Executive summary

The year 2022 ushered in another array of significant and diverse maritime security challenges for Europe: the sabotage of the Nordstream pipelines; the mysterious rupture of submarine fiber-optic cables near France and the United Kingdom; Russian aggression toward NATO ships; a Black Sea grain shipment deal to end a Russian naval blockade in Ukraine; and the announcement of a significant Chinese investment stake in a Hamburg terminal, one of Europe’s busiest shipping hubs. Over the past decade, China and Russia have transformed Europe’s maritime security seascape through their military basing access and port investments across maritime Europe — from the Baltic and Black Seas to the Mediterranean. Europe and NATO have made some progress toward addressing many of these challenges, but they must continue to dedicate resources and platforms to ensure the long-term security of their many maritime geoeconomic assets.

Introduction

In the last decade of great power competition, China and Russia have engendered a new European maritime security dynamic through port and naval base investments that are likely to grow in prominence and complexity over time. As in other regions, the two countries seek to undermine the Western-dominated political and economic order that has existed since the end of the Cold War. They appear to be more aligned with each other than in prior historical moments and have even exercised together in the European theater through joint naval exercises. The war in Ukraine may continue to sew tension in the relationship, but even so — and despite Moscow’s blunders and setbacks in Ukraine — Russia remains as an important naval spoiler and aggressor across maritime Europe; it continues to access regional maritime bases from the Baltic and Black Seas to the Mediterranean (Kalinigrad in the Baltic, Crimea and Novorossiysk in the Black Sea, and Tartus in the eastern Mediterranean.)
comparison, China has created a “softer” security element with its investments in European ports and terminals. According to some estimates, China now controls approximately one-tenth of all European port capacity. But these ports and terminals could become more securitized with additional investments and reinforcements in the future. Given the two countries’ continued ambitions, Europe will need to prioritize and manage these emerging challenges for the region’s long-term security and stability — from Russian traditional naval posturing and power projection to China’s dual-use geoeconomic port investments, Russian oceanic research, and the rise of seabed warfare.1

### Chinese port investments

China’s investments in ports and terminals from Asia to Europe have similar — albeit much more peaceful — historical parallels to Europe’s expansion eastward into Asia. Company-states, such as the British East India Company or the Dutch East India Company, were at the frontier of establishing footholds and treaty ports across the Indian Ocean and East Asia.2 Today, with the support of its state-owned corporations, China has begun to develop a modern-day network of supply and logistics via its port and terminal investments that are akin to a European trading system. China’s investments of the past decade have been part of its Maritime Silk Road, seemingly reflecting its view that geoeconomic and security interests are becoming increasingly intertwined; Beijing laid out a similar vision most recently with President Xi Jinping’s Global Security Initiative. The challenge for Europe today, however, is that as China grows its strategic port and terminal ventures, it gains access and control over important trade and logistics nodes, in addition to critical information infrastructure.

The port in Piraeus, Greece, in particular, highlights the challenges related to China’s growing maritime influence and access to dual-use port facilities. With the initial goal of tapping into the European Union’s Trans-European Transport Network initiative, China has expanded its regional system of ports, railways, and other multimodal transportation projects across northern and southern Europe. In 2008, then President Hu Jintao solidified an estimated $5.5 billion landmark agreement that enabled the Chinese shipping group COSCO to run two of Piraeus’ container terminals (Piers 2 and 3) for a period of 35 years. Eight years later, COSCO announced it had acquired a 67% stake in Pier 1 from the company operating the port, Piraeus Port Authority S.A.3 Elsewhere, China and Italy are reportedly joint financing the “Five Ports Alliance” as part of the larger North Adriatic Ports Association, which includes Ravenna, Venice, and Trieste in Italy, Capodistria in Slovenia, and Fiume in Croatia. The endeavor aims to attract a greater interest in the Adriatic region and routes to western and central Europe, as well as other European trade corridors that tie into China’s Belt and Road Initiative.4 Some reports that scrutinize memorandums of understanding signed between China and Italy, however, assert that very little has come to fruition in the past few years.5 Since 2012, Chinese firms have also slowly expanded their investments in northern and southern Spanish ports. Hutchison Port Holdings, a subsidiary of the Hong Kong-based Hutchison Whampoa Limited, began at the time by investing approximately $387 million in the port of Barcelona, in addition to $184 million financing for a terminal enlargement. Since then, COSCO has been vying for Spain’s other ports as well: In 2017, COSCO succeeded in purchasing a 51% share (worth about $228 million) in Noatum Port Holdings, which owns the main port in Valencia (where the company is headquartered) and in Bilbao (in northern Spain), as well as the major inland terminals in Madrid (Conterail) and Zaragoza (Noatum Rail Terminal Zaragoza).6

In the past decade, China Merchants Port Holdings similarly acquired a 49% advantageous stake from the French CMA CGM shipping company (Compagnie maritime d’affrètement–Compagnie générale maritime) in its subsidiary Terminal Link.7 Terminal Link owns 13 terminals in eight countries, including four terminals in France, two in Morocco,
one in Malta, and one in South Korea, among others. The CMA CGM group is the third-largest container shipping company in the world, serving 420 ports worldwide. The group is headquartered in Marseille, France, with 110,000 employees worldwide.\(^8\)

Chinese firms have also made inroads in northern Europe through various port and terminal investments. For example, in January 2018, COSCO successfully purchased a majority share in the Port of Bruges-Zeebrugge, Belgium’s second largest, after APM (A.P. Møller) Terminals agreed to sell its 51% majority stake that it had owned since 2006. Zeebrugge is strategically located near the ports of Hamburg and Le Havre in Germany and France, respectively, and offers a close transit to the United Kingdom or the Baltic Sea. The port also contains a liquified natural gas terminal that handles Arctic gas shipments from the Yamal Peninsula before heading to East Asian markets.\(^9\) Back in 2004, COSCO purchased a 25% minority stake in another Belgium port, Antwerp Gateway. The port is now 80% reliant upon COSCO shipping and throughput. Though Belgium’s foreign minister recently criticized the threat posed by China through these types of investments, the issue does not appear to have gained significant traction across other parts of Europe.\(^10\)

China has also made parallel inroads nearby through Europe’s largest port of Rotterdam, in the Netherlands, as well as through other spots along Europe’s northern coastline. In 2016, a subsidiary of COSCO Shipping Corporation purchased a 35% stake (worth an estimated $47 million) in Rotterdam’s Euromax Terminal, an automatic container terminal. It acquired its share from a subsidiary of Hutchison Port Holdings. The terminal has a capacity to handle around 3.2 million twenty-foot equivalent units (TEUs) of cargo every year. According to recent estimates, about a quarter of all goods offloaded at Rotterdam arrive from China.\(^11\)

Beijing’s most recent European port and terminal venture came with the announcement of COSCO’s 24.9% investment stake at one of Hamburg’s terminals. Hamburg is one of Europe’s top three ports, behind Rotterdam and Antwerp. As noted by one official German source, “The investment disproportionately expands China’s strategic influence on German and European transport infrastructure as well as Germany’s dependence on China. ... It points to considerable risks that arise when elements of the European transport infrastructure are influenced and controlled by China.”\(^12\)

**Russia as a naval spoiler**

While China grows its maritime geoeconomic footprint, Russia has continued to invest in many naval platforms — mainly through its submarine program — enabling Moscow to continue its aggressive behavior across Europe and Asia. Certainly, Russia’s navy confronts major financial, political, and industrial hurdles in furthering naval development, but it can still act as a potent and powerful spoiler against the United States, European Union (EU), NATO, and other partners and allies. Moreover, Russia’s increased aggression on the high seas and other “gray zone” activities have the potential to cause an inadvertent clash or unintended outbreak of conflict at sea. Its regional naval bases, including in the Baltic, Black, and Mediterranean Seas, give Russia important naval maneuverability and power projection capacity. And Moscow shows no signs of slowing down; it has sought out other basing access in Libya and Sudan.\(^13\)

Russia has what is considered the world’s third most powerful navy, but much of its fleet comprises Soviet legacy holdouts or is largely underfunded. Based on current estimates, Russia’s naval fleet has 210 surface vessels and submarines. The Russian navy also reportedly lost 11 naval vessels and boats in 2022.\(^14\) Even with his struggles in Ukraine, Russian President Vladimir Putin still seems to understand the need for a maritime component in Moscow’s larger strategy. Over the past decade or more, Putin has pushed Russia to focus on the Black and Baltic Seas, historically considered part of Russia’s traditional spheres of influence. With the takeover of Crimea in 2014, Russia established a new perch from which to carry out its larger naval and maritime ambi-
Europe’s New Maritime Security Reality

Even with embarrassing mishaps and losses in recent years, Russia continues to invest heavily in its submarine fleet, which is currently estimated at 55 vessels in service. Though this fleet has had a mixed record — with catastrophes including the sinking of Russia’s Kursk nuclear submarine and loss of its 118-person crew in 2000 and the nuclear submarine fire that claimed 14 sailors in 2019 — Russia’s submarine fleet and other naval vessels are now more active in the Atlantic, Pacific Asia, and Arctic Ocean, much to the irritation of the United States, NATO, the EU, and others.

Russia’s underwater capacity, historically the strongest element of its fleet, also continues to make tangible gains. In the past 10 years or so, Russia has augmented its subsurface activities four to five times, according to some estimates. It has authorized 13 new nuclear and conventional submarines since 2014, and the vessels do not appear to be experiencing the same construction delays as Russia’s frigate-class warships. The submarine program remains a priority for the Kremlin despite other military cuts, evidenced by the ongoing replacement of older Delta-IV nuclear-powered ballistic missile submarines (SSBNs) with sophisticated Borei-class SSBNs.

Russia has also engaged in nontraditional or gray zone activities below the ocean’s surface by tapping into or meddling with undersea cables that the world depends on for internet and telecommunications. Many observers allege that Russia was behind the 2022 sabotage of the undersea Nordstream pipelines, though final investigations are still forthcoming. Russia has traditionally used the guise of oceanic research or search-and-rescue missions to hide illicit actions along ocean floors. Russia’s main directorate of deep-sea research, or GUGI, is separate from the navy even though it has numerous nuclear submarines and surface vessels. GUGI is largely responsible for the Kremlin’s seabed activities across maritime Europe, the Arctic, and globally. Combined, these growing undersea capabilities will do a lot to further enhance Russia’s projection of power and reemergence as a more formidable maritime and nuclear power, which can, at the least, act as a spoiler.

Possible Ways Forward

Owing to China and Russia’s growing interests across maritime Europe, it might be necessary for the United States, the EU, and other respective partners and allies to consider some of the following options:

- **Expand the size of Standing NATO Maritime Groups and increase the number of naval exercises.** In recent years, the United States has understandably been focused on developing an Indo-Pacific strategy. But it should, at the same time, continue to work with NATO to expand the Standing NATO Maritime Groups’ overall size and composition. The combination of increasing the number of ships at sea and conducting more joint exercises will help to act as a greater Russian deterrent and strengthen further interoperability. The NATO Allied Maritime Command is the key anchor for any strategy, and it has already begun to push NATO to adopt a stronger maritime posture. In the last several years, NATO has begun to think more strategically about how to manage Russia’s increased naval activity. NATO has recently conducted larger and more frequent maritime exercises and patrols across NATO’s area of responsibility, including Operation Active Endeavour, Sea Breeze, Dynamic Manta, and Dynamic Mongoose. Since the 2022 NATO summit in Madrid, NATO has begun to lean in more significantly on a forward security posture.

In November 2022, five carrier strike groups
patrolled NATO’s area of operations, albeit with individual mission objectives. The addition of Sweden and Finland as NATO members, and the alliance’s expansion of its annual Freezing Winds exercise, will also have important implications for future maritime security and deterrence.

- **Incorporate more Indo-Pacific partners and allies into maritime Europe.** The United States and European partners should try to host more bilateral or multilateral naval exercises with important partners or allies such as Australia, India, Japan, New Zealand, and South Korea. In April 2022, NATO hosted a foreign ministers’ meeting with several Asia-Pacific partner nations. The meeting built on prior momentum generated from the December 2020 inaugural meeting and represents an important step in the right direction.

- **Develop a seabed warfare strategy.** France has been at the forefront of this undertaking with the publication of its 2022 seabed warfare strategy. Following suit, the United Kingdom announced the establishment of the Centre for Seabed Mapping in its 2022 National Strategy for Maritime Security; the center aims to bolster national and regional maritime domain awareness. These are significant efforts, but more European actors and partners need to create seabed strategies and recognize the great vulnerability of Europe’s many maritime geoeconomic assets. As stated in its strategy, France hopes to “be ready to act and pose a credible threat in the face of diverse, evolving and hybrid modes of action.” But the recent submarine cable cuts near France and the United Kingdom in fall 2022 demonstrate the real vulnerabilities and a lingering lack of preparedness.

- **Protect submarine cables.** More thought and consideration need to go into securing Europe’s various fiber-optic submarine cables: an estimated 17 cable systems connect to North America; 11 to North Africa (excluding Egypt); and 13 to Egypt and the Middle East. The increase in global cyber connectivity has had a profound effect on how information is received and protected on land and at sea. The maritime sector, especially the shipping industry and major ports around the world, has started to think more critically about the necessity to secure essential cyber data streams and other critical maritime infrastructure. As China begins to establish a global submarine cable system that is more independent and acts as a possible redundancy line, as demonstrated by the several SEA-ME-WE (Southeast Asia-Middle East-Western Europe) submarine cable lines, it will be important for other countries to think about how information is secured, stored, and shared from one location to the next. The private sector alone is unable to tackle the breadth and scope of maritime cybersecurity for national security purposes.

- **Promote more coast guard support and training.** The United States should continue to bolster its regional coast guard activities, working in tangent with European partners and allies. The EU revised its Maritime Security Strategy in 2018, updating critical components that are important for the future of Europe’s coastal defense and operations. But coast guards are frequently underfunded or overworked, forcing them to prioritize difficult mission sets over others. The U.S. Coast Guard has numerous authorities that should receive adequate or increased funding in future years to support European nations lacking capabilities or financing. Port security and maritime cybersecurity are two key areas. Since many of China and Russia’s activities are often affiliated with coastal defense or with port operations (in the case of the Chinese), coast guards are frequently the best actors to manage many of these maritime security elements.
- **Promote greater multinational infrastructure investment funding and coordination.** According to some estimates, approximately $94 trillion will be spent globally on infrastructure by 2040.\(^{30}\) The U.S. and EU should continue to support and promote businesses that can be more involved in various (maritime) infrastructure projects. At its June 2021 summit, the G7 adopted the Build Back Better World (B3W) initiative (subsuming the multi-stakeholder Blue Dot Network, which never took off significantly).\(^ {31}\) While waiting to see if this re-framing has achieved greater success, the United States is still in need of a better coordinating body at the National Security Council to oversee and coordinate the U.S. export credit agency EXIM Bank, the International Development Finance Corporation, the U.S. Trade Agency, the U.S. Agency for International Development, and other entities that operate in Europe and around the globe.\(^ {32}\) Following the 2021 G7 summit, the EU launched the $340 billion Global Gateway project to tackle similar infrastructure issues as the B3W initiative, but it is unclear how much of the funds will focus on Europe. In June 2022, the European Parliament passed a measure that created a vehicle that “restricts bids from countries that don’t afford EU firms reciprocal market access in their public procurement markets.” This measure adds to another framework that was adopted in 2019 for “foreign direct investment screening,” but it does not appear to have been applied to China’s port investments.\(^ {33}\) From a security infrastructure standpoint, NATO might be able to lean more heavily on its Article 2 to counter some of China’s future investments. The article can be used to coordinate and scrutinize security infrastructure and technology projects.\(^ {34}\)
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Acknowledgements

The author would like to thank Andrew Yeo and Isaac Kardon for the opportunity to participate in the “Great Power Competition and Overseas Basing” project workshop. He would also like to thank Lori Merritt for editing and Rachel Slattery for layout.

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