifty arms stores in the east and south, as well as bridges across the Lower Dnipro, jeopardizing vital supply lines from Crimea to Kherson.

On July 31, the Russian Navy Day celebrations in Sevastopol were cancelled after a drone strike on the headquarters of the Russian Black Sea Fleet injured six people.

On August 9, at least six explosions hit the Saky military air base in Novofedorivka, Crimea, in nearly an hour. Satellite images revealed that from eight to ten Russian military jets were destroyed. The blasts had significantly degraded the aviation capability of the Russian navy's Black Sea Fleet.³⁶

On August 16, the blasts in the Dzhankoi area, Crimea, destroyed an ammunition depot and damaged a power station and a railway.³⁷

On August 18, four explosions were reported in the Belbek military airbase outside of Sevastopol. The same day, the drone attacks were prevented by Russian air defense in Kerch, Jeypatoriia, and Sevastopol harbor. 38 On August 20, a drone hit the roof of the headquarters of the Russian Black Sea Fleet in Sevastopol.

Overall, since the start of the war the fleet's leaders have failed to adjust and have revealed its structural deficits in terms of training, professionalism, adherence to safety procedures, and adaptability.³⁹ On August 16, the commander of the Black Sea Fleet was replaced by a new one.

system-for-remote-warfare/; Jack Detsch, "'It's Not Afghanistan': Ukrainian Pilots Push Back on U.S.-Provided Drones," Foreign Policy, June 21, 2022, https://foreignpolicy.com/2022/06/21/ukraine-us-dronespushback/.

³⁵ C. Todd Lopez, "More HIMARS, Phoenix Ghost Drones Bound for Ukraine," Defence Department, July 25, 2022, https://www.defense.gov/News/News-Stories/Article/Article/3103655/more-himars-phoenix-ghostdrones-bound-for-ukraine/; Leo Shane, "500-plus Drones, Extra HIMARS Headed to Ukraine in Latest US Package," Military Times, July 22, 2022, https://www.militarytimes.com/pentagon/2022/07/22/500-plusdrones-extra-himars-headed-to-ukraine-in-latest-us-assistance-package/#:~:text=Pentagon%20%26% 20Congress-,500%2Dplus%20drones%2C%20extra%20HIMARS%20headed%20to,Ukraine%20in%20latest %20US%20package&text=The%20White%20House%20will%20provide,against%20Russia%2C%20offi cials%20confirmed%20Friday.

³⁶ Paul Kirby, "Ukraine War: Russia Blames Sabotage for New Crimea Blasts," BBC News, August 16, 2022, https://www.bbc.com/news/world-europe-62560041.

³⁷ Liz Sly, John Hudson, David L. Stern, and Annabelle Timsit, "Explosions Rock Crimea Ammunition Depot as Ukraine Special Forces Strike Again in Crimea," The Washington Post, August 16, 2022, https://www.washingtonpost.com/world/2022/08/16/crimea-depot-explosion-ukraine-russia-dzhankoi/.

^{38 &}quot;Explosions Reported in Ukraine's Russian-Occupied Crimea Region," RFE/RL, August 19, 2022, https:// www.rferl.org/a/ukraine-crimea-explosions-russia-invasion-belbek/31995369.html.

³⁹ Christopher Miller and Paul Mcleary, "Ukraine Has Hobbled Russia's Black Sea Fleet: Could it Turn the Tide of the War?," Politico, August 29, 2022, https://www.politico.com/news/2022/08/29/russias-blacksea-fleet-stuck-struck-and-sinking-00054114.

8 Global Food Security and Grain Export from the Black Sea

For centuries, the Black Sea has been an important region for geopolitics and global food security. Grain export from the lands of present-day Ukraine (ancient "Greater Scythia") was extremely important for ancient Athens, 40 late medieval Genoa and Venice, 41 and the modern Mediterranean, 42 In the last two decades, Ukraine has become one of the key exporters of grain-wheat, barley, corn, and sunflower seeds—to the Middle East (mainly Lebanon and Syria) and some parts of Africa (mainly Egypt and Ethiopia).

The Russian invasion of Ukraine on February 24, 2022 stuck sixty-nine foreign vessels in Ukrainian ports. 43 Russia's blockade of Odesa and other ports has produced some of the gravest global consequences, undermining a global food distribution network. Prices for food staples on world markets have soared—wheat cost about 50 percent more in May than it did in February. Ukraine says the Russian navy is preventing it from shipping grain and other exports and accuses Russian occupation forces of stealing grain from Ukrainian farms in the occupied east and south of the country.

Then, in May–July 2022, Ukraine, Poland, and Romania cobbled together new transport networks using trains, trucks, and river barges on the Lower Danube, raising exports of Ukrainian food to nearly three million short tons (2.7 million metric tons) per month—still far below pre-war levels.

The blockade of Ukraine's grain has caused a global food crisis with wheat-based products like bread and pasta becoming more expensive, and cooking oils and fertilizer also increasing in price. It could lead to famine, political unrest, and a new wave of migration from the global south to Europe. Western officials have accused Putin of using hunger as leverage for sanctions relief.44

⁴⁰ Thomas S. Noonan, "The Grain Trade of the Northern Black Sea," Antiquity: American Journal of Philology 94, no. 3 (1973): 231-42; Peter Garnsey, "Grain for Athens," History of Political Thought 6, no. 1/2 (1985): 62-75.

⁴¹ Michel Balard, "The Black Sea: Trade and Navigation (13th–15th Centuries)," in Maritimes Mittelalter: Meere als Kommunikationsräume, ed. Michael Borgolte and Nikolas Jaspert (Ostfildern: Jan Thorbecke, 2016), 181 – 93; Hannah Barker, "Laying the Corpses to Rest: Grain, Embargoes, and Yersinia pestis in the Black Sea, 1346-48," Speculum 96, no. 1 (2021): 97-126.

⁴² John P. LeDonne, "Geopolitics, Logistics, and Grain: Russia's Ambitions in the Black Sea Basin, 1737-1834," International History Review 28, no. 1 (2006): 1-41.

⁴³ Bahtiyar Abdulkerimov, "Almost 70 Vessels Stuck at Ukrainian Ports, Say Officials," Anadolu Agency, May 6, 2022, https://www.aa.com.tr/en/russia-ukraine-war/almost-70-vessels-stuck-at-ukrainian-ports-sayofficials/2581286.

⁴⁴ Matina Stevis-Gridneff, "Russia Agrees to Let Ukraine Ship Grain, Easing World Food Shortage," The New York Times, July 22, 2022, https://www.nytimes.com/2022/07/22/world/europe/ukraine-russia-graindeal.html.

On July 22, 2022, in Istanbul, Ukraine and Russia signed "mirror" deals that will allow Ukraine to resume exports of grain through the Black Sea. The deal—which took two months to reach—is set to last for 120 days, with a co-ordination and monitoring center to be established in Istanbul, staffed by UN, Turkish, Russian, and Ukrainian officials. It can be renewed if both parties agree. 45

Russia has also benefited from the deals—the Western sanctions imposed on Russian cargo vessels have been lifted. The European Union published legally binding clarifications that banks, insurers, and other firms were permitted to participate in the export of Russian grain and fertilizers, and that its sanctions did not affect the key Russian port of Novorossiisk on the Black Sea. 46

According to diplomats, the deal comprises the following:

- Russia will not target ports while shipments are in transit.
- Ukrainian vessels will guide cargo ships through waters that have been mined.
- Turkey—supported by the United Nations—will inspect ships, to allay Russian fears of weapons smuggling.
- Russian exports of grain and fertilizer via the Black Sea will be facilitated.⁴⁷

Global grain markets reacted immediately to news of the deal. The price of wheat futures fell by more than 5 percent on July 22 to around 7.60 US dollars per bushel.

The deals could help free more than twenty million metric tons (twenty-two million short tons) of grain stuck in Ukraine's blockaded Black Sea ports. According to UN officials, the deals could quickly bring five million metric tons (5.5 million short tons) of Ukrainian food to the world market each month, freeing up storage space for Ukraine's fresh harvests.

In one month since the first vessel sailed under the deal on August 1, 2022, more than eighty ships have carried over 1.6 million metric tons (1.8 million short tons) of agricultural products from Ukraine.⁴⁸

Turkey became the main beneficiary of the grain deal. Of the sixty-nine ships at Ukrainian ports, twenty-six were either Turkish-flagged or owned. The other ships departed from Ukrainian ports for Germany, Djibouti, China, France, South Korea, India, the Netherlands, the UK, Iran, Ireland, Spain, Israel, Italy, Libya, Lebanon, Egypt, Romania, Somalia, Sudan, and Greece.

⁴⁵ Flora Drury, "Ukraine War: Deal Signed to Allow Grain Exports to Resume by Sea," BBC News, July

^{22, 2022,} https://www.bbc.com/news/world-europe-62268070.

⁴⁶ Stevis-Gridneff, "Russia Agrees to Let Ukraine Ship Grain."

⁴⁷ Drury, "Ukraine War."

⁴⁸ Zehra Nur Duz, "12 More Grain Ships Leave Ukraine Under Istanbul Deal, Türkiye Says," Anadolu Agency, September 4, 2022, https://www.aa.com.tr/en/russia-ukraine-war/12-more-grain-ships-leave-uk raine-under-istanbul-deal-turkiye-says/2676463.

Of the eighty-six ships which will go to the ports in Ukraine for the first time after the opening of the grain corridor, thirty-five are Turkish-flagged, Turkish-owned, or operated by Turkish businesses.49

9 The Bosporus and the Dardanelles Straits, the Montreux Convention, and Turkey's Role in the Russo-Ukrainian War

While Turkey supports Ukraine's territorial integrity, it continues to keep the Bosporus Strait open for Russian warships. On February 8 and 9, 2022 six Russian landing warships of the Baltic Fleet and the Northern Fleet passed the Bosporus to the Black Sea to take part in pre-announced military drills with more than 140 military vessels involving more than 10,000 military personnel.⁵⁰ In fact, they were deployed in the Russian attack on Ukraine two weeks later.

On the morning of February 24, 2022, Ukraine's ambassador to Ankara asked Turkey to close the Bosporus and Dardanelles straits to Russian warships in accordance with the Montreux Convention of 1936, which guarantees freedom of passage for civilian vessels but limits the passage of military vessels in times of conflict.⁵¹ Under normal, peacetime rules, the convention regime guarantees the general right of warships of all states to transit the straits, but with a bias toward the six Black Sea riparian states (Georgia, Turkey, Bulgaria, Romania, Ukraine, and Russia). To transit, warships of all other states must not have a displacement greater than 15,000 metric tons (16,535 short tons) and may not stay in the Black Sea longer than twenty-one days. Black Sea states are exempt from these restrictions.

The same day, the Turkish foreign minister Mevlüt Çavuşoğlu said Turkey was studying Kyiv's request but stated Russia had the right under the Convention to return ships to their home base, in this case, the Black Sea. 52 "We came to the conclusion that the situation in Ukraine has transformed into a war," said Foreign Minister Mevlüt Çavuşoğlu, speaking on CNN Turk on February 27. "We will implement all articles of Montreux transparently."53 On February 28, 2022—five days later—Turkey finally declared

⁴⁹ Burak Dag, "Over 1.6 Million Tons of Ukrainian Agricultural Products Shipped Under Istanbul Deal, Türkiye Says," Anadolu Agency, September 3, 2022, https://www.aa.com.tr/en/russia-ukraine-war/over-16million-tons-of-ukrainian-agricultural-products-shipped-under-istanbul-deal-turkiye-says/2675854.

^{50 &}quot;Six Russian Warships Sailing from Mediterranean to Black Sea for Drills," RFE/RL, February 8, 2022, https://www.rferl.org/a/russia-warships-black-sea-ukraine/31692995.html.

^{51 &}quot;Ukraine Asks Turkey to Close Straits for Russian Warships," Daily Sabah, February 24, 2022, https:// www.dailysabah.com/politics/diplomacy/ukraine-asks-turkey-to-close-straits-for-russian-warships.

^{52 &}quot;Turkey Says Cannot Stop Russian Warships Accessing Black Sea," Al Jazeera, February 25, 2022, https://www.aljazeera.com/news/2022/2/25/cannot-stop-russian-warships-returning-in-black-sea-turkey.

⁵³ Jared Malsin, "Turkey Says War Exists in Black Sea, Allowing It to Block Russian Navy," The Wall Street Journal, February 27, 2022, https://www.wsj.com/livecoverage/russia-ukraine-latest-news-2022-02-

its decision to close the Black Sea straits for Russian warships during the Russian-Ukrainian war. Why did it take five days to make the decision? One can suppose that the Turkish leadership waited for an outcome of the invasion—if Russia's blitzkrieg had been successful, then there would have been no need to close the straits and destroy good relations with a victorious Russia. However, on February 28, in Russia-Ukraine first negotiations in Homel (Belarus), the Ukrainian delegation declared Ukraine's intention to fight instead of surrender as Russia expected. It was only afterwards that Turkey demonstrated its observance of the Montreux Convention, albeit in a very special wav.

Nevertheless, Turkey still allows Russia to covertly deliver heavy weapons through the Bosporus strait. On August 29, 2022, Ukraine's deputy minister of foreign affairs, Mykola Tochytskyi, expressed to the Turkish ambassador the Ukrainian side's concerns in connection with the available information regarding the transportation of S-300 missile systems from Syria to Russia via the Bosporus strait by the ship Sparta II, chartered by the Russian ministry of defense. Tochytskyi drew the ambassador's attention to the fact that "according to the provisions of the Convention regarding the Regime of the Straits of July 20, 1936, the specified vessel falls under the definition of a warship for the purposes of this Convention."54

Russia is the main beneficiary of the Montreux Convention. Ever since the Crimean War of 1853 – 55, when Russia's ports on the Black Sea were attacked by British and French warships, Russia/the USSR has been concerned to prevent it from happening in the future. During World War II, the Convention prevented the Axis powers from sending naval forces through the straits to attack the USSR.

It is worth mentioning that in August 2008, when Georgia was invaded by Russia, and the Russian navy maneuvered in vicinity of Georgia's shore, Turkey rejected an American request to move warships to the Black Sea, citing tonnage limits on naval vessels sent from outside the region.55

But perhaps even more remarkably, among the NATO countries Turkey is the only one not to have imposed the sanctions on Russia, either in 2014 or in 2022. Russia was Turkey's tenth largest export market in 2021 and supplies around 40 percent of its nat-

^{26/}card/turkey-says-war-exists-in-black-sea-allowing-it-to-block-russian-navy-uDQCa9dMZsNGZLQsfWYg; "Turkey to Implement Pact Limiting Russian Warships to Black Sea," Reuters, February 28, 2022, https:// www.reuters.com/world/middle-east/turkey-implement-international-pact-access-shipping-straits-due-uk raine-war-2022-02-27/.

⁵⁴ Ministry of Foreign Affairs of Ukraine, "Comment Regarding the Passage of the Ship 'Sparta II' through the Bosphorus Strait," August 29, 2022, https://mfa.gov.ua/en/news/komentar-mzs-ukrayinishchodo-prohodu-sudna-sparta-ii-cherez-protoku-bosfor.

⁵⁵ Thomas Seibert, "US Request Puts Turkey in a Bind," The National News, August 21, 2008, https:// www.thenationalnews.com/world/the-americas/us-request-puts-turkey-in-a-bind-1.588848; "Russia Warns Turkey on U.S. Ships in Black Sea," Hürriyet, August 28, 2008, https://www.hurriyet.com.tr/gundem/rus sia-warns-turkey-on-u-s-ships-in-black-sea-9766567; "Pact on Passage of Warships in Black Sea Makes Turkey Key Actor," Daily Sabah, February 23, 2022, https://www.dailysabah.com/politics/diplomacy/ pact-on-passage-of-warships-in-black-sea-makes-turkey-key-actor.

ural gas needs. For Turkey, Russia has been an important trading partner (32.5 billion US dollars as of 2021), a key source of foreign investment (more than 10 billion US dollars), and a colossal source of tourists (Russians account for almost five million visits. or 10 percent of all foreign tourist visits).56

Some NATO diplomats suggest that Turkey is serving as Moscow's stalking horse within the alliance's ranks.

10 Conclusion

As a consequence of the successful annexation of Crimea in 2014, Putin's ratings skyrocketed in Russia. However, it was not easy to incorporate the peninsula into Russia because Crimean critical infrastructure was well integrated into Ukraine's.

By the end of 2019, Russia had managed to integrate Crimea's power and transport infrastructure into its own. However, the issue of water supply has no other solution than getting water from the Dnipro River through the North Crimean Canal, blocked by Ukraine in 2014.

Every summer Crimea is visited by a huge number of Russian tourists exceeding the number of local residents. Following the annexation, many wealthy Russians bought real estate in the Crimean riviera and settled there. A huge number of Russian officials and military personnel have settled in Crimea along with their families since 2014. The growing population, the seasonal inflow of tourists, and mushrooming military bases have demanded more electricity, food, and water supply. As a strongman and authoritarian leader of a superpower, Putin refused to negotiate publicly the supply issues with Ukraine. The efforts to force Ukraine's concessions through a military escalation in the Donbas failed too. This made inevitable the Russian military invasion of southern Ukraine. By 2022, the peninsula had been turned into a base for the assault on southern Ukraine. On February 24, Russian troops moved into Ukraine from Crimea, spreading east towards Mariupol and west towards Kherson, Mykolaiv, and Odesa, threatening to cut off Ukraine's maritime access, which would inflict huge economic damage on the country.

In the north of Ukraine, Russian troops failed to seize Kyiv, Kharkiv, Sumy, and Chernihiv. It was a huge strategic blunder and in early April 2022 Russian forces were withdrawn back to Russia.

In contrast, the Russian invasion of southern Ukraine was rather successful. Here Russian armed forces pursued realistic objectives: 1) the Nova Kakhovka dam on the Dnipro River as starting point of the North Crimean Canal; 2) the Zaporizhzhia nuclear power station in Enerhodar; 3) Melitopol as a main logistics hub connecting the south and east of Ukraine with Crimea. All these towns as well as the sea ports of Berdiansk

⁵⁶ Iliya Kusa, "Turkey's Goals in the Russia-Ukraine War," Wilson Center. Blog Focus Ukraine, June 13, 2022, https://www.wilsoncenter.org/blog-post/turkeys-goals-russia-ukraine-war.

and Skadovsk were seized within a few days without resistance. Russian forces were well supplied from Crimea, the Russian navy supported the land forces from the Black Sea, and in southern Ukraine the Russian air force dominated in the sky while in the north the Ukrainian anti-aircraft defense was quite effective.

On the other hand, Russians lost almost three months for the siege of Mariupol instead of using these troops in more important directions. Russian forces suffered heavy losses in Mariupol in order to seize only the ruins of the city. As a consequence, following the quick seizure of Kherson in Dnipro Estuary, Russian forces failed to develop their assault on Mykolaiv and Kryvyi Rih.

Furthermore, Ukrainian forces were able to retake the initiative in the summer of 2022. With minimal resources, using their own military drones and missiles as well as the HIMARS multiple rocket launch systems supplied by the US, Ukrainians were able to attack Russian military ships, munitions stores, critical infrastructure, and military air bases in the southern region and Crimea. As a consequence, the activities of Russian fleet were mainly reduced to the harbor of Sevastopol.

The Russia-Ukraine war has reminded the world once again how important the Black Sea region is for global food security.