

# Freedom of Navigation in the Black Sea Area and the Strategic Significance of the Danube 

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## 1. Introduction

This study examines the strategic relevance of the Danube in maintaining freedom of navigation in the Black Sea region, particularly in light of Russia's invasion of Ukraine and its geopolitical complexity. The Danube has grown in importance as the conflict's dynamics have evolved and new lawfare methods emerged, particularly around the instrumentalization of marine trade routes. Freedom of navigation in the Black Sea has been severely curtailed by Russia's kinetic and hybrid actions stemming from its illegal aggression of Ukraine and its wider confrontation with the Euro-Atlantic world. These actions have both regional and global repercussions, impacting energy security and eroding the rules-based order underpinning freedom of navigation elsewhere.

The post-24th of February 2022 developments highlighted the weakness of NATO's security posture in the Black Sea, through insufficient capabilities of littoral states and Ankara's application of the Montreux Convention. To understand that particular risks that Europe faces, we considered two factors that set the Black Sea apart. First, the entire area is split into six EEZs (exclusive economic zones), each belonging to a different littoral state, under UNCLOS. Second, in the event of armed confrontation in the Black Sea, the 1936 Montreux Convention authorizes Türkiye, the custodian of the Bosphorus and Dardanelles, to restrict them to military vessels.

Since Russia's takeover of Crimea in 2014, the Black Sea has seen an accelerated militarization process. Beginning in 2017, lawfare activities became part of the hybrid Russian arsenal, manifesting as blocked perimeters within littoral states' EEZs under the guise of military drills. At the same time, three days after Russia launched its illegal aggression against Ukraine, the Turkish government interpreted the conflict in Ukraine as a sufficient reason to implement the Montreux Convention's provisions, which included closing the Bosphorus and Dardanelles to non-riparian states and belligerents' military vessels, in this case Ukraine and the Russian Federation.

At the same time, Russia's goal of taking over Ukraine's Southern Coast and cutting its ability to trade with the world through the Black Sea, while coming as close as possible to NATO's borders was obvious with the Russian takeover of the Snake Island. While Moscow could not retain its hold of the island for too long, the urgency in taking it and its short-term tenure should remind Europe of the importance of the Danube, a river that the former USSR and currently Russia has much politicized after the end of the World War II to suit its interest. The Snake Island is located just 37 km ( 20 nautical miles) from the Romanian port of Sulina and the mouths of the Danube, the river that connects Germany to the Black Sea.

As the kinetic conflict continued, Russia has not changed its primary's goal of taking over Ukraine's Southern coast. Moreover, by launching its newest foreign policy concept, Moscow has announced it is at war with the West - which is understood to be both NATO and the European Union- and therefore not just Ukraine. This is why we must consider all elements pertaining to the way Russia conducts war, including on the Ukrainian front, to be tied to the strategic goal Moscow sets forth.

This is the contextual environment that the study uses for considering the reconfiguration of trade routes currently underway, which will elevate the importance of the Black Sea and the Danube as an alternative entry/exit point into and from the Black Sea. The Black Sea-Danube, Rhine-Main-Danube, and Rhine-Amsterdam canals provide a direct interior
route from Constanța, the largest port in the Black Sea, to Rotterdam, the largest port in Europe.

The study also examines the military potential of the Danube and its role in supporting Ukraine's war effort and the subsequent reconstruction effort. Starting with March 2024, the signatories of the 1948 Danube Convention unanimously voted to suspend the Russian Federation, opening up space for a new governing regime of the Danube River, capable of maximizing its potential as an inland mare nostrum, a safe and secure avenue for East-West trade.

The study concludes with the issues that must be addressed in order for the Danube to be fully utilized as a strategic route for long-term European stability. While structural factors such as bridge height and the need to dredge sections of the Danube are taken into account, the research highlights the challenges and prospects under present international circumstances.

## 2. The Danube: a history of integration or conflict

The Danube River, the second-longest river in Europe behind the Volga, which is located in Russia. The Danube spans a total length of 2,857 kilometers ( 1,771 miles), traversing ten countries in Central and Eastern Europe: Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Bulgaria, Romania, Moldova, and Ukraine. Originating in the Black Forest highlands of Germany, the river flows to the South-East, until it reaches the Black Sea. Throughout history, the Danube has been crucial for European transit and trade, but also for facilitating the exchange of ideas and culture.

Each of the historical ages brings forth lessons for how we may use the river as a connector within Europe. From natural frontier to an East-West avenue, the Danube has always been both subject and player in the course of history. The Roman period offers some insights as to how the river may be used for both defense and integration. The Romans were the first to have used the Danube for both defensive and commercial purposes, building the so-called Danubian Limes to safeguard their land and regulate commerce and mobility over the river. Starting in the 1st century BC, the Danube River became the empire's natural border. The river's expansive width and the existence of lush trees along its banks served as a natural barrier against nomadic tribes originating from the northern regions. When paired with man-made structures such as forts, watchtowers, and patrol routes, the river's natural attributes made it a robust defensive barrier ${ }^{1}$.

The navigability of the Danube facilitated the efficient transportation of commodities and individuals across the whole empire. Roman merchants used the river to transport a diverse array of commodities as the Danube River served as a vital link between the great urban centers of the Roman Empire and the Black Sea². Alongside its mercantile and defensive functions, the Danube served as a dependable and plentiful water source for Romans, newly built roman towns, and agricultural activities.

[^1]The Romans were also the first to embark on major engineering initiatives to optimize the Danube's functionality. They constructed bridges to expedite river crossings, canals to enhance navigation, and dams to manage water levels and mitigate floods. After all, the Danube was what we call today "critical infrastructure" for the empire. The river's function as a commercial route and military boundary facilitated the assimilation of cultures and the integration of economies within the Roman Empire ${ }^{3}$.

In the Balkans, the Ottoman Empire, which exerted dominion over a significant portion of Southeastern Europe after the 15th century, acknowledged the strategic significance of the Danube River and endeavored to assert authority over its waters. The river served as a conduit for Ottoman administrative and economic strategies, enabling efficient tax collection and the transportation of products around the empire. The Ottomans also constructed a sequence of fortifications and military outposts along the Danube to safeguard their land and ensure the safety of trade routes. The fate of the Ottoman Empire has been intertwined with that of the Danube, perhaps best exemplified during the early 1900s, when the last European holdings of the Ottoman empire were lost on the back of nationalist waves sweeping the region ${ }^{4}$. Considering the Danube's role in what followed after the Austro-Hungarian Empire declared war on Serbia in 1914, the same can be said about the end of the Austro-Hungarian Empire ${ }^{5}$.

Prior to World War I, the river was ruled by the European Commission on the Danube (ECD), an international organization established in 1856 by the Treaty of Paris to regulate navigation on the Danube River. The ECD was composed of representatives from the riparian states of the Danube, called „Maritime Danube" at the time, as it regarded its primary function to ensure free navigation for the navigable part of the Danube River from Ulm, Germany to the Black Sea.

The European Commission on the Danube was particularly welcomed and, in many ways, determined by the British merchants who, at the end of the Crimean War that the UK fought alongside the Ottoman Empire against Russia, were looking to solve a problem dating back to the early 1840s. The merchants had been using the Danube as the route to get Wallachian and Moldovan grain to the Western markets. At the time, Russia not only had both Wallachia and Moldova under its protectorate but also had control over most of the Danube delta channels and had no interest in respecting its commitments concerning dredging them. On the contrary, the Tsarist authorities sought to obstruct the development of the Danube into a grain trade corridor for the West, to protect its own exports from a highly competitive alternative. This posed a direct challenge to the interest of British merchants, playing a key role in the United Kingdom's decision to join the Ottoman Empire in the Crimean War against Tsarist Russia6. The war ended with the Treaty of Paris in 1856, resulting in the end of Russia's protectorate over the two provinces which would be united in 1859, constituting the stepping stone for modern day Romania. The European Commission of the Danube was initiated, successfully enforcing freedom of navigation on the Danube until the start of World War I.

[^2]At the end of World War I, the Paris Peace Conference mandated the internationalization of the Danube River from Ulm to the Black Sea (art. 349), allowing for unrestricted traffic over the whole navigable river, including the principal tributaries of the Danube. Nonetheless, the river's rule was split between two river commissions: the International Commission of the Danube, which had control over the whole navigable portion of the Danube (except the Maritime Danube), and the Commission, which had power over the Maritime Danube, the direct waterway into the Black Sea. The International Commission of the Danube was intended to have representatives from all nations that border the river, as well as the three European powers (France, Great Britain, and Italy) that were not directly next to it but emerged as winners in the war ${ }^{7}$.

By involving non-riparian states, it became evident that exerting control over the Danube meant controlling a vital pathway for European trade, socio-economic development, and consequently, a determinant of political influence in Europe. This marked the first time when the Danube River became politically vested - a political route, as its navigation regulations ceased to solely pertain to technical matters and cooperation among riparian states, but also to political interests that went beyond the specifics of having the river open to free navigation.

In 1936, the signing of the Montreux Convention Regarding the Regime of the Straits vested the Danube River with further (geo)political importance. On one hand, it guaranteed its position as a vital link to the planetary ocean via the Black Sea and the straits, on the other hand making it the only entry point for riparian military vessels to the Black Sea in the case of an armed conflict.

During World War II Danube riparian governments pledged to maintain the river's neutrality. The frontline developments of 1938-1940 significantly impacted the European Danube Commission and the International Commission of the Danube. After the battlefield successes of 1940, Germany proposed the dissolution of the International Commission of the Danube, which it had already left. The Danubian Conference in Vienna in September 1940 included Germany, Hungary, Italy, Romania, Slovakia, and Yugoslavia. German hydro-hegemony was formalized along the internationalized Danube between Bratislava and Brăila. The portion between Ulm and Bratislava remained under German administration ${ }^{8}$. Although the Commission remained in existence in name, the prevailing political and military conditions in Europe transformed the whole Danube, including its lower portion, into another theater of German operations.

[^3]

Source: World in Maps. Available at: https://worldinmaps.com/rivers/danube/

Following the end of the war, the Western powers sought to reinstate the interwar governing regime of the Danube. The Soviets have voiced their intention to restructure the Danube system in accordance with the ideas established in the Vienna Congress of 1815, which would have granted membership in river committees only to riparian states. The United States led the alliance of nations that called for "the utmost degree of trade and navigation freedom" along the Danube, considered as "the main channel of transportation for all of Central Europe." ${ }^{9}$ This explains why the Paris Peace Treaties of 1947 contained a specific clause about the Danube River, underlining the idea of freedom of navigation.

The rifts between the two camps discussing the fate of the Danube in Paris in 1947 gave room for a new conference on the topic. The Danubian Conference was held on 30 July 1948 in Belgrade. Ten nations took part in the proceedings with the outcome was evident. Considering the emerging political circumstances in southeastern Europe. The Belgrade Convention was supported by seven votes, specifically from Bulgaria, Czechoslovakia, Hungary, Romania, the Soviet Union, Ukraine, and Yugoslavia. They were all satellite states of the USSR and Ukraine was a Soviet republic, all having Soviet troops stationed on their territory at the time. The only dissenting vote came from the American delegate, who, unlike the representatives from France and Great Britain, chose not to leave the conference room ${ }^{10}$.

[^4]The Western nations attempted to assert their influence on many matters, but ultimately the Soviet Union prevailed and imposed its will. The pact incorporated the idea of freedom of passage while reserving cabotage rights exclusively for riparian governments. A novel institution, known as the Danube Commission, was established to oversee the navigation activities over the full length of the river. The Danube Commission would establish a permanent secretariat with all necessary services, staffed by representatives from each riparian state that had signed the pact ${ }^{11}$.


Source: The Economist. Available at:
https://www.economist.com/europe/2022/03/22/romania-fears-that-whatever-happens-in-ukraine-it-will-end-up-more-vulnerable

[^5]

Source: Outquesting. Available at:
https://www.outquesting.com/how-to-visit-the-danube-delta-in-romania/

At the time, the Soviets were also careful with involving other states in the Commission seeking to maintain full control over its works. For instance, amidst the disagreement between Stalin and Tito, Moscow declined to include Yugoslavia in the management of the Danube Commission - after all, the two leaders held conflictual views over the river's utility and its strategic position ${ }^{12}$. In the early 1950s, the Soviets were pushing for the Iron Gates and the Danube-Black Sea channel, but both projects were doomed to fail due to lack of skilled personnel and appropriate machinery. The Kremlin insisted to use the Chilia (Kilia) branch for Danube navigation, as this, in their view, was easier to control with one bank situated within the borders of the Soviet Union. However, the natural features of the branch made it difficult for vessels to pass through, hindering fluvial trade. The USSR's exploitation of the Bystroe Channel was largely impeded by regular silting, forcing Soviet authorities to abandon the project and resume using the Chilia branch in 1959 because of the accumulation of sediment ${ }^{13}$.

In the late 1950s, after Stalin's death, the previously communist-controlled Danube River began to gradually allow economic links with Western countries, starting with Austria and West Germany. Starting with June 1957, the representatives of the two countries joined the

[^6]plenary sessions of the Danube Commission and its standing subcommittees as experts. Following an initial failed attempt, Austria became a member of the Danube Commission in January 1960. While the Danube provided both a material and ideational link which pierced the Iron Curtain, much of the trade on the Danube took place among members of The Council for Mutual Economic Assistance (CMEA), a trend perhaps best exemplified by the sudden drop in Danubian trade in 1990 compared to 1989. In the Romanian section of the Danube, fluvial cargo freight dropped from 37 mil. (t) in 1989 to only 12 mil. (t) in 1990 ${ }^{14}$. In 2001, the newly independent Republic of Moldova became the newest riparian state, through its acquisition of the 420 m long strip on the Danube, known today as Giurgiulești port. The territory was ceded to the Republic of Moldova based on the Moldovan Ukrainian bilateral agreement of 1992, to which a provision was added 9 years later. The provision saw the two countries exchange small strips of territory. The Republic of Moldova transferred to Ukraine a small strip next to the Dniester estuary ( $107,7 \mathrm{ha}$ ) which was cutting through the Reni-Odesa highway. In exchange, the Republic of Moldova received a 420m long strip on the Danube, which today hosts the International Port of Giurgiulești.

While the conclusion of the Cold War marked a new era in European trade and politics, the fate of the Danube was heavily influenced by Cold War path-dependencies during the 1990s and early 2000s. Major international treaties adopted since the end of the Cold War addressed the need for environmental protection of the river. The Convention on Environmental Impact Assessment in a Transboundary Context Convention adopted in 1992 obliges riparian nations to inform and engage in discussions with one another regarding any proposed actions that may result in substantial environmental effects across borders. In 2001, the International Commission for the Protection of the Danube River (ICPDR) approved the Strategic Action Plan for the Danube, which serves as a comprehensive framework for the sustainable management of the river to increase the ecological well-being of the Danube, optimize its economic capacity, and foster regional collaboration among the governments that border it. Both treaties have been signed by the Danube Commission members, including Russia.

The most important remnant of the Cold War that has continued to shape the fate of the Danube is the Danube Commission, established in 1948 under the authority of Stalin's representative, consisting of eleven member nations until March 2024. These include the 10 states along the Danube River and the Russian Federation, which has remained a member of the Commission despite no longer being a country that borders the river. In December 2023 the other 10 member states have adopted a resolution urging the Russian Federation to withdraw from the Belgrade Convention by 29 February 2024, adding that should it fail to comply, the Danube states will no longer consider themselves obligated to fulfill their duties under the Belgrade Convention towards the Russian Federation, effective from 1 March $2024{ }^{15}$.

Up until this decision, the representation of the Russian Federation had a say on all projects brought forward by the members of the Danube Commission. Either overtly or covertly, the Kremlin opposed energy and infrastructure projects on the Danube under the pretext of environmental concerns, such as the disruption of migration patterns of fish. At the same time, no articles of the Convention signed in 1948 were ever rediscussed. For instance, Article 30 of the Convention regarding the Regime of Navigation on the Danube which

[^7]prohibits the deployment of naval vessels of non-riparian countries remained unchanged ${ }^{16}$. To Russia this was key: it meant that NATO forces couldn't have naval vessels use the Danube, and, considering it was technically a riparian state, should it ever get back on the Danube, it could actually think about deploying its own vessels on the river. Maintaining things unchanged within the Danube Commission was key to Russia's strategy towards Europe, considering its goal of regaining the power status that the USSR once had.

However, considering Russia will no longer be a member in the Danube Commission starting in March 2024, things will change. Seven member nations of the Danube Commission are affiliated with the European Union, while the remaining three - Serbia, Moldova and Ukraine hope to become members, with Ukraine and Moldova securing the opening of accession talks during a December 2023 vote in the European Parliament. Ten additional governments with economic stakes in Danubian Europe and the Black Sea region hold observer status in the Danube Commission: Belgium, Cyprus, Georgia, Greece, The Republic of North Macedonia, Türkiye, France, Montenegro and Czech Republic. Consequently, the likelihood of transforming the Danube into a conduit for wealth among neighboring nations appears promising, despite - or perhaps even due to - the challenges that the Ukrainian war has brought forward.


Source: United Nations. Available at: https://www.bbc.com/news/world-61759692

[^8]
## 3. The strategic potential for Danube

History shows that connectivity conflicts in the Balkans and the Black Sea region pose a significant risk to global stability. If nothing else, the Russian war on Ukraine has shown the fragility of the global food supply chain, something that affected us all, but especially the poorer states of the world. It brought forward new risks to Europe and increased the potential for new disbalances caused by new refugee flows that are no longer motivated only by the conflicts in the Middle East but also by growing food poverty in Africa due to these countries no longer being able to access cheap grains, most of which were sourced from Ukraine.

The world - and Europe in particular- had to adapt to the new realities that Russia's illegal aggression of Ukraine brought to trading patterns. Besides decreasing their dependency on Russia, European states had to cope with a re-shift in the global supply chains. The onset of the invasion redirected the flow of international goods away from Russian territory.

This translated into a loss for the so-called Northern Corridor and a win for the Middle Corridor, which connects Asia (China in particular) to Europe on land. Since March 2022, transporting commodities over the Caspian Sea has gained significant attention due to its relative attractiveness. Between March and October 2022, container traffic on the Middle Corridor surged by $33 \%$ compared to 2021. However, according to the World Bank, some of that was lost due to high operational costs, with many shippers opting for-sea lanes instead ${ }^{17}$. During the first year of the war, Ukraine's Danube ports have provided an essential lifeline for its grain exports, contributing to food security in Africa and much needed money for the home front. Through its brilliantly employed maritime asymmetric means, Ukraine succeeded in securing its grain corridor which runs parallel with the coastlines of Romania and Bulgaria, bringing its North-Western Black Sea ports back to life. This development lifted pressure of Ukraine's Danube ports and points to some pre-war trading partners, where its Black Sea ports were playing an outsized role in the country's export capacity. The land frictions caused by the border protests of Polish farmers preventing Ukrainian trucks from leaving the country are throwing its Danube ports back into the spotlight. Ukraine plans to by-pass Polish farmers with a new grain route through Romania. The first vessels with containers are expecting to sail upstream on the Danube River in the beginning of March 2024. ${ }^{18}$

Considering that international waters and in particular the Red Sea traffic has also been subject to tensions since November 2023 with many shippers fearing the situation could last for months at the moment of writing ${ }^{19}$, with other potential crises also affecting Asia ${ }^{20}$, it is likely that interest for developing the Middle Corridor stays high. With one of its branches stretching through the Black Sea going through Constanta port into the European infrastructure network. The Middle Corridor highlights the importance of developing the waterways of Europe as the cheapest ways for internal trade and as promoters for sustainable connectivity, a key feature to the current EU strategy of increasing the geopolitical role of Europe ${ }^{21}$. Starting with Georgia, the Middle corridor ramifies with much

[^9]of the traffic continuing to flow westwards via the Black Sea, offering a direct waterway connection with Central and Western Europe via the Black Sea - Danube canal. The most geographically obvious waterway to be targeted with investments is the Danube. The potential for it to play a strategic role, including in deterring Russian influence is not new. Ironically, Cold War thinkers had a similar idea - even if the Middle Corridor did not exist back then. Don O. Noel Jr. noted in The Atlantic, in 1968 that "The Danube could become a major channel of East-West trade, for six of its eight riparian nations are under Communist rule. In five of these six (excepting the Soviet Union, which borders the Danube only near its Black Sea mouth), planners are acutely conscious of their river's potential. They are especially interested in the effect of a link to the Atlantic", noting that Western financial aid could make a difference in creating such a route ${ }^{22}$. Later, in 2017, the EU addressed the importance of The Rhine-Danube corridor as key for the Balkans and Black Sea area stability and, the Trans-European Transport Network (TEN-T) was expanded to include Eastern Partnership nations.

### 3.1. The Danube's economic significance

The global economy is undergoing a period of restructuring, fueled by the Sino-American competition and a global economic crisis that Russia amplified in 2022, following the economic shock brought by the COVID-19 pandemic. Offshoring and friendshoring have become true buzzwords, with countries around the world vowing to bring production back closer to home. As this trend will progress, it will translate into renewed demand for industrial scale transportation capacity. Slovakia, Hungary and Romania are already preferred destinations for manufacturing investments within the EU, likely to attract some of the industries which will be relocating back to Europe. In this new mercantile reality, the Danube can offer a cheap and environmentally friendly mode of transportation.

After the $24^{\text {th }}$ of February, the Black Sea was at the forefront of Russian attempts to suffocate Ukrainian economy, which was exporting over $70 \%$ of its goods via its Black Sea ports, with the figure rising to $90 \%$ for agricultural goods ${ }^{23}$. Early in the war, Russia occupied the Serpent Island, which controls access to Ukrainian North-Western Black Sea ports, as well as the mouth of the Danube, exerting effective control over the Danube's most important feature: its connection with the Black Sea. In January-October 2023, the seaports of the Danube region handled 27.6 mil. ( $t$ ) of cargo, which is $45.6 \%$ more than in the same period in 2022. Compared to the volume of cargo handled in January-October 2021, within 10 months of 2023, the Danube ports increased transshipment by 7.3 times ${ }^{24}$.

[^10]

Cargo ships waiting to access the post of Constanta and the Danube Canals in the summer of 2022. Source: Lloyd's List. Available at: https://Iloydslist.com/LL1141204/Ukraines-Danube-ports-increase-activity-to-boost-grain-trade

Based on the defining features of sustainable connectivity, investment in physical infrastructure is only one of the basic elements that increases coordination between countries. This is how the step made in 2017 could contribute and build on what comes next, also considering the current opportunities that the Danube offers. First, river transport is a more environmentally friendly mode of transportation than road or rail transport. Second, its development supports the buildup of critical infrastructure - riparian states could engage in developing green energy projects along the river that would ultimately decrease the dependency on Russia. By developing new port infrastructure, new hubs for cargo transportation will be created, making it easier to connect the Danube to other modes of transportation, such as rail and road. All of this will have positive spill-over effects in enhancing both institutional and people-to-people connectivity.


## EQUIVALENT LENGTHS



Source: History Iowa. Available at:
https://history.iowa.gov/history/education/educator-resources/primary-source-sets/transportation-rur al-and-urban-spaces/compare-cargo

Moreover, considering the war in Ukraine and the need for the EU to think beyond the kinetic warfare, in contributing both to Ukraine's socio-economic resilience and its post-conflict reconstruction, we need to consider the role of the Danube in the context of the reshaping of current trade routes in such a way that it facilitates both endeavors. Thus, modernizing the Danube, along other internal naval transportation routes is key for sustaining Ukraine's resilience. The FAIRway Danube project - part of the 3SI lists of projects that Romania is supporting in relation to the Danube- is highlighting the role of better inland navigation. Should the Lower Danube navigation route be enhanced, equipment and goods from Western Europe, Germany in particular, could reach Ukraine cheaper, potentially faster, and in an environmentally friendly manner.

Beyond FAIRway Danube, several areas for investment need to be considered for integrating the Danube River into the Middle Corridor. First, there is the need to build new locks and canals. This would improve navigation on the river and make it easier for ships to pass through areas with varying water levels. Second, there is a need to deepen and widen the Danube River, to allow larger ships to navigate the river and thus increase its capacity for cargo transportation. Third, the Kelheim/ Regensburg (5.25m) and the Luitpoldbrücke (Passau) ( 5.15 m ) bridges limit the crossing of ships. Elsewhere on the Danube, the average bridge height hovers around $8-10 \mathrm{~m}$. While this does not pose a significant hurdle for the
transport of freight via barges given their low profile, it does represent a major impediment for military ships as it prevents the passage of military vessels with a fixed mast. Fourth, in line with the EU's Strategic Sustainable Development Goals, investing in port and terminal digitalization is key, as it would improve communication and coordination between shippers, ports, and other parties involved in the transportation of goods along the Danube. All this would not only improve sustainable connectivity, but also decrease congestion - a problem that the Ukrainian war brought forward for shippers and state institutions.

Simultaneously, the flow of the Danube River is significantly impacted by seasonal variations in precipitation. During the winter season, the river has the potential to solidify, rendering it inaccessible for boats. During spring and autumn, the Danube often experiences significant water level increases, leading to the flooding of its surrounding banks thus posing risks to navigation. The occurrence of drought has emerged as a significant concern in recent years. The low water level in the Danube has a direct effect on navigation and freight transportation, leading to a decrease in carrying capacity and a detrimental impact on corporate profitability ${ }^{25}$. Extended periods of drought and very high temperatures during the summer of 2022 have caused significant disruptions to river transportation on crucial waterways in several regions of Europe, such as Germany, Italy, and France. The Danube was no exception - however, it was less affected than other European waterways, even if in Serbia, the authorities have had to employ dredging as a measure to maintain it accessible for navigation ${ }^{26}$. The Rhein - one of the most reliable and busy shipping lanes in Europe- was affected in both 2022 and 2023, ${ }^{27}$ with Germany having to use dredging several times to keep it usable ${ }^{28}$. After many years, work on the Straubing-Vilshoven German Danube section has been advancing, promising to alleviate an important bottle neck on the Upper Danube ${ }^{29}$.

All this translates into questions for discussing economic feasibility together with environmental concerns. Any projects for developing the Danube need to consider the environmental cost pertaining to the long-term investment. At the same time, cooperation between the riparian states of the Danube is essential for developing and maintaining the necessary infrastructure. History and current events show that achieving political coordination along the Danube is not necessarily easy. However, under the current circumstances, it is a prerequisite for improving the security environment. A two-pronged process took place in the past two years. The Danube River went from being a peripheral giant to becoming a lifeline for the Ukrainian economy. Concomitantly, Russia is no longer a member of a body governing the Danube River for the first time in two centuries. These developments put the Danube at the forefront of the reconfiguration taking place on all layers at a European level, providing a newly found impetus for collaboration among riparian states.

The EU may and should play a significant role in having the riparian states understand the socio-economic benefits of developing the Danube. First, the EU is the only international organization that has a strategy for the Danube - which is also the broadest and most diversified of the EU's four macroregional strategies. It was established in 2010, revised in 2020, and now includes 14 EU and non-EU states. Beyond its specific goals having to do
${ }^{25}$ CCNR „Inland Navigation in Europe Market Observation Annual Report 2022", p. 63.
${ }^{26}$ Grulovic, "Low water levels on Danube reveal sunken WW2 German warship".
${ }^{27}$ Wilkes et. al, "Europe's Low Water Levels Threaten Rhine River, Hit \$80B Trade Lifeline."
${ }^{28}$ Sorge et. al "Low Rhine River Levels Puts Europe's Most Important Trade Route at Risk".
${ }^{29}$ Felbermayer, "Major Project - Danube Development".
with improving the Danube as a trade and investment route, it has a key security dimension: the Western Balkans are still unstable, mostly due to socio-economic inequalities and Russian influence. Investment, also sustained through EU funding, is one way to address both issues and increase EU's influence in the region. Moreover, as the kinetic conflict in Ukraine continues, the EU needs to ensure it uses all means it has to limit Russia's opening of another flank in the Balkans.

As the Danube is built to be linked into the Middle Corridor and to function as part of Ukraine's rehabilitation effort, security problems must be addressed holistically. It is imperative to implement security measures to safeguard the Danube corridor from Russian hybrid threats and beyond that, ensure a stable environment in which no state or non-state actor can threaten the freedom of navigation. This goes, of course, beyond the military functions that riparian states need to address and touches upon the institutional coordination that supports sustainable connectivity necessary for the execution of all projects pertaining to the development of the Danube.

### 3.2 The military use of the Danube

After the $24^{\text {th }}$ of February 2022, the Danube became a part of the Black Sea war zone, while its importance for military strategy in the area had increased visibly since 2014. When the Russian Federation illegally annexed Crimea, it became obvious that the Black Sea was slowly turning into an area of direct confrontation. By 2017, the Russian Navy started blocking perimeters located in the littoral states' EEZs under the pretext of military exercises, with direct consequences over freedom of navigation and economic activity in the Black Sea.

The conflict in Ukraine showed how important a natural barrier such as the Dnieper River is and how the geography of its delta played a determining role in the outcome of the battles in Southern Ukraine. The self-declared scope of the Putin regime is to conquer Novorossiya, which encompasses the entire Black Sea Ukrainian coast. This is part of Russia's strategy which seeks to limit Kyiv's ability to self-sustain in the long term, considering that South Ukraine is the most important region for the country's connection to the world market. This is also related to Russia's grand strategy for the region - should it go closer to the Danube's mouth, it could also expand its influence over the Republic of Moldova and even Romania, by seeking to expand control over the navigation routes through hybrid warfare.

This is not surprising, since back in 2014, the ethnically heterogenous Ukrainian region of Budjak, wedged between the Republic of Moldova and the Black Sea has seen attempts to replicate the tactics applied in Donbass. The region encompasses the northern extremity of the Danube Delta, providing a stepping-stone for hybrid operations in the Romanian section of the delta, favored by the marshy, sparsely populated terrain and the presence of the small Russian speaking minority of Lipovans, Old Believers who settled there in the $17^{\text {th }}$ and $18^{\text {th }}$ centuries. In such a scenario, the northern half of the Black Sea would become a "Russian lake". The area offers a textbook case study for Russian hybrid tactics and overt tactics aimed at "protecting" Russian speaking minorities in neighboring countries.

During the autumn of 2023, when Russia bombarded Ukraine's Danube ports, there were at least four documented instances of drone fragments falling on Romanian soil, which sits on the other bank of the Chilia Branch. Russian behavior in the Black Sea can be indicative of
the potential actions of the Russian military were they to control the mouth of the Danube. The area would offer a rich canvas for undermining the very foundations of international law, especially through its changing terrain which would act as pretenses for redrawing current borders between Romania and Ukraine. Such claims would then be corroborated with similar ones in the maritime realm, aimed at reversing decisions of international tribunals, such as the 2009 Hague ICJ decision which awarded approximately $80 \%$ of the waters around the Snake Island to Romania.

The Turkish side activated the provisions of the 1936 Montreux Convention on the $27^{\text {th }}$ of February 2022, preventing warships of non-littoral states from reaching the waters of the Black Sea. The result was, and still is, that the only other entry for maritime military hardware into the Black Sea is the Danube River. Ukraine has made great strides in pushing the Russian Black Sea Fleet away from the North-Western Black Sea, partially restoring freedom of navigation by making use of the protection conferred by Romania's territorial waters.

Romania has the largest riverine fleet in Europe but the Danube's military potential does not lie only within its own banks. With appropriate dredging, the river's cargo capacity can be vastly increased and used for the transport of ammunition, fuel and other supplies crucial for military operations. NATO's Ulm logistical commandment sits right next to the Danube, a suggestive geographical association encapsulating its logistical potential. In the light of the logistical lessons learned during the conflict in Ukraine, allied nations could take concrete steps to ensure the functionality of a reliable heavy-duty East-West connection.

While Ukraine's mosquito fleet tactics have proven useful in the asymmetric warfare it wages against the aggressor, the danger posed by drifting mines remains pervasive and requires military resources of a different nature. In early January, Türkiye refused to allow two minesweepers which the UK donated to Ukraine to cross the straits, according to its interpretation of the Montreux conventions. As of now, there are approximately 400-600 drifting mines in the Black Sea ${ }^{30}$, which will continue to pose a danger for the freedom of navigation for decades to come. In the case of cargo ships with chemical loads, drifting mines can lead to large scale environmental disasters. The legal framework governing the Danube allows for creative thinking in this respect. According to the current statute, riverine countries have the right to send military ships on the Danube, meaning that Ukraine could potentially supplied with minesweepers via this route. Germany has two Ensdorf-class minesweeper ( 2.84 m draft) and eight Frakenthal-class minehunters ( 2.6 m draft) which could travel via the Danube to the Black Sea. Most of the mainstream coverage focuses on the process of neutralizing the mines but locating them is often the hardest part. The combined capabilities of the Ensdorf-class minesweepers and the Frakenthal-class minehunters can play a decisive role in restoring freedom of navigation in the Black Sea. Article 30 of the 1948 Danube Convention stipulates that military ships of riparian states cannot travel on the Danube outside said state's borders, in absence of a prior understanding among the riparian states which waters it will cross. With sound diplomatic coordination, this can translate through a second entry into the Black Sea, bypassing the Turkish Straits and the provisions of the Montreux Convention. The average bridge height remains the biggest obstacle in the face of such a plan. Any such transfer would entail measures such as temporarily removing the mast or taking the vessels apart into transportable segments which can then be reassembled at destination. There has been an instance in the past when

[^11]such an operation was successfully implemented. In 1942, segments of German UBoats have been transferred downstream to Romania, where they were reassembled. ${ }^{31}$

The decision in December 2023 to remove Russia from the Danube Commission which should be confirmed in March 2024 will likely have a major impact on the way both riparian and non-riparian states can employ military vessels on the Danube. Before that happens, allied nations could take concrete steps to test the river's viability. Barges loaded with military supplies are not covered by the provisions of the convention. Large scale exercises should be implemented, to test two crucial variables: the speed of arrival to the chosen destination of said barges and the emergence of bureaucratic hurdles, given that they will be traversing ten or more countries. It is only with concrete data of allied nations' ability to transport military supplies via the Danube that a thorough strategic planning process can take place, where the Danube is widely and better integrated within military plans.

Trade and security are becoming ever more closely intertwined, highlighting the importance of secure trading routes. For Europe, the Danube is no longer a frontier delimitating Habsburg or Ottoman imperial ambitions, but an inland Mare Nostrum, connecting the Black Sea with the Atlantic Ocean via Rotterdam and the North Sea.

## 4. Conclusion

Russia's kinetic and hybrid operations in the Black Sea, arising from its unlawful assault against Ukraine and larger conflict with the Euro-Atlantic world, have severely limited freedom of navigation. While Russia's acts are restricted to the Black Sea, they have an impact on European and global trade and security. The impediment to freedom of navigation in the Black Sea undermines the rules-based system that underlines freedom of navigation elsewhere, while the cynical weaponization of food that it enables has the potential to have a major impact on global food security.

The weeks and months following February 2022, with Türkiye closing the straits showed that while Russian military ships were prevented from entering the sea, international efforts to ensure freedom of navigation in the Black Sea was also hampered. This has exposed NATO's weak stance, owing to riparian states' insufficient capacities while also reminding strategists and strategic planners that the Black Sea has two entrances: the Danube River and the Straits. Furthermore, the restricted usage of the Northern Corridor for international trade between Europe and Asia has emphasized the rising significance of the Middle Corridor, which runs from Asia to Europe via the Black Sea.

The study took on a deep dive into the Danube's political history, drawing on the importance that the river had during and post-Cold War for political and socio-economic development. Former USSR has sought to control the Lower Danube because of its importance for Moscow to maintain influence on Central and Southeastern Europe - areas where Russia seeks to maintain and grow its influence currently. At the same time, the riparian countries have always sought to build up their détnte towards Moscow by building up the Danube and seeking to use it for cooperation and economic development that was tied to their access to the world's ocean through the Black Sea.

[^12]Therefore, there is no Black Sea strategy without a Danube strategy. Russia's attempt to take over and control the Snake Island in 2022 and its attacks on the Ukrainian Southern port infrastructure in 2023 have one thing in common: the Danube and in particular, expanding its influence over the mouth of the Danube. By doing that, Moscow attempts to limit Ukraine's socio-economic resilience and pursue its strategic goal in fighting the West, which it has declared in its newest foreign policy concept in 2023.

The Danube, is after all, Germany's connection to the Black Sea - its way to Asia, through the Middle Corridor, which is currently growing in importance among the global trade routes. Germany is key to Russia's strategy in Europe, first through its energy strategy and second through its international trade strategy. Russia controlled the Northern corridor which was key to on-land German trade with China. By keeping a strong influence over Central Asia, Russia ensures its influence over the Middle Corridor - but it can only control it by controlling the Danube. It was able to do so through the Danube Commission where, despite no longer being a riparian state after the dissolution of the USSR, it maintained its membership until 2023, when, citing the Ukrainian war, riparian states have all voted to expel it from the Commission.

This decision is key for two reasons. If Russia no longer has insight on projects meant for the Danube's modernization and development, its ability to stop their implementation will be limited. Maintaining and growing the Danube's role in supporting Ukraine's socio-economic resilience - given its role for Ukraine's trade transit, while also integrating the Danube into the Middle Corridor supports the EU's goal of growing sustainable connectivity in the region. At the same time, with Russia no longer part of the Danube Commission, there is an opening for rediscussing the role of the river within NATO's defense strategies. Prior to that and independent of such scenarios, however, the riparian states need to develop a strategy for the Danube that preserves freedom of navigation as premises for sustainable development.

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[^0]:    Cover: Cargo Ship on Danube Canal Bamberg, Germany (iStock), Danube Delta (iStock), Snake Island (Wikipedia), Black Sea Danube Canal (iStock)

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