

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2022/23

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Section 1: The Maritime Domain – Strategic Perspectives in the Global Arena

The articles in this section review the global arena, which this year too, was highly dynamic. The most important event this year – the Russo-Ukrainian War, and especially its maritime dimension – is discussed in Section 2. In this section, the war and its implications are discussed at length in the context of broader developments in the political and economic world presented by the opening article, which also traces developments in several of the world’s leading navies. These developments have taken place in the fields of overall and maritime strategy, resource allocations, and naval operations throughout the year. The second article discusses the maritime aspects of China’s Belt and Road Initiative through an examination of Chinese investment in shipping and ports around the world. The third article discusses the trilateral alliance between Australia, the United Kingdom, and the United States (AUKUS), which was signed in September 2021, with significant political and security implications in the Indo-Pacific theater; the article argues that the foundation for this alliance is the special relationship between its three partners, in terms of their shared culture, language, and history.

Global Developments in the Maritime Domain

Shaul Chorev

Introduction

As in previous years, the situation evaluation in this report focuses on the Eastern Mediterranean and the Red Sea. However, it is impossible to disconnect the events transpiring in these two arenas from recent global developments, particularly in the maritime domain, due to the close links between global events and their impact on the regions near Israel.

The year 2022 was marked by several notable events and processes that also affected the maritime domain, including:

- The decline of the COVID-19 pandemic, which was accompanied by a sharp rise in demand, causing delays in the global supply chain;
- The military conflict between Russia and Ukraine and its global implications;
- Sanctions and boycotts imposed by the various parties involved in the Ukraine conflict and their impact on the global economy;
- The strengthening of NATO's eastern front in response to the Russian invasion;
- The process of Sweden and Finland joining NATO;
- The deterioration of U.S.-China relations;
- Strengthening the balancing strategies against China in the Indo-Pacific region;
- Lack of progress on negotiations regarding Iran's return to the nuclear agreement and its continued attempts to become a nuclear threshold state;
- Continued conflict between Turkey, Greece, and Cyprus in the Eastern Mediterranean;
- The continuation of the economic and political crisis in Lebanon and its implications;
- The signing of the Maritime Border Delimitation Agreement between Israel and Lebanon, brokered by the United States;
- Unprecedented natural disasters resulting from climate change caused by human activity.

The global security agenda in 2022 was dominated by the war between Russia and Ukraine and the escalating security tensions between China and the United States. Russia's invasion of Ukraine on February 24, 2022, shocked the international community, especially in light of repeated Russian warnings suggesting the possibility that they would use nuclear weapons in certain extreme situations. The Western response to the Russian

invasion focused on providing military aid to Ukraine and imposing economic sanctions against Russia. According to the Stockholm International Peace Research Institute (SIPRI), the consequences of the war will have far-reaching effects, including a severe impact on global food security, as both Russia and Ukraine are major food producers. Significant changes in European security arrangements (namely, NATO) are taking place, which will lead to changes in political arrangements and in national strategies of countries and blocs. The opposition to Russian actions in Ukraine was widespread but not universal, as reflected by the fact that 35 countries abstained from supporting the UN's resolution in March 2022 to condemn Russia's invasion of Ukraine. Some countries challenged the Western narrative's emphasis on liberal and ethical issues during the crisis, especially regarding the Russian invasion and its impact on the civilian population. It should be noted that China, which reaffirmed its close ties with Russia in early February 2022, was among those abstaining from the UN vote.¹

Following Russia's invasion of Ukraine, a series of European NATO member countries announced a significant increase in defense expenses. To date, 29 European countries have committed to increasing their defense expenses by a total of over \$209 billion – a sum that is likely to increase further. The European Commission announced that investments will be required to replenish low stock levels of military equipment, and Joseph Borrell, the EU's High Representative for Foreign Affairs and Security Policy, called on the bloc to "spend together, more, and better" on its armed forces.²

The relationship between China and Russia has changed in recent decades, from overt animosity during the Cold War to collaboration against the West today. Although there is no formal alliance between the two countries, there is an unofficial agreement between them to coordinate diplomatic and economic actions aimed primarily against the United States. This informal alliance is also based on personal ties between the two heads of state, Vladimir Putin and Xi Jinping. President Putin visited President Xi in Beijing in early February 2022 (prior to invading Ukraine) and in a joint statement, the two emphasized that the friendship between their countries was limitless. The collaboration between them is unconditional and the two expressed a shared aversion to the United States and NATO. Three weeks later, Putin invaded Ukraine. The war in Ukraine, particularly Russia's declaration annexing the territories it occupied in Ukraine after conducting fabricated "referendums" in them, has created economic and diplomatic dilemmas for China. However, this did not change the fundamental alignment of autocratic interests

¹ Dan Smith, [Introduction: International Stability and Human Security in 2021, The War in Ukraine](#), *SIPRI Yearbook 2022*.

² Nan Tian, Diego Lopes da Silva and Alexandra Marksteiner, [The Great Global Rearmament](#), *Foreign Affairs*, July 22, 2022.

and values driving the Chinese-Russian relationship. At the same time, the differences in approaches between the two regimes is worth noting. While Russia is willing to destabilize the world order through actions such as the invasion of Ukraine, China prefers to maintain the stability required to protect its economic interests worldwide by cultivating a reputation for being prudent.³ Both China and Russia view the United States' support for democracies in their respective regions and for those fighting oppression and authoritarianism the two countries as a U.S. effort to expand its influence and ultimately topple their regimes. Both Xi and Putin also consider the network of alliances established and maintained by the United States, such as NATO and the Quad in the Indo-Pacific, as direct challenges to the security of their countries and regimes. It should be borne in mind that President Xi has already secured his third term as Chairman of the Communist Party. In this context, the backlash against the United States following the visit of then-U.S. Speaker of the House, Nancy Pelosi, to Taiwan in August 2022 helped Xi distract the Chinese public from other troubling problems in China. However, it seemed that he was not willing to risk jeopardizing his chances of reelection by a possible military conflict that could arise from the Taiwan crisis.⁴

In this context, the issue of human rights is regaining a central position in international relations. The climate crisis is expected to be at the top of the global agenda as the greatest challenge facing humanity in the current era, as a barometer of norms in the international arena, and as a central basis for both cooperation and competition.

Based on the dramatic changes taking place around the world, it is becoming evident that the conventional concepts of the political left and right are losing their meaning and being replaced by a new type of shared ideology. For example, after being elected, U.S. President Joe Biden turned his back on the neoliberal legacy of his predecessors and supported increased government investment in stabilizing and developing the economy, regulation, and taxing giant corporations. So far, his presidency has been characterized by efforts to forge bipartisan alliances across the four areas of clean energy, investing in the working class, a commitment to social justice, and investing in infrastructures. The series of victories he secured in Congress in the summer of 2022 led to a large investment of resources in the fields of climate change, healthcare, transportation infrastructure, and taxation.⁵

³ David Shullman and Andrea Kendall-Taylor, [Best and Bosom Friends: Why China-Russia Ties Will Deepen after Russia's War on Ukraine](#), *CSIS Briefs*, June 22, 2022.

⁴ Ted Gover, [Xi Jinping Will Not Want to Jeopardize Third Term Prospects with Armed Conflict over Taiwan](#), *CAN*, IG Bloomberg Media Studio, August 11, 2022.

⁵ Peter Baker, [Biden Is on a Roll That Any President Would Relish. Is It a Turning Point?](#), *New York Times*, August 8, 2022.

The Competition between the Superpowers the Rise of China as a Global Power

China continues to pursue its goals of becoming a global power, preserving what it sees as its territory and establishing its importance in regional affairs by building a superpower-class military, which could undermine the stability and norms of international relations. China's military commitment includes a multi-year agenda of comprehensive military reform initiatives. Combined with the unprecedented expansion of its military, the question arises as to what use will be made of this force, especially in light of China's increasing aggressiveness in all matters relating to its territorial claims in the South China Sea and Taiwan.

The visit of then-U.S. Speaker of the House Nancy Pelosi to Taiwan in early August 2022 raised strong opposition from Beijing and concerns in the United States and throughout the Indo-Pacific region about the impact on regional security of the visit and the Chinese military's response. Following the visit, Beijing launched large-scale military exercises, leading to public debates about a situation that had already been experienced three times before and therefore became known as the "Fourth Taiwan Strait Crisis". Both China and the United States tried to control the narrative regarding who caused the crisis. China repeatedly emphasized Pelosi's high position in the political hierarchy of the United States in an attempt to define her visit as a provocation. Chinese Foreign Minister Wang Yi stated: "The U.S. side claimed that China is escalating the situation, but the basic facts are that the United States first provoked China on the Taiwan question and blatantly violated China's sovereignty and territorial integrity".⁶ The Biden administration argued that China's military exercises, including short-range ballistic missile tests over Taiwan, represented a "manufactured" crisis and an overreaction to a routine congressional delegation visit. U.S. Under Secretary of Defense for Policy, Colin Khal, stated in regard to Pelosi's trip that: "Nothing about the visit changed one iota of the U.S. government's policy towards Taiwan".⁷

The tension over the Taiwan Strait dominated much of the annual meeting of the Association of Southeast Asian Nations (ASEAN) foreign ministers, as well as the ASEAN Regional Forum in Cambodia, attended by both U.S. Secretary of State Antony Blinken and Chinese Foreign Minister Wang Yi. As expected, ASEAN ministers issued a joint statement expressing concern and calling for dialogue without mentioning China or Taiwan by name.

⁶ Jude Blanchette, Charles Edel, Christopher B. Johnstone, Scott Kennedy, et al., [Speaker Pelosi's Taiwan Visit: Implications for the Indo-Pacific](#), *Center for Strategic & International Studies (CSIS)*, August 15, 2022.

⁷ Ibid.

However, this does not mean that individual countries in Southeast Asia are not concerned about China's aggressive response. The consensus among the elites and a large part of the public in Southeast Asia is that Pelosi's visit may have been ill-timed or even harmful. However, China's response was unusual in its intensity, forcing the United States to stand firm and not cancel the visit. Philippine leaders are beginning to realize that they, too, are likely to be involved in any conflict over Taiwan, whether they like it or not. It should be noted that the northernmost islands of the Philippines can be seen from Taiwan, and some of the military exercise areas declared by China were within the Philippines' Exclusive Economic Zone (EEZ). This led the United States and the Philippines to conduct talks for the first time regarding their respective expectations in the event of a Chinese invasion of Taiwan. This is part of a modernization process their alliance is undergoing, which began with last year's bilateral strategic dialogue and includes ongoing negotiations on new defense guidelines, a comprehensive military information agreement, a new dialogue on maritime security, and other security issues. In early November, Philippine authorities announced their intention to accelerate the implementation of the 2014 Enhanced Defense Cooperation Agreement, which allows American troops to be stationed for extended periods and to access local military bases. The Philippine government also announced that it was conducting talks with Washington regarding additional sites to be covered by the Enhanced Defense Cooperation Agreement, including areas near Taiwan and the disputed South China Sea.⁸

China has also expanded its involvement in the Middle East through its "grandiose and flagrant penetration into Saudi Arabia, which has always been defined as American territory".⁹ In early December 2022, the Chinese president visited Saudi Arabia and held a tripartite summit with Saudi Arabia and the leaders of the Gulf countries, as well as a separate and more comprehensive Arab summit. During the visit, President Xi signed a comprehensive strategic agreement between the two countries and agreements worth tens of billions of dollars. This alliance threatens the United States' dominance that prevailed not only in Saudi Arabia but throughout the Persian Gulf. Although Saudi Arabia presented the agreement as being part of the joint effort to integrate King Salman's 2030 vision with China's Belt and Road Initiative, official data shows a growth of more than 380% in the trade volume between the countries between 2016 and 2020, mainly due

⁸ Cliff Venzon, [Philippines to Accelerate U.S. Defense Deal on Base Access](#), *Nikkei Asia*, November 15, 2022.

⁹ Tzvi Bar'el, "[The Distancing from the U.S. Pushed Saudi Arabia to Tighten its Relations with China](#)", *Ha'aretz*, December 16, 2022 (Hebrew).

to a sharp increase in Saudi oil exports to China. In 2021, the total exports amounted to approximately \$44 billion.¹⁰

The Biden administration's official National Security Strategy (NSS) was published in October 2022. The document outlines the president's priorities at the start of a crucial decade of global challenges ahead. The most urgent strategic challenge facing the United States stems from regimes that combine authoritarian governance with revisionist foreign policies, referring to Russia and China, which pose a challenge to peace and stability. According to the document, the United States will prioritize maintaining a sustained competitive advantage over China while restraining Russia, which is still considered a dangerous country. Russia is defined as an immediate threat to the free international system because it utterly disregards the fundamental laws of international order, as evidenced by its aggression against Ukraine. China, on the other hand, is defined as the sole competitor that has the intention of reshaping the international order and increasing its economic, diplomatic, military, and technological power in pursuit of this goal. Another significant challenge presented in the document involves dealing with transnational phenomena, such as climate change, food insecurity, infectious diseases, terrorism, energy shortages, and inflation. Beyond that, the strategy focuses on local investments to maintain the United States' competitive advantage, modernizing and strengthening the military, and creating coalitions to deal with the influence of its adversaries.¹¹

The Biden administration has continued to restore and improve relations with its partners in the European Union and NATO following the damage caused by the Trump administration. The Russian conflict in Ukraine undoubtedly contributed to both sides recognizing the need to strengthen and even expand the alliance. In August 2022, the United States Congress approved the addition of Sweden and Finland as new members of NATO, which involved convincing Turkey to remove its objections to their accession. At the NATO summit of leaders held in Madrid in June 2022, the organization decided to increase its readiness level to 300,000 soldiers in response to the Russian invasion of Ukraine.¹²

At this summit, as part of the comprehensive dialogue held around the Russian invasion, two topics stood out in particular and were at the heart of the summit's discussions. These were the inclusion of Asia Pacific countries in the discussions and the increased investment in emerging and disruptive technologies (EDTs). NATO adopted the 2022

¹⁰ Ibid.

¹¹ [Biden-Harris Administration's National Security Strategy](#), *The White House*, October 2022.

¹² Jordan Fabian and Jenny Leonard, [Biden Returns to Drama Back Home After Success of NATO Expansion](#), *Bloomberg*, June 30, 2022.

Strategic Concept document, which reaffirms NATO's values and objectives.¹³ The Strategic Concept document has been updated every ten years since the Cold War to reflect the security environment assessment and provide a roadmap for military and diplomatic development. Among the changes made this year, it was necessary to clarify how NATO countries operate and invest in their long-term goals to diversify their partnerships and expand their military toolkit, while ensuring a proper foreign relations system with China and reducing dependence on the United States.¹⁴ The strategic document identifies Russia as the "most significant and direct threat" and China as a "systemic challenge". There is a shared understanding among NATO member states that Russia cannot be dealt with in isolation from China. China has expanded its military support for Russia, created dependency in the global supply chain, and exerted regional dominance by increasing its military exercises. NATO members declare that they will continue to work towards just, inclusive, and sustainable peace, and remain a stronghold for a rules-based international order. The document highlights the deterioration in the international relations system and the uncertainty this creates. It points out that the Russian Federation's aggression against Ukraine has shattered the peace and seriously altered the global security environment. The organization emphasizes that a strong and independent Ukraine is vital to the stability of the Euro-Atlantic region and notes the need to continue to address the ongoing threat of terrorism in all its forms and expressions. Increasing instability, strategic competition, and progressive authoritarianism challenge the interests and values of the organization. Therefore, NATO sees it as its obligation to cooperate in the Indo-Pacific region through agreements and alliances such as the ones between the United States, the United Kingdom, and Australia (AUKUS and the Quad).¹⁵

NATO's main missions according to the Strategic Concept document are:

1. Defense and deterrence;
2. Crisis prevention and management;
3. Cooperative Security.¹⁶

The Quadrilateral Security Dialogue (Quad), which includes the United States, Australia, India, and Japan, was established to cooperating following the 2004 tsunami in the Indian Ocean and is not a formal alliance. In 2021, the group strengthened its ties due

¹³ [NATO 2022 Strategic Concept](#), Adopted by Heads of State and Government at the NATO Summit in Madrid, June 29, 2022.

¹⁴ Antara Vats, [Going Beyond the Conventional: NATO Summit 2022](#), *Observer Research Foundation – ORF*, July 14, 2022.

¹⁵ *NATO 2022 Strategic Concept*, p. 1.

¹⁶ *NATO 2022 Strategic Concept*, pp. 7–10.

to the increased shared concern of the leaders of the four countries regarding China's assertive behavior in the region, leading them to propose a constructive framework for cooperation. It should be noted that the countries of the Pacific are currently at the center of a continuing geopolitical competition between the United States and China. The Indo-Pacific region spans two oceans and several continents, making it important to United States' maritime interests. Economically, the Indo-Pacific region is a center of global trade and commerce, making it a potential area for economic growth for the countries in the region, where 65% of the world's population, 63% of the global GDP, and 46% of the world's trade in goods are located.

In February 2022, the White House published the United States' Indo-Pacific Strategy document, which opened with the words of President Biden: "The future of each of our nations – and indeed the world – depends on a free and open Indo-Pacific enduring and flourishing in the decades ahead".¹⁷

The document states that the future of the region depends on the actions we take today, and that the crucial decade ahead will determine whether the region's countries can cope with and address expected climate changes, among other things. In addition, the region's countries need to examine how the region is recovering from the coronavirus pandemic, which was a once-in-a-century event, and decide whether they can uphold democratic principles of mutual respect, openness, and transparency. The United States expressed hope that together with its partners in the region, it will be able to contribute to the well-being of all the world's countries and to strengthen and prepare for the challenges of the 21st century, while taking advantage of opportunities to make the Indo-Pacific region prosperous and strong.

The document focuses on the following topics:

1. Promoting a free and open Indo-Pacific;
2. Building connections within and beyond the region;
3. Driving Indo-Pacific prosperity;
4. Bolstering Indo-Pacific security;
5. Building regional resilience against transnational threats expected in the 21st century.

On his first trip to the region since taking office on May 24, 2022, President Biden met with the leaders of the Quad in Tokyo, which was in fact the first personal meeting between the group's leaders since the war in Ukraine had begun. The latest security agreement between China and the Solomon Islands was also on the agenda, as well as

¹⁷ [Indo-Pacific Strategy of the United States](#), *The White House*, February 2022.

trade, technology, and climate change. At the end of the meeting, the four countries presented a maritime initiative to combat illegal fishing and pledged to invest over \$50 billion in infrastructure development in the Indo-Pacific region as part of their goal of addressing China's increasing influence in the area. The leaders of the countries noted in their joint statement that they "commit to work tirelessly to deliver tangible results to the region".¹⁸ It should be emphasized that the Russian invasion of Ukraine jeopardized the group's unified front, as India, which has close ties to the Russian Federation, opposed the other partners' calls to condemn the war.¹⁹ China reacted to the meeting by describing the group as an "Asian NATO", although the four countries did not sign a mutual defense agreement and only deepened their military, economic, and diplomatic ties. However, China's increasing influence in the small scattered island countries of the Pacific Ocean continues to raise concerns for the United States. A tracking of Chinese activity reveals that Chinese actors are operating slowly and often quietly in these countries and attempting to increase their dependence on China by funding infrastructure projects and conducting persuasive diplomacy among influential actors in these countries. The leak of an economic and security agreement exposed China's intentions of signing ten Pacific Island countries onto a deal that could fundamentally shift the balance of power in a region that comprises almost a third of the world. Chinese Foreign Minister Wang Yi embarked on an unprecedented and outstanding trip between May 26 and June 4, visiting eight countries throughout the Pacific Ocean to offer economic assistance packages that would dramatically expand China's security influence in the region. Wang landed in the Solomon Islands, then went on to Kiribati and Samoa, and later to Fiji, Nauru, Tonga, Papua New Guinea, and Timor-Leste. This visit took place despite the ongoing COVID-19 pandemic that is still raging in some islands due to dysfunctional healthcare systems, and therefore they are still closed to visitors.²⁰

Regarding the Eastern Mediterranean, during his visit to Israel and Saudi Arabia in July 2022 and in his meeting with the Gulf leaders in Saudi Arabia, President Biden stated that the United States' commitment to the Middle East is based on five principles: partnership, deterrence, diplomacy, integration, and values.

Partnership: The United States will support and strengthen partnerships with countries that have signed onto the rules-based international order and ensure that these countries can defend themselves against external threats.

¹⁸ [Quad Joint Leaders' Statement](#), *The White House*, May 24, 2022.

¹⁹ [The Quad: The origins of the Quadrilateral Security Dialogue](#), *The Week*, May 25, 2022.

²⁰ Kate Lyons, [A Pivotal Moment: Pacific Faces a Choice Over China that Will Shape it for Decades](#), *The Guardian*, May 27, 2022.

Deterrence: The United States will not allow foreign or regional powers to endanger the freedom of navigation through the waterways of the Middle East, including the Hormuz and Bab el-Mandeb Straits, and will not tolerate any country's efforts to control another or the region through the deployment of military forces, invasions, or threats.

Diplomacy: The United States will not only aim to deter threats to regional stability, but will also work to reduce tensions and resolve conflicts wherever possible through diplomacy.

Integration: The United States will build political, economic, and security relationships with its partners wherever possible, while respecting the sovereignty and independent choices of each country.

Values: The United States will always advance human rights and the values enshrined in the UN Charter.²¹

After prolonged negotiations between Israel and Lebanon, mediated by the United States, an agreement was reached regarding the demarcation of the maritime border. The maritime agreement primarily focuses on: establishing the status quo of the existing maritime boundary near the coast (the "buoy line"); setting a permanent maritime border between Israel and Lebanon from the end of the buoy line to the edge of the EEZ; acknowledging that the agreement is permanent and equitable and marks the end of the conflict over the disputed maritime area; and regulating the development of the cross-border reservoir in the disputed maritime area. The agreement is expected to enable Lebanon to complete the negotiations of recent months over its supply of gas from Egypt via Jordan and Syria to Lebanon, thereby easing the severe electricity supply crisis in the country. In addition, in the short to medium term, Lebanon will probably seek to leverage the agreement in order to join the energy market by exploring the potential energy reserves in the depths of the sea in the Kanah field. For Israel, the agreement removes doubts concerning the development of the Karish field due to the risk of potential instability or escalation, and Israel may also benefit from the wells found in the Lebanese Kanah gas field, which is shared by both countries.

On the two-year anniversary of the Abraham Accords, which normalized diplomatic relations between Israel, the United Arab Emirates, Bahrain, and Morocco, and raised hopes that have not yet materialized regarding Sudan, new opportunities for security cooperation have emerged, especially between Israel, Bahrain, and the UAE, who share a similar perspective on the security threat Iran poses to the Middle East. The Negev Forum, which convened in Sde Boker in the spring of 2022, included Egypt in

²¹ [Fact Sheet, The United States Strengthens Cooperation with Middle East Partners to Address 21st Century Challenges](#), *The White House Press Release*, July 16, 2022.

the Abraham Accords coalition and suggested additional options for cooperation on shared interests, including energy, food and water security, healthcare, and other issues. However, cooperation between Israel and its Arab partners has not succeeded in advancing the relationship between Israel and the Palestinians, despite the fact that the Negev Forum's agenda included steps to improve the Palestinians' living conditions. The Abraham Accords have not yet succeeded in adding new members, and despite some softening in Saudi Arabia's position in the bilateral relations, including in the field of security cooperation and opening its airspace to Israeli flights, it remains committed to the existing 2002 Arab Peace Initiative (API) and maintains that the normalization of relations with Israel will come at the end of the process, not at the beginning. Even Gulf countries such as Oman and Qatar, which had (and who still may have) unofficial relations with Israel, have so far refused to turn them into full diplomatic relations. On the two-year anniversary of the Abraham Accords, normalization has opened the door for private sector entities, especially in the UAE, that were in a convenient position to expand and take advantage of the bilateral trade and commerce opportunities that arose as a result. However, the agreements have not yet succeeded in changing the attitudes of Arab populations towards Israel. Apart from Morocco, where surveys indicate that only 11% of the population see Israel as a threat, the Arab public generally continues to view Israel in a negative light, primarily due to its recent failure to resolve the Palestinian issue. This issue undoubtedly causes decision-makers in other Arab capitals, especially Riyadh, to hesitate to move forward with normalization. In light of this, the risk is that the lack of progress on the Palestinian front will ultimately lead to the Abraham Accords being perceived as just another cold peace.²²

As a reminder, in 2017, the island of Tiran was transferred/returned from Egypt to Saudi Arabia. The Straits of Tiran, located west of the island, have a long history related to Israel's freedom of navigation to and from Eilat: Egypt's blocking of the Straits of Tiran before the Sinai War in 1956 by deploying coastal artillery at Ras Nasrani was one of the main causes for the outbreak of the war. In May 1967, Egypt blocked the passage through the Straits of Tiran, which was the main factor leading to the outbreak of the Six-Day War. During his visit to Israel and Saudi Arabia in mid-July 2022, U.S. President Joe Biden announced that the Multinational Force and Observers (MFO), which oversees the implementation of the peace treaty between Israel and Egypt reached in 1979 through U.S. mediation and which is intended to ensure freedom of navigation in the Straits of Tiran, will end its mission, and that the area will be monitored by optical means. This may

²² Gerald M. Feierstein and Yoel Guzansky, [Two Years On, What is the State of the Abraham Accords?](#), *MEI@75*, September 14, 2022.

be part of what Israel agreed to give the Saudis in exchange for advancing the relationship between the countries.

A study conducted by the Maritime Policy & Strategy Research Center at the University of Haifa presents the factual background regarding the transfers of the island from Saudi Arabia to Egypt and back and discusses the challenges facing the region in terms of maritime law in light of the transition from an agreed legal status (Israel-Egypt) to a legal status that was not agreed upon (Israel-Saudi Arabia). The author of the monograph notes that in light of history and maritime law, the future may hold challenges in all matters related to freedom of navigation in the Straits of Tiran.²³

On the other hand, in the field of security in the Red Sea region, the Saudis have shown willingness to work with Israel. They have agreed to allow Israeli civilian flights to pass over the Kingdom's territory on flights to and from the East and have approved direct travel of pilgrims from Israel to Mecca. Both moves reflect a more accepting Saudi stance towards cooperation with Israel. It should be noted that Israeli policymakers may also consider developing relations with Saudi Arabia outside the framework of the Abraham Accords.

In contrast, Iran sees itself committed to the struggle against the United States and its regional allies, assuming that they are seeking to reduce its geopolitical influence in the Middle East and are trying to change the regime in Tehran. Iran's actions reflect its perception regarding the hostile attitude of the United States, Israel, and Gulf states. It will continue to project power through its security apparatus (including the Iranian Revolutionary Guard Corps) and proxy forces, seeking to extract diplomatic and economic concessions from the international community. As for U.S. interests, Iran's willingness to conduct attacks depends largely on its perception of the United States' readiness to respond, Iran's ability to carry out attacks without them leading to direct conflict, and the likelihood that carrying out attacks will jeopardize the easing of U.S. sanctions in the future. The leaders of President Raisi's new regime have toughened their stance and continue the policy of "brinkmanship" with regard to the negotiations on the Joint Comprehensive Plan of Action (JCPOA). Iran is determined to continue maintaining its influence in Syria as part of its strategy to expand its regional influence, for example, in Lebanon and through Hezbollah, which will threaten Israel. Iran will take advantage of the ongoing economic crisis in Lebanon and try to use civilian aid (including fuel supply) channeled through Hezbollah, to prevent the Lebanese government from seeking

²³ Benny Spanier, [*Fifty Years Since the Six Day War: Freedom of Navigation in the Tiran Straits from the Perspective of Maritime Law – Over but Not Done With*](#) (Haifa: The Maritime Policy & Strategy Research Center and the Chaikin Chair for Geostrategy, University of Haifa, 2017) (Hebrew).

assistance from the West. Iran's ongoing support for the Houthis in Yemen will continue, as this support, including the supply of missiles and unmanned systems, poses a threat to U.S. partners and interests, especially through attacks on Saudi Arabia. Iran will continue to threaten Israel, both directly through its missile forces and indirectly by supporting Hezbollah and other terrorist organizations.

The Biden administration has not developed a consistent policy towards Turkey, despite the fact that several complex situations in the region affect Turkey's relations with the United States and other key players, as Turkey is seeking a more independent foreign policy. These include Russia's invasion of Ukraine in 2022, the Syrian civil war (which resulted in over 3.6 million refugees fleeing to Turkey), and other challenges related to Greece, Cyprus, and Libya. Since 2021, Turkey has worked to reduce tensions and increase trade with Israel (including upgrading diplomatic relations to an ambassadorial level), the UAE, and Saudi Arabia. There is no clear definition of U.S. diplomatic goals regarding Libya and there are no policy goals regarding Syria's reconstruction. Turkey is publicly discussing a new military operation in Syria aimed at removing Syrian Kurds affiliated with the PKK (Kurdistan Workers' Party) from areas near its border; however, criticism from the United States and Russia may affect if and how such an operation takes place.

There are concerns among NATO members in light of rising tensions in security relations between Turkey and Greece, as evidenced by a number of incidents between the two countries' air forces, which occurred while NATO was trying to focus on presenting a united front against Russia following its invasion of Ukraine. Experts are worried that if the tension escalates into hostile actions, Russian President Vladimir Putin may exploit it. Both Turkey and Greece are heading into crucial elections in 2023, with Turkish President Recep Tayyip Erdogan facing a significant challenge to his 20-year rule due to economic difficulties and immigration issues, while Greek Prime Minister Kyriakos Mitsotakis, who was elected in 2019, is suffering some loss of popularity due to rising energy prices resulting from the war in Ukraine. It is likely that Ankara will continue its two-pronged approach to Turkey's conflicts in the Mediterranean, attempting to strike a balance between "arm twisting" and diplomacy.

In summary, the Eastern Mediterranean region requires a new political order. Without a strong, coherent, and coordinated policy on the part of the European Union and NATO, relations in the Eastern Mediterranean are likely to become even more volatile. However, political solutions to the maritime border dispute between Greece and Turkey, the Cyprus issue, and the conflict in Libya, based on the rule of law and the existing political reality, have the potential to positively affect the entire region immediately, reboot EU–Turkey relations, and build future cooperation between the EU, the Eastern Mediterranean countries, and North Africa (MENA).

The Red Sea, Arabian Sea, and Persian Gulf Region

The Red Sea, the Gulf of Aden, and the Persian Gulf were at the center of international tensions in 2022. The tense atmosphere between Iran and the Gulf states has always been a contributing factor to regional instability. However, since the United States withdrew from the JCPOA in 2018 during the Trump administration, covert wars between Israel and Iran and between the United States and Iran, which had previously taken place on land and in the air, have shifted to the waters of the Persian Gulf, the Gulf of Oman, and the southern Red Sea. In addition to the main rivalries mentioned, this campaign should also be seen as part of the battle between the Shiite bloc led by Iran and the Sunni states in the Middle East and the countries belonging to the Gulf Cooperation Council (GCC).

The Red Sea itself is rife with regional and international geopolitical barriers, especially at its chokepoints. The Straits of Hormuz were and remain threatened by Iran's proximity. The war in Yemen and Iran's support for the Houthi rebels has subjected the Red Sea, and particularly its southern part, to geostrategic and geopolitical threats similar to those in the Persian Gulf. In recent years, the eastern and western shores of the Red Sea have become a shared political and security arena, where both regional powers and countries in the area have significant interests, especially regarding free trade conducted through the Red Sea and the Gulf of Aden, valued at approximately \$700 billion annually. The impact and implications of the Suez Canal being blocked for six days in March 2021 by the container ship *Ever Given* have revealed the strategic centrality of the Red Sea as a transit route for oil and global trade.²⁴ From a geopolitical perspective, there are multiple national interests involved in this region, forming the foundation for the close relationship between its two coasts: the Arabian Peninsula and the Horn of Africa. The increased number of ports and new military facilities in the coastal areas of Sudan, Eritrea, Djibouti, and Somalia emphasizes the crucial relevance of East African countries to the Gulf States, as well as to other external powers involved in the region, such as Russia, Turkey, and China. At the same time, countries of the Horn of Africa are leveraging their strategic position to attract investments, thereby enabling powers to strengthen their grip on the region.

The western coast of the Red Sea and the Horn of Africa have also become a focal point for geopolitical changes. The UAE and Saudi Arabia's ambition on one hand and Turkey and Qatar's on the other, to gain control of the Horn of Africa has led to instability and

²⁴ Udi Gonen, "The Incident of the Suez Canal Blockage by the Ever Given Container Ship – The Implications for the Region and for Israel" In: Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa: The Maritime Policy & Strategy Research Center, University of Haifa, 2022), pp. 201–220.

insecurity in an already volatile region known for its lack of governability. The competition between Egypt, Sudan, and Ethiopia over the use of the Nile remains unresolved and can potentially cause future conflicts between these countries. Brutal armed conflicts persist in Somalia, South Sudan, Sudan, and Yemen, involving countries on both sides of the Red Sea. This rivalry between Middle Eastern players raises the strategic rivalry between the United States and China and Russia to the top of the national security agenda.²⁵

The COVID-19 Pandemic and Its Impact on the International System

The outbreak of the coronavirus pandemic in late 2019 created a sense of vulnerability and, to a certain extent, helplessness around the world, rapidly and profoundly changing daily routines and affecting all aspects of life. The effects of the pandemic extend far beyond global health, and have an impact on the economic, political, and security spheres. COVID-19 is likely to remain a threat to populations worldwide until vaccines and effective treatments are widely disseminated across all sectors of the global population. The economic and political ramifications of the pandemic will continue to emerge for many years to come.

The Global Economy

According to the Global Economic Prospects report issued by the World Bank, in the wake of the impact of the COVID-19 pandemic, the Russian invasion of Ukraine has deepened the slowdown in the global economy, which is entering what could become a prolonged period of weak growth and intense inflation. This raises the risk of stagflation, with potentially damaging consequences for economies with low to medium incomes. Global growth is expected to decline from 5.7% in 2021 to 2.9% in 2022 – significantly lower than the 4.1% forecast made in January 2022. This is expected to be the case during 2023–2024, as it is expected that the war in Ukraine will disrupt activity, investment, and trade in the near term, pent-up demand will fade, and fiscal and monetary policy accommodation will be withdrawn. As a result of the pandemic and the war, income levels in developing economies will be nearly 5% lower this year than the pre-pandemic trend.²⁶

Some claim the COVID-19 outbreak had only temporary effects on the global economy and that globalization would renew once it subsides. However, recent research has produced other data indicating that the pandemic will have significant long-term effects

²⁵ Moshe Terdiman, "Changes and Transformations in the Red Sea Basin – and Their Implications for Israel," In: Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa: The Maritime Policy & Strategy Research Center, University of Haifa, 2022), pp. 173-182.

²⁶ [Stagflation Risk Rises Amid Sharp Slowdown in Growth, Global Economic Prospects](#), World Bank Group, June 2022.

on globalization. These conclusions are based on three observations. First, the pandemic increased inequality between and within countries and reversed trends in poverty reduction, which will increase anti-globalization sentiment in the future. Second, the pandemic has fueled populism, nationalism, and a return of state intervention in the economy, which has paved the way for an increase in protectionism. Third, governmental responses to the COVID-19 crisis have undermined the international institutions that have so far facilitated globalization. These forces have led to growing global uncertainty and higher transaction costs in international business. Research suggests that the reconfiguration of global value chains will result in a less global and more regionally fragmented global economy.²⁷

However, the results of a survey conducted in March 2022 by McKinsey indicate that geopolitical instability remains the most cited threat to the global economy, and runaway inflation has overtaken volatile energy prices to become the second most cited concern. Supply chain disruptions is the third leading risk, followed by fluctuating energy prices and rising interest rates (see Figure 1). Overall, the level of pessimism regarding the second half of 2022 is on par with the first months of the COVID-19 pandemic in 2020, with more than half of those surveyed predicting that global economic conditions will worsen in the coming months.²⁸

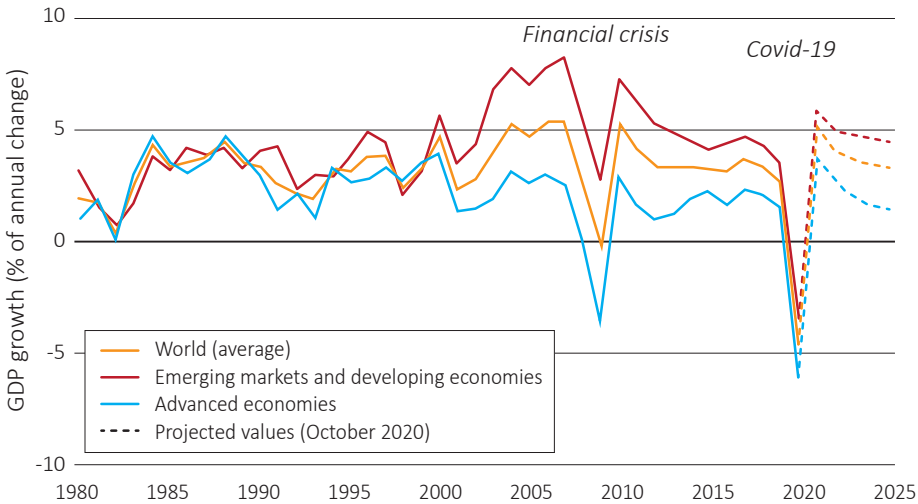


Figure 1: Disruptions in the supply chain – the three leading risks

²⁷ Luciano Ciravegna and Snežina Michailova, [Why the World Economy Needs, But Will Not Get, More Globalization in the Post-COVID-19 Decade](#), *Journal of International Business Studies*, 53 (2022), 172–186.

²⁸ [The Coronavirus Effect on Global Economic Sentiment](#), *McKinsey Company Survey*, June 29, 2022.

The report also offers new insights regarding the impact of the war on energy markets, which also casts a shadow on the global growth forecast. The war in Ukraine has led to an increase in prices of a wide range of energy-related commodities. Higher energy prices are expected to continue to lower real income, increase production costs, worsen financial conditions, and limit macroeconomic policies, especially in energy-importing countries.

Global Trade

The Global Supply Chain

The COVID-19 pandemic has affected every part of the value chain, from the purchase of raw materials to the end customer. It has challenged the commercial, operational, financial, and organizational resilience of most companies around the world, highlighting risks and vulnerabilities for many organizations. The pandemic has impacted or led to:

1. Logistic disruptions;
2. Production delays;
3. Overreliance on a limited number of third parties;
4. Doubling down on technology investment;
5. Commodity pricing;
6. Workforce and labor.²⁹

The supply chain challenges anticipated for 2023 include:

1. *Material shortages*: "Insufficient inputs have been a problem for several years now, largely brought on by the surge in consumer demand. In 2023, many retailers and suppliers have still not got on top of this demand. The limited availability of many materials and parts is part of the problem, and other global events such as the war in Ukraine are not making this any easier."³⁰
2. *A rise in shipping costs*: The need for shipping containers increased significantly during the pandemic. This led to a greater demand for imported raw materials and consumer goods (a large percentage of which are transported in shipping containers), which was met with inadequate shipping capacity and an unprecedented shortage of empty or available containers. The shortage caused a significant increase in shipping

²⁹ [Six key Trends Impacting Global Supply Chains in 2022, From Logistics Disruption, to Workforce and Labour](#), KPMG, Retrieved August 14, 2022.

³⁰ [Supply Chain Challenges and Tips For 2023](#), Eventura, January 25, 2023.

costs, and in 2022 for example, shipping costs from China to the West Coast of the United States skyrocketed by 240%.

3. *Difficulty with predicting demand:* The COVID-19 pandemic has disrupted the forecasts of countless retailers and suppliers of consumer products and services, making it impossible for them to estimate the amount of inventory they should hold or manufacture at any given time.
4. *Port congestion:* The congestion caused by the pandemic remains one of the leading challenges for supply chains worldwide. While the loading/unloading process generally proceeds according to plan, a shortage of manpower and social distancing due to the pandemic has created major bottlenecks in several busy global ports, causing companies to be unable to deliver their goods on time. This also affects distributors and logistics providers who are unable to meet their delivery commitments.
5. *A shift in consumer behavior:* Consumer behavior has changed significantly during the pandemic, including demands for shorter delivery times and increasing demand for a positive customer experience.³¹

The pandemic brought e-commerce demand to an all-time high. While an increase in order volume was an advantage for traders, new infrastructure needs and disruptions in the supply chain were major concerns.

The problems caused by the pandemic and its impact on the global supply chain were exacerbated by the war between Russia and Ukraine, which broke out in February 2022. Understanding Russia's trade specialization is crucial in assessing the potential implications of war-related disruptions on global supply chains and their geographic aspect. Russia's exports of oil, gas, and coal account for 15% of the global export of these commodities and the European Union is its largest importer, as well as the region with the highest dependence on imports from Russia. This explains the supply pressures arising in the natural resource sector. In addition to energy commodities, Russia is also a key exporter of raw materials, including those classified as critical by the European Commission (2020) due to their economic importance and high supply risks (see Figure 2). For example, Russia exports materials used to produce fertilizers, primarily potash, a field in which it has a dominant position, as well as rock phosphate and sulfur. In terms of critical raw materials, Russia is a major exporter of palladium, vanadium, and cobalt, which are mainly used in the production of 3D printers, drones, robotics industries, batteries, and semiconductors, thereby affecting other sectors too, such as electronic appliances, transportation, and most prominently the car sector. Russia is also the fourth largest producer of coking coal,

³¹ [Future of Supply Chain: Challenges, Trends & Tips for 2022](#), Skubana, March 17, 2022.

used for steel production, where it also enjoys a dominant market position, while Ukraine is one of the largest exporters of iron ore, which is used in the iron and steel industries.³²

The war also created a severe food shortage, mainly in low-income countries in Africa. This is because Ukraine and Russia produce about a third of the world's wheat and a quarter of its barley, not to mention about 75% of the sunflower oil supply – all critical goods for maintaining human nutrition. The combination of sanctions imposed on Russia, the blocked Ukrainian ports, the closure of the Turkish straits, and the inability of Ukrainian farmers to work their fields, created global turmoil and a humanitarian crisis.

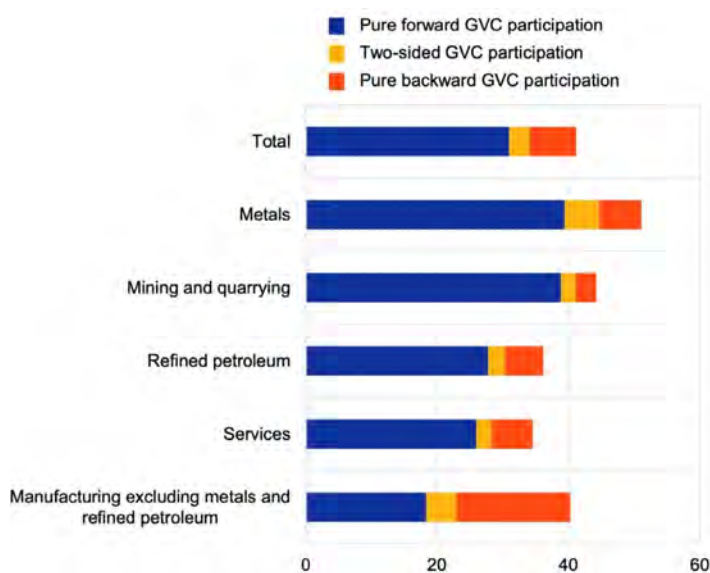


Figure 2: Russia's participation in global value chains across sectors by modes (percentage share of total export, 2020)³³

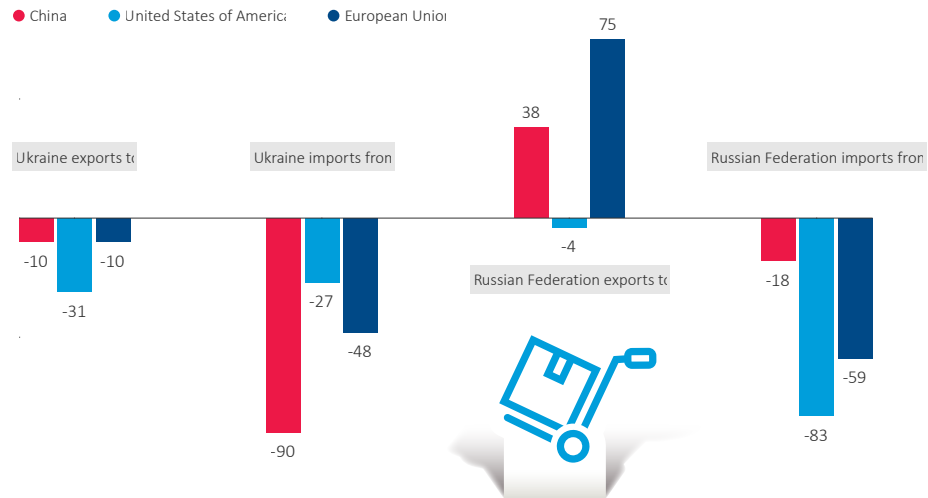
On July 22, 2022, the Russian Defense Minister and the Ukrainian Infrastructure Minister signed an agreement allowing the opening of Ukrainian ports on the Black Sea for wheat and fertilizer exports. The agreement, which was mediated by Turkey and underwritten by the UN, could impact the global food market, particularly benefiting developing countries in Africa and Asia that cannot afford the high wheat prices caused by the war in Ukraine. Under the agreement, Ukraine will export produce from three main ports, including the

³² Maria Grazia Attinasi, Rinalds Gerinovics and Vanessa Gunnella, [Global Supply Chains Rattled by Winds of War](#), *Vox EU*, June 8, 2022.

³³ Lucia Tajoli, "Too Much of a Good Thing? RussiaEU International Trade Relations at Times of War", *Journal of Industrial and Business Economics*, 49, no. 3 (2022): Fig. 5.

port of Odesa. The UN established a coordination center staffed by officials from the organization, Turkey, Russia, and Ukraine, whose role is to oversee the implementation of the agreement. The agreement stipulates that Turkey and UN monitors will inspect ships entering the port of Odesa to load wheat to ensure that they are not transporting Western weapons to Ukraine, while the Russians commit to not using the passageways in the maritime minefields cleared by Ukraine to bring in landing ships and land troops on Ukrainian ports. The first ship loaded with wheat left the port of Odesa in early August 2022 and 16 more ships were waiting to be loaded with wheat.³⁴

Year-over-Year percentage change in the value of merchandise trade during March and April 2022



Source: UNCTAD calculations based on the national statistics of China, the United States, and the European Union.

Figure 3: Russia and Ukraine's trade with three global economies (Source: UNCTAD)³⁵

The transportation arteries connecting China with Europe have also been affected by the Russian invasion. The rise in gas prices has pushed up transportation costs across all modes of transportation. The railway route connecting the regions, which became highly competitive during the peak of the pandemic, especially for industries that value shorter delivery times, such as the automobile and electronics industries, is now jammed. This is particularly true for the main corridor that crosses Russia, Belarus, and Poland before continuing to Germany, France, and other countries in Europe.

³⁴ Dalton Bennett and Kareem Fahim, [First Ship Carrying Grain Leaves Odessa in Deal to Ease Global Food Crisis](#), *Washington Post*, August 1, 2022.

³⁵ [Global Trade Update](#), United Nations CTAD, Division on International Trade and Commodities, July 2022.

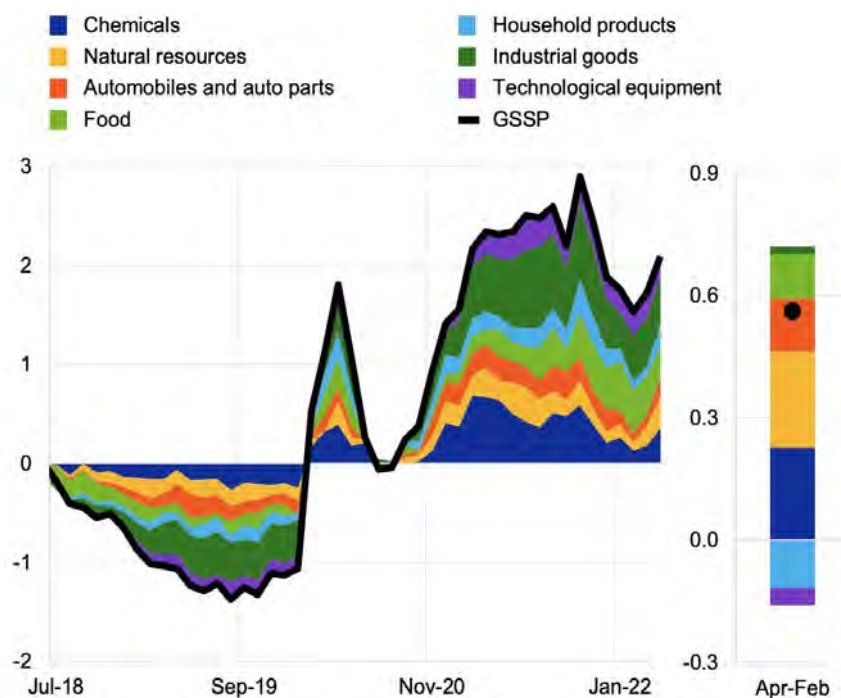


Figure 4: Supply chain pressure indicator in global manufacturing Latest observation: April 2022. Source: IHS Markit Ltd.

The value of global trade increased during the first quarter of 2022, although its growth continued to slow. Overall, the value of global trade reached a record level of around \$7.7 trillion in the first quarter of 2022, an increase of about \$1 trillion compared to the first quarter of 2021 and an increase of about \$250 million compared to the fourth quarter of 2021. Both trade in goods and trade in services grew during the first quarter of 2022. Trade in goods reached around \$6.1 trillion (an increase of about 25% compared to the first quarter of 2021 and an increase of about 3.6% compared to the fourth quarter of 2021), while trade in services amounted to about \$1.6 trillion (an increase of about 22% compared to the first quarter of 2021 and an increase of about 1.7% compared to the fourth quarter of 2021). Trade growth is expected to remain positive but continue to slow during the second quarter of 2022.³⁶ The value of global trade grew due to rising commodity prices, while trade volume grew much more moderately (see Figure 5).

The organization predicts a worsening of the geopolitical situation and continued friction that could negatively affect global trade at the end of the second half of 2022.

³⁶ Ibid.

Merchandise trade in values and volumes (Index 2019=100)

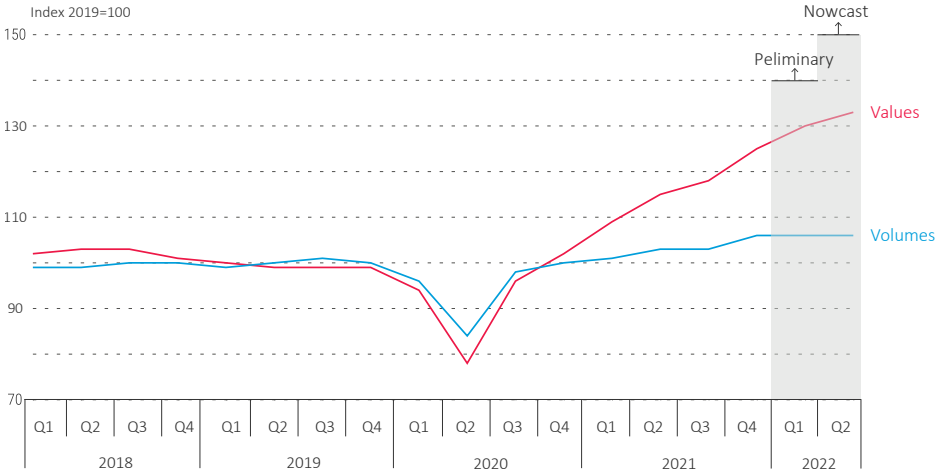
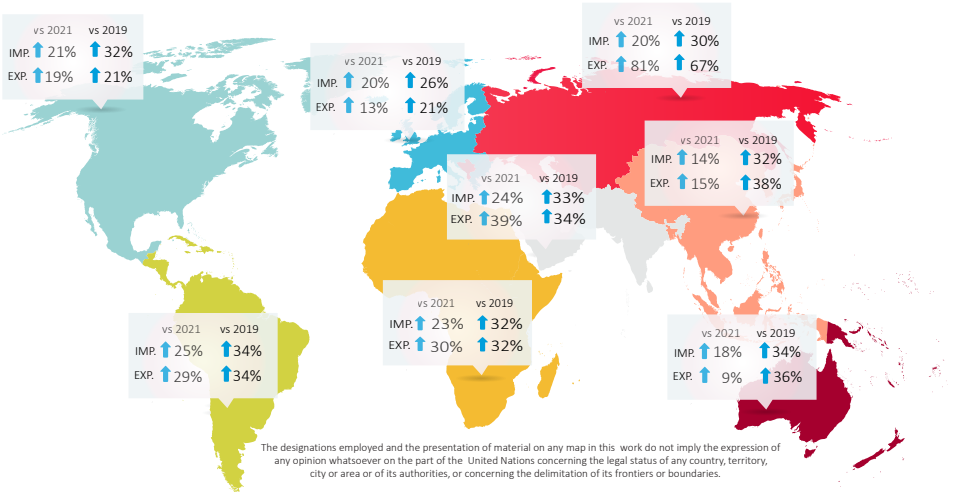


Figure 5: The impact of rising commodity prices on international trade (Source: UNCTADStat)³⁷

Trade continues to increase in all regions, but less so in the East Asia and Pacific regions

Q1 2022 relative to Q1 2021 and Q1 2019



Source: UNCTAD estimates based on national statistics.
 Note: Changes are year-over-year. Data excludes intra-EU trade. Data does not include trade in services.

Figure 6: Growth in trade across all regions (at a lower rate in East Asia and the Pacific regions)³⁸

37 Ibid.

38 Ibid.

China's Trade Balance

China's trade surplus unexpectedly fell to \$79.39 billion in August 2022 from \$59.13 billion in the same month last year, well below market expectations of \$92.7 billion. The decline was due to a more moderate increase in exports amid disruptions to production output caused by new COVID-related restraints and historic heat waves, while foreign demand weakened as inflation rose in many countries (see Figure 7). Shipments grew by 7.1% compared to the previous year, marking the slowest growth in shipments and the first single-digit growth since April, and below the market estimate of 12.8%. Imports grew by 0.3%, marking the slowest growth in incoming shipments since the standstill in April – also weaker than the expected growth of 1.1%. In the period between January and August 2022, China's trade surplus stood at \$560.52 billion, with exports growing by 13.5% while imports grew by 4.6% compared to the previous year. The trade surplus with the United States shrank to \$36.77 billion in August from \$41.5 billion in July.³⁹

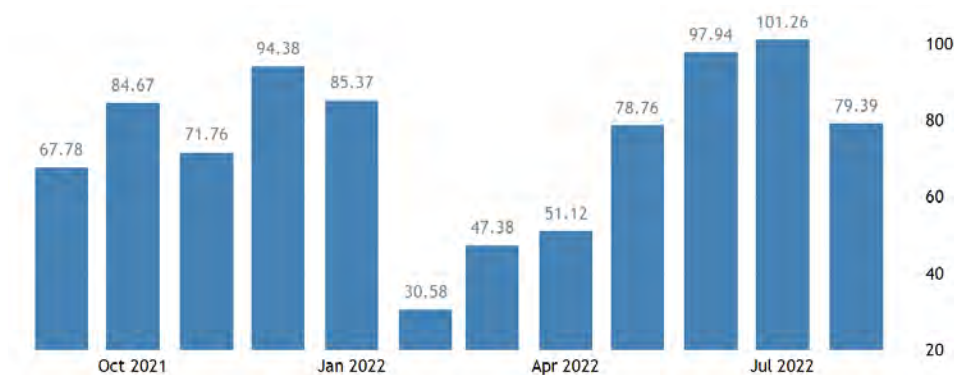


Figure 7: China's trade balance in the first half of 2022, Source: Tradingeconomics.com
General Administration of Customs

Demand for Oil and the State of the Tanker Fleet

European importers avoided crude oil sent from Russia in response to the invasion of Ukraine. This caused Russia to divert its oil exports towards Asia, mainly India and China. Assuming Europe will completely avoid Russian oil flows at a certain stage, this will affect the average monthly flows of 55 million barrels (around 1.8 million barrels per day) or up to 85 million barrels (2.8 million barrels per day) including oil from Kazakhstan.⁴⁰

³⁹ [China Balance of Trade](#), Trading Economics, Retrieved September 30, 2022.

⁴⁰ Fotios Katsoulas and Rahul Kapoor, [Tanker Demand to Grow 3.5%–6.5% as Europe Avoids Russian Oil – Asia Imports More](#), S&P Global Market Intelligence, June 13, 2022.

As India has already increased the volumes it imports from Russia to over 900,000 barrels per day (compared to only about 30,000 barrels per day in 2021), it is highly likely that the country will be able to import 30 million barrels of crude oil from Russia every month (or around 1 million barrels per day). Meanwhile, China may increase its imports from Russia (primarily through additional shipments from Russia's European ports) by 15 million barrels per month compared to last year's activity, which is equivalent to an increase of half a million barrels per day.

This scenario will increase global demand for crude oil tankers by 3.5% (1.8% related to India and 1.7% driven by additional flows to China). A more optimistic scenario, in which India increases its flow from Russia to 45 million barrels per month, or 1.5 million barrels per day, and from China to 25 million barrels per month, or 830,000 barrels per day, will cause global demand for crude oil tankers to rise by 5.6% (2.8% related to India and 2.8% to China). A factor that could affect the market is the possibility of a ban imposed both by the United Kingdom and the European Union on insuring Russian fuel-carrying vessels worldwide, which could significantly affect the global shipping industry.⁴¹ This ban, which will come into effect six months after the ban on oil transportation, could cause severe pressure against Russian oil exports from the Black and Baltic Seas, which could lead to a drop in exports by up to one million barrels per day. Without insurance, buyers will not agree to have the oil transported by sea unless governments establish mechanisms to cover local insurance, as was done in the past for fuel shipments from Iran.

The alternative observed so far, with Russia sending oil primarily to China and India, involves Russia having to rely on a tonnage estimate conducted under local control or ownership. According to estimates, replacing Russian oil shipments sent to China and India instead of Europe requires an additional 30 80,000–100,000 deadweight ton (DWT) Aframax tankers, 50 tankers capable of passing through the Suez Canal (Suezmaxes), and more than 40 VLCCs (see Figure 8).

It is important to note that the market for liquefied natural gas (LNG) transported by sea has grown significantly in 2022 in response to disruptions in pipeline gas supply. For the first time in history, this year, at least half of Europe's natural gas consumption was imported by ships.

⁴¹ Ibid.

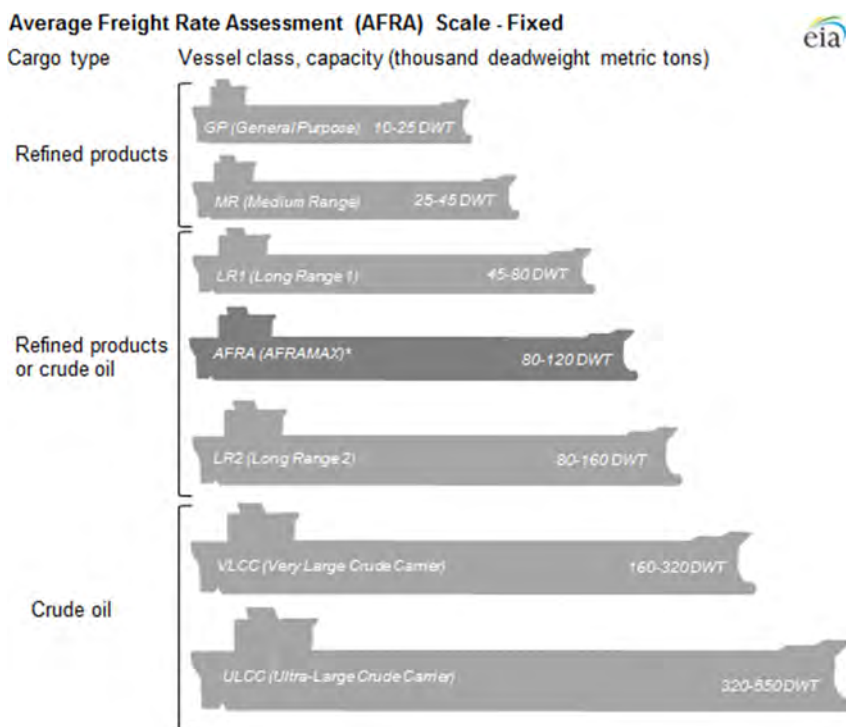


Figure 8: Vessels for transporting fuel and distillates (Source: Eia)

Chokepoints

Chokepoints are strategic and narrow passages that connect two larger regions. With regard to maritime trade, these are usually straits or channels through which high traffic volumes pass due to their optimal location. There are currently eight major chokepoints. These include the Panama Canal, the Suez Canal, the Strait of Hormuz, the Bab el-Mandeb Strait, the Strait of Malacca, the Strait of Dover, the Strait of Gibraltar, and the Turkish Straits (Bosporus and Dardanelles). These vital chokepoints pose a number of risks for ships that pass through them, including:

Structural risks: As occurred when the *Ever Given* ship blocked the Suez Canal for six days in March 2021, a ship can become grounded along the canal's coast if the passage is too narrow, causing traffic jams that can last for days.

Geopolitical risks: Due to their high traffic volume, chokepoints are particularly vulnerable to deliberate blockades or disruptions during periods of political unrest. An example of this was when Turkey closed the Bosporus and Dardanelles Straits during the conflict between Russia and Ukraine in the spring of 2022.

Figure 9 depicts the risks associated with transit through the eight main chokepoints, divided into the categories of environmental risks, security risks, and administrative risks.⁴² The type and level of risk vary depending on the location of the chokepoints and the existence of alternative routes.

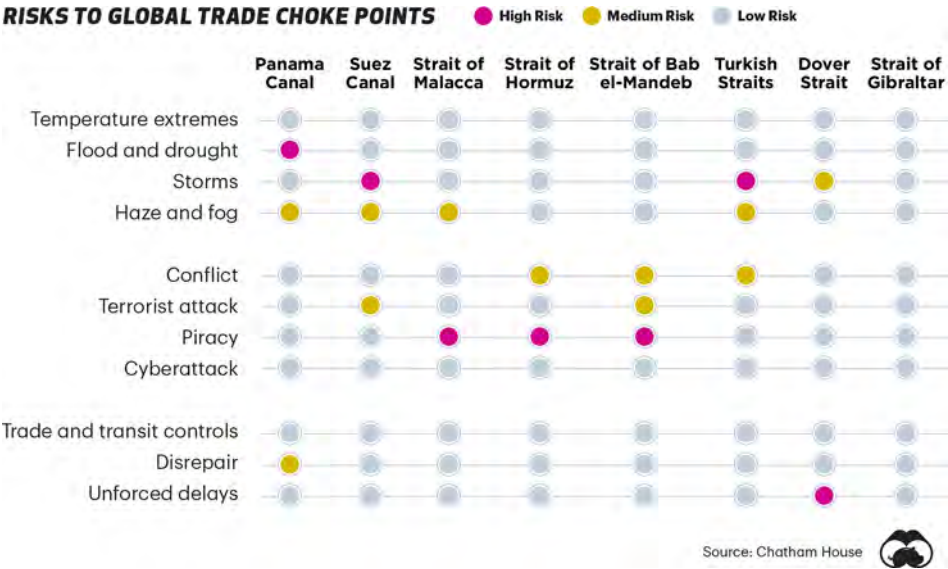


Figure 9: Risks to global trade at chokepoints⁴³

The blockage of the Suez Canal in March 2021 by the giant cargo ship *Ever Given* due to an environmental risk (a weather event) exposed chokepoint vulnerabilities and their impact on global trade. Another reminder of this was when the crude oil tanker *Affinity V*, sailing under the flag of Singapore, ran aground in late August 2022 at the same location where the *Ever Given* cargo ship had grounded in March 2021. Fortunately, the tanker was refloated after five hours, but as mentioned, this served as a reminder of the vulnerabilities of chokepoints through which the majority of global trade is transported.⁴⁴

Another incident occurred at a different chokepoint. In July 2019, the British-flagged tanker *Stena Impero* unknowingly strayed and entered Iran's territorial waters while crossing the Hormuz Strait (presumably due to a security risk involving the disruption of its navigation system). The incident serves to demonstrate the vulnerability of the GPS navigation system to disruption and manipulation. GPS blocking is already within

⁴² Carmen Ang, [Mapping the World's Key Maritime Choke Points](#), *Visual Capitalist*, March 30, 2022.

⁴³ Ibid.

⁴⁴ Mike Schueler, [Crude Oil Tanker Briefly Grounds and Blocks Suez Canal](#), *Captain*, August 31, 2022.

the reach of some countries, through jamming or spoofing. While military GPS signals are encrypted and harder to access and manipulate, this is not the case in the civilian/commercial domain. It should also be noted that the civilian GPS technology available today can be used to attack military assets indirectly. Maritime analysts suggested that the Iranian Revolutionary Guards' navy falsified the *Stena Impero's* GPS signals in retaliation against the United Kingdom for detaining an Iranian tanker suspected of delivering oil to Syria.⁴⁵ In the future, such incidents may become increasingly common.

The *Ever Given* incident that completely blocked maritime traffic in the Suez Canal for more than six days and led to an estimated daily loss of \$9.6 billion in trade was attributed to a combination of environmental factors, such as strong winds, and human navigation errors by the bridge team. While this event was not a deliberate or malicious attack, maritime cyber experts recommend preparing for the possibility that adversaries with malicious intent may create similar incidents through cyber-attacks or by disrupting navigation equipment at any one of the chokepoints or other narrow waterways.

Israel relies on three main chokepoints: the Suez Canal and the Bab el-Mandeb Strait for trade with the East, which accounts for a quarter of Israel's total trade, and the Turkish Straits (the Bosphorus and Dardanelles) through which it imports most of its wheat from the Black Sea Basin, which is expected to reach 1.74 million metric tons (MMT) in 2022.⁴⁶

Protection of Underwater Infrastructures

The war between Russia and Ukraine illustrates the importance of defending critical infrastructure from attacks. Technical dependence, risks to the supply chain, and damage to critical infrastructure create opportunities for unwanted foreign intervention. Current geopolitical struggles for power are increasing in the technological and digital domains and different countries and technology companies are advancing toward achieving technological superiority and control of the global cyber domain.

Underwater fiber optic cable networks carry around 95% of international communication traffic and data. They are vital to the digital revolution in regard to expanding computing power and advancing artificial intelligence. Most of the world's internet traffic is transmitted through underwater cables spread out along thousands of kilometers of the ocean floor. The growth of this infrastructure is driven by a huge demand for data, cloud-based services, next-generation networks, and the need to adapt to the growing Internet of Things. Accordingly, there has been rapid growth in the deployment of underwater

⁴⁵ Michelle Wiese Bockmann, [Seized U.K. Tanker Likely 'Spoofed' by Iran](#), *Lloyd's List Intelligence*, August 16, 2019.

⁴⁶ *USDA Foreign Agricultural Service*, [Israel: Grain and Feed Annual](#), March 21, 2022.

cables around the world in recent years. Hundreds of these cables, operated by various government and private entities, support a broad range of fields, from data and cellular network traffic to bandwidth-intensive applications, such as video sharing, consumer shopping, and government communication. Therefore, underwater cables are the critical and core infrastructure in the digital age and can also affect geopolitical aspects that are currently still being ignored.⁴⁷

As a result, the resilience and security of underwater cables are vital for securing global governance and order now and in the future. They involve key geopolitical issues, ranging from connectivity, security, and regulation to narrow technical problems. Most of these cables are not owned by governments but are operated by separate consortiums of private companies or entities, with almost no international agency or intergovernmental system governing them.

In light of the threat assessment mentioned above and the fact that this threat was realized when the gas pipelines in the Baltic Sea were attacked in late September 2022, leading to a leak in the Nord Stream gas pipelines from Russia to Europe, UK Defense Secretary Ben Wallace announced that Britain would procure two ships and convert them to protect underwater infrastructure, such as communication cables and gas pipelines.⁴⁸ The Italian navy also announced that it would take steps to bolster the protection of gas pipelines passing through the Mediterranean following suspicions of sabotage in the Nord Stream system. According to a plan developed by Defense Minister Lorenzo Guerini, the Italian navy will operate remote-controlled submarines to monitor key areas in the Mediterranean, particularly around the infrastructure used to transport gas from North Africa to Europe. Norway, which supplies gas to European countries such as Poland, has also increased its readiness regarding electronic communication, specifically focusing on underwater communication cables. In the spring of 2022, a data cable connecting the Arctic islands of Svalbard to the Norwegian mainland was damaged and official sources concluded that "human actions" caused the underwater cable to tear.

In the near future, it will be necessary to expand the concept of maritime domain awareness to include underwater infrastructure and ways to maintain and protect it effectively.

⁴⁷ Raluca Csernatonu, [The Geopolitics of Submarine Cables, the Infrastructure of the Digital Age](#), *Italian Institute for International Political Studies – ISPI*, June 20, 2022.

⁴⁸ Reuters, [Britain To Acquire Two Specialist Ships To Protect Underwater Infrastructure](#), *gCaptain*, October 2, 2022.

Climate Change and Its Impact on the Environment

It is currently estimated that the effects of climate change and continued environmental damage will create a combination of direct and indirect threats in the near future and beyond, including risks to the economy, political instability, increased numbers of refugees and displaced people, and new sources of geopolitical competition in the near future and beyond. Scientists warn that rising temperatures in the atmosphere, on land, and in the sea will create more frequent and variable extreme weather events compared to those of today, including heat waves, droughts, and floods that will directly threaten the interests of countries such as the United States if they are unable to cope with these conditions. The decline in the quality and depletion of soil, water, and biological diversity will almost certainly threaten infrastructure, health, water, food, and security, especially in many developing countries that lack the ability to adapt quickly to changes, and will increase the potential for conflict over rare natural resources.

The International Climate Change Conference was held in Glasgow, Scotland between October 31 and November 12, 2021, with the main goal of ensuring global net-zero carbon emissions by the middle of the century, thereby making it possible to keep global warming to a maximum of 1.5 degrees Celsius. After 13 days of negotiations between nearly 200 countries, the Glasgow Climate Pact was signed, completing the Paris Agreement rulebook.

Likewise, commitments were made regarding a variety of other issues, such as forests, methane, vehicle emissions, and private financing. This included a commitment by 137 countries to "halt and reverse forest loss and land degradation" by 2030. Ending the use of coal for energy production was a key goal of the conference's presidency held by the United Kingdom. One hundred ninety countries agreed to gradually phase out their coal-fired power plants, resulting in an expected 76% reduction in planned new coal power plants. Over forty countries declared their support for transitioning from coal to cleaner energy.⁴⁹

The Conference of the Parties (COP), which is the annual meeting of the United Nations Framework Convention on Climate Change (UNFCCC), was held in Sharm el-Sheikh between November 6–18, 2022. This was the largest event sponsored by the UN and was attended by approximately 37,000 official participants and 100,000 participants from civil society organizations. Egypt hosted the conference as a representative of the African continent. The conference was aimed at coordinating global efforts and discussing joint

⁴⁹ Dominic Carver, [What Were the Outcomes of COP26?](#), U.K. Parliament, House of Commons Library, January 27, 2022.

action to mitigate climate change, which could lead to a potential loss of up to 18% of global GDP by 2050. The conference also prepared to examine the implementation of decisions made at the previous conference, such as the establishment of the global mechanism for trading in emissions, setting a global adaptation target, and examining progress on funding for coping with climate change. In addition, a discussion was held on the issue of compensation for climate losses and damages.⁵⁰ Prior to the conference, the UN stated that there was no realistic path to achieving the goal, as the world had not worked towards achieving it thus far. Therefore, an agreement was reached prior to the conference aiming to limit the global temperature increase to no more than two degrees Celsius.

Under pressure from countries such as Egypt, Saudi Arabia, Russia, and China, and due to the presence of many lobbyists from the oil and gas industries at the conference, critical clauses for the fight against global warming were not included in the agreement reached at the conference. Among other things, there was no clear commitment to stop using fossil fuels, and there was no commitment to bring about a drastic reduction in greenhouse gas emissions from 2025. In addition, there was no commitment by all the countries of the world to update their emission reduction targets by next year.⁵¹

After two weeks of discussions, representatives of around 200 countries agreed to establish a compensation fund for developing countries that have been affected by the damages of the climate crisis, which have mainly been caused by the activities of wealthy and polluting countries.⁵² This is a significant achievement for poor countries that have been fighting for this compensation for a long time. However, the representatives at the conference failed to strengthen global efforts to stop global warming that is causing climate damage, at a time when the window of opportunity to prevent severe crisis damages is closing rapidly. The world is currently on a path of catastrophic warming of at least 2.4 degrees Celsius compared to the pre-industrial era. Scientists warn that this warming will lead to dramatic changes to the nature of life on Earth and significantly increase the likelihood of natural disasters, such as fires, droughts, extreme heat waves, floods, and more. The issue of compensating underdeveloped countries was at the center of the discussions at the conference from the first day, and this is the first time this issue has officially appeared on the conference agenda.

⁵⁰ Shani Ashkenazi, "[Meaningless Speeches and a Missed Goal: The Climate Change Conference concludes a week](#)", *Calcalist*, November 12, 2022 (Hebrew).

⁵¹ Li Yaron, "[Where is Humanity Heading? Summarizing Two Weeks of Battles at the Climate Change Conference in Sharm el-Sheikh](#)", *Haaretz*, November 20, 2022 (Hebrew).

⁵² [Sharm el-Sheikh Implementation Plan](#), *United Nations, Framework Convention on Climate Change*, Revised Advance Version, November 20, 2022.

In the United States in recent years, and especially during the presidency of Donald Trump, there has been a significant reluctance to acknowledge the severity of the climate crisis and the need to take drastic action to stop global warming. The situation changed with the election of Joe Biden as president and the start of his term in January 2021. President Biden introduced two legislative proposals on the issue: investments in infrastructure and jobs, and the social investments act. The first proposal, which included investments of \$80 billion in transitioning to clean energy, was easily passed in the Senate, with support from 19 Republican senators. The majority of the climate-related investment was included in the second proposal, known as the Build Back Better Act. The Inflation Reduction Act, led by Senator Joe Manchin and Senate Majority Leader Chuck Schumer, includes \$384 billion in new budgets to accelerate the transition to clean energy, incentivize consumers to purchase electric cars, and promote additional green priorities, as well as incentives for the oil and gas industry. This is one of the largest financial commitments made by the United States government to combat climate change and was signed by President Biden in mid-August 2022. The expected reduction in emissions due to this law is equivalent to the annual emissions from France and Germany combined, which are about 2.5% of the world's annual emissions. This act alone may revive the goal of limiting global warming to 1.5 degrees Celsius, as determined in the Paris Agreement.⁵³

The International Maritime Organization (IMO) has also committed to working to reduce greenhouse gas emissions from ships in Resolution MEPC.304(72), with the intention of adhering to the decisions made at the Glasgow conference. It should be noted that the global shipping industry is responsible for generating 3% of all greenhouse gas emissions, and therefore it is important that it is aligned with the decisions made at the conference. The resolution emphasizes the benefits of working towards a synergy between clean air policies in shipping and building on existing measures related to reducing ship pollution under the International Convention for the Prevention of Pollution from Ships (MARPOL). The organization's leaders expressed great concern regarding the findings of the IMO's fourth greenhouse gas study for 2020, which estimates that if further steps are not taken, international ship emissions are expected to reach 90% to 130% of 2008 emission levels by 2050. The organization also recognizes that a rapid transition in the next decade to clean marine fuels, zero-emission vessels, alternative propulsion systems, and global availability of onshore infrastructure to support these is necessary to facilitate the shift to clean shipping. The statement signatories emphasized the need to establish an international coalition between proactive governments to work together and demonstrate

⁵³ Elisabeth Ponsot, "[Bill Gates, Joe Manchin, and the Climate Bill That Nearly Wasn't](#)", *Bloomberg*, August 17, 2022.

that it is possible to reach zero-carbon emissions from ships while creating new business opportunities and socioeconomic benefits for communities around the world.

On June 15, 2022, the seventh ministerial meeting of the Eastern Mediterranean Gas Forum (EMGF) was held in Cairo and attended by the President of the European Union, Ursula von der Leyen. The purpose of the forum is to serve as a regional framework for cooperation between governments and a multi-party dialogue on natural gas. During the forum, Israel's then-Energy Minister Karine Elharrar signed a memorandum of understanding between Israel, Egypt, and the European Union on cooperation in trade, transportation, and natural gas exports to EU countries. The signatory parties will work together to enable regular natural gas supply to EU countries from Egypt, Israel, and other countries through the existing natural gas infrastructure in Egypt. The agreement represents another step towards positioning Israel as a natural gas power, which will increase the country's natural gas exports to Egypt and from there to other countries in Europe that require an additional natural gas source due to the global energy crisis. Natural gas exports serve as a lever for Israel's geopolitical status while preserving the amount of natural gas required for domestic consumption. This also has major economic implications for the local energy sector and the Israeli economy. Furthermore, this step helps Israel and countries such as Egypt reduce the use of polluting fuels, such as coal and oil, and dramatically reduces air pollution in the region.

The Clydebank Declaration for Green Shipping Corridors

In light of the negative contribution of the shipping industry to greenhouse gas emissions, the signatories of the declaration committed to supporting the establishment of green shipping corridors, i.e., maritime routes between two (or more) ports with no carbon emissions. The signatories to the declaration stated:

It is our collective aim to support the establishment of at least 6 green corridors by the middle of this decade, while aiming to scale activity up in the following years, by, among other measures, supporting the establishment of more routes, longer routes and/or having more ships on the same routes. It is our aspiration to see many more corridors in operation by 2030. We will assess these goals by the middle of this decade, with a view to increasing the number of green corridors. In the pursuit of these goals, with reference to the approach(es)..., signatories pledge to... identify and explore actions to address barriers to the formation of green corridors. This could cover, for example, regulatory frameworks, incentives, information sharing or infrastructure... [and] the inclusion of provisions for green corridors in the development or review of National Action Plans...⁵⁴

⁵⁴ [COP 26: Clydebank Declaration for Green Shipping Corridors, Policy Paper](#), Gov.UK, Updated April 13, 2022.

Israel's Commitment to Reducing Greenhouse Gas Emissions

In July 2021 and in anticipation of Israel's participation in the Glasgow Climate Change Conference, the government of Israel approved a proposal to transition to a low-carbon economy to meet the standards of advanced countries in the world (OECD) and set goals for reducing emissions. Initially, the government set modest targets: an 85% reduction in greenhouse gas emissions by 2050 compared to 2015 emissions and a reduction in emissions of only 27% by the end of the current decade. Shortly before, then-Prime Minister Naftali Bennett attended the UN Climate Change Conference in Glasgow in November 2021. Israel decided to align with the OECD countries and declared a target of net-zero emissions by the middle of the century (2050). However, while other countries were required to update their nationally determined contribution (NDC) prior to the conference and did so, Israel has not yet submitted a detailed plan to the UN.⁵⁵ To implement the transition to a low-carbon economy, Israel Government Resolution 171 stipulates that a cross-ministerial committee led by the director general of the Ministry of Environmental Protection, Galit Cohen, was to develop and submit a detailed national plan for carrying out the necessary steps. As of the writing of this report, this plan has not yet been completed.⁵⁶

The Cyber Domain

Cyber-attacks are designed to steal information, influence populations, and harm industries, including critical physical and digital infrastructure, and they will continue to pose a threat to countries and global companies around the world. Despite the increasing cyber capabilities of countries and non-state actors, the Western world is mainly concerned about Russia, China, Iran, and North Korea. The growing use of cyber operations by states as a means of wielding national power, including their increased use by militaries around the world, raises the likelihood of offensive and more harmful cyber activity. As states attempt more aggressive cyber actions, they have a higher chance of impacting civilian populations and strengthening other states seeking similar results. Authoritarian and illiberal regimes around the world will increasingly exploit digital tools to monitor their citizens, control freedom of expression, increase censorship, and collect information to control their populations. Governments will conduct more and more cross-border cyber intrusions that affect citizens beyond their borders as part of broader efforts to identify foreign populations and influence them. Over the past decade, state-sponsored hackers

⁵⁵ [Nationally Determined Contributions \(NDCs\)](#), *United Nations Climate Change*, Process and Meetings, Retrieved August 23, 2022.

⁵⁶ Prime Minister's Office, Government Resolution No. 171 dated July 25, 2021, [Transition to a Post-Coal Economy](#) (Hebrew).

have infiltrated software networks and IT services, aiding in espionage, sabotage, and preparation for war.

The maritime industry, which is a central part of the supply chain for all products, is highly dependent on computer and control systems. More than 90% of global trade is transported by sea, and a cyber-attack on ports or shipping vessels and companies can have significant and wide-ranging economic consequences. In recent years, it has become apparent that supply chains in many organizations and companies are vulnerable in terms of cybersecurity. A supply chain is a coordinated system of organizations, people, activities, information, and resources involved in delivering a product or service from a supplier to a customer. This means that an attack on a weak link in the chain can lead to the collapse of the global supply chain. In the maritime domain itself, which is a significant part of the supply chain, as ships continue to adopt more and more digital technology, the risk of cyber-attacks increases. The IMO defines a maritime cyber risk as: "the extent to which a technology asset could be threatened by a potential circumstances or event, which may result in shipping-related operational, safety or security failures as a consequence of information or systems being corrupted, lost or compromised". However, during the COVID-19 pandemic, it became clear that the greatest cyber threat actually lies in the shipping and ports sector. The pandemic accelerated the digitization that was already occurring in the world due to guidelines that required people to work from home via the internet. As a result, the shipping and ports sector has had to increasingly rely on internet communication, which requires shipping systems to remain continuously connected to the network, making them more vulnerable to cyber-attacks. The situation is exacerbated by the fact that a large part of the systems and computers in the shipping industry rely on complex and outdated operating systems, which further compromises their resilience to cyber-attacks. In 2017, the IMO's Maritime Safety Committee (MSC) adopted guidelines for managing maritime cyber risk in safety management systems in Resolution 98 428. MSC. The resolution encourages shipping company managers to ensure that cyber risks are properly addressed in existing safety management systems (as defined in the ISM Code) no later than the company's first annual verification of the compliance document after January 1, 2021. Internet-related (IT) and operational technology (OT) systems that may be exposed to cyber threats include, among other things, command bridge systems, cargo handling and management systems, propulsion and machinery management systems, power and access control systems, communication systems, and more. The ship crews' limited ability to support or manage advanced cyber security issues are emerging as a persistent problem in the maritime industry.⁵⁷

⁵⁷ [Maritime Cyber Risk Management in Safety Management Systems](#), Annex 10, Resolution MSC.428(98), adopted on 16 June 2017.

A report issued by the maritime cyber security company CyberOwl published in March 2022 revealed significant gaps in cyber risk management in shipping organizations and the broader supply chain, despite the guidelines provided to shipping stakeholders by the IMO in 2021. The report is based on a survey of over 200 industry professionals, including C-suite executives, cyber security experts, sailors, port managers, and suppliers. The survey's main findings are as follows:

- The financial cost of a cyber-attack can be severe: when attacks led to ransom demands, the average ransom paid by ship owners was \$3.1 million.
- However, most ship owners have invested significantly in cyber security management: over half of them spend less than \$100,000 per year.
- Two-thirds of industry professionals do not know whether their insurance covers cyber-attacks.
- Only 55% of suppliers in the industry are required by ship owners to prove that they have cyber risk management guidelines.
- More than 25% of sailors do not know (and have not been trained regarding) what actions are required of them in the event of a cyber event.
- Within organizations, the higher a person's position, the less likely they are to be aware of a cyber-attack.⁵⁸

In the future, it is highly likely that hostile regimes, non-state actors with malicious intent, and proxy organization supporters will create unprecedented destruction in coastal waters and chokepoints.⁵⁹ Cyber threats and other electronic threats are particularly prominent in the maritime domain and have grown dramatically over the past decade. Malicious actors understand that the maritime domain depends on automation and will seek to exploit vulnerabilities in ship systems. Tactical and strategic damage in information-dependent systems is becoming so common and inexpensive that even small nation-state rivals and organized groups can exploit this dependence, either on their own or as proxies of larger powers. Additional countries interested in challenging the world order and non-state actors use and will continue to use cyber threats as a strategy against law-and-order-abiding states. This is a new form of irregular warfare and it is assumed that the cyber threat on ships, ports, and maritime infrastructure will increase sharply in the coming years. Therefore, preparation is required to protect the assets mentioned, including international cooperation to defend and deter state or other actors from operating in this domain.

⁵⁸ [Global Industry Report: The Great Disconnect – The State of Cyber Risk Management in the Maritime Industry](#), HFW Cyberowl, March 2022.

⁵⁹ Diane Zorri and Gary C. Kessler, [Adversaries are Leveraging Maritime Cyber Vulnerabilities for advantage in Irregular Warfare](#), *Modern Warfare Institute*, September 8, 2021.

Refugees and Immigration

Refugees are people who have been forced to flee their homeland in order to escape conflict, violence, natural disasters, or persecution because of their race, religion, nationality, political opinion, or association with a particular social group. The largest refugee crises in 2022 took place in the following countries: Somalia, Sudan, the Democratic Republic of Congo, Rohingya in Myanmar, South Sudan, Afghanistan, Ukraine, and Syria. In 2022, Syria was still the country that had caused the largest refugee crisis in the world. Over 6.8 million Syrians have been forced to flee their country since 2011, and another 6.9 million people remain internally displaced. The vast majority of refugees – around 5.2 million people – have found refuge in neighboring countries, mainly in Turkey, Lebanon, and Jordan. Germany is the largest non-neighboring host country, having taken in over 620,000 Syrian refugees. In the past decade, the chances of a speedy end to the refugees' plight and their return to their homes have diminished. In general, in the 1990s, an average of 1.5 million refugees were able to return home each year. In the past decade, this number has dropped to around 385,000, meaning that the annual creation of refugees far exceeds the ability to safely return them to their homelands.⁶⁰

The Russian invasion of Ukraine in February 2022 led to a major exodus of refugees from Ukraine. The exact number of refugees created by this invasion is still unknown, but the UN estimates that it has already created at least 4.8 million international refugees, with an estimated 7.1 million internally displaced persons still within the country. In April 2022, the UN referred to the refugee crisis in Ukraine as "the fastest and largest displacement of people in Europe since World War II".⁶¹ It should be noted that despite the large number of refugees created by the war between Ukraine and Russia, almost all refugees choose to flee to neighboring European countries by land, especially after ship movement in the Black Sea was almost completely halted due to the closure of the Bosphorus and Dardanelles Straits and areas suspected of being sea-mined.

In the maritime domain: Between January and September 2022, 1,280 people have lost their lives while attempting to cross the Mediterranean Sea from the coasts of North Africa on their way to Europe. A total of 194,484 people attempted to cross the Mediterranean, of whom 113,535 arrived illegally, 78,926 were intercepted at sea, and 2,023 are missing

⁶⁰ [Global Issues, Refugees](#), *The United Nations*, Retrieved, September 30, 2022.

⁶¹ ["The war has Caused the Fastest and Largest Displacement of People in Europe since World War II"](#), *United Nations, Ukraine*, March 24, 2022.

or dead.⁶² Since 2014, the Missing Migrants Project has recorded over 20,000 deaths and disappearances in the Mediterranean Sea.

The main migration route in the Mediterranean Sea is the crossing from North Africa to Italy, and to a lesser extent, to Malta. Those who migrate this way usually aim to reach the shores of Italy and arrive from a variety of North African countries bordering the Mediterranean Sea. Although in recent years most migrants left from Libya, which is a destination for migrants as well as a transit state, there is also a relatively small but growing number of departures from Tunisia, Egypt, and Algeria. Tunisia, in particular, has seen a rise in this context, with Tunisian nationals accounting for over 60% of those who used the main Mediterranean migration route in 2020. A large proportion of migrants on the central route are intercepted and returned to their exit points in North Africa.⁶³

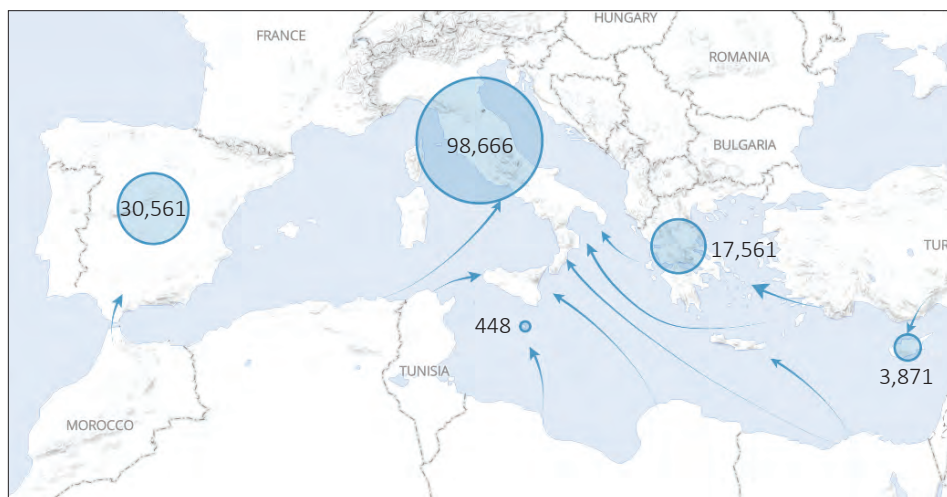


Figure 10: Immigration to selected countries in Europe⁶⁴

The dire economic situation in Lebanon, now in its third year, with three-quarters of the population living below the poverty line and the Lebanese pound losing 90% of its value against the dollar, has led to a wave of sea migration to Europe. One incident in which many migrants lost their lives occurred on September 21, 2022, when a boat filled with migrants leaving Lebanon capsized off the coast of Tartus, Syria. At least 94 people died,

⁶² Migration within the Mediterranean, [Missing Migrants Project](#), the International Organization for Migration (IOM), September 11, 2022.

⁶³ Ibid.

⁶⁴ UNHCR, the UN Refugee Agency, [Sea Arrivals in 2022](#), Last updated 18 December 2022.

including at least 24 children. Twenty people survived and the rest were declared missing. This was one of the deadliest boat sinkings in the Eastern Mediterranean in recent years. More and more Lebanese, Syrians, and Palestinians are trying to escape cash-strapped Lebanon for Europe in search of jobs and stability. The UN High Commissioner for Refugees reports that attempts at dangerous sea migration from Lebanon have increased by 73% over the past year.⁶⁵

Table 1: Refugees arriving on European shores by sea during 2014–2022 and the number of missing/dead

| Year | Refugees Arrivals* | Number of Missing/Dead |
|------|--------------------|------------------------|
| 2014 | 219,000 | 3,500 |
| 2015 | 853,000 | 3,771 |
| 2016 | 363,000 | 5,096 |
| 2017 | 172,000 | 3,139 |
| 2018 | 141,500 | 2,277 |
| 2019 | 112,000 | 1,283 |
| 2020 | 95,000 | 1,445 |

* Including sea arrivals to Italy, Cyprus, and Malta, and both sea and land arrivals to Greece and Spain (including the Canary Islands). Data are as of 31 December 2020 for all countries except Cyprus, for which last available data are as of 31 August 2020.

Terrorism and Maritime Terrorism

The Global Terrorism Index (GTI) for 2022, which is a comprehensive study analyzing the impact of terrorism on 163 countries covering 99.7% of the world's population, indicates that despite a rise in attacks, the impact of terrorism continues to decline. Only 44 countries recorded deaths from terrorism in 2021, compared to 55 countries in 2015.⁶⁶ The report notes that politically motivated terrorism has become the central driver of terrorism, as opposed to religiously motivated terrorism, which decreased by 82% in 2021. In the last five years, there have been five times more attacks from politically motivated sources than religiously motivated sources.⁶⁷ Other emerging trends include the following:

Sub-Saharan Africa has become a global hotspot for terrorism. Despite the number of global terror attacks rising to 5,226 in 2021, the number of global deaths slightly decreased by 1.2% compared to the previous year. The conflict in Ukraine could lead to an increase

⁶⁵ Kareem Chehayebd, ["Don't Leave Me": Survivor Recounts Lebanon Boat Sinking](#), *AP News*, September 28, 2022.

⁶⁶ Institute for Economics & Peace, [Global Terrorism Index 2022, Measuring the Impact of Terrorism](#) (Sydney, March 2022).

⁶⁷ *Ibid.*, p. 2.

in traditional and cyber terrorism, and could change the positive trends previously seen in the region. In 2021, the number of global terror attacks decreased, due to, among other reasons, travel restrictions imposed to limit the spread of the COVID-19 pandemic. However, the Southeast Asian region in the Sulu-Celebes Sea, which connects Borneo and Sulawesi to Mindanao through a long chain of islands, has become a hotbed of crime, piracy, and terrorism in recent years.⁶⁸

Terrorism in Western countries has decreased significantly: attacks decreased by 68%, and politically motivated attacks surpassed religiously motivated attacks, their total number amounting to five times greater than religiously motivated attacks, which decreased by 82%. The United States recorded its lowest index since 2012. Africa south of the Sahara accounted for 48% of global terrorism deaths, and the region known as the Sahel is home to the fastest growing and deadliest terrorist groups in the world. Myanmar had the largest increase in terrorism, and the number of deaths multiplied by 20 to 521 deaths in 2021.⁶⁹

In 2021, the Islamic State (ISIS) became the deadliest terrorist group in the world, surpassing the Taliban. Terrorism has become more concentrated in certain areas; however, there were no recorded deaths due to terrorism in 119 countries, marking the most positive situation since 2007.

A trend has been observed in recent years whereby terrorist organizations are using more advanced technologies, including drones, GPS systems, and encrypted messaging services.

In a study conducted in 2022 regarding the level of threat posed by maritime terrorism to the reliability of the global supply chain and logistics, researchers concluded that the real concern is not the immediacy of the threat and whether it materializes, but rather the potential danger such an event could pose in the 21st century. According to the researchers, even a small maritime terrorist incident in a major port or maritime infrastructure has serious economic and political implications. For example, a ship being hijacked and used as a weapon or to block chokepoints like the Strait of Malacca or the Suez Canal would cause significant damage to the global economy.⁷⁰

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Mikhail Zelenkova, Yuliya Laamartia, Marina, Charaevab, Tatyana Rogovac, Olga Novoselovad, and Aehlita Mongushe, [Maritime Terrorism as a Threat to Confidence in Water Transport and Logistics Systems](#), *Transportation Research Procedia* (2022): 63, p. 2265.

In this context, it should be noted that the Gulf of Aden and the southern Red Sea have become an area through which Iran supplies weapons and ammunition to terrorist organizations operating in Yemen and the western coast of Saudi Arabia in the Red Sea, using the Revolutionary Guards' naval force. Although the activities of the Iranian Revolutionary Guards Corps (IRGC) and its naval branch are not included in the Global Terrorism Index for 2022 for some reason, the organization appears on the U.S. State Department's Foreign Terrorist Organization list (FTO), and it should continue to be designated as such. To deal with the threat posed by the organization in the Gulf of Aden and the southern Red Sea, in April 2022, the Combined Maritime Forces (CMF) of 34 countries led by the U.S. Central Command (CENTCOM) established a new multinational task force, CTF-153, consisting of 34 countries, that focuses its activities in the Red Sea, Bab el-Mandeb, and the Gulf of Aden. This force is supposed to prevent Iranian weapons from being smuggled to terrorist representatives who are fueling conflicts throughout the Middle East. Observers note that this force must receive adequate resources and support from the United States and its regional partners to be able to prevent weapon smuggling and terrorist attacks in this maritime area, which is vital to the economic and security interests of the United States and the international community, and send a deterrent message to Tehran.⁷¹

Piracy and Maritime Robbery

In the first half of 2022, the International Maritime Bureau (IMB), a specialized department of the International Chamber of Commerce (ICC) that monitors crimes related to maritime transportation and trade (such as piracy and commercial fraud and the protection of ship crews), received reports indicating the lowest number of piracy incidents since 1994. In the latest IMB report (January 2022– June 2022), 58 incidents of piracy against ships were recorded, a decrease from 68 incidents during the same period in 2021 (see Figure 11). However, it is important to note that the threat of piracy still exists in certain areas of the world, such as the Malacca-Singapore Straits, the Sulu and Celebes Seas (southeast of the Philippines), the Gulf of Aden in Africa, off the coast of Somalia, and in the Gulf of Guinea in Africa.⁷²

The report notes that although there have been no reported piracy incidents in the Red Sea and the Gulf of Aden since the beginning of the year, there is still a piracy threat in this

⁷¹ Bradley Bowman, Ryan Brobst and Rear Adm. Mark Montgomery (ret.), [New Mideast Task Force can Counter Iranian Arms Smuggling, but More Capabilities are Needed](#), *Defense News*, May 9, 2022.

⁷² [Global Piracy and Armed Robbery Incidents at Lowest Level in Decades](#), ICC – Commercial Crime Services, International Maritime Bureau (IMB), July 12, 2022.

area, particularly off the coasts of Yemen and Somalia. Despite the reduced opportunities for incidents, Somali pirates are still capable of carrying out attacks, and all merchant vessels are advised to adhere to the best updated operating procedures when travelling through these areas.⁷³

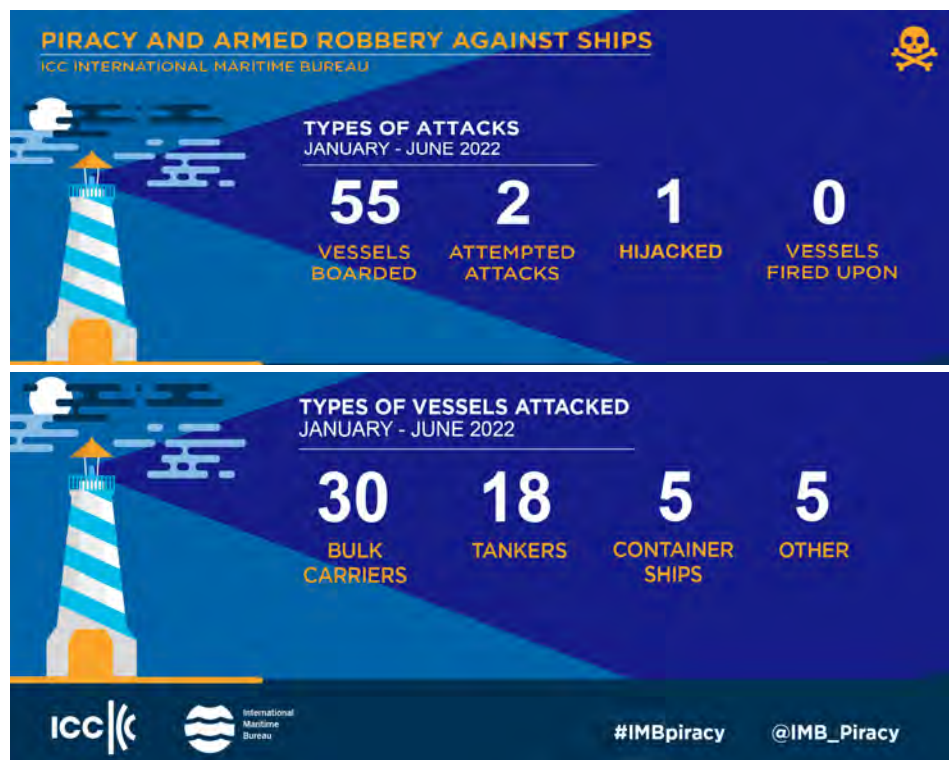
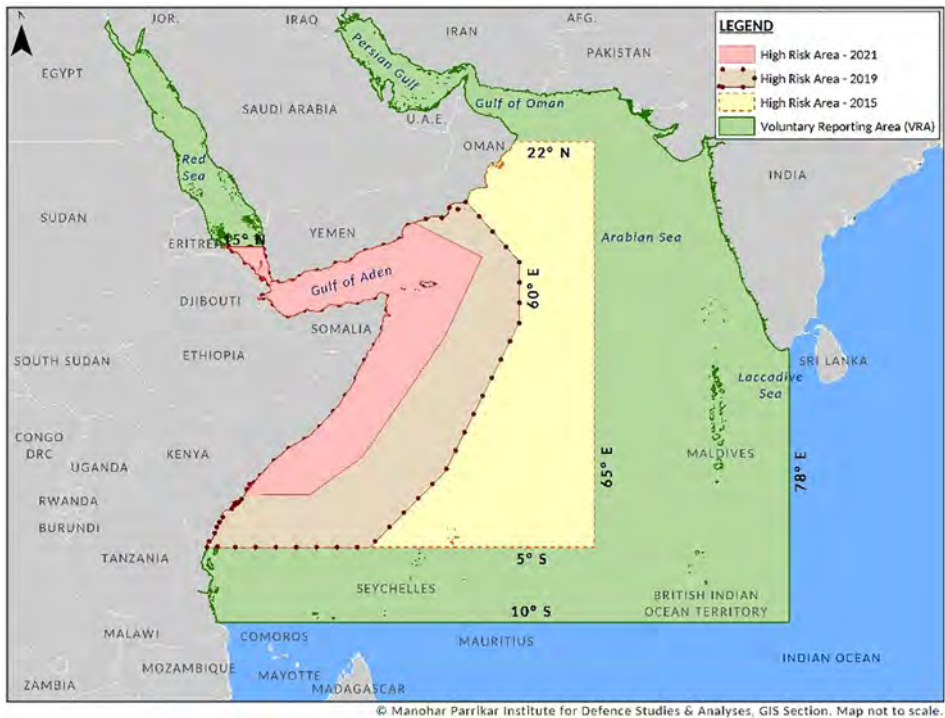


Figure 11: Maritime piracy terrorist incidents (ICC International Maritime Bureau)

Following a continuous reduction in piracy incidents, global shipping and oil industries announced an agreement to reduce the boundaries of High-Risk Areas (HRA) in August 2021. The changes reduced the boundaries to the territorial waters of Yemen and Somalia, and exclusive economic zones in the east and south (see Figure 12).⁷⁴

⁷³ Ibid.

⁷⁴ High Risk Area-HRA Extension and Subsequent Revisions.



© Manohar Parrikar Institute for Defence Studies & Analyses, GIS Section. Map not to scale.

Figure 12: Piracy High Risk Area revisions⁷⁵

Main Navies – Trends and Changes

A review of the changes and trends in the world's largest navies compared to the previous report of 2021 is presented below, with a focus on each fleet's areas of operation, operational strategy, and navy force structure building. A dedicated section will be devoted to each of these navies' activities in the Middle East, the region where the Maritime Policy & Strategy Research Center primarily focuses its interest.

The Global Naval Powers Ranking for 2023 is updated annually and tracks 35 countries, 35 naval arms, and 2,948 individual units from these arms. The organization uses a formula that takes into account values related to the overall combat power of various navies in the world. The formula generates a true value rating, which helps to differentiate each navy based not only on overall strength but also on its level of modernization, logistical support, offensive and defensive capabilities, and so on. In this way, a navy is evaluated not solely on the basis of the total number of warships and submarines it has, but also on

⁷⁵ Anurag Bisen, [Delegitimising China's Naval Presence in the Indian Ocean Region](#), Manohar Parrikar Institute for Defence Studies and Analyses (MP-IDSA), August 30, 2022.

the quality and overall mix of its overall inventory. In addition, there is a focus on local naval capabilities, the inventory balance (the overall mix of unit types), and the navy's experience.⁷⁶ Table 2 below indicates the ranking of various navies for 2022.

Table 2: Global Naval Powers Ranking for 2022

| Place | Fleet | Number of units | Score |
|-------|--------------------|-----------------|-------|
| 1 | United States | 243 | 323.9 |
| 2 | China (PLAN) | 416 | 319.8 |
| 3 | Russian Federation | 266 | 242.3 |
| 4 | Indonesia | 242 | 137.3 |
| 5 | Korea | 138 | 122.9 |
| 6 | Japan | 102 | 121.3 |
| 7 | India | 102 | 99.1 |
| 8 | France | 66 | 92.9 |
| 9 | United Kingdom | 51 | 88.3 |
| 10 | Italy | 54 | 80.7 |
| 11 | Turkey | 89 | 76.7 |
| 12 | Taiwan | 91 | 74.6 |
| 13 | Egypt | 107 | 72.4 |
| 14 | North Korea | 186 | 67.9 |
| 15 | Bangladesh | 50 | 58.6 |
| 16 | Spain | 42 | 56.0 |
| 17 | Germany | 34 | 54.7 |
| 18 | Iran | 66 | 50.3 |
| 19 | Australia | 36 | 48.9 |
| 20 | Thailand | 86 | 47.6 |

These are followed by Greece, Canada, Singapore, Brazil, Portugal, Sweden, the Netherlands, Pakistan, the Philippines, Argentina, South Africa, Saudi Arabia, Ukraine, Belgium, and Turkmenistan. Israel is not included in the rankings. This assessment should be treated with some caution, especially regarding the description of the components used to determine each navy's final score.

The U.S. Navy

The U.S. Navy is still ranked first in the Global Naval Powers Ranking for 2022, despite the fact that the Chinese navy has surpassed it in terms of the number of vessels it operates.

⁷⁶ [Global Naval Powers Ranking 2023](#), Current Ranking of the Various Naval Services of the World Provided by WDMW, Retrieved January 8, 2023.

In the field of strategy, on March 28, 2022, the U.S. Department of Defense presented Congress with the National Defense Strategy (NDS) for 2022.⁷⁷ For the first time, the document was presented to Congress after being developed in conjunction with the Nuclear Posture Review and the Missile Defense Review, thus ensuring coordination between the strategic ends and the means to achieve them. It should be noted that this document replaces the 2018 document, written during the tenure of then-Secretary of Defense James Mattis. The earlier document served as a milestone in the U.S. national defense strategy, as it highlighted the United States' focus on China, which is becoming a rival power.

The new document draws on the interim version of the National Security Strategy, issued by President Biden three months after the start of his tenure, which established four national goals: safeguarding America's vital national interests, defending the American people, expanding America's prosperity, and upholding democratic values. The priorities established by this document are:

1. Protecting the homeland while taking into account the increasing multi-domain threat posed by China.
2. Deterrence of strategic attacks against the United States, its territories, and its allies.
3. Deterrence of aggression, preparedness to prevail in conflict if necessary, prioritizing the challenge posed by China in the Indo-Pacific, followed by the challenge posed by Russia in Europe.
4. Building a Resilient Joint Force and a Defense Ecosystem.

The Department of Defense is committed to working vigorously to maintain and strengthen deterrence against China, which is the United States' most important strategic rival and a developing challenge for the Department.

Russia poses serious threats, as demonstrated by its brutal and unprovoked invasion of Ukraine. The United States will be ready to cooperate with its allies and NATO partners to strengthen deterrence against Russian aggression. The Department of Defense will be able to address ongoing threats, including those from North Korea, Iran, and violent extremist organizations.

The Department of Defense will be able to adapt its operations to global climate change and other dangerous cross-border threats, including pandemics, which are increasingly putting pressure on the Joint Force and its supporting systems. The Department of Defense will identify emerging kinetic and non-kinetic threats to the United States'

⁷⁷ [Fact Sheet: 2022 National Defense Strategy](#), U.S. Department of Defense, March 28, 2022.

sovereign territory from its strategic competitors and take the necessary actions to increase resilience – the ability to withstand, fight, and rapidly recover from disruption.

Mutually beneficial alliances and partnerships are an ongoing source of strength for the United States and critical to achieving its goals, as demonstrated in the united response to Russia's further invasion of Ukraine. In response to a call to action, the Department of Defense will integrate allies and partners with similar perspectives that have capabilities and offer advantages at every stage of defense planning.

The Department will achieve its goals through three main courses of action: integrated deterrence, campaigning, and building enduring advantages.

- Integrated deterrence entails developing and combining the United States' strengths to maximum effect, by working seamlessly across warfighting domains, theaters, the spectrum of conflict, other instruments of U.S. national power, and its unmatched network of alliances and partnerships. Integrated deterrence is enabled by combat-credible forces, with limitations in the areas of weapon safety, security, and a credible, effective nuclear deterrent.
- A campaign will strengthen deterrence and enable the United States to gain advantages against the full range of competitors' coercive actions. It will operate forces, synchronize broader Department efforts, and align Department activities with other instruments of national power to thwart competitors' coercive actions, complicate competitors' military preparations, and develop its own warfighting capabilities together with allies and partners.
- Building enduring advantages for the future Joint Force involves undertaking reforms to accelerate force development, obtaining the required technology more quickly, and making investments in the exceptional personnel of the Department, who remain their most valuable resource. The Department will develop, design, and manage U.S. forces, linking operational concepts and capabilities to achieve strategic objectives. This requires a Joint Force that is lethal, resilient, sustainable, survivable, agile, and responsive.

The requested budget for the U.S. Department of Defense for 2022 is \$705,939 billion, an increase of \$9,978 billion compared to the 2021 budget. The Appropriations Committee of Congress emphasized the following goals in the budget approval:

- Preserving national security, maintaining the United States' advanced manufacturing base, supporting jobs and economic growth, and investing in research and development.
- Closing the detention facility at Guantanamo Bay, which cancels the budgetary ploy of offshore contingency operations and limits U.S. involvement in Yemen.

- Promoting democracy by countering China and investing efforts to protect the Indo-Pacific region as a free and open area.
- Safely evacuating Afghan citizens who provided faithful and valuable service to the United States and who may be at serious risk following the United States' withdrawal.
- Supporting working families by requiring employers to pay a minimum wage of \$15/hour.
- Addressing the climate crisis through investments in clean energy, adapting facilities to climate change, and developing readiness to tackle global security challenges arising from these effects.
- Addressing gender-based violence by allocating resources to address sexual assault in the military and countering extremist ideologies, including white supremacy.

Some of the issues emphasized point to a new democratic agenda, although in relation to the policy against China the goal remains the same.

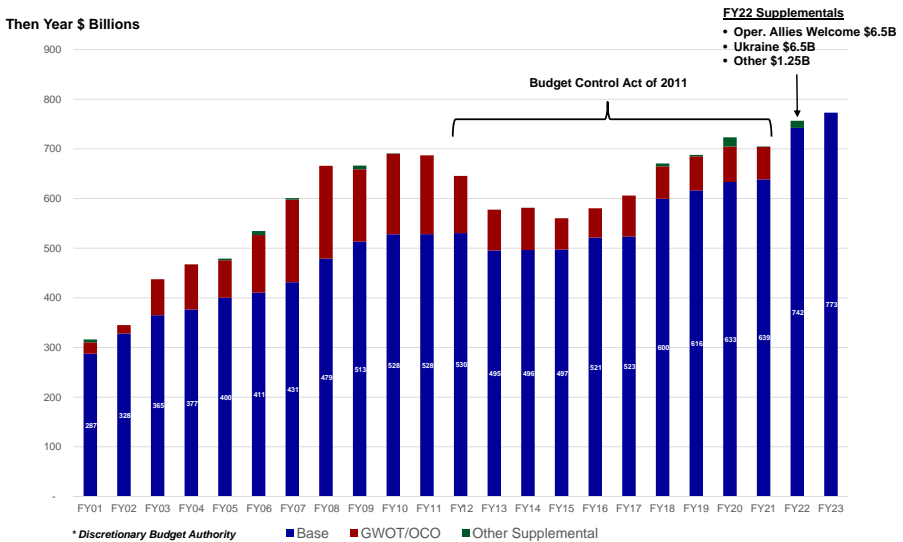


Figure 13: U.S. Department of Defense Budget, 2001–2023⁷⁸

U.S. Navy's Budget Request for 2023

The U.S. Navy's budget request for 2023, as submitted to Congress, stands at \$230.8 billion and is divided into categories as shown in Table 3 below. The budget request reflects an

⁷⁸ Defense Budget Overview, [United States Department of Defense Fiscal Year 2023 Budget Request](#), Office of the Under Secretary of Defense (comptroller)/chief financial officer, March 2022.

increase of \$2.034 billion compared to the 2022 budget. The amounts allocated in 2022 include cancellations from the previous year and additional funding for: Operation Allies Welcome, a Biden administration effort to ensure housing and employment for 70,000 Afghan refugees resettled in the United States; naval assistance in disaster situations; the Red Hill fuel storage facility that supports military operations in the Pacific Ocean; and the War in Ukraine.

Table 3: The U.S. Navy's budget requirement as submitted to Congress

| Discretionary Budget Authority in Thousands | FY 2022 Enacted* | FY 2023 Request | Δ Department of the Navy FY23 – FY22 |
|---|------------------|-----------------|--------------------------------------|
| Military Personnel | 56,450,125 | 58,484,305 | +2,034,180 |
| Operation and Maintenance | 74,383,273 | 77,704,776 | +3,321,503 |
| Procurement | 63,101,269 | 65,985,288 | +2,884,019 |
| RDT&E | 22,084,416 | 24,078,718 | +1,994,302 |
| Military Construction | 4,685,142 | 3,889,392 | -795,750 |
| Family Housing | 705,521 | 447,957 | +257,564 |
| Revolving and Management Funds | 150,000 | 0 | -150,000 |
| Total Department of the Navy | 221,302,182 | 230,848,000 | +9,545,818 |

The Navigation Plan published in January 2021 by the Chief of Naval Operations (CNO) Adm. Michael Gilday focuses U.S. naval efforts on four main areas: readiness, capabilities, capacity, and sailors. In 2022, the document was updated to reflect changes in the strategic environment stemming from three significant trends:

1. The erosion of reliable military deterrence, especially due to China's rapidly growing military capabilities.
2. Increasingly aggressive behavior on the part of China and Russia that destabilizes the rules-based international order.
3. The accelerated pace of technological change and the expanding impact of the information environment.⁷⁹

Reference to China as the main threat to the U.S. Navy is also expressed in Navigation Plan 2022, in which the Chief of Naval Operations explains the main reasons for this:

Over the past three decades, China has aggressively leveraged its economic power to grow and modernize its military. China has tripled the size of its Navy, expanded its strategic nuclear capacity and capability, advanced its cyber and space capabilities, and constructed a system of sophisticated sensors and long-range precision weapons

⁷⁹ United States Navy, Chief of Naval Operations, [Navigation Plan 2022](#), Security Environment (2022): p. 7.

to intimidate neighbors, challenge free and open access to the seas, and place U.S. naval forces at risk. These investments in offensive warfighting systems—across all domains—are aimed at the heart of America's maritime power. China designs its force for one purpose: to reshape the security environment to its advantage by denying the United States military access to the western Pacific and beyond.⁸⁰

Regarding the evolving security environment, the U.S. Navy has set itself the goal of being a "vital decisive naval power in this security environment", arguing that "America cannot cede the competition for influence. This is a uniquely naval mission". Therefore, "a combat-credible U.S. Navy—forward-deployed and integrated with all elements of national power—remains our Nation's most potent, flexible, and versatile instrument of military influence. As the United States responds to the security environment through integrated deterrence, our Navy must deploy forward and campaign with a ready, capable, combat-credible fleet". Accordingly, the document outlines the development directions and technologies that the U.S. Navy will need to cope with in the future, including: "artificial intelligence, ubiquitous sensors, unmanned systems, and long-range precision weapons [that] are proliferating globally, making contested spaces more transparent and more lethal, and transforming how navies will fight in the future".⁸¹

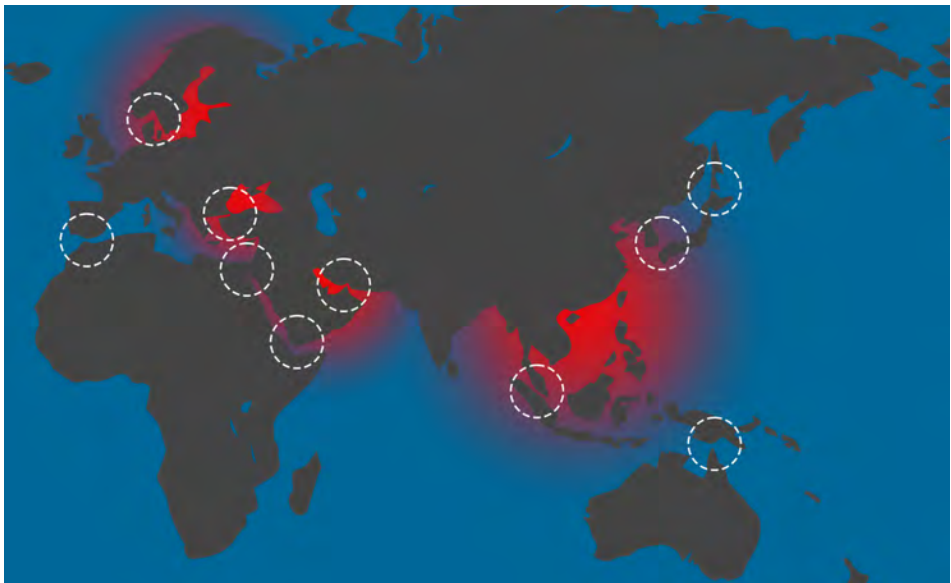


Figure 14: Key maritime regions and geographic chokepoints under increased threat⁸²

⁸⁰ Ibid. p. 4.

⁸¹ Ibid. p. 5.

⁸² Ibid. p. 6.

The document notes that the unique missions and responsibilities of the United States Navy require a larger, more ready, capable, and lethal fleet. To meet these requirements, Adm. Gilday emphasizes the following issues: readiness, capabilities, capacity, and our sailors.

The document emphasizes the Navy's decisive role in strengthening the integrated deterrence provided by its submarine force intended to raise the price paid by adversaries that attack vital U.S. national interests. Integrated deterrence is a safe and reliable strategic nuclear capability. The document notes that the U.S. Navy's submarine force operates and maintains its most survivable leg and represents about 70% of America's deployed nuclear arsenal.⁸³

The document addresses the U.S. Navy's composition and primary order of battle from the 1940s onwards, referring to target numbers of more than 350 manned ships, about 150 large unmanned platforms (surface and subsurface), and around 3,000 aircraft. It should be noted that the numbers mentioned are capacity goals and are probably not fully supported by the budget. They include:

- 12 Columbia-class ballistic missile submarines to provide America with an assured deterrent to any strategic attack;
- 12 nuclear-powered aircraft carriers;
- 66 Virginia-class fast-attack submarines;
- 96 large surface combatants, including next-generation missile destroyers;
- 56 Constellation-class frigates;
- 31 large amphibious assault ships, including a core of amphibious assault ships to support Marine Expeditionary Units and light expeditionary shops to provide maritime maneuver for Marine Littoral Regiments;
- Around 150 unmanned surface and subsurface platforms to enhance the fleet's survivability. According the document "this transition will rebalance the fleet away from exquisite, manpower intensive platforms towards smaller, less expensive, yet lethal ones".⁸⁴
- 82 combat logistics (refueling and supply) ships, auxiliary utility repair ships, salvage ships, and hospital ships;
- Approximately 1,300 next-generation manned aircraft and a family of Next Generation Air Dominance systems;

⁸³ Ibid. p. 6.

⁸⁴ Ibid. p. 10.

- Approximately 900 aircraft for anti-submarine and anti-surface warfare, to include helicopters and maritime patrol and reconnaissance aircraft, all augmented by unmanned aviation systems;
- 750 support aircraft, including intra-theater lift, training, and research and development.

Order of Battle and Primary Vessel Deployment (as of September 2022)

The U.S. Navy currently has 299 active ships, including 241 surface ships and 58 submarines. For several years now, the Navy has struggled to surpass the threshold of 300 ships and reach the goal it set for itself.⁸⁵



Figure 15: Estimated locations of U.S. Navy aircraft carrier groups and amphibious groups worldwide, as of September 8, 2022.⁸⁶

Table 4: U.S. Navy vessel deployment worldwide

| Underway | Deployed | Total Battle Force |
|-----------------------|-----------------|--------------------|
| 68 | 111 | 299 |
| 47 deployed, 21 local | USS 75, USNS 36 | USS 241, USNS 58 |

Table 5: U.S. Navy ships belonging to the various fleets worldwide

| 2 nd Fleet | 3 rd Fleet | 4 th Fleet | 5 th Fleet | 6 th Fleet | 7 th Fleet | Total |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|
| 5 | 1 | 3 | 11 | 29 | 59 | 108 |

⁸⁵ [USNI News Fleet and Marine Tracker](#), *USNI News*, September 8, 2022.

⁸⁶ *Ibid.*

U.S. Marine Corps Organization and Combat Reform

The art of war is constantly evolving and those who are able to anticipate changes in the nature of warfare are more likely to succeed when the next crisis arises. The ability to innovate in terms of doctrine and technology during peacetime has occupied many researchers in the field, and the results have often been controversial. This is the problem facing the dramatic reform plan designed by the Marine Corps Commandant Gen. David H. Berger. Berger wants to remove previous-generation platforms, such as tanks and artillery, from the Marine Corps and search for new capabilities, such as long-range sensing and precision fire that will better prepare it for future conflicts. Critics of his plan, such as former Navy Secretary Jim Webb, argue that Berger's reform is misguided, but Berger is convinced his ideas as embodied in the reform will better equip the Marines to deal with their main adversary, China.⁸⁷ General Berger's Force Design 2030 reforms are close to revolutionary. According to his plan, the Marine Corps will dramatically reduce its artillery and helicopter forces and completely eliminate its tank forces. Several infantry battalions and their supporting elements will be cut. Berger admits that these reforms carry risks and have caused controversy within the Marine Corps. However, he believes the Marines have finite resources that must be organized around maintaining the international democratic order and defeating the greatest threat to America in the world today, China.

In a war with China, which is likely to be primarily amphibious, the U.S. Marines will likely have a central and distinctive role compared to the other arms of the U.S. military. As stated in federal law, the Marines' primary mission is to provide: "service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign". In the South China Sea, this means that Marines may need to operate far from other U.S. assets, out of small land-based facilities that are easily disconnected from the command-and-control support of the U.S. military, intelligence platforms, and long-range and integrated weapons systems. Berger believes the Marines will need to operate as an "organic kill chain" that does not rely on external detection, attack, logistics, and other command-and-control support from the U.S. military. He wants small teams of Marines to be able to seize artificial island areas in the South China Sea. Berger's plan will allow the Marines to quickly establish strong combat units in Taiwan and the Philippines. These units will deploy mobile capabilities of small units against ships, submarines, and aircraft in order to prevent China's People's Liberation Army (PLA) from moving, operating, and replenishing its supply freely. The Marines would then seek to defend these areas as strongholds

⁸⁷ Tom Rogan, [The Marines Are Reforming to Prepare for War with China](#), *WSJ Opinion*, April 4, 2022.

to support the delivery of supplies and project power forward for other U.S. and allied forces, as well as to collect intelligence for attacking Chinese military targets.

Berger's Force Design 2030 plan led to an outcome that the Marine Corps commander probably did not anticipate, sparking a virtual revolt among many retired generals, who spoke out against it. Ironically, Berger's initiatives were generally praised by analysts and policymakers outside the Marine community. Former Navy Secretary Jim Webb explained his critical analysis, saying that: "the traditional respect for the Marine Commander has been replaced by a sense of duty to the Marine Corps and its crucial role in our national security".⁸⁸

The Impact of the COVID-19 Pandemic on the U.S. Navy's Activity

On August 9, 2021, the U.S. Secretary of Defense issued a memorandum that starting in mid-September 2021, it would be mandatory for all members of the U.S. security forces, including members of the U.S. Navy and the Marines, to be vaccinated against the coronavirus. As of August 24, 2022, 3,000 active-duty service members and 3,376 reservists remained unvaccinated. A status summary of coronavirus cases in the U.S. Navy and Department of Defense is presented in Table 6 below.

In Navigation Plan 2022 published, as mentioned, by the Commander of the U.S. Navy, Adm. Gilday, the COVID-19 pandemic no longer holds the same importance it did a year earlier and is included in the section on the security environment. Adm. Gilday notes that "COVID-19 demonstrates how rapidly some threats can become global in scope, generating worldwide political and economic instability".⁸⁹

Table 6: U.S. Navy – COVID-19 illness status as of August 2022

| | Cases | Hospitalizations | Recovered | Deaths | Total accumulated cases of coronavirus |
|-----------------------|-------|------------------|-----------|--------|--|
| Military personnel | 574 | 1 | 104,686 | 17 | 105,277 |
| Civilians | 1,980 | 3 | 59,726 | 120 | 61,826 |
| Department of Defense | 68 | 1 | 12,436 | 7 | 12,511 |
| CTR | 325 | 0 | 15,083 | 49 | 15,457 |
| Total | 2,947 | 5 | 191,931 | 193 | 195,071 |

Source: U.S. Navy COVID-19 Updates

⁸⁸ Benjamin Jensen and Matthew Strohmeiermay, [The Changing Character of Combined Arms](#), *War on the Rock*, May 23, 2022.

⁸⁹ Navigation Plan 2022, p. 5.

The U.S. Navy's Activity in the Eastern Mediterranean

In light of the Russian Federation's invasion of Ukraine, attention has been focused on the maritime area of the Black Sea and the Sea of Azov, as well as the chokepoints at their entrances: the Bosphorus and Dardanelles. This area is controlled by the U.S. Navy's Sixth Fleet and NATO's naval forces. Some analysts argue that: "the U.S. and NATO's lack of focus on the Black Sea allowed Russia to pursue aggressive goals, like its invasion into Ukraine". They also argue that despite the strategic importance of the Black Sea and the three NATO member states located along its shores (Turkey, Bulgaria, and Romania), NATO still lacks a coherent and clear strategy for this region. These analysts believe the war in Ukraine has "served almost sort of as a wake-up call" for the U.S. or NATO to begin thinking about their strategy for this region.⁹⁰

The war between Russia and Ukraine has shifted the United States' focus back to Eastern Europe almost 30 years after the end of the Cold War following the dissolution of the Soviet Union. In the past, the United States has minimized the operation of strike groups that include aircraft carriers in the Eastern Mediterranean. However, the conflict between Russia and Ukraine has led to the deployment of a strike group led by the aircraft carrier *Harry Truman* near Greece carrying combat and surveillance aircraft that have been conducting patrols along NATO's eastern borders to prevent further Russian aggression following its attack on Ukraine. This strike group is also expected to serve as a mobile air base on the front line in the event that NATO decides to intervene in the conflict in Ukraine, or NATO forces are drawn into direct conflict with Russia. At the same time, it is important to note that at the beginning of the conflict between Russia and Ukraine, President Biden made it clear that the United States and NATO "will not fight a war against Russia in Ukraine", as "direct conflict between NATO and Russia is World War III".⁹¹

In late February 2022, following Russia's invasion of Ukraine, Turkey closed the Bosphorus and Dardanelles Straits to warships from any country, whether they border the Black Sea or not. While the closure allowed warships whose home port is in the Black Sea to reach their base, it limited Russia's ability to move ships from its other fleets into the Black Sea. This prevented two Russian Slava-class ships operating in the Mediterranean (the *Marshal Ustinov* of the Northern Fleet operating south of Italy and the *Varyag* of the Pacific Fleet operating off the coast of Syria) from passing through the straits and reinforcing the Russian Black Sea fleet.

⁹⁰ Heather Mongilio, [NATO Need to Turn Attention to Black Sea, European Policy Experts Say](#), *USINAVY News*, September 13, 2022.

⁹¹ Bret Samuel, [Direct Conflict between NATO and Russia Would be 'World War III'](#), *The Hill*, March 11, 2022.

At the outbreak of the conflict, the United States committed to sending Harpoon missile launchers mounted on vehicles to Ukraine to assist it in defending itself against Russia's Black Sea Fleet. The missiles were sent by NATO member states such as Denmark, and they improved the capabilities of the Ukrainian Navy. In June 2022, the U.S. Department of Defense announced its intention to provide the Ukrainian Navy with 18 Mark VI patrol boats as part of its continued assistance to Ukraine against the Russian invasion.

The U.S. Navy and NATO's annual joint exercise, Sea Breeze 2022, which was supposed to take place in the Black Sea in the summer of 2022 was canceled and instead, an exercise by the same name was held in mid-July 2022, but far from the combat zone between Russia and Ukraine, near the city-ports of Bulgaria in the Black Sea. The exercise involved 24 ships, five planes, and two helicopters and was NATO's first major exercise since the start of Russia's recent invasion of Ukraine. U.S. ships were not involved in the exercise; however, American personnel and planes did participate.⁹²

Due to Israel being transferred to the United States Central Command (CENTCOM) and the Israeli Navy and Fifth Fleet's increased joint activity, the number of the Israeli Navy and Sixth Fleet's joint exercises decreased in 2022 compared to previous years.

The U.S. Navy's Activity in the Red Sea and Gulf of Aden

The U.S. Naval Forces Central Command is responsible for an area of approximately 2.5 million square miles that includes the Persian Gulf, the Gulf of Oman, the northern Arabian Sea, the Gulf of Aden, and the Red Sea. Its main missions are to conduct maritime security operations, theater security cooperation efforts, and strengthen the maritime capabilities of partner nations to promote security and stability in the U.S. Fifth Fleet's operational area.



Figure 16: U.S. Fifth Fleet Headquarters in Manama Bahrain⁹³

⁹² David Brennan, [U.S. Navy Cancels 'Essential' Black Sea Drills Over Russia-Ukraine War](#), *Newsweek*, July 25, 2022.

⁹³ [War against terror, Shaikh Isa Air Base and U.S. 5th Fleet headquarters](#), *CNN*, Retrieved December 22, 2022.

The U.S. Fifth Fleet's Response to Repeated Provocations by the Iranian Navy

The Fifth Fleet operates in, among other areas, the tense area of the Persian Gulf amid the ongoing negotiations over the Joint Comprehensive Plan of Action (JCPOA) between the United States, other members of the Security Council, Germany, the European Union and Iran. The fleet's activity is aimed at containing such events, which influences its response to recurring provocations by Iranian forces and proxies. For example, in May 2022, the Islamic Revolutionary Guard Corps stopped two Greek oil tankers in the Persian Gulf due to a dispute between the two countries over the fate of an Iranian oil cargo aboard a Russian-flagged vessel that was seized by Greece in April. This took place shortly after Tehran warned it would retaliate against Athens due to the U.S. confiscation of Iranian oil from a tanker sailing in the northern Aegean Sea. Greece had stopped the tanker as part of the sanctions imposed on Russia by the EU following its invasion of Ukraine in February 2022. The United States, through the Fifth Fleet, did not respond to Iran's seizure of the Greek tankers.⁹⁴

In February 2022, the Fifth Fleet announced the establishment of an additional integrated task force, Task Force 153, to specifically address maritime threats in the Red Sea and Gulf of Aden. The Fifth Fleet assumed leadership of the task force upon its establishment, but stated that it would transfer leadership to a regional partner in the future. In September, it was announced that command of the task force would be transferred to the Egyptian Navy. Task Force 153 was established pursuant to the activities of three previous task forces in the CENTCOM area of responsibility: Task Forces 150, 151, and 152. Task Force 150 operates outside the Persian Gulf, in the Gulf of Oman, and in the northern Arabian Sea, and is apparently led by a Saudi naval officer. Task Force 151 operates to prevent maritime piracy throughout the Fifth Fleet's area of responsibility, and Task Force 152 operates within the Persian Gulf. Task Force 153 will operate from the Gulf of Aden, through the Bab el-Mandeb Strait and up to the Yemen-Oman border.⁹⁵

In early September, the U.S. Navy intercepted an Iranian war ship that had seized two unmanned Sailer Explorer vessels operated by the Fifth Fleet in the Red Sea, two days after Iran failed to seize a similar vessel in the Arabian Sea. The unmanned vessels were unarmed and were taking unclassified photographs of the surrounding area as they navigated through a selected area that was at least four nautical miles away from the

⁹⁴ [Iran Seizes Oil Tanker it Alleges was Smuggling 11 Million Liters of Fuel in Gulf](#), *The Times of Israel*, October 31, 2022.

⁹⁵ Megan Eckstein, [Combined Maritime Forces Establishes New Naval Group To Patrol Red Sea Region](#), *Defense News*, April 13, 2022; Mike Wagenheim, [U.S. Navy Extends Activities in Middle East in Cooperation with Allies](#), *The Media Line*, December 5, 2022.

nearest maritime traffic route. The vessels did not pose a threat to maritime traffic and operated in the general vicinity of the southern Red Sea for more than 200 consecutive days without incident.⁹⁶

Cooperation with the Israeli Navy

In early February 2022, then-Israeli Defense Minister, Maj. Gen. Res. Benny Gantz, and Commander of the Israeli Navy, Adm. David Sa'ar Salma, visited the U.S. Fifth Fleet base in Manama, Bahrain. Minister Gantz emphasized the importance of the relationship between the three countries in light of increasing threats from Iran. The visit took place while tensions in the Gulf were at a peak, with the attacks of the Iranian-backed Yemen-based Houthi militia against the United Arab Emirates having intensified significantly. Minister Gantz stressed the importance of the cooperation between Israel, the U.S. Fifth Fleet, and the Gulf States in the face of growing challenges in the maritime front in particular and the region in general.⁹⁷ In mid-February 2022, then-Prime Minister Naftali Bennett also met with the Commander of the U.S. Fifth Fleet, Vice Adm. Brad Cooper, during his official visit to the country. These visits demonstrate the importance Israel places on its relationship with the U.S. Central Command and the Fifth Fleet in particular, given the increasing tension in the maritime arena with Iran's naval forces in the Persian Gulf and southern Red Sea.

Starting from Israel's integration into the CENTCOM and in light of the increasing Iranian threat to Israeli maritime freedom in the southern Red Sea and the Gulf of Aden, the two navies held close security coordination and joint exercises on a range of topics. On March 27, 2022, the Israeli Navy and the U.S. Fifth Fleet conducted a ten-day joint exercise, *Intrinsic Defender*, focusing on maritime security operations, explosives disposal, medical issues, and unmanned systems integration. More than 300 U.S. personnel participated in the exercise, including a U.S. Navy explosive ordnance disposal dive team, U.S. Coast Guard maritime engagement team, and global health engagement team. U.S. Navy guided-missile destroyer USS *Cole* (DDG 67), dry cargo ship USNS *Wally Schirra* (T-AKE 8) and various unmanned vessels also participated in the exercise. It is worth noting that U.S. destroyer USS *Cole* was attacked in October 2000 by an explosive boat while docking in the Port of Aden. The USS *Cole* has been operating in the U.S. Fifth Fleet area of operations to support security stability in the region since January 4, 2022.⁹⁸

⁹⁶ [U.S. Navy Statement on Iranian Incident in Red Sea](#), U.S. Naval Forces Central Command, *NAVCENT Public Affairs*, September 2, 2022.

⁹⁷ Judah Ari Gross, [Visiting U.S. Fleet in Bahrain, Gantz Hails Ties While Warning of Threat from Iran](#), *The Times of Israel*, February 3, 2022.

⁹⁸ [U.S. and Israeli Navy Begin Exercise Intrinsic Defender](#), U.S. Naval Forces Central Command, March 27, 2022.

At the beginning of August 2022, Israeli and U.S. naval forces conducted a four-day joint naval exercise in the Red Sea. The exercise was a bilateral training event focused on mission planning, maritime interdiction, and other exercises in the northern Red Sea. The exercise involved the U.S. Fifth Fleet's *Nitze*, USS *Lewis B. Puller* and USNS *Matthew Perry*, and the Israeli Navy's INS *Eilat* and INS *Keshet* participated. The increasing number of joint maritime exercises and meetings between senior officials in the Israeli security forces and their American counterparts indicate the deepening security cooperation and coordination taking place between the two navies in light of the challenges they both face in this complex area.

The Chinese Navy (the People's Liberation Army Navy –PLAN)

The Chinese Navy is ranked second in the world in the 2022 Global Naval Powers Ranking. The growing importance of China's maritime interests, which have already been reported in previous situation assessments, has led the Chinese navy to continue increasing the frequency, duration, and range of its operations beyond China's shores. This activity is consistent with the emphasis placed on operating in the maritime domain in China's May 2015 white paper under the title "Defense on the High Seas".

The August 2021 report to the U.S. Congress on the modernization of the Chinese Navy and its implications for U.S. naval capabilities deals with several issues related to the strengthening of the Chinese Navy and its operational strategy. The report emphasizes that the Chinese Navy is undoubtedly the largest in East Asia and that in recent years it has surpassed the U.S. Navy in the number of combat ships (although not in quality), a fact that makes the Chinese Navy the largest in the world in numerical terms. Its ships, aircraft, and weapons systems are modern and have many more capabilities than those that it had in the early 1990s. Today they can be compared in many respects to those of modern Western navies and it is possible to say that "the design of Chinese naval vessels and the quality of materials used are in many cases similar to those of the U.S. Navy."⁹⁹ The report further states that the Chinese navy is rapidly closing the gap in all areas. In the event of a military conflict between the countries, the Chinese navy is perceived as a significant challenge to the U.S. Navy, especially in relation to gaining control of "blue water" areas in the western Pacific Ocean – a challenge the U.S. Navy has not faced since the end of the Cold War. Accordingly, the report notes that China wants to continue to build up its navy so it can implement an anti-access, area denial (A2/AD) strategy and deter the United States from intervening in a conflict, should one occur in the South China Sea, the area of the Island of Taiwan Strait, or another scenario. If it fails to do so,

⁹⁹ [China Naval Modernization](#): Implications for U.S. Navy Capabilities—Background and Issues for Congress Updated August 3, 2021 p. 3.

it will delay or reduce the effectiveness of U.S. military forces seeking to intervene in the conflict. In addition, the Chinese Navy will need to secure China's sea lanes, including against piracy, during the evacuation of Chinese citizens from foreign countries when necessary, and will have to be responsible for providing humanitarian assistance in cases of natural disasters (humanitarian assistance and disaster relief).

Although China's naval modernization has significantly improved its maritime capabilities, the assessment is that the Chinese navy is limited in its capabilities in the following areas: anti-submarine warfare (ASW), long-range targeting, training a large number of crew members for its new ships, command unity, and lack of combat experience. It should be noted that China is aware of these gaps and is working to narrow or overcome them.¹⁰⁰

In addition to modernizing its navy, China has also significantly expanded its coast guard in recent years. China's coast guard is undoubtedly the largest among East Asian countries. China also operates a large naval militia with a large number of fishing vessels, as was evident in the early stages of the economic water dispute with the Philippines. With the navy operating as a potential backup force, China relies primarily on its naval militia and coast guard to assert and defend its maritime claims in its nearby waters.

The Chinese Navy's Force Buildup Plan

This section of the report provides a brief overview of the components of the Chinese navy's development and modernization efforts in recent years. At the end of 2021, the Chinese navy had 355 ships, and the U.S. Department of Defense estimates that by 2025 it will increase its fleet to 420 ships and by 2030 to 460 ships. The 355 ships include surface ships, submarines, aircraft carriers, ocean-going amphibious ships, minesweeper ships, and auxiliary forces (see Table 7). This number does not include 85 patrol and anti-ship cruise missile-carrying ships (ASCM). The Chinese navy's surface ship fleet is organized into three fleets: the North Sea Fleet, the East Sea Fleet, and the South Sea Fleet (see Figure 17).

In 2021, the Chinese navy launched 32 vessels, including a Type 075 landing helicopter dock, one submarine, and several destroyers. The submarine is a Type 094 ballistic missile submarine, which was developed by the Chinese and is expected to gradually replace the Type 092 submarine. The next model, Type 096, is already in early development stages. The large Type 055 destroyer is a class of stealth guided missile destroyer and a multi-mission ship. The combination of sensors and weapons suggests a main role of area air

¹⁰⁰ To learn about China's multi-layered strategy regarding defense of its shores, see Shaul Chorev, "Key Naval Fleets – Trends and Changes", in Shaul Chorev and Ehud Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2021), pp. 66–67.

defense, with anti-submarine warfare capabilities surpassing previous Chinese surface combatants (see Figure 18).¹⁰¹

Table 7: Types and quantities of vessels in the Chinese Navy

Numbers of Chinese and U.S. Navy Battle Force Ships, 2000-2030

Figures for Chinese ships taken from ONI information paper of February 2020

| | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
|---|------------|------------|------------|------------|------------|------------|------------|
| Ballistic missile submarines | 1 | 1 | 3 | 4 | 4 | 6 | 8 |
| Nuclear-powered attack submarines | 5 | 4 | 5 | 6 | 7 | 10 | 13 |
| Diesel attack submarines | 56 | 56 | 48 | 53 | 55 | 55 | 55 |
| Aircraft carriers, cruisers, destroyers | 19 | 25 | 25 | 26 | 43 | 55 | 65 |
| Frigates, corvettes | 38 | 43 | 50 | 74 | 102 | 120 | 135 |
| Total China navy battle force ships, including types not shown above | 110 | 220 | 220 | 255 | 360 | 400 | 425 |
| Total U.S. Navy battle force ships | 318 | 282 | 288 | 271 | 297 | <i>n/a</i> | <i>n/a</i> |

Source: Table prepared by CRS. Source for China's navy: Unclassified ONI information paper prepared for Senate Armed Services Committee, subject "UPDATED China: Naval Construction Trends vis-à-vis U.S. Navy Shipbuilding Plans, 2020-2030," February 2020, 4 pp. Provided by Senate Armed Services Committee to CRS and CBO on March 4, 2020, and used in this CRS report with the committee's permission. Figures are for end of calendar year. Source for figures for U.S. Navy: U.S. Navy data; figures are for end of fiscal year.

Note: n/a means not available.



Figure 17: Deployment of the Chinese Navy and Major Headquarters¹⁰²

¹⁰¹ [Analysis: List of Chinese Navy Vessels Commissioned in 2021](#), *Navy Recognition*, January 25, 2022

¹⁰² Mallory Shelbourne, [China Has World's Largest Navy With 355 Ships and Counting, Says Pentagon](#), *UNSI News*, November 3, 2021.

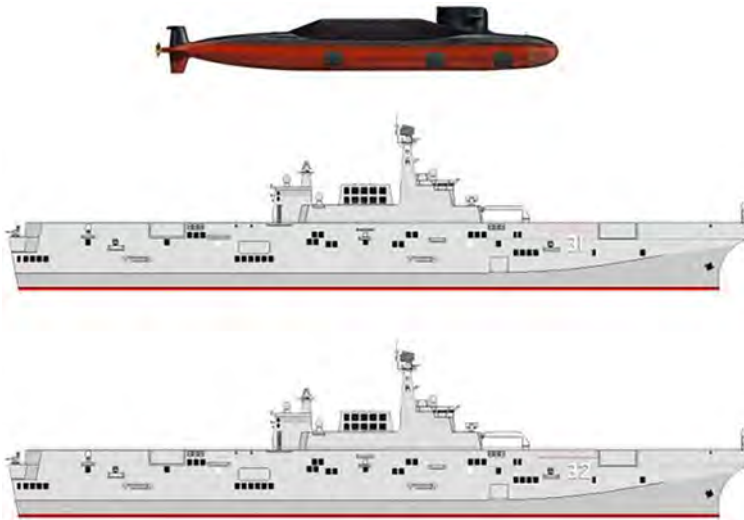


Figure 18: Type 094 submarine, Type 075 LHD Hainan and Type 075 LHD Guangxi Twitter account of Louis Cheung HK¹⁰³

China is building a large number of additional Type 075 amphibious assault ships with the goal of establishing an expanded expeditionary force capable of conducting "three-dimensional" operations involving air, sea, and land forces from multiple directions. This growing force will complement the rapidly expanding Chinese Marine Corps, which has grown from two to six operational brigades in less than a decade. The multi-role Z-20 helicopter, which has similar characteristics to those of the American Black Hawk, has been introduced into Chinese naval service and converted for anti-submarine warfare and other missions. This is a significant addition, particularly for the Chinese Marine Corps.

In the fifth session of the 13th National People's Congress in early March 2022, the Chinese government announced a defense budget of 1.45 trillion yuan (approximately \$229 billion) for the 2022 fiscal year, a 7.1% increase from the 2021 budget.¹⁰⁴ After years of double-digit increases in the 2000s and early 2010s, this is the seventh consecutive year in which China's defense spending has grown at a single-digit rate. However, China has risen in the global rankings and is now second only to the United States in defense spending. In the Indo-Pacific region, China's military spending is progressively dwarfing that of its neighbors. According to the Stockholm International Peace Research Institute (SIPRI), China now spends more on its military than Japan, South Korea, the Philippines,

¹⁰³ Analysis: List of Chinese Navy Vessels Commissioned in 2021, 2002

¹⁰⁴ Hauxia, [Explainer: Prudent Chinese Defense Budget Growth Ensures Broad Public Security](#), *Xinhua*, March 5, 2022.

and India combined.¹⁰⁵ For example, China's \$229 billion defense budget is more than three times that of India, which stands at \$70 billion for 2022. China's increase in defense spending is a red flag for its neighbors and the United States in light of the growing tensions over Taiwan, the South China Sea, the East China Sea, and the China-India border conflict in the Himalayas.

Very little is known about the costs of weapons and equipment produced by the Chinese security industry or the amount of money allocated to research and development. The lack of transparency in China's security spending raises concerns regarding its strategic intentions.¹⁰⁶ It is also difficult to know what the budget share allocated to the Chinese navy is. Using its computerized analysis tools and its database, a study by the U.S. Center for Strategic and Budgetary Assessments found that China has the resources necessary to continue its modernization process throughout the 2020s and will be able to expand its capabilities and size, so that by 2030, it will have up to five aircraft carriers and ten nuclear ballistic missile submarines (see Figure 19).¹⁰⁷ Most of China's submarines are non-nuclear-powered attack submarines (SSS). However, China also operates a limited number of nuclear-powered attack submarines (SSN) and even fewer nuclear-powered ballistic missile submarines (SSBN). The estimate is that the number of its nuclear-powered attack submarines (SSNs) and ballistic missile submarines (SSBNs) will increase in the coming years. China currently has two types of fixed-wing aircraft carriers, and at takeoff, they rely on a ski ramp, the latest of which, *Shandong*, was put into active service in the summer of 2021. The Chinese are expected to complete the construction of their fourth aircraft carrier by the end of the current decade, which will be similar in size to American aircraft carriers and equipped with catapult stopping systems. All of China's aircraft carriers are conventionally powered. Despite their importance, experts estimate that these aircraft carriers will not be a major component of any military operation against Taiwan, as Taiwan's proximity to the mainland allows China to operate its air force from land bases in China.

When China offers to build infrastructure for the production of eight submarines in the Karachi shipyard in Pakistan, along with supplying four frigates and setting up the infrastructure to accommodate the vessels after their construction is complete, and manages to compete with other Western actors with similar capabilities, it is clear that

¹⁰⁵ [World Military Expenditure Passes \\$2 Trillion for First Time](#), *SIPRI*, April 25, 2022.

¹⁰⁶ Amrita Jash, [China's 2022 Defense Budget: Behind the Numbers](#), *China Brief*, 22, no. 8, April 29, 2022.

¹⁰⁷ Jack Bianchi, Madison Creery, Harrison Schramm and Toshi Yoshihara, [China's Choices, A New Tool for Assessing the PLAN's Modernization](#), The Center for Strategic and Budgetary Assessments CSBA, 2022.

there is a significant subsidy component that enables it to carry out the aforementioned projects. Moreover, these resources are part of the soft power that China exercises in the Indo-Pacific region to expand its influence in the area.¹⁰⁸

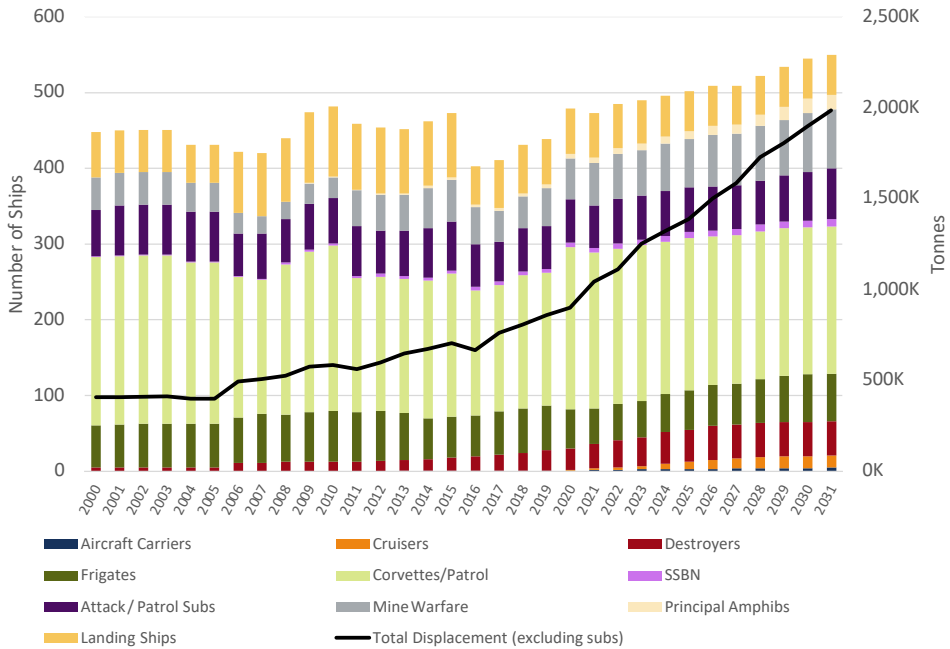


Figure 19: Projected cost-informed PLA Navy force structure¹⁰⁹

Anti-Surface Vessels Missiles

As mentioned, China's defense plan is based on naval vessels and combat tools allocated to its three land commands. A large part of China's firepower is based on land-based ballistic missiles. China operates two types of land-based ballistic missiles that have the ability to strike naval vessels: the DF-21D, an anti-ship ballistic missile (ASBM) with a range of about 1,500 kilometers (more than 910 nautical miles), and the DF-26, an intermediate-range ballistic missile (IRBM) that can be transported on highways and has a maximum range of about 4,000 kilometers (2,160 nautical miles). A Pentagon report indicates that they are capable of carrying out conventional and nuclear precision strikes against ground targets and conventional attacks against naval targets. In a November 2020 news report,

¹⁰⁸ [Project 75 – As China Arms Pakistan With Lethal Submarines, Is Indian Navy 'On Backfoot' Despite Being A Global Naval Power?](#) *The EurAsian Time*, September 21, 2022.

¹⁰⁹ [China's Choices, A New Tool for Assessing the PLAN's Modernization](#). p. 45. Fig. 10.

it was noted that a successful test of both types of missiles was carried out in August 2020 against moving sea targets south of the Paracel Islands. In late 2020, Adm. Philip Davidson, Commander of the Indo-Pacific Command, confirmed for the first time that the Chinese had successfully tested a ballistic missile against ships and that China is also developing hypersonic glide vehicles, which, when integrated with missiles, would make their interception extremely difficult. These types of missiles move five times faster than the speed of sound, can destroy aircraft carriers without a warhead, and cannot be tracked. China holds the lead in developing this technology. Russia claims to have completed the development of hypersonic glide vehicles, and the United States is also currently developing these missiles, but has no means of intercepting and shooting them down at this stage. Hypersonic glide vehicles integrated with naval control and guidance systems will enable China to attack other U.S. aircraft and naval vessels operating in the Pacific Ocean. The U.S. Navy has not previously faced the threat of a precise ballistic missile with effective penetration capabilities, and it describes this weapon as a "game-changer". China recently launched a hypersonic glide vehicle in a drill near Taiwan in August 2022.¹¹⁰

China also has a very large stockpile of Russian and Chinese-made anti-ship cruise missiles (ASCM), including several advanced models with high capabilities, such as the Chinese-made YJ-18. The relatively long ranges of Chinese anti-ship missiles are a concern for the U.S. Navy in terms of the superiority of its sea-based missiles, for example in aspects such as their range.

China's Activity in the Middle East

China continues to deepen its involvement in the Middle East and the Eastern Mediterranean, using its deep pockets to ensure influence over key allies in the region as a means to promote its global aspirations. The plan to develop and expand the Maritime Silk Road – which will essentially connect China to the Mediterranean Sea via the South China Sea, the Indian Ocean, and the Suez Canal – is a vital component of China's Belt and Road Initiative (BRI). Strategic maritime chokepoints along these shipping routes provide further impetus for Beijing to funnel more money into investment and infrastructure projects in the Middle East. As one of the world's largest oil consumers, China, which purchases oil from Saudi Arabia, Oman, Kuwait, Iraq, and the United Arab Emirates, has increased its oil imports from Iran in recent years, benefitting from cheaper rates due to the embargo. The Biden administration has decided not to impose sanctions at this stage on Chinese individuals or companies trading with Iran in order not to harm ongoing

¹¹⁰ Shannon Bugos, [China Showcases Hypersonic Weapon Near Taiwan, U.S. Test](#), *Arms Control Association*, September 2022.

negotiations between the five permanent members of the Security Council and Germany. It also doesn't want to endanger Iran's return to the 2015 agreement (JCPOA). In order to protect its strategic interests, China is likely to further strengthen its military ties with Iran, which will heighten regional tensions. As the United States reduces its presence in the Middle East, China is increasing its diplomatic and economic involvement in the region. China has already signed prominent agreements with long-standing U.S. partners such as Saudi Arabia and managed to maintain close ties with Iran. While China has emphasized its ties with Iran, it has also increased its economic cooperation with Iran's rivals in the Middle East, in line with Beijing's strategy of focusing on a "cautious balance". China has deepened its economic ties with other Gulf countries such as Saudi Arabia, the United Arab Emirates, Bahrain, Qatar, Kuwait, and Oman, particularly in infrastructure, telecommunications, technology, and energy – all critical areas for China's BRI. In 2021, China invested \$10.5 billion in the Belt Route Initiative and energy-related projects in Iraq, which is its third-largest oil supplier after Saudi Arabia and Russia. China has deepened its infrastructure cooperation with Saudi Arabia in recent years and is now involved in projects to renovate the Kingdom's Grand Mosque. Even as the United States withdraws from the Middle East, some in the U.S. foreign policy community believe the region will be among the places where intense power competition between the United States and China will materialize. China is heavily involved in crucial projects in Egypt, particularly in the construction of Egypt's new administrative capital, where Chinese state-owned companies are building the central business district. China has reoriented and intensified its economic ties with Egypt over the past two decades, and Chinese organizations have a special interest in Egypt given its strategic location and potential to serve as an important regional production and transit center. China has widely penetrated the Egyptian market after the opening of the Suez Canal Economic Zone and remains the largest investor in the Suez Canal Development Zone, which is Beijing's most important shipping route to Europe. The naval base in Djibouti, which officially opened in 2017, was initially established to support the Chinese mission against piracy off the coast of Somalia in the Gulf of Aden, but over time, it has expanded and can now serve as a logistics supply point for its blue-water navy ships, such as the new Type 075 amphibious assault ship or the recently commissioned aircraft carriers. In May 2022, the 41st Chinese naval escort task force set off for the Gulf of Aden and Somali waters from a military port in Zhoushan, Zhejiang Province in eastern China. The task force replaced the 40th task force that had been operating in the region for the past few months. The task force consists of the Suzhou guided-missile destroyer, the Nantong guided-missile frigate, and the Chaohu supply ship, which also carries two helicopters and dozens of special operations soldiers. This is the first time the Suzhou and Nantong ships have performed escort missions. Task forces like

these typically consist of three to four ships deployed for three to four months, spending most of that time at sea.¹¹¹

In late January 2022, Iran, Russia, and China held joint naval exercises for three days in the Indian Ocean with the aim of strengthening "shared security". In 2022, unlike in the past, there were no naval exercises or Chinese Navy fleets in the Mediterranean Sea, but according to various reports, China is continuing to promote its interests in the Eastern Mediterranean. Cyprus's geographical location, its membership in the European Union, and its importance as a transport hub have been of interest to China in the past year. In November 2021, China and Cyprus officially announced their strategic partnership on the 50th anniversary of their diplomatic relations, which is significant and a milestone in their bilateral relations. The two heads of state decided to upgrade China-Cyprus relations to a strategic partnership. The Chinese view is that Cyprus' central location between Europe, Asia, and Africa should play an important role in China's efforts to expand its influence in the Eastern Mediterranean. Cyprus is perceived in China as being located in an important geostrategic position and as having a developed shipping sector, gas reserves in its exclusive economic zone, and experience in the financial sector. China can leverage the geographical advantages of Cyprus's ports to facilitate and increase the volume of goods transferred from China and the Far East to the European Union, the Balkans, and the Black Sea region, and vice versa.¹¹²

Algeria and China are on the verge of signing several cooperation memorandums and transfer of technology agreements (ToT) in the field of military training and military production. Under the military agreements, Algeria will receive armored vehicles, tanks, naval vessels, and radar systems. In return, Algeria will become China's first logistics and supply center in the Mediterranean Sea. This development raises concern among NATO countries, particularly France, which sees this move as threatening its long-standing interests in Algeria.¹¹³

Western analysts argue that while economy, trade, and investment are the cornerstones of Beijing's balancing act, maintaining security and stability in the region is crucial in order to continue this momentum. However, this becomes difficult in the absence of any strong collective and inclusive security arrangement. Without such arrangements, analysts predict that: "China could be more assertive and use its economic and political

¹¹¹ Li Jiayao, [China's 41st Naval Escort Taskforce Sets Off for Gulf of Aden](#), *China Military Online*, May 19, 2022.

¹¹² Mordechai Chaziza, [Cyprus: The Next Stop of China's Belt and Road Initiative](#), *The Diplomat*, December 21, 2021.

¹¹³ [Algeria, China Sign a Strategic Cooperation Plan](#), *Asharq Al-Awsat*, November 9, 2022

tools directly and indirectly by influencing the powerful and ruling elites in the region to protect its strategic interests upon reaching a difficult position in the delicate balancing act".¹¹⁴

Tension with Taiwan

China only controls Mainland China and does not have control over Taiwan; however, it claims that Taiwan is part of its territory under the "One China Principle". Strategically, if China gains control over Taiwan, it could expand its activities beyond the first island chain, which includes a line of countries that have security agreements with the United States, including Japan and the Philippines, to the Pacific Ocean. China could, then, ostensibly, escape the detection and control of the U.S. Navy and its allies in the region. The first island chain currently provides a defensive ring for the United States and its allies. Thus, China gaining control over Taiwan would open up the western Pacific to Chinese military expansion.

It is important to remember that the Taiwan Strait is one of the busiest shipping lanes in the world, with nearly half of the global container fleet using the strait in the past year. China has the ability to impose a blockade on this strait, and various parties in the West are attempting to envision what would ensue in the event of such a scenario unfolding.¹¹⁵ A blockade would undoubtedly cause severe damage to the global economy and lead to additional delays in the global supply chain, which is already facing significant difficulties and delays due to the COVID-19 pandemic and the conflict between Russia and Ukraine.

In response to then-U.S. Speaker of the House Nancy Pelosi's visit to Taiwan in early August 2022, China deployed fighter jets, ships, and missiles for 72 hours of exercises. It announced six exercise zones around Taiwan, including off the island's eastern coast, in an effort to project its power beyond the Chinese mainland. During this time, China also conducted live-fire drills lasting until August 7. The trajectory of at least one of the missiles fired eastward and passed over Taiwan's capital, Taipei, landing in the Pacific Ocean within Japan's exclusive economic zone. Since Pelosi's arrival in Taiwan, government websites in Taiwan have crashed due to cyber-attacks, most likely originating from China.

The events surrounding Pelosi's visit to Taiwan and China's dramatic response have led some U.S. foreign policy analysts to ask: "Why isn't the United States doing more to prepare for war with China over Taiwan – precisely to deter and thus avoid it?" According

¹¹⁴ Nadeem Ahmed Moonakal, [The Impact and Implications of China's Growing Influence in the Middle East](#), *The Diplomat*, July 9, 2022.

¹¹⁵ Chris Buckley, Pablo Robles, Marco Hernandez and Amy Chang Chien, [How China Could Choke Taiwan](#), *The New York Times*, August 25, 2022.

to them, recent events have highlighted the severity of the issue, and a war with China over Taiwan has shifted from what many once saw as a remote scenario to a fearfully plausible one. These analysts point out that despite this alarming reality, the United States does not seem to be adequately preparing for such a conflict, despite a strengthening commitment towards Taiwan, especially by the Biden administration.¹¹⁶

The Russian Federation Navy

Since the beginning of the latest wave of reforms in Russia's armed forces in 2009, the Russian leadership has been conveying the message that the Russian Navy's crisis period is over, that it is returning to its former glory, and that it is capable of carrying out missions befitting the navy of a superpower. Looking ahead, based on the current force buildup plans, the Russian Navy is not expected to reach the size of the late-1970s Soviet fleet. However, recent developments indicate that the fleet is upgrading its capabilities and will not be the rundown fleet it was in the 1990s following the collapse of the Soviet Union. The Russian Federation's Navy is ranked third in the 2022 Global Naval Powers Ranking and includes the vessels listed in Table 8.

As the conflict in Ukraine continues, particularly in the Black Sea, maritime experts are raising questions regarding the future of the Russian Navy. While Russia's naval forces have played an important role in the war, their performance has been, at best, mixed. The Russian Navy successfully blockaded Ukrainian ports and launched missiles against coastal targets throughout Ukraine. However, in the process, it lost its flagship in the Black Sea as well as one of its most important amphibious vessels, failed to secure control of Snake Island, and failed to execute crucial amphibious operations on the Ukrainian coast.

Table 8: Types and Numbers of Russian Navy Vessels

| | Type of vessel | Number of vessels | Comments |
|---|------------------------------|-------------------|--------------------|
| 1 | Aircraft carrier | 1 | Unclear competence |
| 2 | Helicopter carrier | 0 | |
| 3 | Destroyers and cruisers | 15 | |
| 4 | Frigates | 11 | |
| 5 | Corvettes | 86 | |
| 6 | Submarines (SSK, SSN, SSBN)* | 70 | |
| 7 | Reconnaissance ships | 59 | |
| 8 | Minesweepers | 49 | |

* SSK – diesel-electric submarines; SSN – nuclear-powered submarines; SBN – ballistic missile submarines

Source: https://www.globalfirepower.com/country-military-strength-detail.php?country_id=russia

¹¹⁶ Elbridge Colby, [Being Ready Is the Best Way to Prevent a Fight with China](#), *Foreign Affairs*, August 10, 2022.

The Naval Campaign between Russia and Ukraine

On August 17, 2022, the Russian media reported that President Putin dismissed the commander of the Black Sea Fleet, Igor Osipov, and appointed 59-year-old Vice Adm. Viktor Sokolov as his replacement following the sinking of the Russian Black Sea Fleet's flagship, the *Moskva*, by Ukraine, the withdrawal from Snake Island, and the recent attacks on bases in the Crimean Peninsula. Sokolov had been the head of the Naval Military Academy in St. Petersburg since 2020. According to the Russian news agency RIA, Sokolov was introduced to the fleet's command staff at the headquarters in Sevastopol, Crimea. Such an event is generally both public and well-publicized; however, sources who spoke with the news agency said that the event was kept discrete in this case due to the high terror alert status in the peninsula in general and in Sevastopol in particular. The Russians are clearly concerned about Ukrainian commando attacks across the peninsula and fear for the lives of senior commanders in the Russian Navy. Moreover, this change of command by President Putin demonstrates his dissatisfaction with the performance of his Black Sea Fleet, which is one of the most important components of the Russian Navy. In the past, Sokolov also headed the Russian naval force in the Syrian arena.¹¹⁷

The Russian Federation Navy's New Doctrine

Despite the Russian Navy's disappointing performance in the Black Sea, President Putin approved the updated version of the Russian Maritime Doctrine in late July 2022 (on Russian Navy Day), updating the previous 2015 document.¹¹⁸ This is a strategic planning document of the highest-level, which details Moscow's official approach to the maritime domain. The new edition reflects significant changes compared to the previous 2015 version.¹¹⁹

The 2022 doctrine follows the 2015 template, now identifying fourteen national interests, as opposed to seven in the 2015 doctrine. The national interests listed combine the main principles from the 2015 doctrine and the current national maritime policy goals. Similar to the 2015 doctrine, the 2022 doctrine addresses the implementation of what is referred to as the "National Maritime Policy". It is interesting to note that while the 2015 doctrine was released after Russia invaded the Crimean Peninsula and subsequently

¹¹⁷ Neta Bar, [Reported in Russia: Putin Dismisses the Black Sea Fleet Commander](#), *Israel Hayom*, August 17, 2022 (Hebrew).

¹¹⁸ Daniel Rakov, [Putin's Waves of Ambition \(and Imagination\)](#), *News1 First Division*, September 24, 2022 (Hebrew).

¹¹⁹ See Tzevy Mirkin's discussion on this matter, "Russia's New 'Naval Doctrine' in the Context of the War in Ukraine", presented in this volume.

annexed it, the 2022 doctrine was released against the backdrop of the ongoing conflict between Russia and Ukraine. At the time of writing this report, it appears the Russian fleet does not have the upper hand. The 2022 doctrine emphasizes a more nationalist approach, seeking to position Russia as a strong maritime nation with a permanent global presence. This theme is clearly reflected in the first strategic goal, which is "to develop the Russian Federation as a great maritime power and strengthen its position among the world's leading maritime powers". The 2022 doctrine is the third in a series since the first doctrine was published in 2001. Once the patterns are discerned, the 2022 doctrine, like the earlier versions, appears ambitious. It tends toward global confrontation with the West, prioritizes security concerns in defining national objectives, and reorients Russia's foreign policy toward the Global South following its invasion of Ukraine. The Kremlin intends to strengthen its naval combat capabilities worldwide and announced greater readiness to employ military means to further its interests in international waters, including its intention to increase its naval presence on the high seas. In order to do so, the new doctrine calls for a complete restructuring of the shipbuilding industry while enhancing the quality of its technological and production capabilities, both in the military and civilian domains. In the strategic objectives chapter, Russia asserts that it is a "great maritime power" and has interests in all seas and oceans.

Another important change is in the classification of all maritime domains in the world according to how vital they are to Russia's interests and Russia's willingness to use armed force in them. The three categories are:

1. "**Areas of existential importance**", where Russia can use all components in the defense of its interests, including armed force. Under this category are the territorial waters and Exclusive Economic Zone (EEZ) of Russia, the Russian part of the Caspian Sea, the Sea of Okhotsk (near Japan), and large parts of the Arctic Ocean.
2. "**Important areas**", where the use of force will be available as a last resort after the other options have been exhausted. These areas include the eastern Mediterranean basin, the Black Sea and the Sea of Azov, the Baltic Sea, the Turkish, Danish, and Kuril straits, and even international shipping routes off the coast of Asia and Africa.
3. "**The other regions**", referring to the rest of the international waters, where Russia's interests will be promoted by non-forceful methods.

Similar to the 2015 text, the new doctrine divides the world into six geographical "directions;" however their order of importance has now changed. The Arctic and the Pacific directions, previously mentioned in the second and third places, have been upgraded to the first two spots, at the expense of the Atlantic direction, now numbered third. One of Russia's main goals in each of these three directions is to "ensure strategic stability" (a euphemism for mutual nuclear deterrence), stated in more assertive and

urgent language compared to 2015. This might be linked to President Putin's use of "nuclear signals" toward the West when he deployed strategic submarines during one of the stages of the conflict with Ukraine.

The doctrine declares that the Arctic has turned into a region of global military and economic competition and emphasizes the need to sustain Russia's leading position in this region and "wide exploitation" of its mineral reserves. Russia intends to utilize the Northern Sea Route (NSR) as its internal waters. Thus, the resource-intensive NSR, initially promoted by the Russians as an alternative to the Suez Canal, has been redirected eastward since the war began to expedite the export of Russian commodities to Asia.

With respect to maritime law, the new doctrine establishes the supremacy of Russian law over international law. It gives a stronger emphasis than in the past to the production and export of energy resources from offshore reservoirs and the protection of underwater gas pipelines; strengthens the ability to mobilize all maritime capabilities, including civilian ones, in emergencies; calls for strengthening the Russian military and commercial fleet and developing the necessary technological and industrial capacity, including in the field of aircraft carrier construction; and calls for the acceleration of Russian diplomatic activity in the maritime context in international organizations dealing with maritime issues, as well as the presence of Russian battleships and research ships in the global maritime domain.

Maritime analysts note that Russia seems to be seeking to avoid an image of being increasingly dependent on China following the disastrous Russian invasion of Ukraine. Whereas the 2015 doctrine stated that the "development of friendly ties with China is a key component of national maritime policy in the Pacific direction", China is completely absent from the current document. Instead, there are new "key components", which include lowering the threats to Russia's national security, assuring strategic stability in the region, and developing friendly relations with the countries in Asia-Pacific countries. It is clear from the document that both the Arctic and the Pacific are perceived as areas of strategic confrontation between Russia and the United States and its allies.¹²⁰

The new document's reference to the Mediterranean basin (which Russia considers a sub-region of the Atlantic region) has been updated and is more detailed than that in the 2015 doctrine. It states, among other things, that Russia seeks to strengthen its partnership with Syria; will ensure its military presence in the Mediterranean on the basis of the Russian military outpost in Tartus, Syria; will seek to establish additional techno-

¹²⁰ Daniel Rakov, [Russia's New Naval Doctrine: A 'Pivot to Asia'? Russia's New Maritime Doctrine Gives Increasing Importance to the Pacific and the Arctic](#), *The Diplomat*, August 19, 2022.

logistical outposts in the region; will work vigorously to ensure military-political stability in the Middle East; and will seek to deepen its cooperation with Middle Eastern countries.

With regard to the Indian Ocean and the Persian Gulf, the doctrine notes Russia's desire to expand its cooperation with Iran, Saudi Arabia, and Iraq, including developing relationships that involve security and maritime cooperation with all the countries of the Indian Ocean region. In this context, it should be noted that the facts on the ground indicate Russia's lack of success in operating the Russian fleet in the Red Sea and the Persian Gulf. In addition, its attempts over the past three years to persuade the Sudanese government to implement the long-term lease agreement for part of Port Sudan that was signed with former dictator Omar al-Bashir, have proven unsuccessful.

In conclusion, the glaring discrepancy between the goals set by the 2022 doctrine and the reality in the maritime arena as it unfolded (and is still unfolding) in the conflict between Russia and Ukraine is all too evident. The Black Sea Fleet's performance does not match the naval doctrine document, which is essentially part of Russia's national security approach. The naval doctrine document focuses on the conflict between Russia and the United States and NATO and emphasizes the central place for the use of force in defending Russia's global interests. It also highlights Russia's inclination to turn international waters into an arena for strategic competition and confrontation between the major powers. The document's approval by President Putin and publication on Russian Navy Day may indicate how detached President Putin and his senior admirals are regarding the low performance level demonstrated by the Black Sea Fleet in the conflict between Russia and Ukraine in the Black Sea. The Russian fleet's force buildup plan also reflects gaps in technology and in the capacity of Russian shipyards to meet the targets for building the Russian fleet as a "blue water navy" capable of operating effectively across the seven seas.

Conclusion and Implications for Israel and Its Strategic Partners

The 2022 naval doctrine is the first national security document that Russia has published since the beginning of the war in Ukraine, and reflects the Kremlin's strategic thinking at the present time. The document focuses on Russia's overall confrontation with the United States and NATO and emphasizes a more central place for the use of force in defending Russian global interests and seeking economic and strategic alternatives to the West in the developing world.

The doctrine's approach to the Middle East is revolutionary compared to previous Russian strategic documents, and bridges the gap that has emerged over the past decade between the actual importance of the region for Moscow and how the issue is referred to in the new naval document. Russia considers the Eastern Mediterranean, and therefore

the Middle East, as an "important area" and is willing to use force to defend its assets in a confrontation with the West.

In planning Israel's long-term policy, it is imperative to take into account Russia's aspirations to deepen its military grip and political activity in both the Mediterranean and the Red Sea. While Russia understands that Europe is expected to wean itself off Russian gas, it is in no hurry to relinquish its energy monopoly over the continent. Therefore, during this tense period, unlike in the past, promoting gas exports from the Eastern Mediterranean to Europe as an alternative to Russian gas may provoke Russia and even lead to efforts to hinder the progress of such projects.

In light of Iran's growing importance to Russia, as reflected in the doctrine, the question arises as to whether Russia will continue to separate its relations with Israel from its ties with Iran. Iran is relevant to Russia not only in the Indian Ocean region, where it is mentioned by name, but is also critical in the Caspian Sea and in relation to the Russian presence in Syria. Iran is defined as a "partner" as opposed to a "strategic partner" – a term Russia uses in regard to India only. Saudi Arabia is mentioned as a counterweight to Iran, and is vital to Russia for pushing oil prices higher.

The bleakness in which the maritime doctrine is written leads many researchers to tend to focus on how detached Putin and his admirals are from the reality of the Russian Navy's grim state of affairs. Indeed, it is very likely that Russia will find it difficult to meet its full ambitions, especially in regard to building a "blue waters navy". The Russian navy falls short of the U.S. Navy in all categories, and were it not for its nuclear weapons, it would not be perceived as a serious threat. Even if Russia greatly increases its investment in building its navy, it is unlikely to match the capabilities of the United States or of China, the latter rapidly introducing advanced military vessels at a rate unparalleled by any other country in the world.

Nevertheless, in our region, the gap between Russian aspirations and achievements may prove to be narrower due to Russia's bases in Syria, the geographic proximity, and the fact that the Russian navy is considered "green water navy" that is capable of operating in its nation's littoral zones. Israel's maritime activity, which is more closely coordinated with the United States than it has been in the past, will need to take into account operational constraints (preventing conflict) and Russia's advanced intelligence capabilities, which are likely to have an impact on Israel's freedom of operation, especially in the Eastern Mediterranean Sea. These challenges may intensify if Russian-Iranian relations grow stronger, and as a result, Russia may intentionally work to restrict Israel's range of actions, including in the context of the "Campaign between the Wars" taking place in Syria.¹²¹

¹²¹ Ibid.

The Russian Navy's Force Buildup

Since coming to power, Putin has invested significant resources in restoring Russia's military potential, which was severely damaged following the collapse of the Soviet Union. As part of this effort, he has focused on rebuilding the Russian Navy. At the same time, Russian commercial companies have expanded their activities in the field of offshore drilling, laying underwater gas pipelines, and developing the Arctic region.

Despite ambitious national plans and considerable financial investment, many problems remain that limit Russia's development as a naval power, and some have even become more acute. Both the military and civilian industries in Russia suffer from a lack of technological expertise, production infrastructure, and advanced human resources in many areas. For example, since the collapse of the Soviet Union, Russia has struggled to maintain its only aircraft carrier, which is obviously outdated. After the sinking of the *Moskva* cruiser in the war in Ukraine, Russia has only four ships that can be classified as cruisers/combat cruisers and about ten destroyers. All of these ships were either launched or under construction during the Soviet era, and Russia lacks the ability to build new large ships.

There is speculation that the Russian Navy's force buildup plan will be modified after President Putin approves the Navy Doctrine and Russian Navy Regulations on Navy Day, on July 31, 2022.¹²² Due to the cooling of relations between Russia and the West, several European commercial companies have refused to supply diesel engines and shipborne equipment promised in contracts that were signed prior to the conflict between Russia and Ukraine.

Russian Navy Commander Nikolay Yevmenov announced in early June 2022 that during 2022, the Russian Navy would receive 46 new warships and auxiliary vessels. Yevmenov noted at the keel-laying ceremony for two diesel-electric submarines held in St. Petersburg that the global military-political situation requires Russia to maintain a strong and balanced fleet. Yevmenov reiterated President Putin's desire for the Russian Navy to maintain a ratio of at least 70% modern ships in its order of battle.¹²³ In the same month, keel-laying were held for six new vessels for the Russian Navy, including two Lada-class conventionally-powered submarines being built at the Admiralty Shipyards, two research vessels at the Zelenodolsk Shipyard, one Alexandrit-class minesweeper at the St. Petersburg shipyard, and a Razumny-class corvette at the Amur Shipyard. Given the

¹²² Naval News Staff, [Russian Shipbuilding Program to Be Modified Under New Naval Doctrine](#), TASS News Agency, August 9, 2022.

¹²³ [Russian Navy to Receive 46 Ships in 2022](#), *China Daily*, June 13, 2022.

significant numerical superiority of NATO's naval forces, it appears highly logical for the Baltic Fleet to equip itself with advanced missile-carrying submarines whose survivability has been proven in the conflict in the Black Sea.

In the civilian sector, Russia lacks the capability to lay underwater gas pipelines, perform deep-water drilling, or liquefy gas, and has relied on Western companies that have either stopped or are stopping their work in Russia due to the sanctions imposed on it following the outbreak of the war with Ukraine.

Nuclear-armed submarines are the mainstay of the Russian Navy's power and allow Russia to pose a significant threat to other major powers. Russia has been successful in building new submarines of this type and advancing modernization projects for them. In the coming years, it will showcase a unique array of ultra-quiet torpedo-armed submarines equipped with powerful nuclear warheads (Poseidon). In the conventional domain, the Russians have managed to produce corvettes, frigates, and diesel submarines, arming them with advanced and accurate cruise missiles: the Kalibr, which has a range of up to 2,500 km and was used extensively against Ukraine and in Syria, and soon the Zircon, a hypersonic missile with an estimated range of 1,000–1,500 km. Russia is also the global leader in the field of nuclear-powered icebreakers, which are essential for the development of the Arctic region.

However, all the Russian naval projects suffer from: a proliferation of models, which complicates maintenance; substandard quality and negligence, frequently leading to catastrophic accidents; delays in the development and production schedule; a shortage of technological personnel; and a heavy reliance on foreign components. The regime of Western sanctions imposed on Russian industries even before the current war in Ukraine is expected to present significant challenges for the development of Russia's naval power, which is the crux of its new naval doctrine.

As the Russian Navy is primarily composed of smaller ships and is a "green-water navy" rather than a "blue-water navy" designed for the open ocean, most of its activity is focused in the water basins near Russia's borders (primarily the North Sea, the Black Sea, the Baltic Sea, the Caspian Sea, the Sea of Okhotsk, and the Sea of Japan). The eastern part of the Mediterranean Sea is a unique and exceptional area in which the Russian Navy has managed to establish a permanent presence in the post-Soviet era. The naval base in Syria, at the port of Tartus, has been leased to Moscow for decades, as has the air force base in Khmeimim, which provides it protection. The military importance of the eastern Mediterranean has become more evident in recent days: Russia has concentrated the lion's share of its warships there and in the Black Sea with the aim of deterring NATO from deepening its involvement in the war in Ukraine.

The Russian Navy's Activity in the Eastern Mediterranean and the Black Seas and Its Operational Doctrine

International relations researcher Basil Germond notes that "whereas President Putin's final objectives remain unclear, control of the Northern coast of the Black Sea from the official border of the Russian Federation to the Russian-backed secessionist Republic of Transnistria is likely one of his geopolitical objectives". He adds that "Russia's interest in dominating the Black Sea has been a recurring feature of its foreign policy since Peter the Great. Tsarist Russia, and then the Soviet Union, have repeatedly sought to control the Black Sea and, beyond the Turkish Straits, in a bid to gain perennial access to "warm waters".¹²⁴ In this context, it is worthwhile to examine the naval campaign that took place in this region when Russia invaded Ukraine in February 2022.

Following the signing of the second Minsk Agreement between Russia and Ukraine in 2015, the Kremlin released a document on its maritime strategy. The Russian government stated that it views the maritime domain of paramount importance, as it enables the import and export of trade. Russian President Vladimir Putin stated that Russia places central importance on two maritime zones, the first, the Baltic Sea and the Black Sea, and second, the Mediterranean Sea to its south. The Mediterranean Sea, which is accessed via the Black Sea, is essentially Russia's gateway to trade routes to and from Asia, the Middle East, and Africa, through which Russia is able to export wheat and gas. The Black Sea Fleet is also responsible for operations in Syria, supplying soldiers, transferring weapons, and establishing Russian naval control in the Mediterranean arena. Since 2015, Russia has built up its Baltic and Black Sea fleets in both quality and quantity. Warships, submarines, missiles, aircraft, and other weapons in these areas have been upgraded and their numbers increased. About two weeks before the Ukraine invasion began, Russian warships were deployed in the Mediterranean and Aegean Seas, creating a naval blockade isolating the Black Sea from the U.S. Sixth Fleet ships and other NATO vessels. This move was effective and prevented the entry of NATO ships into the Black Sea through the Bosphorus, despite Turkey's announcement a week after the start of the war that it would deny access to the Black Sea for any military vessels.

Preventing access (Anti-access –A2/AD) is a classic strategy for the Russian Navy, the goal being to limit the maneuverability and effectivity of NATO's military actions at sea and in the air, using long-range air defense systems and anti-ship missiles. Russian naval vessels effectively control the sea and airspace at distances of hundreds of kilometers.

¹²⁴ Basil Germond, [Ukraine War: The Limits of Traditional Naval Power and the Rise of Collective and Civilian Seapower](#), *E-International Relations*, May 10, 2022.

The second layer of the A2/AD strategy was executed by deploying three battalions of Yakont anti-ship missiles with a range of almost 400 miles.

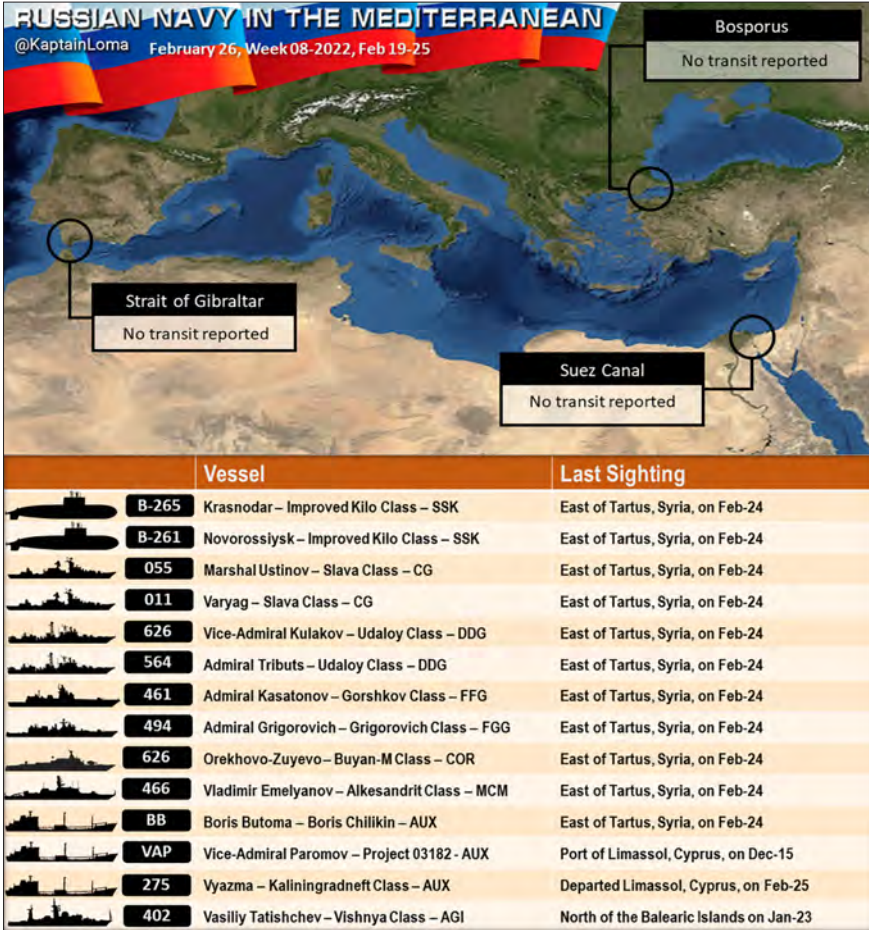


Figure 20: Deployment of the Russian Navy in the Eastern Mediterranean on the eve of the conflict between Russia and Ukraine¹²⁵

On February 24, 2022, President Putin launched a "special military operation" against Ukraine, during which airports and military headquarters were attacked. Tanks and forces rolled in from Russia, Crimea, and Russian-controlled Belarus. The Russian army had three main axes of operation on land: one into the north of Ukraine (from Russia/Belarus) toward Kyiv, one into the northeast of Ukraine (from Russia) toward Kharkiv/Donbass,

¹²⁵ Van Lokeren, [Russian forces in the Mediterranean – Wk08/2022](#), *Russian Navy – News and Analysis*, February 20, 2022.

and one toward the southern coast of Ukraine from Crimean. The direction of the attack from the south (Crimea) led westward toward the port of Odesa and eastward toward the port of Mariupol. The military operation launched from the south, from Crimea, also involved naval aspects. The naval operation and activity in the Black Sea may not seem significant compared to the military operation on land, but there are important connections between the two events. The events in the Black Sea appeared to be less tense compared to the military operation on land and in the air because Ukraine lost most of its navy during Russia's invasion of Crimea in 2014.

In the conflict that erupted in February 2022 against Ukraine, Russia's initial strategy in the Black Sea was intended to block Ukraine's shipping routes. Had this move been successful, it would have given Russia an economic advantage and begun turning the Black Sea into what could be considered a Russian sea. However, Ukrainian forces fended off the Russian forces, and apart from one early amphibious attack, the Russians did not use their ships to try to land forces near the coastal cities.

In the early days of the Russian invasion of Ukraine, the Russian Navy controlled the northern part of the Black Sea, between Crimea and Ukraine. It quickly occupied the Ukrainian base on Snake Island, near the Romanian border in the southwestern corner of the region, and imposed a sea blockade on merchant traffic, some of which was attacked by Russian Navy ships, thereby sending a clear message. The Russian Navy subsequently attacked Ukrainian Navy ships, as seen in the destruction of the *Sloviansk* ship, and managed to seize ten more Ukrainian warships. In late February, the Ukrainian Navy sank its own flagship, the frigate *Hetman Sahaidachny*, in the port of Mykolaiv to prevent it from falling into the hands of the Russian Navy.

Another of the Russian Navy's missions was to carry out precise bombing of quality military and civilian targets deep inside Ukraine. The attacks were carried out using long-range high-precision Kalibr missiles (SS-N-30), which have a range of 1,500 miles and a warhead with the power of half a ton. It is estimated that in the early days of the war, Russian submarines and surface ships fired more than 30 Kalibr missiles at targets within Ukraine's territory.

The Russians created the anticipation that they were about to conduct a planned amphibious landing near Odesa to create a land bridge to the Russian-breakaway state of Transnistria in Moldova. Although the landing did not ultimately occur, Russian Polnocny-class landing ships sailed back and forth, creating a palpable sense of threat. Russian warships, including two Admiral Grigorovich-class frigates, patrolled near Odesa, conducting occasional bombing missions and collecting essential intelligence. Russian warships, even those with limited defenses, could operate uninterrupted within range

of the city's coastline. According to various assessments, the Ukrainians laid sea mines to prevent invasion along parts of its coast, which may have prevented Russia's access to certain areas. Russia responded by deploying minesweepers in front of its landing ships and continued to operate freely.

The situation changed dramatically less than two months after the start of the war, when on April 13, two Ukrainian Neptune missiles (based on the Russian Kh-35) hit Russia's Black Sea Fleet's flagship, the RTS *Moskva*, causing it to sink on April 14, 2022.

The impact of the sinking of the *Moskva* was greater than the loss of a single ship and severely damaged the Russian fleet's image of being invincible. Until the *Moskva* was hit, the Black Sea Fleet had operated with almost no disruption and a sense of complete maritime control, despite its warships seeming to have suffered some minor damage. Since the *Moskva's* sinking, the Russian fleet has primarily hidden behind Crimea, which has affected Russia's ability to control the Black Sea.

Beginning in May 2022 there were increasing reports that Denmark would supply anti-ship Harpoon missiles to Ukraine. In fact, on June 17, the Russian tugboat *Vasily Bekh*, which was on its way to re-supply Russian-occupied Snake Island, was hit by two Harpoon missiles despite having a Tor system on board capable of destroying incoming missiles. The ship sank as a result.



Figure 21: The Russian Navy's losses in the conflict between February 24 and May 3, 2022¹²⁶

126 [Russian Navy's 5 Significant Losses in The Ukraine War So Far](#), *Naval News*, May 4, 2022.

On June 20, Harpoon missiles were used once again to neutralize a Russian-controlled gas platform in the Black Sea. Such platforms were used to track Ukrainian vessels, and, thus, in a dramatic turn of events, Russia abandoned Snake Island at the end of June. This was a victory for the Ukrainian artillery systems used to bombard the exposed island, as well as for the Harpoon missile system, which made the Russian's supply mission so dangerous.

Another distinct role of the Black Sea Fleet is to ensure freedom of navigation for Russian merchant ships carrying wheat, gas, and other goods, which provide "oxygen" for the Russian economy during the war. It should be noted that several times during the war, Russian merchant ships were detected sailing without an Automatic Identification System (AIS), allowing them to sail relatively covertly to avoid being targeted by NATO forces. In this context, the Russian fleet discovered and later removed floating sea mines that were thrown into the sea by the Ukrainians.

On Russian Navy Day, held at the end of July 2022, the Ukrainians attacked the Black Sea Fleet command in Sevastopol, Crimea, with drones, and repeated such an attack in August 2022, indicating Russia's Black Sea Fleet commanders' inability to adapt to the new situation and adjust their operational approach accordingly.¹²⁷

As of the writing of this report (December 2022), the Russian Navy is sailing much less and its patrol areas tend to be far from the Ukrainian coast. Amphibious ships are increasingly being kept in port and offensive operations are limited to launching cruise missiles in proximity to their home port entrances.

Russian submarines are part of the launch system for cruise missiles fired against ground targets in Ukraine; their ability to launch cruise missiles while submerged allows them to come closer to Ukraine's shores. However, reports published by British intelligence in mid-September 2022 suggest that Russia has moved its Kilo-class submarines from the naval base in Sevastopol, Crimea to the Krasnodar region in Russia, fearing that they would be targeted by long-range Ukrainian fire.¹²⁸ Even the new Admiral Grigorovich-class frigates are operating beyond the range of the Harpoon missiles, despite being equipped with both soft and hard defense systems against anti-surface defense missiles.

Russia suddenly began to increase the defenses of the Kerch Bridge connecting the Kerch Peninsula in Crimea to the Taman Peninsula in Krasnodar, at the entrance to the Sea of Azov, despite it being out of range of most Ukrainian weapons. This fact suggests an increased sense of risk among the Russian command in the area. The Black Sea Fleet's

¹²⁷ Christopher Miller and Paul Mcleary, [Ukraine has Hobbled Russia's Black Sea Fleet. Could it Turn the Tide of the War?](#) *Politico*, September 29, 2022.

¹²⁸ [Russia's Black Sea Fleet Relocating Some of its Submarines: UK](#), *Aljazeera*, September 20, 2022.

air wing, located at the Saki airbase in Crimea, was also heavily damaged in aerial attacks carried out on the night of August 9, which destroyed about half of the unit's aircraft.¹²⁹

Despite this, Russia still maintains an effective blockade. It does so with missile corvettes and patrol boats operating much further south, near the coast of Romania. However, according to a large number of maritime analysts, it appears that Russia has much less control over the northern Black Sea.¹³⁰ Since the spring of 2022, the Black Sea Fleet's problems have been increasing as a result of poor leadership, outdated equipment, and vulnerabilities that the Ukrainians have been happy to exploit. This series of failures led to the replacement of Russian Black Sea Fleet Commander Adm. Igor Osipov by Adm. Viktor Sokolov on August 17.

Russia's Attack on the Nord Stream 1 and 2 Subsea Gas Pipelines

In late September 2022, three leaks were discovered in the Nord Stream 1 and 2 subsea gas pipelines that run from Russia to Germany under the Baltic Sea. Officials identified two significant drops in pressure in the Nord Stream 2 pipeline on September 26, followed by an additional drop in pressure in the Nord Stream 1 pipeline, and determined that there were three separate leaks. Swedish seismologists stated that subsea explosions preceded the pressure drops that caused these leaks. The Danish military released images of gas bubbling up from the pipeline to the surface of the Baltic Sea in the vicinity of the Danish island of Bornholm. A single leak in a large pipeline might be a random occurrence, but simultaneous leaks in completely separate locations are unprecedented. This suspicion is compounded by the fact that these pipelines are the source of geopolitical tensions resulting from the war in Ukraine, making it highly difficult to explain this as an accident or coincidence. All of this occurred while officials were inaugurating the Baltic Pipeline, a new gas route from Norway to Poland. At present, while European and U.S. officials are calling it a deliberate act, they have not directly specified the potential suspects. Official authorities in several countries, including Germany, Sweden, and Denmark, are investigating the sources of the leaks. However, many in Europe unofficially blame Russia for the sabotage, and the European Union maintains that the Kremlin has a track record of using energy as a weapon. Moscow probably has the ability and equipment to carry out such an operation as well as the incentive to continue to apply pressure on Europe while President Putin increases his military efforts.

¹²⁹ Dan Sabbagh and Samantha Lock, [Russian Warplanes Destroyed in Crimea Airbase Attack, Satellite Images Show](#), *The Guardian*, August 11, 2022.

¹³⁰ H. I. Sutton, [Ukraine Is Turning the Tide Against Russian Navy in Black Sea](#), *Naval News*, July 5, 2022.

The North Atlantic Treaty Organizations' (NATO's) Naval Forces

Changes in government in the United States have led to a strengthening of its commitment toward NATO, of which the United States was a founding member, a sentiment that was also reflected in the first meeting between U.S. Secretary of Defense General Lloyd Austin and NATO's Secretary General. Austin emphasized the United States' view of NATO as the essential forum at the core of transatlantic security, and reaffirmed its strong support for NATO Secretary General Jens Stoltenberg's 2030 initiative, which aims to keep the alliance strong militarily, strengthen it politically, and give it a more global standing. The alliance consists of 30 countries.

In the wake of the Russian invasion of Ukraine, two additional countries, Sweden and Finland, requested to be accepted into NATO. Both simultaneously sent their official letters of request to join NATO to Secretary General Jens Stoltenberg on May 18, 2022. NATO heads of state and government invited Finland and Sweden to join the alliance at the Madrid Summit on June 29. The accession protocols for both countries were signed on July 5, after the accession talks were completed. The process itself requires approval by all 30 NATO member countries. As of September 2022, 27 member countries had approved the request. The remaining two countries, Turkey and Hungary, have not yet approved the request, and it is expected that Turkey's approval will not be granted before mid-2023, mainly due to the issue being linked to support for the Kurdish PKK organization.¹³¹

Even before their final acceptance to NATO, Finland and Sweden participated in NATO's large-scale naval exercise in the Baltic Sea in mid-June 2022, despite Turkey's reservations about their membership. NATO's BALTOPS 22 exercise, which lasted for two weeks, was hosted in Sweden this year, and the Finnish Navy and air force also participated. The exercise, which was the largest in recent years, involved 45 ships and 76 aircraft from 16 countries (14 from NATO, one from Sweden and one from Finland).¹³²

Russia's invasion of Ukraine on February 24, 2022 marked the first time since the end of the Cold War that NATO was challenged by a superpower (Russia). To a large extent, NATO and the European Union responded effectively in the early months of the war. The U.S. leadership once again demonstrated its essential role in successfully mobilizing international efforts, particularly in coordinating military support for Ukraine. NATO's

¹³¹ [NATO Membership for Sweden and Finland on Track, Officials Say](#), *The Wall Street Journal*, December 8, 2022.

¹³² Philip Andrew Churm, [Finland and Sweden Prepare for Large NATO Naval Drill, Amid Turkish Concerns](#), *EuroNews*, June 4, 2022.

response to the war sought to balance stronger and increasing support for Ukraine with a reluctance to engage in a broad military confrontation with Russia, and has so far has proven justified. Most European countries turned to NATO's tried and tested security umbrella, which is backed by U.S. military capabilities, while the G7 and the European Union proved to be swift in tightening sanctions.

However, as the aggression continues, with Russia focusing its efforts on gaining control of eastern and southern Ukraine through attrition warfare, the Western alliance is being put to the test. Different interpretations of sanction demands affecting the transportation of banned goods to Kaliningrad illustrate this problem. The UN and the Organization for Security and Cooperation in Europe (OSCE) have not been able to offer meaningful responses, mainly due to the paralyzing effect of Russia's veto power. Furthermore, solidarity with Ukraine is still not universal among all UN member states, especially from one of the rising powers – China.

The war between Russia and Ukraine has not yet tested the reliability of NATO's collective defense guarantees as stipulated in Article 5 of the treaty. So far, the mere existence of Article 5, along with NATO's increased forward presence (now comprising more than 40,000 soldiers under direct NATO operational command), has provided sufficient deterrence. However, President Putin's unpredictable behavior, coupled with his declaration to consider using missiles and the most destructive weapons systems against targets in foreign territories (which had become common at the time in Syria), have created a new reality in the vicinity of NATO member states' territories. Moscow has shown its willingness to use indiscriminate force without legitimate military reasons and to commit war crimes, with using the justification of the restoration of lands once held by Tsarist Russia. Unsurprisingly, NATO member states bordering Russia are concerned about a potential – even if temporary – loss of parts of their territory, and after witnessing the erasure of Mariupol and Kharkiv, are alarmed by the threat of direct missile attacks on their cities and critical infrastructure.

NATO found itself in the heart of the conflict between Russia and Ukraine in the Black Sea without a clear strategy for this maritime area, despite several researchers warning about the problem as early as the summer of 2021.¹³³ The lack of a strategy for the Black Sea region and NATO's failure to perceive itself as an integral part of it are problematic. NATO has limited itself to narrow thinking regarding Article 5 commitments in the Black Sea region, which is bordered by the waters of Romania, Bulgaria, and the Turkish coast. This had already been demonstrated by NATO's lack of response to the Russian-

¹³³ Hana Shelest, [The Maritime Dimension of the Russian-Ukrainian War](#), *Defence and Security Foresight Group*, July 2021.

initiated incident on November 25, 2018 in the Kerch Strait, during which the Russian Federal Security Service's coastal guard fired upon and seized three Ukrainian vessels in international waters off the coast of the Crimean Peninsula.

Against the backdrop of the Russian invasion of Ukraine, a NATO summit was held in Madrid in late June 2022, at which NATO heads of state and government approved its 2022 Strategic Concept.¹³⁴ It should be noted that there was an early understanding among NATO members that the previous document needed updating. The new concept document presents its purpose and principles:

1. NATO is determined to preserve the freedom and security of its member states. Its central goal and greatest responsibility are to ensure our collective defense against all threats, from all directions. We are a defensive alliance.
2. The transatlantic link between our nations is vital to our security. We are bound together by shared values: individual liberty, human rights, democracy, and the rule of law. We remain firmly committed to the purpose and principles of the United Nations Charter and the North Atlantic Treaty.
3. NATO is the unique transatlantic forum for consultation, coordination, and action on all matters related to our individual and collective security. We will strengthen our alliance based on indivisible security and our strong solidarity, and we are committed to defend one another, as anchored in Article 5. Our ability to deter and defend is the backbone of this commitment.
4. NATO will continue to fulfill three core missions: deterrence and defense; crisis prevention and management; and cooperative security. These are complementary in ensuring the collective defense and security of all member states.
5. We will improve our individual and collective resilience and our technological edge. These efforts are critical to fulfilling NATO's core missions. We will promote good governance and integrate climate change, human and gender security, peace, and security in all our tasks. We will continue to promote gender equality, as reflected in our values".¹³⁵

It is especially worth noting NATO's strategy regarding China, which is worded in the new document in a particularly blunt and sharp manner, likely influenced by the United States:

The stated ambitions and coercive policies of the People's Republic of China (PRC) are aimed at challenging our interests, security, and values. China is using a wide range of

¹³⁴ [NATO 2022 Strategic Concept, Adopted by Heads of State and Government at the NATO Summit in Madrid](#), June 29, 2022.

¹³⁵ *Ibid.* p. 3.

political, economic, and military tools to expand its global influence. China's actions in the field of hybrid and cyber warfare, accompanied by manipulative rhetoric and disinformation, are directed against the United States' allies with the intention of undermining NATO's existence. China seeks to dominate a number of technological and industrial sectors, critical infrastructure, strategic materials, and supply chains. It uses its economic leverage to create strategic dependencies and increase its influence. It seeks to undermine the rules-based international order, including in the space, cyber, and maritime domains. The tightening strategic alliance between the People's Republic of China and the Russian Federation and their coordinated efforts to undermine the international rules-based order, are contrary to our values and interests.¹³⁶



Figure 22: NATO forces' deployment following Russia's invasion of Ukraine¹³⁷

NATO's nuclear weapons arsenal relies on the strategic nuclear capabilities of the alliance, especially those of the United States, and the document emphasizes the supreme assurance this weapon provides to the security of the alliance. The document also emphasizes that the independent nuclear strategies of the United Kingdom and France have their own deterrent role and greatly contribute to the alliance's overall security.¹³⁸

The document emphasizes the strategic importance of the Western Balkans and the Black Sea regions for NATO's maritime domain.¹³⁹ It should be noted that the document

¹³⁶ NATO 2022 Strategic Concept, p. 5.

¹³⁷ [Deterrence and Defence](#). NATO, Last updated September 12, 2022

¹³⁸ NATO 2022 Strategic Concept, p. 8.

¹³⁹ *Ibid.* p. 11.

is general in nature and addresses each of the challenges at the thematic level rather than the geographic level, and therefore no emphasis is made in regard to the maritime domain in which NATO operates.

In the context of any NATO naval contribution to the conflict between Russia and Ukraine, NATO was not in a position to activate its naval power in any significant way. NATO officials justify this based on the specific geopolitics of the Black Sea, as well as the necessity to avoid escalation with a nuclear-armed state. While the United States deployed a combat group led by an aircraft carrier in the Aegean Sea, with F-18 aircraft covering part of the combat zones in southern Ukraine, these were not activated at any stage of the conflict. The U.S. Navy, along with the rest of NATO's fleets operating outside the Black Sea, including those of the United Kingdom and France, decided not to respond for fear of escalating the conflict. The situation was further complicated by Turkey's decision to close the Black Sea to all warships, not just those covered by the Montreux Convention. It should be noted that the Turkish Straits regime (Bosporus and Dardanelles), established by the Montreux Convention in 1936, gives Turkey the authority to close the straits to warships involved in combat (based on its assessment of the situation), which it did less than a week after the start of the war.¹⁴⁰ As the war continues, it seems that Turkey's actions are hurting Russia more, as they prevent it from reinforcing its naval forces in the Black Sea with naval forces from other arenas, especially in light of the losses the Russian Navy has suffered in the conflict so far (see the review of the Russian Navy).

There are those who criticize the lack of direct involvement by NATO naval forces in the crisis. The last warship from NATO fleets that patrolled the Black Sea was a French destroyer, which completed its mission in mid-January 2022, and since then, no NATO military vessels have entered the Black Sea. In contrast, 16 vessels from the Russian navy, including missile ships and vessels capable of landing tanks, have sailed to the Black Sea. The main reason for NATO's inaction in this realm is disagreements among NATO members on whether the Russian Navy should be challenged in the area, when there is no coherent and significant NATO strategy for the Black Sea. This also includes the reluctance of some NATO members, primarily Turkey, to agree to naval patrols so as not to provoke Russia. Other factors are budget constraints and the existence of other priorities among some leading NATO countries.¹⁴¹

¹⁴⁰ For an extensive discussion on this topic, see Glen Segell, "The Regime of the Straits (Montreux Convention 1936) and the Russia and Ukraine War," in this volume.

¹⁴¹ John Irish, Robin Emmott and Jonathan Saul, [U.S. Navy Left the Black Sea Unprotected Allowing Russia to Invade Ukraine](#), *Reuters*, February 24, 2022.

To compensate for NATO's lack of involvement in the war against Russia and to avoid direct military conflict between NATO countries and Russia, the organization has relied on the private maritime sector, which is undoubtedly a component of contemporary sea power, in order to harm Russia while avoiding military escalation. As a result, almost all the major shipping companies, including MSC, Maersk, and ONE, have suspended their activities to Russian ports, which has affected the Russian economy. This demonstrates the holistic nature of sea power, which is wider than that exercised by state actors through military force, and includes the corporate sector, whose interests and concerns in this case drive it to act against Russia with other tools. In addition, the United States, United Kingdom, and other European countries have banned Russian-flagged or Russian-owned ships or the operation of Russian companies from entering their ports. All of these steps are part of a comprehensive global diplomatic effort led by public and private stakeholders to put pressure on President Putin's regime. This maritime element is not negligible, and its impact on the Russian economy is already being felt by Russian maritime stakeholders.

The maritime dimension of the conflict is likely to be linked to the fate of Odesa. If the port city falls and Russia manages to control the entire Ukrainian coastline (which at the time of writing this report seems relatively unlikely), Ukraine's ability to resist will be harmed and additional pressure will be placed on global food security by prolonging Ukraine's inability to freely access global maritime shipping routes. In practice, Russia is prioritizing ground operations and avoiding the use of naval forces to achieve this goal. In the longer term, the effects of the civilian components of sea power could ultimately contribute to Russia's failure even without the use of naval force. These effects are already being felt and will only increase over time, as maritime countries and stakeholders continue to leverage their sea power to exert as much pressure as possible on Russia.

Naval forces from 11 NATO member states participated in the annual Sea Breeze 2022 military exercises in the Black Sea, which began in July 2022. These were the first major exercises in the Black Sea since Russia's full-scale invasion of Ukraine in February 2022. All necessary precautions were taken in the exercise areas to ensure the safety of the participants due to the risk of free-floating mines in this area. The U.S. Navy decided not to send warships to the 2022 exercise, but its crews participated in the command-and-control work that accompanied the exercise. The U.S. Navy's Task Force 68 participated in several activities, including anti-mining warfare, remotely operated vessel searching techniques, and underwater ordnance reconnaissance. Task Force 67 participated in the exercise using P-8A-class Poseidon maritime patrol aircraft.

In 2022, NATO continued its Operation Sea Guardian throughout the Mediterranean Sea. This flexible operation, which NATO began in 2016, is controlled by NATO's Allied Maritime Command – MARCOM, in Northwood, United Kingdom, and is designed to cover

all of NATO's maritime security operation (MSO) missions. The operations themselves take place only in the Mediterranean Sea and include three maritime security missions: maritime security capacity building, maritime situational awareness, and counter-terrorism at sea. This operation remains one of the most important tools for projecting NATO's stability throughout the Mediterranean and provides an opportunity to increase cooperation and mutual capabilities with additional non-NATO countries located along the shores of the Mediterranean Sea. It should be noted that France withdrew from these operations in July 2020 following an incident in the eastern Mediterranean Sea, in which a Turkish frigate demonstrated aggression toward a French destroyer, which had stopped a Turkish merchant ship suspected of violating the UN embargo on Libya.¹⁴²

In January 2022, the first operation of the year was held in the eastern Mediterranean Sea, in which maritime patrol aircraft from Greece, Poland, and Turkey, as well as submarines from Greece and Turkey participated. The flagship of the operation was the Turkish frigate TCG *Barbaros*. At the time, NATO's Standing Maritime Group 2, which included the flagship vessels ITS *Margottini*, ESPS *Blas de Lezo*, and TCG *Goksu*, was deployed in the eastern Mediterranean Sea and was expected to contribute to NATO's efforts to improve awareness of its maritime status in the region. In late June 2022, a two-week operation was concluded in the western Mediterranean Sea under the command of the Spanish frigate ESPS *Reina Sofia*, which was joined by a submarine from Italy and maritime patrol aircraft and early warning aircraft from Canada, Portugal, and Spain. During the two weeks, the force conducted focused security patrols at sea to deter and detect possible illegal maritime activities.¹⁴³

The addition of Sweden and Finland to NATO will enhance NATO's capabilities in two critical ways. One is geostrategic: the Baltic Sea will no longer be a gray security zone, and Finland's 1,340-kilometer border with Russia will no longer be a source of concern for a land invasion that could threaten NATO from the north. The result would be a weakening of Russia's security position in the Nordic and Arctic regions. As for the maritime domain, although the Swedish Navy is the smallest of Sweden's three military arms, it is equipped with five submarines (three Gotland-class and two Södermanland-class), seven corvettes (five Visby-class and two Gävle-class), eight minesweepers (four Koster-class and four Styrös-class), 13 larger patrol ships (two Stockholm-class and 11 Tapper-class), and nine auxiliary ships. The Swedish Navy is considered an advanced one, based on its domestically-built diesel-electric submarines, which are among the most cutting-edge in

¹⁴² Eduard Sole, [The EU and the Eastern Mediterranean: How to Deal with Turkey](#), CIDOB Barcelona Center for International Affairs, May 2021.

¹⁴³ [NATO Operation Sea Guardian Security Patrols Concluded in Western Mediterranean](#), NATO, July 6, 2022.

the world as well as its possession of the first non-nuclear-powered submarine to include an air-independent propulsion system, extending its underwater endurance from a few days to weeks.

NATO's Security Budget Following Russia's Invasion of Ukraine

The Russian invasion of Ukraine has led NATO members to recognize that they need to increase their defense spending in light of what NATO Secretary General Jens Stoltenberg called "the most serious security crisis of our generation".¹⁴⁴ Despite the decision made at the 2014 Wales Summit following Russia's invasion of Crimea to increase the defense spending of all NATO members to 2% of each country's GDP by 2024, only nine out of the 30 NATO countries are expected to fulfill this commitment (see Figure 23).¹⁴⁵ According to NATO sources, since the invasion in February 2022, most member countries have committed to investing more in defense, and at a much faster pace. As we are dealing with maritime aspects – the effects of this decision on NATO's naval force buildup will be examined.

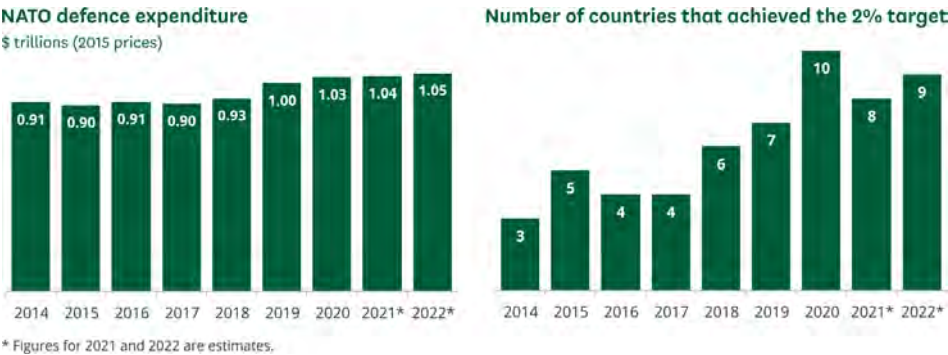


Figure 23: NATO defense expenditures in 2014–2022 and the number of countries that have met the 2% goal¹⁴⁶

Following the invasion, Germany set plans to increase defense spending to more than 2% of its GDP through a special fund of €100 billion, earmarked for the modernization of military equipment and spread over several years. Germany has not met the 2% target, and until recent events, it was not expected to manage to do so by the final deadline of

¹⁴⁴ [Doorstep statement by NATO Secretary General Jens Stoltenberg at the Start of the Extraordinary Summit of NATO Heads of State and Government](#), NATO website, March 27, 2022.

¹⁴⁵ Esme Kirk-Wade and Sanjana Balakrishnan, [Defence Spending Pledges by NATO Members Since Russia Invaded Ukraine](#), U.K. Parliament House of Commons Library, August 11, 2022.

¹⁴⁶ Ibid.

2024. Germany is currently the third-largest contributor to NATO, after the United States and the United Kingdom. If Germany does indeed spend this amount, it will surpass the United Kingdom's current defense spending in absolute terms and become NATO's second-largest security contributor.¹⁴⁷ Poland was one of the few countries already spending 2% of its GDP on defense prior to Russia's invasion of Ukraine. Shortly after the invasion, it committed to increasing its spending to 3% of its GDP by 2023, and passed legislation to ensure that this commitment would indeed be fulfilled. It is still unclear what portion of the additional budget will be allocated to maritime reinforcement, whether in vessels or combat systems.

Table 9: NATO's order of battle as of 2022

| Vessel type | Number of vessels | Comments |
|----------------------|-------------------|----------------------------------|
| Aircraft carriers | 17 | Including from the United States |
| Submarines | 144 | |
| Destroyers | 112 | |
| Frigates | 135 | |
| Corvettes | 56 | |
| Minesweepers | 153 | |
| Reconnaissance ships | 298 | |

Source: Clark, [Number of military ships in NATO in 2022, by type](#), Statista, March 2, 2022

Rivalries and Cooperation within NATO

The pact between Australia, the United Kingdom, and the United States (AUKUS) led to the cancellation of the French submarine project intended for Australia and a cooling of relations between France and the three pact partners. The French security establishment was left shocked after suddenly losing a \$66 billion deal for the French company Naval Group to build diesel-electric submarines for Australia, when the Australians decided to change course and build a new fleet of nuclear-powered submarines with the help of the United States and the United Kingdom.¹⁴⁸ The relationship between France and Turkey deteriorated, as mentioned, after the incident in 2020 in the eastern Mediterranean Sea in which a Turkish frigate acted aggressively towards a French ship that had stopped a Turkish merchant ship suspected of violating the UN embargo on Libya during the Sea Guardian operation. On July 1, 2020, France announced that it was suspending its involvement in the Operation Sea Guardian due to the tensions with Turkey. In fact, France's support for Greece was already revealed in 2020 when Greece was coping

¹⁴⁷ Ibid.

¹⁴⁸ For a discussion on this matter, see Itzhak Bilia, "Strategic Weapons Supplies in the Context of Special Relations: AUKUS as a Case Study", in this volume.

with Turkish naval operations in the eastern Mediterranean Sea, which both France and Greece viewed as highly hostile.¹⁴⁹

These events have prepared the ground for a strengthening of France's security relationship with Greece. On September 28, 2021, the Greek Ministry of Defense committed to purchasing three FDI-class (frégate de défense et d'intervention) frigates from France's Naval Group, along with a weapons system provided by the French company MBDA Missile Systems, in a deal valued at approximately \$3.5 billion. On the same day, a memorandum of understanding on strategic defense partnership was signed in Paris between French President Emmanuel Macron and Greek Prime Minister Kyriakos Mitsotakis. According to security analysts, this agreement confirms that bilateral relations are shifting towards a new balance. Greece, which has now emerged from its financial and political crisis, has become an appealing economic and diplomatic partner for France. The French investment in Greece strengthens the "Mediterranean Option" that was developed during Macron's tenure, and provides natural support for Athens, which is seeking security and looking to break free from its obsessive rivalry with Turkey, whose diplomacy is currently opening up to new opportunities. The French-Greek partnership, originally presented as a contribution to European strategic autonomy, fits in perfectly with the French presidency's plan for the European Union Council. However, the French-Greek option raises questions for NATO, as the mutual assistance clause of the agreement implicitly targets Turkey. Naturally, Turkey condemned the agreement, and certain elements within the European Union, such as Germany, also expressed skepticism regarding its stabilizing effect.¹⁵⁰

In March 2022, Greece and France signed the agreements and the Greek Navy will receive the first two ships in 2025 and 2026. To meet these goals, the French agreed to provide the Greeks with frigates from the production line originally intended for the French Navy. The frigates are intended for both surface and air missions and are equipped with modern sensors, such as the Thales Sea Fire radar. They have an innovative mast that integrates all the sensors, with a fixed coverage capability of 360 degrees. The frigates are also equipped with the Naval Group's MU90 torpedo and anti-aircraft and anti-surface missiles made by MBDA. The ships have a landing surface that allows a helicopter weighing 10 tons and an aerial drone to take off and land and will also be equipped with CANTO anti-torpedo defenses from Naval Group. The system consists of small, launchable decoys that emit

¹⁴⁹ [The French-Greek Partnership: Beyond the Eastern Mediterranean](#), *French Institute of international relations*, February 23, 2022.

¹⁵⁰ Sebastian Sprenger, [Greece Signs Pact to Buy Three Frigates from France](#), *Defense News*, September 29, 2021.

a continuous stream of signals to confuse attacking torpedoes at a long range from the ship, until they are exhausted.

Despite NATO's vital importance, there are rivalries and conflicting interests within it that are difficult to reconcile, and its true test will be if Russia attacks one of its members and triggers Article 5, which requires the entire organization to come to the aid of the attacked party.

The British Royal Navy

The Royal Navy is ranked ninth in the Global Naval Powers Ranking for 2022. As is well-known, the United Kingdom left the European Union on January 31, 2020 (Brexit), but remained a NATO member. It was among the most determined NATO countries in opposing Russia's invasion of Ukraine, providing a range of military, economic, humanitarian, and defensive assistance to Ukraine, as well as imposing additional sanctions on Russia and Belarus.

The New British Maritime Strategy

On August 15, 2022, the United Kingdom published a new maritime strategy for the next five years, focusing on improving freedom of navigation in the Indo-Pacific region, officially recognizing that environmental challenges in the maritime domain are a cause for concern and have a negative impact on maritime security in its broader sense. The new strategy redefines maritime security as the preservation of rules, regulations, and norms to enable a free, fair, and open maritime domain. With this new approach, the government rightly acknowledges "any illegal, unreported and unregulated (IUU) fishing and environmental damage to our seas as a maritime security concern".¹⁵¹ The strategy document is authored by the heads of five U.K. government ministries, including the Ministry of Defense, who note that Russia's war in Ukraine and other events are bringing the world to a state of heightened global tension. They also write that leaving the European Union has given the United Kingdom the ability to develop policies and strategies that best represent the priorities and values that are most important to the British people.

The new maritime security strategy outlines how the United Kingdom will enhance its capabilities in technology, innovation, and cyber security, officially recognize environmental damage as a concern for maritime security, address modern issues, such as illegal fishing and polluting practices, and improve the quantity and quality of available seabed mapping data to expand its knowledge and help identify emerging threats.

¹⁵¹ [New Maritime Security Strategy to Target Latest Physical and Cyber Threats](#), U.K. Government, August 15, 2022.

The strategy document sets the following goals for joint government, academia, and industry efforts:

1. Protecting the homeland (delivering the world's most effective maritime security framework for the United Kingdom's borders, ports and infrastructure).
2. Responding to threats: taking a whole system approach to bring world-leading capabilities and expertise to bear to respond to new, emerging threats.
3. Ensuring prosperity: ensuring the security of international shipping, the unimpeded transmission of goods, information and energy to support continued global development and the United Kingdom's economic prosperity.
4. Championing values: championing global maritime security underpinned by freedom of navigation and the international order.
5. Supporting a secure, resilient ocean: tackling security threats and breaches of regulations that have an impact on a clean, healthy, safe, productive and biologically-diverse maritime environment.

In March 2022, the United Kingdom published a national shipbuilding strategy, according to which the country plans to invest £4 billion (approximately \$5.3 billion) in the shipbuilding industry. This investment will also support shipyards and suppliers across the United Kingdom and create a production line of over 150 new military and civilian vessels over the next 30 years.¹⁵²

Insights into the threats perceived by the United Kingdom can be found in the remarks made by its First Sea Lord, Adm. Sir Ben Key, in July 2022, regarding the lessons learned from the conflict in Ukraine. Adm. Key said that the conflict in Ukraine had underscored both the importance of the sea and global trade on the oceans and the value of the best equipment, operated by highly-motivated, professional armed forces. However, he warned that: "Putin has, through his actions, created a new Iron Curtain from the Baltic to the Black Sea... focusing solely on the Russian bear risks missing the tiger in the room". According to Adm. Key: "The world has woken up to the risks that Russia's invasion poses, and the need for nations to meet their NATO spending targets as a matter of urgency". However, he emphasized that: "Today we see Russia as the clear and present danger, but China will pose the greater long-term challenge. Having overestimated some of Moscow's military capabilities, we can't now risk underestimating those of Beijing". Adm. Key believes that China "is potentially on the way to building the largest navy in the world, backed up by a massive coastguard and maritime militia, making the Royal Navy's allies and partners in the Indo-Pacific – including the United States, Australia, France and Japan

¹⁵² Xavier Vavasor, [U.K. Issues Refreshed National Shipbuilding Strategy](#), *Naval News*, March 10, 2022.

– crucial in ensuring the continuance of the rules based order that has promoted peace and prosperity since the end of World War II."¹⁵³ These remarks underscore the United Kingdom's commitment to its traditional ally, the United States, against the threat the latter identifies as its primary concern, despite the ongoing conflict between Russia and Ukraine and President Putin's threats against NATO countries (and particularly the United Kingdom), which include the use of nuclear weapons in extreme situations.

The Royal Navy's Size and Force Buildup Plan

As of August 2022, there were 74 vessels in active service in the Royal Navy. The number of Royal Navy warships has shrunk over the past three decades, primarily due to the end of the Cold War. According to the 2010 Strategic Defense Review, the total number of destroyers and frigates, which was 23 at the time, would continue to decrease to only 19 if the force buildup plan was not changed. As part of the increase in defense spending announced in November 2021, then-Prime Minister Boris Johnson said he wanted the United Kingdom to be "the foremost naval power in Europe".¹⁵⁴ That ambition implicitly included the intention to reverse the fleet's decline and increase it to at least 24 ships by the first half of the 2030s. These would include the new Type-26 and Type-31 frigates, and the announcement of a preliminary design, the Type-32. The Royal Navy is not the only navy facing challenges in trying to rebuild a larger number of naval vessels, provide new capabilities, and introduce new technologies while the industrial capacity to do so is diminishing. In light of this, there is a concern that before the number of vessels increases, the Royal Navy will be forced to retire aging vessels and reduce its overall fleet size.

The United Kingdom is nearing the end of an ambitious force buildup plan, the highlight of which is the operationalization of its two new aircraft carriers, the HMS *Queen Elizabeth* and HMS *Prince of Wales*. The HMS *Prince of Wales*, which was supposed to sail to the United States and participate in a joint exercise with the U.S. Navy to operate F-35B jets and unmanned systems, returned to Portsmouth in late August 2022 for repairs after suffering significant damage to its shaft and propeller. In addition to the propeller damage, superficial faults in the rudder were also found. Royal Navy sources described the malfunction as related to the coupling which joins the final two sections of the shaft. The aircraft carrier HMS *Queen Elizabeth* replaced the HMS *Prince of Wales* in the joint exercise in the United States.¹⁵⁵

¹⁵³ [First Sea Lord Outlines Lessons of war in Ukraine for U.K. and Naval Allies](#), *Royal Navy*, July 19, 2022.

¹⁵⁴ [U.K. Royal Navy Fleet Numbers: More or Less?](#) *IISS*, August 5, 2022.

¹⁵⁵ [HMS Prince of Wales Returns to Portsmouth after Suffering 'Significant' Damage to Propeller](#), *ITV News*, September 4, 2022.

British Activity in the Indo-Pacific and the Relationship with France

Almost a year after the surprise announcement of the agreement between Australia, the United Kingdom, and the United States (AUKUS) in 2021, the full diplomatic implications are still unclear. The pact facilitates cooperation on security issues in the Indo-Pacific region in particular and concerns the sharing of critical military capabilities and technologies, such as cyber, artificial intelligence, quantum technologies, and undersea areas. It reflects the increased attention the United States, the United Kingdom, and Australia are dedicating to the Indo-Pacific and their commitment to limiting China's exercise of power in this region. The pact provoked outrage in France and was a prominent source of dispute between countries that see themselves as defenders of the liberal international order. At the core of the agreement is Australia's intent to acquire nuclear-powered submarines from either the United States or the United Kingdom, abandoning its 2016 agreement to purchase diesel-powered submarines built in France, as Australia believes that the French-made submarines are no longer suitable for its purposes.

The appointment of Catherine Colonna, a professional diplomat and former French ambassador to London, as France's Foreign Minister, is a sign that after a year of mutual anger, France is ready to move forward pragmatically and start anew. After all, the Indo-Pacific remains a high priority of the French foreign policy and France needs find a way to work with AUKUS members. Thus, in May 2022, French and Australian officials committed to restoring bilateral relations, as Australia indicated it would compensate the French Naval Group for the loss of revenue from the submarine contract, and France plans to deploy an aircraft carrier to the region by 2025, which is expected to carry out operations in cooperation with the U.S. Navy.

With the easing of tensions between France, Australia, the United Kingdom, and the United States, some in the West recommend considering ways in which France could join the non-nuclear aspects of the AUKUS framework. Given France's significant presence in the Indo-Pacific region in recent years, which is more than that of any other European power, the United States could leverage both France's experience and capabilities to counter China's growing influence in the region, while exploring ways to harness the technological and economic capabilities of European and Asian countries. These sources highlight the benefits of including France in AUKUS, as it is the driving force behind the European Union's growing engagement with Asia, with the most prominent advantage being a trans-European-Pacific effort to counter China's regional influence, with implications for Americans, Europeans, and other Asian partners.¹⁵⁶

¹⁵⁶ Gesine Weber and Edgar Tam, [Moving on after AUKUS: Working with France in the Indo-Pacific, War on the Rock](#), August 8, 2022.

The United Kingdom has no aspirations to be a power on the level of the United States in the Indo-Pacific region. However, it is rapidly building on its maritime presence in Singapore and its garrison in Brunei and is expected to become a power on the level of Australia, with considerable capabilities and numerous interests in the region. For example, in May 2022, the Royal Navy ship HMS *Tamar* successfully completed its first deployment in the Indo-Pacific as part of the United Kingdom's permanent maritime presence in the region. The ship left its home port in the United Kingdom in September 2021 and is planned to operate for five years (alongside its sister ship, HMS *Spey*) with allies and partners throughout the region, including visits to countries such as Australia, Japan, Fiji, and Singapore.¹⁵⁷ Such a result is vital to the interests of the United States, and therefore it supports and encourages the United Kingdom in these efforts.

The Indian Navy

India's Position in the Crisis between Russia and NATO

Since late February 2022, when Russian forces invaded Ukraine, India has maintained a neutral position regarding the war. It abstained from UN votes condemning Russia's invasion and refused to publicly blame Russia for the crisis, despite the fact that it traditionally values sovereignty and territorial integrity. India has maintained its strong historical ties with Russia, increased its imports of Russian oil, and welcomed Foreign Minister Sergey Lavrov on a diplomatic visit in April 2022.¹⁵⁸

The Indian Fleet

India emphasizes its navy's mission of protecting its natural wealth, keeping its trade routes open for economic development, and maintaining its international status. India's coastline is 7,516.6 km long. Therefore, India needs to build and operate a large and strong navy that is always at a high level of readiness so that during a security crisis, or natural disasters, such as floods, droughts, cyclones, earthquakes, and other hazards, it can efficiently and safely fulfill its missions. India's soft power has always preceded its hard power. However, in the past decade, it has tried to strike a balance by expanding its naval power without threatening its neighbors while still defending its interests. Many factors have influenced the paradigm shift in India's maritime security strategy. These include: bordering countries with nuclear capabilities, such as China and Pakistan; the

¹⁵⁷ Press Release, [HMS Tamar Visits Darwin: Royal Navy Ships Complete First Deployment of Indo-Pacific](#), UK.GOV, June 1, 2022.

¹⁵⁸ Rajan Menon and Eugene Rumer, [Russia and India: A New Chapter](#), *The Carnegie Endowment for International Peace*, September 20, 2022.

United States, which since the 2000s has considered India to be an important power that should be engaged in its battle against China in the Indo-Pacific region; and other non-state actors, that also play a vital role. India is concerned about China, which is clearly moving towards becoming a global superpower by directing its resources towards the maritime domain in general, and which attaches special geopolitical importance to the Indian Ocean in its Belt and Road Initiative.

India's Maritime Force Buildup

The Indian Navy is one of the largest navies in the world, ranking seventh in the Global Naval Powers Ranking for 2022 while the British and French navies are ranked eighth and ninth, respectively. Its primary combat fleet includes ten destroyers, 13 frigates, 17 submarines, and one aircraft carrier. In 2022, India was expected to launch its second SSHN Arihant-class submarine into its strategic arsenal, as well as a second domestically designed and built aircraft carrier. However, in India, there can be a gap between plans and execution, and delays may occur in this project.

To cope with the imbalance opposite the Chinese Navy (which serves as a reference), the Indian Navy plans to acquire a number of new and advanced vessels, particularly submarines (both nuclear-powered and conventionally powered). Two additional Arihant-class submarines are in various stages of construction and are scheduled to join the Indian fleet by 2025. Three larger S-5-class submarines are scheduled to be built in the latter half of the decade. The Indian Navy is preparing to build six nuclear attack submarines and replace the leased SSN INS *Chakra* by 2025 with a newer Russian SSN Akula-class submarine.

By the end of the decade, the Indian Navy plans to complete the construction of seven low radar cross-section (stealth technology) Nilgiri-class frigates and four Admiral Grigorovich-class frigates, with two being built in Russian shipyards and two by India itself.

As noted in the *Maritime Strategic Evaluation for Israel, 2020/21*, the Indian Navy is building a new naval base as part of the Varsha Project (INS Varsha), which is intended to be the homeport for the navy's new fleet of nuclear submarines and ships. The base was planned to be located within a radius of about 200 km from Visakhapatnam, where the headquarters of the Indian Navy's Eastern Fleet Command is situated, at a site called Rambilli, 50 km from Visakhapatnam.

The Indian Navy's Budget

The Indian Navy's 2022–2023 defense budget reflects a 17.57% increase for research and development (R&D) compared to the 2021–2022 budget. Twenty-five percent of the R&D

budget is allocated to industry, startups, and academia, in an aim to promote innovation, development, and manufacturing in India.

India's defense budget for 2022–2023 requires thorough examination in the context of the country's changing geopolitical environment and the modernization of its armed forces. The current Indian defense budget features a renewed focus and reorientation of security policy aimed at moving away from the land-centric focus that characterized previous years. In a speech delivered by Indian Prime Minister Narendra Modi at the Swavlamban Naval Seminar held on July 25, 2022, he described India's vision for development and security, which is centered around the pursuit of AatmaNirbhar, or self-reliance, in developing military capabilities. The prime minister noted that India's defense must meet a vast array of security challenges, which are no longer limited to land, sea, and air, and argued that the armed forces must work together to strengthen the country's military capabilities. Highlighting the importance of self-reliance in the defense sector, the prime minister said dependence on imports for small requirements of the armed forces could pose serious strategic challenges. Cautioning the armed forces about new threats, Prime Minister Modi said that the contours of national security have expanded and the challenges are moving towards space, cyberspace, social space and the economic sphere.¹⁵⁹

Table 10: The Indian Armed Forces Budget for 2021–2022 compared to the 2022–2023 budget

| F i s c a l Year | Capital outlay for Indian Navy (figure in crores) | Overall capital outlay for all three services (figure in crores) | Share of IN in overall capital expenditure (in percentage) |
|---------------------|---|--|--|
| 2021–22 | 33,253.55 | 1,35,060.72 | 24.62 |
| 2022–23 | 47,590.99 | 1,52,369.61 | 31.23 |

Source: [Notes on Demands for Grants, 2022–2023](#), *India Budget*, No. 21/Capital Outlay on Defence Services

The most significant portion of the defense budget for 2022–2023 (65.19% of the total allocation, including revenues and capital) is allocated to the Indian Navy, more than the 58.73% allocated in 2021–2022.¹⁶⁰

¹⁵⁹ P. K. Vasudeva, [Defence 'Atmanirbharta' Key to Robust Indian Economy](#), *The Pioneer*, August 6, 2022.

¹⁶⁰ Rahul Rawat, [India's Defence Budget: The Navy and its Atmanirbhar Bharat Mission](#), *Observer Research Foundation – ORF*, July 16, 2022.

The Goals of the Naval Force Buildup Plan

Self-reliance on equipment, platforms, and systems has become a strategic necessity. The same concern has been reflected in "Indianization" and the "Make in India" trend. In this spirit of a renewed national focus on self-reliance, a ten-year Integrated Capability Development Plan (ICDP) has been adopted for the Indian Navy, replacing the earlier 15-year Maritime Capability Perspective Plan (MPCC). The major change in planning will cater to the development of maritime theater command and will provide more flexibility in modernization, given rapid changes in technology. In accordance with this new approach, the Indian Ministry of Defense published three lists of import bans, including items intended for local production. This publication effectively set the roadmap for the Indian defense system to operate in accordance with the AatmaNirbhar mission in the local defense sector. This will also apply to the upgrading of major platforms that were previously tied to foreign parties and projects under development.



SOURCE: SIPRI Arms Transfer Database, accessed July 27, 2022.

NOTE: TIVs, or trend indicator values, are based on the known unit production costs of a core set of weapons. SIPRI intends to capture all military resources rather than a transfer's financial value.

Figure 24: Indian Armed Imports by Country¹⁶¹

¹⁶¹ Rajan Menon and Eugene Rumer, [Russia and India: A New Chapter](#), *The Carnegie Endowment for International Peace*, September 20, 2022, Figure 4.

Upgrading Platforms

In 2022, the Indian Navy introduced into operational service a fully indigenous twin-engine, multi-role, new-generation helicopter designed and developed by Hindustan Aeronautics Limited (HAL). Similarly, the DRDO developed an indigenous Air Independent Propulsion (AIP) system, which is a critical technology that once upgraded and integrated into submarines, will increase their subsurface endurance, resulting in improved operational capabilities. The first upgrade will be carried out for Kalvari-class submarines by 2025. Another significant development are the Scorpene-class conventional submarines (supplied by France) worth \$5.78 billion. The development of the submarines in this series has led to an increase in local production reaching 40% of the cost of the project. In addition, for the first time, India is developing a marine diesel engine for these submarines. These submarines will feature advanced stealth characteristics, equipped with long-range guided torpedoes, as well as an anti-ship missile sensor suite.¹⁶²

Future Projects

The domestically-built Vikrant aircraft carrier will consume a significant portion of the budget allocated for procurement within India. In the field of anti-submarine warfare (ASW), the Indian Navy is preparing to build new ships at the Garden Reach Shipbuilders & Engineers Ltd. (GRSE) shipyard, which are planned to replace the Russian Abhay-class corvettes.

The Indian Navy is preparing to complete the acquisition of seven Nilgiri-class advanced stealth frigates from Mazagon Dock Shipbuilders Ltd. (MDSL) and Garden Reach and Shipbuilders Ltd. (GRSE). The value of the local contribution to this project is expected to amount to around 75% of its total cost. In addition, the Indian Navy has allocated an initial budget for the development of eight next-generation corvettes (NGC).

Indian Navy commanders are eager to continue the long-term modernization plan of acquiring a twin-engine combat aircraft capable of operating from its aircraft carriers (a naval version of the Tejas combat aircraft, which is a multi-role combat aircraft) developed in collaboration with the Defence Research and Development Organisation (DRDO), Hindustan Aeronautics Limited (HAL), and the Aeronautical Development Agency (ADA).

Undoubtedly, this is a challenging plan that will require the Indian industry to undergo a cultural shift in regard to competition (as the Indian shipbuilding industry is dominated by public company monopolies), production quality, and meeting delivery deadlines for vessels and weapons systems – an area in which significant problems have previously arisen.

¹⁶² India's Defence Budget, 2022.

The Indian Navy's Activity

This year, we have also decided to highlight the Indian Navy's activities in the western Indian Ocean: the Gulf of Aden, the Horn of Africa, and the Red Sea.

In 2015, Prime Minister Modi launched the national initiative for the Indian Ocean region called Security and Growth for All the Region (SAGAR). The vision is to build broad trust and promote mutual respect for maritime laws and peaceful resolution of disputes among the countries in the region. This initiative was also a response to China's Belt and Road Initiative and China's disregard for international rulings on sovereign water boundaries in the South China Sea region.

The Gulf of Aden and the Gulf of Oman form the western sector of the Indian Ocean and are included in this initiative, even though its more pressing targets were countries like Sri Lanka and the Seychelles Islands, where the Chinese penetration was more immediate and conspicuous. Thus, for example, as part of this initiative, India built and delivered two patrol boats to the Seychelles Coast Guard in April 2021.

With the increasing importance of the Red Sea for international trade, the Indian Navy's activity in the western part of the Indian Ocean and the Red Sea has expanded, along with more and more navies increasing their activities in the Gulf of Aden and the Red Sea. In the context of the Indian Navy, the previous review already noted that in 2018, India signed an agreement with the Sultanate of Oman and gained access and use of the facilities at Duqm Port, intended to serve the Indian Navy operating in the western part of the Indian Ocean. The geostrategic location of Duqm Port allows it to serve both the eastern and western corridors, as it is located far from the Strait of Hormuz, in the middle of the Indian Ocean, directly open to international waters, and situated near the international trade route between Asia and Europe. Moreover, Duqm Port is easily accessible to the shipping lines serving the Indian markets as well as Africa. This reflects, among other things, the importance India attaches to preserving its shipping routes, especially for energy imports from Gulf countries, which are a crucial component of the energy the developing Indian economy requires. In May 2021, India renewed two central defense agreements with Oman, its oldest strategic partner in the region. In February 2022, Oman's top defense official, Mohammed Nasser Al Zaabi, visited India to co-chair the tenth meeting of the Joint Military Cooperation Committee (JMMC). During the visit, Al Zaabi met with Indian Defense Minister Rajnath Singh, and at the end of the visit, the Indian Ministry of Defense released a statement regarding new avenues of cooperation between the two countries. These involve military-to-military engagements, including joint exercises, industry cooperation, and various ongoing infrastructure projects. The two countries decided to enhance cooperation in the defense industry, strengthening the

assessment that India is increasing its defense partnership in the western Indian Ocean region in light of China's growing presence in the area.¹⁶³

With the aim of enhancing mutual maritime operational capabilities, the Indian Navy ship *INS Tarkash* conducted a joint exercise with Sudanese Navy ships *Almazz* (PC 411) and *Nimer* (PC 413) in the Red Sea near the naval base in Port Sudan in early July 2022. According to Indian Navy sources, the exercise provided "an opportunity for exchange of professional experiences and strengthening Maritime Cooperation between the two countries".¹⁶⁴ The Indian Navy frigate *INS Talwar*, deployed in the Gulf of Aden to combat piracy in the region, visited the port of Djibouti between May 25 and May 28, 2022. During its stay, the ship's crew participated in several bilateral meetings and activities aimed at strengthening stability and improving mutual operational capabilities with other multinational forces deployed in the region. The ship conducted joint training exercises with the Djibouti Coast Guard to enable its crew to better respond to emerging challenges and piracy threats.¹⁶⁵

Despite India being a member of the Quadrilateral Security Dialogue (Quad), which is committed to supporting a free, open, inclusive, and resilient Indo-Pacific, and Prime Minister Modi's participation in the Quad's second summit held in Tokyo on May 24, 2022, along with Japanese Prime Minister Fumio Kishida, U.S. President Joe Biden, and Australian Prime Minister Anthony Albanese, India continues to maintain close relations with Russia. The defense relations between India and Russia are nearly half a century old and the Indian armed forces have been and still are equipped with Soviet weapon systems. India's Vice Chief of Naval Staff, Adm. SN Ghormade, said that the construction of Indian Navy ships in Russian shipyards is proceeding as planned, an interesting remark considering the ongoing Russia-Ukraine war that has cast a shadow on defense supplies from Moscow. At this stage, two *Talwar*-class frigates are being built in Russia for the Indian Navy. In addition, the Indian missile-guided destroyer *INS Kochi* conducted an exercise with the Russian Federation's naval forces led by the *Admiral Tributs* destroyer in the Arabian Sea in mid-January 2022. The exercise showcased cohesiveness and interoperability between the two navies and included tactical maneuvers, cross-deck helicopter operations and maritime activities.¹⁶⁶

¹⁶³ Saptarshi Basak, [How Is India's Access to Oman's Duqm Port Linked to China's Maritime Schemes?](#) *The Quintworld*, February 2, 2022.

¹⁶⁴ [INDO-SUDAN Joint Naval Exercise in Red Sea](#), *Indian Navy*, July 8, 2022.

¹⁶⁵ [INS Talwar visited Djibouti as Part of Anti – Piracy Patrol](#), *Indian Navy*, June 1, 2022.

¹⁶⁶ Manjeet Sehgal, [The Indian Navy's Indigenous INS Kochi Takes Part in Joint Exercise with Russian Warships](#), *India Today*, January 16, 2022.

In conclusion, the Indian Navy will continue to position itself as an ocean-going navy, with strategic capabilities and naval power aimed at deterring India's traditional rival, China, from exerting influence in the Indian Ocean region. Despite the United States' ongoing efforts to bring India closer as an ally and sever its traditional ties with Russia, India, in the spirit of the non-Alignment Movement (NAM) policy, will seek to maintain the diversification of its procurement sources and its cooperation with countries like Russia. In light of the Russian invasion of Ukraine and the annexation of breakaway regions to Russia, India has expressed its stance against the Ukraine war more firmly to counter criticism of its lax policy towards Russia. However, it has refrained from holding Russia responsible for the invasion and will not change its policy on importing inexpensive Russian oil and coal.¹⁶⁷ India will also maintain its membership in the Quad, which is a strategic dialogue between the United States, Japan, Australia, and India, held through talks among the member countries, as well as the strategic relationship it has developed with the United States in recent years. This issue will also be reflected in India's maritime strategy, which is updated periodically.

The Turkish Navy

The Turkish Navy is ranked 11th in the world in the 2022 Global Naval Powers Ranking, which reflects its ambitious naval force buildup plan and other components included in the index.

The *Maritime Strategic Evaluation for Israel 2020–2021* featured a comprehensive article on the strengthening of the Turkish Navy.¹⁶⁸ Therefore, the current review will address only developments and changes that have taken place in the past year in relation to what was noted in the aforementioned article, particularly those related to Turkey's role in the conflict between Russia and Ukraine, with an emphasis on the maritime sphere.

The Impact of Russia's Invasion of Ukraine on Turkish Policy

Russia's invasion of Ukraine has made Turkey a central player in the conflict, despite its lack of direct involvement. During the early days of the war, Turkey was praised by both Ukraine and its Western allies for supporting Ukrainian sovereignty and territorial integrity. Turkey provided armed drones to Ukraine and closed the Bosphorus and Dardanelles Straits to the passage of warships from the warring parties. By the end of

¹⁶⁷ Krishna N. Das and Devjyot Ghoshal, [Analysis: India Sharpens Stand on Ukraine War but Business as Usual with Russia](#), *Reuters*, September 28, 2022.

¹⁶⁸ Shlomo Gueta, "The Turkish Navy – Its Strengthening Process and Operational Doctrine", in Shaul Chorev and Ehud Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2021), pp. 168–186.

July 2022, its diplomatic efforts to ease the grain blockade from the Black Sea ports were welcomed, and an agreement was reached under the auspices of the UN with the consent of the parties involved.

Turkey closed the Black Sea to Ukrainian and Russian warships by invoking the 1936 Montreux Convention, which grants Turkey the right to prevent warships belonging to warring parties (except those returning to their home ports) from using the Dardanelles and Bosphorus Straits located within its territory. As a result, after Ukrainian forces sank the Russian Black Sea fleet's flagship, the *Moskva*, in mid-April, Russia was not able to send reinforcements from its other fleets to the Black Sea to bolster its forces (in retrospect, not carrying out the operation might have saved the Russian fleet from losing additional vessels). In addition to blocking the straits, Turkey also advised its NATO allies not to enter the Black Sea during the war in Ukraine to prevent the conflict from escalating. Turkish Defense Minister Hulusi Akar stated that this would maintain the status quo in the Black Sea and mitigate the possibility of any potential rivalry.¹⁶⁹

The agreement for renewing grain exports from Ukraine through the Black Sea, in which Turkey played a significant role during the ongoing war, was described by UN Secretary-General António Guterres at the signing ceremony in Istanbul on July 27, 2022, as a "beacon of hope" in a world desperately in need of it. The UN plan, which also paves the way for Russian food and fertilizer to reach global markets, will help stabilize food prices that are rising worldwide and avert a famine affecting millions. The initiative specifically allows for significant volumes of commercial food exports from three key Ukrainian ports in the Black Sea: Odesa, Chernomorsk, and Yuzhny. At the agreement signing ceremony, the UN Secretary-General also announced the establishment of a joint coordination center (JCC) in Istanbul, which will monitor the implementation of the agreement and include representatives from Ukraine, Russia, and Turkey. The JCC will track the movement of commercial vessels to ensure compliance with the agreement, focusing exclusively on the export of commercial grains in bulk and related food products. In addition, the JCC will ensure on-site control and monitoring of cargoes from Ukrainian ports and report on shipments made under the initiative. It was agreed that Ukrainian vessels would lead the cargo ships into the international waters of the Black Sea while avoiding mined areas, and the cargo ships would then proceed towards the Bosphorus Strait along a corridor agreed upon by the parties. Ships sailing to and from Ukrainian ports will be inspected by organized JCC teams.¹⁷⁰

¹⁶⁹ Tuvan Gumrukcu, [Turkey Urges Respect for Black Sea Straits Pact After Closing Access](#), *Reuters*, March 1, 2022.

¹⁷⁰ [Black Sea Grain Exports Deal 'A Beacon of Hope' Amid Ukraine War – Guterres](#), *UN News Global Perspective Human Stories*, July 22, 2022.

The Discovery of Gas Reserves in the Black Sea

In mid-June 2022, Turkey began laying the first pipes for the subsea pipeline network that will transport natural gas from the Sakarya gas field, which is located 93 miles off the Turkish coast in the Black Sea, to the port of Filyos, about 400 km (250 miles) east of Istanbul. It is estimated that by mid-2023, Turkey will be able to start producing gas, enabling it to reduce its dependence on energy imports. In 2021, 45% of the gas used in Turkey came from Russia, and the rest from Iran and Azerbaijan. Turkey currently has three drilling ships, the *Fatih*, *Kanuni*, and *Yavuz*, which operate in the Black Sea and the Mediterranean Sea.¹⁷¹



Figure 25: Turkey's economic waters in the Black Sea and the Sakarya gas field¹⁷²

As time passes, it appears that Turkey's activity in the eastern Mediterranean Sea is increasingly drawing from an ambitious legal and geopolitical doctrine, based on a claim of sovereignty over a vast maritime area, referred to as the "Blue Homeland", or *Mavi Vatan* in Turkish. The strategy was developed by several admirals who were aware of the strategic importance of the maritime domain and gained traction among Turkey's military officials, political and economic establishment, and intellectual elites. The strategy was

¹⁷¹ Melisa Cavcic, [WATCH: Türkiye Edging Closer to First Gas from Giant Black Sea Project as Pipe Laying Work Wraps Up](#), *Offshore Energy*, November 21, 2022.

¹⁷² Ayşe Betül Bal, [Turkey Finds 320 BCM of Natural Gas in Black Sea, Erdoğan Announces](#), *Daily Sabah*, August 21, 2020.

adopted by President Recep Tayyip Erdogan, allowing him to establish his alliance with nationalist movements while providing a legal framework for his activity in Libya. The adoption of the strategy has led, among other things, to the growing importance of the Turkish Naval Forces (*Türk Deniz Kuvvetleri*), which have become increasingly involved in implementing this policy and its derivatives, including through their involvement in conflicts in the eastern Mediterranean Sea.

Turkey-Israel Relations

The *Mavi Marmara* incident in 2010 and the subsequent deterioration of diplomatic relations between the two countries also affected the relationship between the Turkish Navy and the Israeli Navy. Following efforts to restore relations to their previous state, the relationship between the two navies has also improved, although it has not returned (and is unlikely to return) to the way it was in the mid-1990s.

In mid-August 2022, Turkey and Israel announced the normalization of relations and the return of their ambassadors. Israel's then-Prime Minister, Yair Lapid, stated that renewing relations with Turkey was an important asset for regional stability and an important economic development for Israeli citizens. The announcement was preceded by a conversation between Director General of the Israeli Foreign Ministry, Alon Ushpiz, and Turkish Deputy Foreign Minister, Sedat Onal, in which they agreed on the restoration of full diplomatic relations between Israel and Turkey and the return of both nations' ambassadors and consuls-general. In early September 2022, the Turkish frigate TCG *Kemalreis* entered the port of Haifa with a crew of 203. The frigate arrived together with U.S. destroyer USS *Forrest Sherman* (DDG-98) on a NATO patrol mission and remained in the Port of Haifa for two days. During the visit, an incident occurred in which the soldiers and officers of the Turkish frigate were not allowed to go ashore because the Turkish embassy had not informed the Israeli Foreign Ministry about the arrival ahead of time and the crew did not have the required permits. This was undoubtedly an exceptional occurrence, as nothing of the kind had taken place in the past 12 years. However, in order to reduce possible tensions, the IDF spokesperson said that the warship was making a stopover as part of "NATO activity".¹⁷³

The prevailing assessment is that the warming of relations between Israel and Turkey is driven by Turkish President Erdogan's desire to emerge from the country's economic crisis before the presidential elections scheduled to take place in May 2023. Evidence of this can be found in Erdogan's attempts to improve relations with other regional rivals. One

¹⁷³ Yossi Lavi, [For the First Time in a Decade: A Turkish Warship Anchored at the Port of Haifa](#), *Bachazit*, September 3, 2022 (Hebrew).

of his successes was the reconciliation with the wealthy Gulf States, with which he had had conflicts in the past due to his support for Qatar. In November 2021, the ruler of the United Arab Emirates, Mohammed bin Zayed, visited Ankara after years of cold relations with Turkey. The result of the visit was the announcement of the establishment of an Emirati investment fund in Turkey worth \$10 billion for, among other things, investment in Turkish infrastructure companies and the energy sector. In April 2022, Erdogan visited Riyadh, the capital of Saudi Arabia, despite tensions between the two countries over the murder of Saudi journalist Jamal Khashoggi, which took place on Turkish soil. Erdogan hopes that as a result of the visit, the Saudis will also open their wallets and direct massive investment funds towards Turkey.¹⁷⁴

On October 27, 2022, then-Israel Defense Minister Benny Gantz met in Ankara with Turkish President Erdogan and Turkish Defense Minister Hulusi Akar. In a joint statement, Akar and Gantz announced that they had agreed to renew security ties. It should be noted that in recent years, as relations between Turkey and Israel deteriorated, official security ties between the countries were almost completely severed and conducted primarily in secret and between relatively low-ranking officials. Lately, secret meetings have been taking place between Israeli and Turkish security officials aimed at renewing relations, culminating in Gantz's visit to Ankara.¹⁷⁵

Turkey-Libya Relations

In recent years, Turkey, alongside Qatar, opened a military front supporting Fayeze Sarraj's recognized Libyan government against renegade leader Khalifa Haftar, who is backed by Russia, Egypt, the United Arab Emirates, and France. This ambitious front put Turkey on a potential collision course with Russia and could have also led to a confrontation with NATO, of which Turkey is a member. A possible shift in Turkey's position towards the regime in Libya can be seen in the visit of Aquila Saleh, head of the House of Representatives in eastern Libya, in the summer of 2022. The visit signaled a clear change in policy towards the civil conflict in Libya two years after Ankara provided military support to the government it had established in Tripoli against eastern forces led by Khalifa Haftar. Aquila Saleh, who heads the eastern-based House of Representatives and is considered an ally of Haftar despite discord between the two, met with President Recep Tayyip Erdogan and parliament speaker Mustafa Sentop during a visit to Ankara on August 1–2. Abdullah al-Lafi, vice chair of Libya's Presidential Council, accompanied him on the trip. Saleh has been

¹⁷⁴ Dani Zaken, [What's Behind the Warming of Relations between Turkey and Israel](#), *Globes*, August 19, 2022 (Hebrew).

¹⁷⁵ Jonathan Lis and Yaniv Kubovich, [Gantz Meets with Erdogan and Defense Minister in Ankara, Announces Renewal of Security Ties](#), *Haaretz*, October 27, 2022 (Hebrew).

known for his rejection of two crucial agreements that the Government of National Accord signed with Turkey in 2019. The first allowed for the deployment of Turkish troops to train and support Libyan forces, while the second delineated maritime borders between the two countries, effectively allowing Turkey to declare Turkish economic waters between Crete and Cyprus as it conducts gas exploration in the eastern Mediterranean Sea. The invitation of Saleh to Turkey and his visit to Ankara stemmed from the changing dynamics in Libya, forcing the sides to adjust their positions. However, Turkey's reconciliation with the eastern part of Libya does not mean it has withdrawn its support for the existing government in Tripoli and it retains the option of influencing the entity elected in Libya's free elections (date currently undetermined) which the United States is pushing to hold. In this context, after a meeting with Libya's foreign minister in early August 2022, U.S. Ambassador to Tripoli Richard Norland said that the U.S. position is that "free and fair elections are the only means to establishing a national government with legitimacy".¹⁷⁶

In late September 2022, Turkey's naval forces conducted a joint military exercise with their Libyan counterparts off the coast of the North African country in the central Mediterranean Sea. According to the Turkish news agency, Anadolu, the Turkish missile frigate TCG *Gaziantep* and the Libyan amphibious landing ship *Ibn Ouf-132* participated in the maneuvers under the command of Turkish naval forces. This highlights the importance Turkey attaches to security cooperation with Libya.¹⁷⁷

Defense Expenditure and Enhancement of the Turkish Navy

Turkey's defense expenditure is planned to grow between 2019 and 2025, reflecting the priority the Turkish government is giving to its defense industry, and particularly its maritime defense industry. Turkey's defense spending reached a peak in the 2020 fiscal year, amounting to \$14.8 billion – a 6.5% increase from the previous year. This trend is expected to continue and reach \$17.5 billion on defense spending by 2025.

Following the sanctions imposed by the United States on Turkey due to its purchase of the S-400 air defense system from Russia, local solutions were prioritized in the Turkish Navy's force buildup plan. As part of this, priority was also given to the Turkish defense industry to support the navy and upgrade its vessels and weapon systems. The reliance on the development of the Turkish industry is intended to turn the Turkish Navy into a maritime power comparable in size to those of Britain and France. This is reflected

¹⁷⁶ Fahim Tastekin, [After Years of Hostility, Turkey Forges Ties with Eastern Libya](#), *El Monitor*, August 8, 2022.

¹⁷⁷ [Libya and Turkey Conduct Joint Naval Exercise in the Mediterranean](#), *The Libya Update*, October 2, 2022.

in the construction of the amphibious assault ship and helicopter carrier *Anadolu* (TCG *Anadolu*), which began in 2016. The *Andalou* underwent sea trials in 2021 and is expected to enter service in 2022.¹⁷⁸ It is a multipurpose amphibious assault ship that can to some extent be defined as a light aircraft carrier, and is designed to head a Turkish task force in the Aegean Sea, the Black Sea, and the Mediterranean Sea, as well as in the Indian and Atlantic Oceans. The ship can carry drones and will also serve as a command center, protected by autonomous USVs. It is estimated that the *Anadolu* will be able to carry up to 50 Baykar TB-3 and MIUS drones. The Turkish Navy's ability to rely on command-and-control capabilities (including satellite links, communication via drones, and fixed and mobile command centers) allows it to use vessels such as the *Anadolu* as command-and-control centers.¹⁷⁹ It should be noted that the Turkish Navy has been the main victim of the sanctions imposed by the United States following Turkey's acquisition of the Russian S-400 air defense systems. The navy plans to operate F-35B aircraft (with vertical takeoff and landing capabilities) from the *Anadolu*, effectively turning it into a light aircraft carrier. During the negotiations for Sweden and Finland's admission to NATO, Turkey unsuccessfully attempted to condition its agreement on approval of the deal.

The Turkish Navy is expected to acquire two large landing ships (LSTs) in the next two years, which will actually be the largest vessels of this type in the world. In the next decade, I-class frigates, Ada-class corvettes, and TF-2000-class destroyers are expected to be built and delivered to the Turkish Navy for operation. The construction plan for the Istanbul-class frigates includes constructing four frigates to replace the older Yavuz-class frigates. The first ship was delivered to the Turkish Navy in early 2021 and the remaining three ships will be supplied by the mid-2020s. The Golcuk naval shipyard is also expected to complete the construction of six 214-series submarines (Piri Reis-class) by the middle of the current decade. Mid-life refurbishment plans for the Barbaros-class frigates and the 209-series submarines built in German shipyards (Preveze-class Submarines) are expected to enable them to remain in service until the mid-2030s. The Turkish Navy's development plan also includes a prototype of a domestically manufactured unmanned surface vessel (ULAQ AUSV).

In April 2022, Turkey held one of the largest naval exercises in its modern history. During the Blue Homeland 2022 exercise, more than 122 warships, fighter jets, aerial refueling aircraft, reconnaissance aircraft, ATAK helicopters, drones, naval commando units, and teams specializing in chemical, biological, radioactive, and nuclear warfare were deployed. The exercise took place in the Aegean Sea, the Mediterranean Sea, and

¹⁷⁸ Tayfun Ozberk, [Turkish Navy's Future Flagship TCG Anadolu Completes First Helo Landings](#), *Naval News*, November 20, 2022.

¹⁷⁹ Amir Husain, [Turkey Builds a Hyperwar Capable Military](#), *Forbes*, June 30, 2022.

the Black Sea simultaneously, and in the final stage of the exercise, from April 18–21, 72 ships visited ports surrounding Turkey. Unlike in previous Blue Homeland exercises, warships in the eastern Mediterranean Sea conducted firing drills and regular exercises in maritime areas that would not lead to confrontations with Greece. This was instead of carrying out military operations based on the Blue Homeland doctrine, which, in a maximalist approach, defines Turkey's maritime jurisdiction borders in the Aegean Sea and the eastern Mediterranean Sea. Some interpret this shift as evidence that Turkey has abandoned its foreign policy of exercising military power in the eastern Mediterranean based on the Blue Homeland doctrine and that it has put the doctrine on hold for now in the eastern Mediterranean.¹⁸⁰

Turkey, which until the late 1990s was an importer of military vessels and submarines from foreign shipyards and whose surface fleet relied on U.S. Hazard Perry-class frigates, is becoming an exporter of vessels and combat systems, which is helping it advance its international political standing. Recently, the Istanbul shipyard has completed the construction of the first of two MILGEM-class corvettes. In the handover ceremony held in mid-August 2021 at the Istanbul shipyard, which was attended by Turkish President Erdogan and Pakistani President Dr. Arif Alvi, the two leaders noted that these ships "would significantly add to the lethality of Pakistan Navy's capabilities and contribute in maintaining peace, security and balance of power in the Indian Ocean Region".¹⁸¹ The Turkish shipyard is assisting Pakistani shipyards in Karachi to establish a production line where four additional corvettes of this model will be built for the Pakistani Navy. This aspect of cooperation should be seen in the broader context of the deepening relationship between Turkey and Pakistan, which includes addressing the challenges both countries are expected to face following the completion of the U.S. and NATO's withdrawal from Afghanistan.

The Turkish Navy's participation in the multinational force operations in the Gulf of Aden and the Persian Gulf

On February 2, 2022, the Grand National Assembly of Turkey extended the presence of the Turkish Navy in the Gulf of Aden, Arabian Sea, and adjacent seas for one more year. Since 2009, the Turkish Navy has commanded the multinational counter-piracy task force CTF-151 six times and carried out at least 21 deployments in the area to combat piracy. Its ships conduct patrols, intercept ships suspected of piracy/armed robbery, escort and protect

¹⁸⁰ Fatih Yurtsever, [Analysis, Blue Homeland: Naval Exercise Signals Departure from the Doctrine](#), *Turkish Minute*, April 21, 2022.

¹⁸¹ Martin Manaranche, [Istanbul Shipyard Launched First Babur-Class Corvette for Pakistan Navy](#), *Naval News*, August 16, 2021.

merchant ships sailing in the area, assist them in case of pirate/maritime robber attacks, intervene, stop, neutralize, and confiscate any vessels used by pirates/sea robbers using proper force if necessary, and arrest and detain pirates/sea robbers and armed persons in these vessels. The Turkish Navy ships also participate in executing various policing duties, including interrogation and collecting evidence against suspicious vessels.¹⁸²

Conclusion

Russia's campaign in Ukraine may have a geopolitical impact on Turkey's position in the international system. While dissatisfaction with the West and anti-Western sentiment have facilitated warm relations and cooperation between Russia and Turkey, Russian geopolitical revisionism has almost always pushed Turkey closer to the West, as it poses a direct security threat to Turkey. Historically, the focal point of the Turkish-Russian rivalry was the Black Sea. From the Turkish perspective, Russia's actions – from the war in Georgia, through the annexation of Crimea, to the invasion of Ukraine – all tilt the balance of power in this region decisively in favor of Russia. While the details and nuances of Russia's policies in each of these cases may vary, together they point to an unmistakable outcome: Russian revisionism in the post-Soviet space and an aspiration to turn the region into a sphere of Russian domination, which, according to experts, could aggravate Turkey's threat perception with regard to Moscow.¹⁸³ The recent crises expand the common ground between Turkey and the West, although the West's "geopolitical resurgence" will not change Turkey's perception of a multipolar world as better serving its interests. Therefore, it is unlikely that Turkey will give up its quest for autonomy in its foreign policy.

Turkish authorities consider the Turkish Navy to be a central tool in the geopolitical game. In recent years, it has increased the number of its vessels and enhanced its capabilities and the government infrastructure that allows it to upgrade its capabilities and autonomy in developing advanced domestic-made weaponry. The navy will continue to be part of NATO forces, but will also operate independently in the eastern Mediterranean and Black Seas to protect Turkey's maritime interests.

The Egyptian Navy

According to the 2022 Global Naval Powers Ranking, the Egyptian navy is ranked as the 13th most powerful navy in the world. This reflects Egypt's desire to become the strongest

¹⁸² [Turkish Parliament Extendst the Presence of The Navy in Gulf of Aden for One Year](#), *Bosphorus Naval News*, February 6, 2022.

¹⁸³ Galip Dalay, [Deciphering Turkey's Geopolitical Balancing and Anti-Westernism in Its Relations with Russia](#), *SWP Comment*, May 20, 2022.

maritime power in the eastern Mediterranean and Red Seas. In my opinion, the ranking is based on the types and quantity of vessels, neglecting additional factors, such as the quality of combat systems, the level of operation, and more. However, it does indicate a clear and undeniable trend, which is that Egypt has been investing significant resources in its navy in recent years, particularly based on an understanding of the important role its navy plays in facing the geopolitical and strategic challenges emerging in the Middle East.

In July 2022, Egypt's revenues from passage through the Suez Canal for the 2021–2022 fiscal year amounted to \$7 billion, compared to \$5.8 billion in 2020–2021, representing a 20.7% increase.¹⁸⁴ Alongside the rise in revenues (which were the highest relative contribution to Egypt's economy), the risk level for navigation, especially in the southern Red Sea near the Bab el-Mandeb Strait, has increased due to the actions of the Houthis, the Iranian proxies, emphasizing the importance of the Egyptian navy's role in this arena. The Mediterranean Sea Fleet (the Northern Fleet) is dedicated to dealing with the growing geopolitical conflicts in the eastern Mediterranean region over maritime zones and hydro-energy resources. Its main mission is to protect Egypt's economic interests, especially the new gas fields that have been discovered and developed. In addition, the Northern Fleet is trained and equipped to participate in handling the flow of refugees from North Africa to Europe.

The Egyptian Navy's Force Buildup

In the 1980s and 1990s, Egypt began acquiring American weapon systems (and in the case of the Egyptian Navy, Oliver Hazard Perry-class frigates) to replace its primarily Soviet-based arsenal. Now, for political reasons, it has changed direction and begun to diversify its defense procurement, including for the Egyptian Navy, as will be described below. The Egyptian Navy's ranking as the 13th most powerful in the world in 2022 reflects the impressive force buildup plan it has implemented in recent years and the diverse range of vessels it operates.

Egypt has become one of only five countries in the world to possess Mistral-class amphibious assault ships, which were built for it in France: the *Gamal Abdel Nasser* and the *Anwar Sadat*. Ships of this type allow Egypt to carry out amphibious operations far from its territory in the Red Sea (primarily) and in the Mediterranean Sea.

The Egyptian Navy is equipped with Gowind 2500-class frigates, known in Egypt as El-Fateh frigates, which are manufactured by the French shipyard Naval Group Lorient and assembled at the Alexandria shipyard in Egypt. The Alexandria shipyard has begun conducting sea trials for the Gowind-class corvette intended for the Egyptian Navy. The

¹⁸⁴ [Egypt's Suez Canal Revenue Hits \\$7 Billion Record Peak](#), *Reuters*, July 4, 2022.

ENS Luxor corvette is the last of the four Gowind-class ships ordered by the Egyptian Navy. It is also the third ship that was built domestically in Egypt, as the ENS El Fateh-class flagship was constructed in France by the Naval Group defense company.¹⁸⁵

In early August 2021, the fourth Type 209/1400 submarine was delivered to the Egyptian Navy. In early September 2022, the press reported that Egyptian President Abdel Fattah el-Sisi wanted to purchase up to six Barracuda-class submarines from the French Naval Group, in which the French government holds a 62% stake. These are nuclear-powered submarines and the cost of acquiring six of them is expected to exceed €5 billion. The French government seems to be dragging its feet in responding to Egypt on this matter.¹⁸⁶ Along with the news about Egypt's desire to purchase submarines from France, there were reports that the Egyptian Ministry of Military Production (MoMP) is expected to hold talks with ThyssenKrupp, which built the four Type 209 submarines for Egypt, regarding technology transfer and a production agreement for submarines, including the establishment of production lines at one of Egypt's ports.¹⁸⁷ Regardless of whether the reports are accurate, this demonstrates Egypt's determination to continue advancing the buildup of its naval forces in general and its submarine fleet in particular, including by establishing production infrastructure in Egypt itself.

Mohammed al-Kenany, director of the Military Studies Unit at the Cairo-based Arab Forum for Analyzing Iranian Policies, explained that Egypt is seeking to expand and develop its submarine fleet in order to maintain its position in the naval balance of power in the region. He added that this was not the final step in arming process, and that since many countries in the region are increasing their underwater capabilities, Egypt will not be satisfied with just four submarines from Germany. According to al-Kenany, this is because Egypt operates two fleets – the Northern Fleet in the Mediterranean Sea and the Southern Fleet in the Red Sea – and due to the increasing challenges and threats to freedom of navigation posed by terrorism and arms smuggling, among other things. In this context, it should be noted that the current contract between Egypt and the German shipyards includes an option to order two additional submarines.

The Egyptian Navy's Organization for Its Mission

In January 2017, Egypt decided to divide its navy into two fleets: the Northern Fleet and the Southern Fleet. The Northern Fleet's area of operation covers the Mediterranean Sea

¹⁸⁵ [Egyptian Navy's fourth Gowind-Class Corvette Begins Sea Trials](#), *Robban Assafina*, July 8, 2022.

¹⁸⁶ [Inside Story on Talks over €5bn Naval Group Submarine Sale to Egypt](#), *Africa Intelligence*, September 7, 2022.

¹⁸⁷ Fatima Bahtić, [Egypt Sets Sights on French Barracuda-Class Submarines](#), *Naval Today*, March 10, 2022.

and its mission is to secure Egypt's northern and western strategic fronts. The Southern Fleet covers the Suez Canal and the Red Sea area and is charged with securing the eastern and southern fronts. This division has improved the performance and flexibility of several naval commands and provided a new approach to Egypt's naval force buildup, based on the nature of the operations assigned to each fleet and defined by the geopolitical context of the operational area.¹⁸⁸

As noted, the Northern Fleet is dedicated to dealing with the growing geopolitical conflicts in the Eastern Mediterranean over maritime zones and to protecting the energy resources extracted from the sea. Its main mission is to defend Egypt's economic interests, especially the newly developed gas fields. The Northern Fleet is also in charge of controlling the flow of illegal immigration from North Africa to Europe.

The Southern Fleet deals mostly with deterring the security threats arising from the political instability in Yemen and the Horn of Africa, where Iranian-backed terrorist organizations and militias are continually harassing ships and blocking vital maritime chokepoints. In this sense, the Southern Fleet plays a crucial role in securing international shipping and trade between Asia, Africa and Europe via the Red Sea and the Suez Canal.

The July 3 Naval Base is expected to play a crucial role in increasing Egypt's political and military cooperation with Libya, thereby putting an end to Turkish and Russian military interventions there. The participation of Libya's interim president, al-Menfi, in the opening ceremony of the new base in Gargoub only reinforces this assumption. As far as the senior Egyptian administration is concerned, Libya represents the strategic security depth on Egypt's western border and the stationing of Turkish soldiers and foreign mercenaries under the separate command of Turkey and Russia on Libyan soil are a source of concern.¹⁸⁹

The Egyptian Navy utilizes the diplomatic dimension of the naval strategy and conducts joint exercises with various navies without aligning itself with any one of the blocs. In August 2022, NATO's USS *Forrest Sherman*, which was the flagship of Standing NATO Maritime Group 2 (SNMG2) at the time, and Spanish Navy ship *ESPS Almirante Juan de Borbón* visited the port of Alexandria and conducted a passing exercise with the Egyptian Navy ship *ENS El Fateh*. During the visit, senior commanders from the task force lectured and trained students from the Egyptian Naval War College, presenting various NATO

¹⁸⁸ For more on this topic, see Shaul Chorev, "Global Developments in the Maritime Domain", in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2022), pp. 95–96.

¹⁸⁹ For more on the July 3 Naval Base and the role it is expected to play, see *ibid.*, pp. 96–97.

operational concepts, including task group command and control, rules of engagement, mine countermeasure operations, and maritime interdiction.¹⁹⁰

In the Red Sea arena, the Egyptian Navy took command of Combined Task Force 153 (CTF-153) from the U.S. Navy on December 12, 2022, during a ceremony in Bahrain, where the multinational task force's headquarters are located. Capt. Robert Francis of the U.S. Navy, who had led CTF-153 since April 2022, transferred command to Egyptian Navy Rear Adm. Mahmoud Abdelsattar. This marked the first time that Egypt has assumed command of the multinational naval force, in which 34 countries participate and which Egypt joined in 2021. CTF-153 was established by the U.S. Navy's Fifth Fleet in April to combat smuggling and other illegal activities in the Red Sea, Bab el-Mandeb, and Yemeni waters.¹⁹¹ This is the fourth such grouping under the U.S.-led Combined Maritime Forces (CMF), a multinational maritime security cooperative first established by the United States to patrol Middle Eastern waters in the aftermath of the attacks on September 11, 2001.

The Iranian Navy

The Iranian Navy ranks 18 in the 2022 Global Naval Powers Ranking. Last year, a special chapter written by Shlomo Guetta and Motti Elharar was published in the *Maritime Strategic Evaluation for Israel* examining Iran's naval force buildup.¹⁹² Additional publications also addressed the activities of the Iranian Navy and the Iranian Revolutionary Guard Corps (IRGC) Navy. Therefore, this year we chose not to present an extensive review of this navy, but only to mention notable events that occurred in regard to force buildup and naval activity.

The patrol vessel *Shahid Soleimani*, which is built with stealth technology, equipped with a vertical missile launch system, and allows for a maritime helicopter to be operated from it, was delivered to the Iranian Navy in the summer of 2022 in a ceremony held in the southern city of Bandar Abbas. The ship is named after the commander of the IRGC's Quds Force, who was killed in a U.S. drone strike in Baghdad in January 2020. In addition, two Shahid Rouhi missile boats entered active service in the IRGC Navy.

¹⁹⁰ [Passing Exercise Between NATO and Egyptian Navy in the Med](#), *Naval News*, August 30, 2022.

¹⁹¹ Jared Szuba, [Egypt's Navy to Lead New Red Sea Maritime Task Force](#), *Al Monitor*, September 12, 2022.

¹⁹² Shlomo Guetta and Motti Elharar, "The Development of the Iranian Naval Branch in Recent Years and the Implications for Israel and the Middle Eastern Countries," in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2022), pp. 139–163.

A number of extensively refurbished vessels joined the Iranian Navy's Southern Fleet in a ceremony held on September 4. These include two missile-launching boats, a logistics ship, and a light Ghadir-class submarine, which were "restored and refurbished" in Iran. It is important to note that although Iran sometimes exaggerates its maritime achievements and its ability to operate far from Iranian shores, the considerable investments it has made in this sector have yielded significant progress in terms of its regional naval standing and power.¹⁹³

Iranian maritime activity in the Red Sea has continued during the past year. The IRGC's naval force continued to provide assistance to the Houthi military forces in Yemen, usually by smuggling weapons and components for producing weapons. Some of these shipments were intercepted by coalition forces led by the U.S. Fifth Fleet. At this stage, no activity by IRGC vessels has been detected in the Red Sea; however, this is expected to change in the near future with the introduction of the new Qasem Soleimani-class missile corvette into operational service. It is possible that an IRGC naval task force that includes the new corvette and is escorted by one of the mother ships previously converted for use by the IRGC Navy will carry out this mission.

In the past year, the Iranian navy has continued its activities in the Red Sea with task forces that typically included a frigate and an accompanying support/mother ship. Some of these activities involved escorting tankers sailing to the Suez Canal to transport fuel to Syria.

On August 30, U.S. CENTCOM announced that on August 29, U.S. Fifth Fleet forces prevented an IRGC support vessel in the Persian Gulf from towing an American USV engaged in a patrol and imagery collection mission. Iran released the ship hours later, after explaining the principles of "navigation safety and security" to U.S. forces in the area. In early September, just days after the IRGC attempted to seize American USVs in the Persian Gulf belonging to the Fifth Fleet, the Iranian navy tried to repeat the action and seize two more American USVs operating in the southern Red Sea. Two destroyers belonging to the Fifth Fleet, the USS *Nitze* and USS *Delbert D. Black*, deployed MH-60 Sea Hawk helicopters that hovered near the Iranian towing vessel until the Iranians released the USVs.¹⁹⁴

¹⁹³ Farzin Nadimi, [New Iranian Warship Signals Longer Maritime Reach, More Aggressive Strategy](#), *Washington Institute, Policy Analysis, PolicyWatch* 3646, September 16, 2022.

¹⁹⁴ Mallory Shelbourne, [Iran Temporarily Captures Two U.S. Saldrones in Red Sea](#), *USNI News*, September 2, 2022.

On November 15, 2022, the Pacific Zircon oil tanker, which was sailing under the Liberian flag, operated by a Singaporean company, and partially owned by Israeli businessman Idan Ofer, was attacked by an armed Iranian drone about 240 km off the coast of Oman. According to a statement from the U.S. Central Command in the Middle East, the drone was identified as a version of the Iranian-made Shahed. Iran denied involvement in the attack.¹⁹⁵

Between December 21 and 27, 2022, the Iranian, Russian, and Chinese Navies conducted the joint military exercise Sea-2022 in waters east of the sea area from Zhoushan to Taizhou, in East China's Zhejiang Province. This is a normal arrangement based on the annual military cooperation plan between the Chinese and Russian militaries. However, in the context of the Russia-Ukraine conflict and the fact that the military exercise area is the closest it has been to Taiwan in the past decade, the misunderstandings and misinterpretations arising from this joint military exercise were greater than in previous years and have increased the risk of a flare-up.¹⁹⁶

The Royal Saudi Navy

The Royal Saudi Navy was founded in 1960 and began to grow significantly with the assistance of the United States, as did the Imperial Iranian Navy. Following the Iranian Revolution, Saudi Arabia launched an additional expansion plan for its navy, which was carried out with French support. Additional vessels were acquired from the United Kingdom and France during the 1980s and 1990s. In 1980, the Royal Saudi Navy's main command, control, and communication centers were built by an American contractor. The Royal Saudi Navy ranks 30th in the world in the Global Naval Powers Ranking for 2022. Based on the ambitious force buildup plan it is leading and the resources invested in it, it will likely rank higher by the end of the decade.

The Royal Saudi Navy operates from several bases along 2,500 kilometers (1,600 miles) of the Saudi coastline, in the Red Sea and the Persian Gulf, and has two fleets. The Eastern Fleet operates in the Persian Gulf from the King Abdulaziz Naval Base in Jubail, and the Western Fleet operates in the Red Sea from the King Faisal Naval Base in Jeddah (Al-Qadima military port). Each fleet has full military capabilities, including warships, support vessels, administrative and technical support, a naval air fleet, marines, and special security units.

¹⁹⁵ Richard Allen Greene, Hadas Gold, Mostafa Salem and Oren Liebermann, [CNN Obtains Exclusive Photos of Drone Attack Aftermath on Pacific Zircon Tanker Ship](#), *CNN*, November 17, 2022.

¹⁹⁶ [China-Russia Joint Exercise is Upright, Aboveboard: Global Times editorial](#), *Global Times*, December 22, 2022.

Amid regional tensions, Saudi Arabia is vigorously advancing a multi-billion-dollar modernization process for its navy, which includes five new Avante 2200 corvettes being built in the Bay of Cadiz, Spain. These vessels are part of a multi-year expansion plan. The 104-meter-long corvettes are equipped with air defense systems, anti-submarine warfare, and surface combat capabilities. The first corvette in the series was delivered to the Royal Saudi Navy at the end of March 2022, in a ceremony held at the La Carraca Naval Base facilities in San Fernando, Cadiz.¹⁹⁷ While the new warships are primarily intended for surveillance and control operations, Saudi Arabia sees their arrival as an opportunity for technology transfer that may contribute to the Vision 2030 initiative. As part of the technology transfer, the country has developed its first naval combat system, the Hazem. The system is already integrated into the first corvette, the *Al Jubail*, which includes a combat management system, integrated communication, combat system integration, integrated platform management, a fire control system, and a training system.¹⁹⁸

In mid-September 2022, the ship arrived at its home port in Jeddah, located on the Red Sea. The new warships are expected to join the Kingdom's Western Fleet to guard approximately 1,800 kilometers (1,118 miles) of its coastline in the Red Sea and secure freedom of navigation in the Gulf of Aden. The Gulf of Aden is strategically important to Saudi Arabia, as it borders Yemen, where the Iran-backed Houthis are based and from where they have recently launched ballistic missiles and unmanned aerial vehicles (UAVs) against strategic sites in Saudi Arabia, causing damage to important infrastructure. The Saudis aim to address both the direct attacks carried out by the Houthis on commercial and civilian support ships and the activities of Somali organizations involved in piracy, human trafficking, and weapons and drugs smuggling. These Somali vessels have previously collaborated with the Houthis in transporting African fighters to join them in Yemen. The Houthi rebels have previously launched repeated attacks using boats laden with explosives in the southern Red Sea, including an attack against an oil tanker at the Jeddah port in December 2020. Arms smuggling to Yemen is another threat to Saudi security, and some of it is carried out through routes in the Red Sea and the Gulf of Aden.

Saudi Arabia currently operates three multi-purpose anti-air warfare Al Riyadh F3000S-class frigates, which were built by the French shipyard DCN for the Royal Saudi Navy and ordered in 2002. These frigates are capable of operating in open seas and played a key role during the anti-Houthi effort in 2015, known as Operation Decisive Storm. From May 29 to June 4, 2022, a joint naval exercise, Red Wave-5, was conducted and led by the Royal Saudi Naval Forces with the participation of the Red Sea coastal countries of Djibouti,

¹⁹⁷ [Navantia Delivers the First Avante 2200 Class Corvette to The RSNF](#), *Naval News*, March 31, 2022.

¹⁹⁸ Alie Peter and Neil Galeon, [Saudi Arabia's First Avante 2200 Corvette Arrives in Jeddah](#), *The Defense Post*, September 2022.

Egypt, Jordan, Somalia, Sudan and Yemen in addition to the Royal Saudi Land Forces, Royal Saudi Air Forces and Saudi Border Guard. The commander of the Saudi Western Fleet, Adm. Yahya bin Mohammed Asiri, who led the exercise, said it was aimed at "enhancing military cooperation, unifying of concepts, raising the combat readiness and exchange of experience that would contribute to upgrading the capabilities to protect the seas and regional and international water passages and guarantee maritime navigation in the Red Sea".¹⁹⁹

In late September 2022, the Saudi Western Fleet began operating for the first time with the International Maritime Security Construct (IMSC) in the Red Sea. This activity signifies an expanded partnership between the multinational coalition and the Royal Saudi Navy. The Western Fleet, which is concentrated in the Red Sea, now contributes to the IMSC missions in the Bab el-Mandeb Strait area, and the HMS *Al Jubail* corvette conducts patrols as part of this framework. The Saudi Eastern Fleet has been operating with the IMSC since 2019, when Saudi Arabia joined the nine-member coalition.²⁰⁰

The Establishment of a Maritime Technological Infrastructure in Saudi Arabia

Part of the joint technology transfer between Saudi Arabia and Spain led to the production of Saudi Arabia's first maritime combat system, the Hazem, which is now integrated in the first corvette, the *Al Jubail*. As mentioned, it includes a combat management system, integrated communication, combat system integration, integrated platform management, a fire control system, and a training system. The Saudis believe local production can help develop the Saudi manufacturing sector and create employment for Saudi citizens, which are two central goals of the Saudi Vision 2030 policy.

In 2018, Saudi Arabia signed a contract with the American company Lockheed Martin for four multi-mission surface combatants (MMSC) based on the U.S. Navy's Freedom-class littoral combat ship, which encountered complex problems when it was entered into operational service in the U.S. Navy. The first steel-cutting ceremony for the MMSC 1 ship was held on October 24, 2019, and the ceremony for the second ship, the MMSC 2, was held on January 28, 2021. These vessels are expected to serve in the Saudi Eastern Fleet.

¹⁹⁹ [Royal Saudi Navy's Western Fleet Wraps Up Red Wave-5 Maneuver](#), *Saudi Gazette*, June 3, 2022; Baher al-Kady, [Saudi Arabia, Egypt Leads Regional Naval Drills in Red Sea](#), *Al-Monitor*, June 11, 2022.

²⁰⁰ [Saudi Arabia Expands Maritime Partnership with International Coalition](#), *NAVCENT Public Affairs*, September 28, 2022.

Conclusion

The year 2022 brought with it surprises and changes regarding global developments in general and maritime aspects in particular. The world had begun to recover from the COVID-19 pandemic, but found itself tangled in a web of international crises and challenges that affect its ability to recover from the pandemic. These include the competition between the United States and China, which has intensified, Russia's unexpected invasion of Ukraine and its impact on European countries, and the unfolding climate crisis, which demands attention and the formulation of an international plan to address it.

The conflict between Russia and Ukraine has been ongoing since February 2022, although its intensity has decreased with the arrival of winter. However, its consequences are more far-reaching than they may appear on the surface and include, among other things, Russia's attempt to position itself against NATO countries using new rules of engagement, including the implied threat of using nuclear weapons under certain circumstances.

Global trade, which has been steadily growing in recent years, is expected to lose momentum in the second half of 2022 and remain relatively stagnant in 2023, as numerous shocks are weighing down the global economy. Economists from the World Trade Organization (WTO) noted that global trade volumes in goods would increase in 2022, but that the growth would be very moderate in 2023 compared to 2022.

In the maritime domain, the United States is continuing to focus its efforts on creating a coalition of countries against China, as it has done through the trilateral alliance with the United Kingdom and Australia (AUKUS) and the establishment of regional mechanisms such as the Quadrilateral Security Dialogue (the Quad) with Australia, India, and Japan. The United States is conducting Freedom of Navigation Operations (FONOPs) in the South China Sea aimed against China's excessive maritime claims regarding its territorial waters in the region.

In the eastern Mediterranean Sea, the search for additional gas fields will continue, facilitated by the Eastern Mediterranean Gas Forum (EMGF), which aims to contribute to the stability and prosperity of the region's population by coordinating policies among exporting, consuming, and transit countries. However, conflicts over maritime border demarcation among the region's countries, and primarily between Turkey on one side, and Greece and Cyprus on the other, could lead to a deterioration of relations between the rivals and potentially escalate to a military conflict.

The Red Sea, Gulf of Aden, and Persian Gulf will continue to be a focal point of conflict between Iran and its proxies and the moderate countries in the region, particularly Egypt and Saudi Arabia. In the ongoing shadow war between Iran and Israel, Iran will continue

to use the tactic of targeting merchant ships that have any affiliation to Israel sailing in the area whenever it feels the need to respond to Israeli actions against it or against its proxies in other areas, such as Syria and Lebanon.

Climate change and global warming are clearly evident in the Middle East, which is currently considered one of the most significant global warming hotspots. These changes will become more frequent and intense and will be accompanied by events such as droughts, storms, heatwaves, and rising sea levels. As climate change intensifies, dangerous weather events are becoming more frequent or severe. The maritime domain's sensitivity to these changes is significant, requiring countries to develop plans to cope with these challenges, including placing responsibility for implementing them on the naval forces and coastal guards of the various countries.

Given that this situation evaluation refers to Israel's maritime domain, its final chapter will present the gathered insights regarding all the aspects covered in this report, examine their implications for Israel, and translate them into recommendations for the Israeli government and various governmental entities responsible for addressing these areas.

China's Port and Shipping Diplomacy

Benni Ben Ari

The History of China's Commerce and Ports

For its thousands of years of existence, since the imperial age, China's geostrategy has always been land-based and defensive. At the same time, because of its long coastlines and many rivers, shipping and highly technologically advanced ship-building began developing as early as the Han dynasty (256–220 BCE). Years later, the Tang and Song dynasties (618–1279 CE) established the Maritime Silk Route, connecting China with Europe and the Middle East. The pinnacle of ancient maritime exploits was achieved during the Ming dynasty (1368–1644) when Admiral Zheng voyaged across the seas with enormous treasure ships between 1405 to 1433, expanding China's maritime diplomacy and commercial network all the way to East Africa.¹ But China did not use any of this as a basis for establishing naval power, in part because all of its enemies were continental nations. Having no overseas enemies, it did not invest in building a navy. Moreover, in response to opposition from supporters of Confucianism and to save on military expenditures, the navy was entirely scrapped after Zheng He's seventh voyage (in the course of which he died in 1432). Maritime commerce with Europe was henceforth also severely curtailed.² In fact, China closed itself off to the outside world, losing its global status and its control of the seas. The Ming dynasty did not take advantage of the opportunity to build a permanent presence in far-flung corners of the world. Thus, for almost its entire history, China did not engage in a policy of establishing colonies or conquering distant territories by sea. As a result, its international status was weak until the end of the 20th century.³

With the arrival of Europeans in China (1500–1750), China's maritime trade was in private hands and the country lacked a government navy. Not surprisingly, during the Opium Wars (the first between the United Kingdom and the Ching dynasty lasted from 1839 until 1842, and the second between assorted western nations and China from 1856 until 1860), China was actually defeated at sea. Only then did the Chinese discover that enemies could also appear in the maritime domain. The change in China's attitude to a military naval power came only towards the end of the 20th century, when it became clear that China's economy depended on commerce by sea.

¹ For more on Zheng He's voyages, see: "[Zheng He's Achievements](#)", *Encyclopedia Britannica*.

² G. Wang, "[China, ASEAN and the New Maritime Silk Road](#)", *The Straits Time*, November 22, 2021.

³ V. Bileta, "[Zheng He's Last Voyage, How Ming Chin, Closed Themselves to the World](#)", *The Collector*, October 29, 2022.

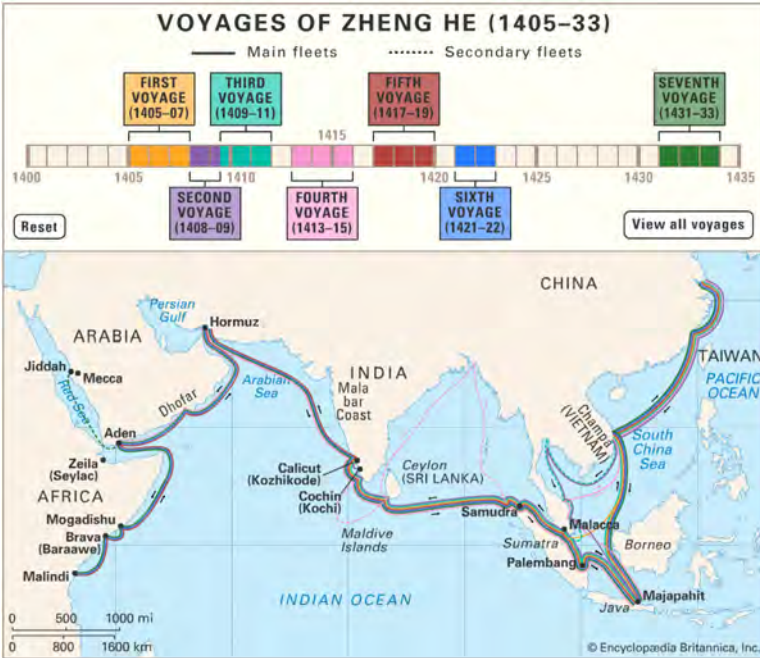


Figure 1: [Admiral Zheng He 7 voyages](#)



Figure 2: [The Treasure Fleet under Admiral He Command](#)

This article examines the development of China's ports and commercial maritime traffic and describes its port and shipping diplomacy, which led the country to becoming today's leading power in maritime trade. Sea trade now plays an integral role in China's economic

plans, including the Belt and Road Initiative (BRI),⁴ by preparing for economic and strategic competition, mainly with the United States. This article seeks to answer the question of whether China's port and shipping diplomacy is for commercial and economic purposes only, or whether it also serves geopolitical and geostrategic aims, such as achieving hegemony and greater influence on the global agenda and being in a position to promote its policies on a global level, as part of the competition with the USA.



Figure 3: [Container port in Shanghai](#)



Figure 4: [Hansaport bulk cargo port](#)

Scope of Global Maritime Commerce

In 2000, the global commercial shipping fleet consisted of 99,800 vessels, with a net tonnage of 100 and above; of these, 53,000 had a net tonnage of 1,000 and above. In January 2021, capacity was equivalent to 2.13 billion DWT (deadweight tonnage) (Table 1). In 2020, delivery of new ships fell by 12 percent (as a result of the Covid-19 lockdowns, which wreaked havoc with industrial marine activity). Most of the ships delivered were bulk cargo ships, followed by oil tankers, and container ships.⁵ According to another source, the number of vessels in the world, including fishing ships and tugboats of 100 and above tonnage, was 120,000, of which 63 percent were commercial ships.⁶

A model published in February 2022 estimated that the real value of maritime cargo after the Covid-19 pandemic of 2020 and 2021 would steadily rise, and having risen in 2021 to \$20,175 billion, would reach \$21,038 billion in 2022 and would continue to rise. The

⁴ China's Belt and Road Initiative is meant to connect Asia with Africa and Europe through a network of overland and maritime routes designed to promote regional integration, expand trade, and encourage the country's economic growth. President Xi Jinping, inspired by the Silk Road of the Han Dynasty of 2,000 years ago, gave the plan its name in 2013.

⁵ United Nations Conference on Trade and Development UNCTAD, "[Review of Maritime Transport 2021](#)", United Nations, Geneva, 2021.

⁶ Equasis, [The 2020 World Merchant Fleet Statistics from Equasis](#).

volume of cargo would also increase, reaching more than 20 billion tons within a decade. It can be assumed that maritime transport of such magnitude will require increased activity at ports all around the globe (Figure 5).

Table 1: Types of tonnage of ships in the global merchant marine⁷

| World fleet by principal vessel type, 2020–2021 (thousand dead-weight tons and percentage) | | | | | |
|---|-----------|--------|-----------|--------|-------------------------------------|
| Principal types | 2020 | | 2021 | | Percentage change 2021 over 2020 |
| Bulk carriers | 879 725 | 42.47% | 913 032 | 42.77% | 3.79% |
| Oil tankers | 601 342 | 29.03% | 619 148 | 29.00% | 2.96% |
| Container ships | 274 973 | 13.27% | 281 784 | 13.20% | 2.48% |
| Other types of ships: | 238 705 | 11.52% | 243 922 | 11.43% | 2.19% |
| Offshore supply | 84 049 | 4.06% | 84 094 | 3.94% | 0.05% |
| Gas carriers | 73 685 | 3.56% | 77 455 | 3.63% | 5.12% |
| Chemical tankers | 47 480 | 2.29% | 48 858 | 2.29% | 2.90% |
| Other/not available | 25 500 | 1.23% | 25 407 | 1.19% | -0.36% |
| Ferries and passenger ships | 7 992 | 0.39% | 8 109 | 0.38% | 1.46% |
| General cargo ships | 76 893 | 3.71% | 76 754 | 3.60% | -0.18% |
| World total | 2 071 638 | | 2 134 640 | | 3.04% |

Source: UNCTAD calculations, based on data from Clarksons Research.

Note: Propelled seagoing merchant vessels of 100 tons and above; beginning-of-year figures.



Figure 5: Increase in global maritime trade in monetary value and tonnage⁸

⁷ UNCTAD, [Review of Maritime Transport 2021](#). Table 1.

⁸ Tomasz Brodzicki, "[Global Trade Outlook 2022. High Global Trade Volume Growth in 2021 and Significant Moderation in 2022. Supply Chains Disruption is Likely to Continue in the First Half of 2022](#)", *S&P Global, Market Intelligence*, January 12, 2022.

Modern / Smart Ports

About 90 percent of global commerce is shipped by sea via merchant ships of all kinds. The demand for efficient ports and shipping lanes will only grow as the scope of maritime trade triples by 2050. It is obvious that the system of maritime transportation, ships, and ports is part of an economic mechanism that creates added value to the economies of nations that operate ports.⁹

A port is an area capable of providing harbor to many vessels and allowing continuous or periodic activity of loading and offloading goods and people. Ports may be highly important to a nation, serving as catalysts for economic development by enabling commerce and supporting the supply chain. Investments in ports have economic benefits, both direct and indirect. Ports may also have military importance.

Today, most ports (especially seaports) are equipped with special facilities and computerized systems to ease the flow of routine traffic and reduce the time any ship stays docked. Generally speaking, there are five types of ports: inland ports built on lakes or rivers, with or without a channel to sea; fishing ports; warm water ports, which have the operational advantage of not freezing over in the winter; dry ports, which are ground terminals located away from the seaport and connected to it by a network of ground transportation; and seaports, the most common, generally located in natural bays or behind artificial seawalls on the coast or at river estuaries.¹⁰ The most significant ports in terms of the economy are those that also serve as cargo ports, classified by their specializing in types of cargo – container ports, oil and gas ports, and bulk ports – or mixed ports capable of serving different types of cargo.

A smart port is a digital port; it must be more attractive and innovative in a competitive environment, be better connected to logistics, industrial environments, and development resources. These are automatic ports using technologies with an emphasis on the maritime environment. They use smart data systems geared for innovation, including big data, AI, blockchain technologies, nonstop service, efficiency, automation, and green technologies. The need to develop and become "smart" is more vital now than ever, given the changing demands of global trade: ships are getting bigger, goods are moving faster, and geopolitical issues create new challenges for ports all over the world.¹¹

⁹ OECD, [The Ocean, Ocean shipping and Shipbuilding](#).

¹⁰ Soumyajit Dasgupta, "[What Are Different Types of Ports for Ships](#)", *Marine Insight*, April 26, 2022.

¹¹ Port Technology Team, "[What is a Smart Port?](#)", *Port Technologies*, April 14, 2021.



Figure 6: [A smart port](#)



Figure 7: [The importance of the use of smart technology in ports was made clear during the pandemic](#), Photo: Andy Li

Specialization in transporting containers has become a key factor in competition among ports. At times, the economic constraints of countries and other factors make it necessary to privatize ports or apply an PPP model – public-private partnership – to them. PPP models may be categorized into four broad groups in order of increased involvement on the part of the private sector: supply and management contracts, partnerships, private ownership, and franchising.¹²



Figure 8: [Singapore Port](#), 4th on the list of 10 smart ports in the world

China's Shipping Strategy

Since the economic reforms in China and the institution of its "Open Door" policy (starting in 1978),¹³ along with the global port privatization trend beginning in the 1990s, and China's

¹² *iRami*, "[Major Features of Modern Ports](#)", September 15, 2012.

¹³ Guocang Huan, "China's Open Door Policy, 1978–1984", *Journal of International Affairs*, 39, no. 2, China in Transition (Winter 1986):1–18.

entry into the World Trade Organization (WTO) in the early 2000s, foreign investors have flocked to China's port sector, operated on the basis of the 2004 Chinese "Port Law" for joint ventures supported by the Chinese government. Thus began a process of mergers of government-owned Chinese companies, receiving financial support and political backing, such as the 2015 merger of the largest port management company in the world, the China Merchant Group (CMG), a shipping company founded in 1872, and the 2016 merger of the COSCO Group with China Shipping Group, which led to the creation of the third-largest shipping company in the world. The Chinese authorities set ambitious maritime strategic goals, both domestic and international, investing \$132 billion in international ports between 2010 and 2019 for 25 projects in 18 countries.¹⁴ The outcome has been not just an expansion of ports, infrastructures, and service in China, but also cumulative experience that, with government support, has led to the expansion of other cooperative ventures at ports around the world.¹⁵

Two major factors apparently form the basis for China's buildup in maritime transportation (and also in other fields of the economy) and for its full or partial ownership of dozens of ports around the world. The first is the formulation of a new communist ideology, "socialism with Chinese characteristics," that combines China's unique history and culture with the nation's communist doctrine, and is a key component in China's economic, social, and security development. According to party propaganda, China's economic development is a source of profound admiration, the standard of living has improved dramatically, and the use of capitalist principles incorporated with a socialist foundation has brought China nothing but good. Similarly, in the realm of national pride, China has developed and advanced after "the century of humiliation."¹⁶ The emphasis on the intention and ambition to return to a place of Chinese superiority was part of China's name from the year 1000 BCE until the 16th century, when the nation was called "the Middle Kingdom"¹⁷ and was a world leader diplomatically, militarily, and economically.

¹⁴ Jude Blanchette, "[Hidden Harbors: China's State-backed Shipping Industry](#)", *CSIS*, July 8, 2020.

¹⁵ K.X. Li, W. Zhang, S.L. Chen, and W. Huo, "[International Port Investment of Chinese Port-Related Companies](#)", *International Journal of Shipping and Transport Logistics*, 11, no. 5 (January 2019): 430.

¹⁶ "The century of humiliation" is a historical term referring to the period of Western and Japanese intervention and imperialism in China and ranges from 1839 to 1949.

¹⁷ At different times, China was called the "Middle Kingdom" or "Central Kingdom" and, in fact, in Chinese the name of the nation is Zhongguo, which is translated as "the Middle Kingdom." It is indicative of the country's supreme function as the center of civilization or even the world. With such self-confidence and collective sentiment, China was destined to be isolated. From the beginning of the year 1000 BCE, the members of the Zhou dynasty, not aware of high civilizations in the West, believed that their empire had conquered the middle of planet Earth and was surrounded by barbarians.

Like historically distant leaders, the Communist Party of China (CPC) of today also behaves as if China is at the center of the universe.

The second factor in China's maritime growth is the reliance of China's maritime policy shapers on the naval doctrines of Mahan and Corbett, both of whose writings have directly influenced the concept of China's military fleet and are an inseparable part of its policy of shipping and controlling ports all over the world (see below).



Figure 9: "[Socialism with Chinese characteristics](#)"

As early as 2017, President Xi, speaking about the BRI, said, "If you want to get rich, first build a road, but in coastal areas, if you want to get rich, you also need to build a port."¹⁸ He also said that "Economic powers must be maritime powers and shipping powers."¹⁹

In previous articles, I have tried to clarify China's geostrategic intention as an economic policy and strategy rather than as an aspiration for hegemony or a military strategy.²⁰ For hundreds of years, China's security strategy was aimed at its long land borders with its neighbors. In the 1980s and 1990s, as China's industry grew, accompanied by an impressive increase in maritime commerce (imports and exports), China's grand strategy

¹⁸ Isaac Kardon, "[China's Ports in Africa](#)", *NBR*, Special Report, no. 9:8. May 3, 2022.

¹⁹ "[How Is China Influencing Global Maritime Connectivity?](#)", *China Power*, Retrieved September 17, 2022.

²⁰ Benni Ben Ari, "Strategies in the Indo-Pacific Region", in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021–2022* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2022), pp. 103–121; Benni Ben Ari, "Is U.S. Strategy on China's Maritime Buildup Correct?" in Ziv Rubinovitz (ed.), *The Geostrategic Series 2022* (Haifa: Chaikin Chair for Geostrategy and the Maritime Policy & Strategy Research Center, University of Haifa, 2023), pp. 12–17 (Hebrew).

shifted to "offshore balancing."²¹ In my opinion, making China's maritime strategy part of the nation's grand strategy is a result of its population size and the CPC's policy that it must ensure that its 1.5 billion citizens are satisfied with the standard and quality of living in the country. A population of that size demands the of production²² and import of massive quantities of food (China is the world's large food importer,²³ as well as a leading exporter of foodstuffs²⁴) and a constant flow of raw goods to the industrial sector, including energy products – coal, oil, and gas – lacking in China (which is the world largest importer of oil,²⁵ as well as the largest importer and consumer of iron in the world).²⁶ Employment opportunities for so massive a population and the world first-place manufacturing capacity demand extensive export and import capabilities.²⁷ Such activities, undertaken on such a large scale, can be carried out only by sea transport; therefore, China must have a very large merchant fleet and a well-developed home port system. In seven years, the expansion of the merchant fleet's gross tonnage (GT) totaled 97.4 million: from 126.3 million GT at the end of 2014 to 223.7 million GT at the end of 2021. Almost half of the total expansion in that time involved bulk carriers, including ore carriers (47 percent); about one-quarter involved container ships (26 percent), followed by tankers (17 percent), and other types of vessels (10 percent).²⁸

The rapid growth of China's economy on the world stage steps primarily from the constant growth in exports of the last few decades. Container ships transport more than 80 percent of international commerce, which is why China is implementing a plan for export-oriented economic growth. Along with this, the Chinese government is investing

²¹ "Offshore balancing" in strategy is a term used in the doctrine of international relationships that perceives multi-polarity – international relations controlled by force over many – as an opportunity rather than a threat. For more on China's strategy, see: Benni Ben Ari, "[The Cat Is out of the Bag: Geostrategy and Geopolitics in the South China Sea](#)," Maritime Policy & Strategy Research Center, University of Haifa, October 11, 2021 [Hebrew].

²² K. Whiting, "[Food Security: This is How China Plans to Feed its 1.4 Billion People](#)", *World Economic Forum*, March 11, 2022.

²³ O. Wang, "[China Food Security: How's It Going and Why It Is Important](#)", *China Macro Economy*, November 29, 2000.

²⁴ T. Brodzicki, "[Agri-food Exports of China](#)", *S&P Global*, February 25, 2020.

²⁵ K. H. Wang, C. W. Su, "[Dose High Crude Oil Dependence Influence Chinese Military Expedition Decision Making?](#)", *Energy Strategy Reviews*, 35: 100653, May, 2021.

²⁶ Luo Guoping, Fan Ruohong, and Han Wei, "[China's Steel Industry at a Crossroads as Long Winter Looms](#)", *Nikkei Asia*, September 7, 2022.

²⁷ "[Top Manufacturing Countries in the World](#)", *Global Upside*, Global Manufacturing Output, China, – 28.7% United States, – 16.8% Japan, 7.5%, Retrieved December 12, 2022.

²⁸ "[Powerful Growth in the China-Owned Fleet](#)", *Hellenic Shipping News*, June 16, 2022.

in upgrading and strengthening the infrastructure of the country's ports, through which most of the nation's international commerce passes.²⁹ The Chinese companies building and operating infrastructures overseas are exposed to ever-increasing competition from other world powers. In fact, China is not alone in operating a port strategy, and, currently, a number of port operators from one country own and operate terminals in others. PSA (the Singapore Port Authority) operates terminals in 15 countries; the Danish Maersk Line has 76 ports in 41 countries; Switzerland's Mediterranean Shipping Company (MSC) operates 35 terminals in 22 countries; and DP World from Dubai runs 77 ports in 40 nations.³⁰

China's defense experts applied Alfred Thayer Mahan's principles of naval strategy during the impressive development of the merchant fleet and later to the naval branch of the armed forces charged with maritime defense of China's coasts and littoral water, as Mahan's ideas suited China's growing strength and influence.³¹ Later, the development of commercial sea routes to all corners of the globe led to a conceptual change and the adoption of Julian Corbett's naval strategy, which holds that naval strategy always derives from a nation's unique political ambitions and desires while taking into account its limitations and constraints.³² According to Corbett, such a grand strategy requires an appropriate naval strategy that can link the use of naval power with the political objective of preventing the development of a negative balance of power in each and every region. In China's case, such a strategy necessarily involves achieving the objectives of being able to face other navies and threats, especially from the United States and its navy.³³ Mahan's doctrine may be summarized as focusing the navy on finding and destroying the adversary's navy in a decisive battle at sea (an offensive defense). In contrast, Corbett's theory may be summarized as the need to ensure command of the sea to deny freedom of action to one's adversary. A transition to Corbett's strategy also requires a well-

²⁹ "[How the Ports are Helping China to Lead the Global Container Shipping Industry](#)", *The Cooperative*, February 2, 2022.

³⁰ W. Shepard, "[China's Seaport Shopping Spree: What China Is Winning by Buying Up the World's Ports](#)", *Forbes*, September 6, 2017.

³¹ Alfred Thayer Mahan was considered "the guru" of U.S. naval power in the 19th century and the spiritual father of the modern U.S. Navy. His theories are not time-dependent, and Chinese experts refer to his writings again and again, urging their nation to construct a powerful navy.

³² Corbett's main goal was to fill the lacunae in the British Royal Navy's doctrine by articulating the theories and principles of naval warfare. His strategies focused on the art of naval warfare and formulated the differences between warfare on land and at sea.

³³ Andrew Latham, "[Mahan, Corbett, and China's Maritime Grand Strategy](#)", *The Diplomat*, August 24, 2020.

developed navy to be a "blue-water navy"³⁴ equipped with suitable weapons capable of securing commercial maritime routes and operating at distant chokepoints³⁵ that have the potential to interfere with or even prevent free and secure shipping at sea.

Major Ports and Maritime Commerce in China

Along its 14,500 km. long coastline, China operates 34 large open-sea ports and more than 2,000 smaller ports located along rivers and canals, all of which are active year-round. Thus, most large cities have a port of their own or are close to one.³⁶ After the economic reforms that followed the Cultural Revolution (post-1979) and as exports and imports increased, in particular after the announcement of the Belt and Road Initiative in 2013,³⁷ the field of maritime commerce and port construction has undergone considerable development. Today, China has the largest number of home ports of any country in the world, and of the ten largest ports in the world, seven are located in China (since 2009, the largest port in the world has been the Port of Shanghai).³⁸ China also controls more than 150 ports in 79 countries scattered across all five continents (a different source claims 63 nations;³⁹ a breakdown of Chinese ports in the world may be found below).

In the first quarter of 2022, China's foreign trade increased by 10.7 percent (compared to the previous year), for a value of CN¥9.42 trillion (\$1.48 trillion), maintaining a growth momentum for seven consecutive quarters and kicking off a stable year despite mounting challenges: the Russia-Ukraine crisis and local outbreaks of the Omicron strain of Covid-19.⁴⁰ Undoubtedly, a significant part of maritime trade growth is due to the recovery of maritime transport, which slowed during the pandemic, and due to the many efficient ports in China itself and the ports it controls throughout the world.

³⁴ Navies with the ability to operate at great distances in the waters of all the oceans.

³⁵ A narrow strategic route providing transit to another region.

³⁶ [List of ports in China](#), *wikinone.com*, Retrieved July 20, 2022.

³⁷ Belt and Road Initiative, a development strategy that President Xi Jinping proposed, focused on connections and cooperation with other nations, especially between the People's Republic of China and other Eurasian nations, in the developed of commercial and industrial infrastructures.

³⁸ "[Top 9 Ports in China](#)", *ShipHub*, Retrieved July 9, 2022.

³⁹ Matthew Rochat, "[China's Growing Dominance in Maritime Shipping](#)", *The Diplomat*, December 18, 2021.

⁴⁰ GT staff reporters, "[China's Foreign Trade Mirrors Stable Start in Q1 Despite Omicron Outbreak, Ukraine Crisis](#)", *Global Times*, April 13, 2022.



Figure 10: Sea ports in China



Figure 11: Volume of international commerce shipping by sea in China in the first quarter of 2022

China's Shipping Policy

China's merchant marine grew by an average of 8.5–14.5 percent between 2015 and 2020. Over the last decade, the capacity of China's merchant fleet has more than doubled (at the end of 2011, the total GT was 106 million; at the end of 2021, the GT had grown to 223.7 million). A fair estimate puts the number of Chinese merchant marine vessels of all types at more than 9,000. Expanding the fleet of Chinese-owned bulk carriers, tankers, container ships, gas carriers, and other types has made it possible for China to increase maritime imports and exports and reduce its dependence on foreign-owned ships. These trends are the result of the implementation of a national maritime shipping policy that appears in various economic programs of the PCP. Thus, the involvement of nationally-owned ships has also grown in maritime trade routes in which China is neither an importer nor an exporter. In fact, today China owns about one-seventh of all commercial ships in the world.⁴¹



Figure 12: [Container ships belonging to COSCO](#)

The Chinese merchant navy has also been of military-strategic importance for some time. As early as 2015, when China announced its shift of maritime military strategy from "defense in the nation's littoral waters" to an incorporation of "the open sea" in the navy's missions,⁴² the state approved and published guidelines for shipyards building merchant navy ships entitled "The Technical Standards for New Civilian Ships to Implement National Defense Requirements." This was done to ensure that the ships – container ships, roll-on-roll-off carriers (i.e., designed for wheeled cargo, such as cars, buses, etc.), general cargo, fuel tankers, and bulk carriers⁴³ – could also be used to transport soldiers, military

⁴¹ "[Powerful Growth in the China-owned Fleet](#)", *Hellenic Shipping News*, June 16, 2022.

⁴² Himanil Raina, "[China's Military Strategy White Paper 2015: Far Seas Operations and the Indian Ocean Region](#)", *CIMSEC*, July 1, 2015.

⁴³ Conor M. Kennedy, "[Civil Transport in PLA Power Projection](#)". *China Maritime Report No. 4*, U. S. Naval War College, December 2019.

equipment, armored combat vehicles, and various weapons systems.⁴⁴ In 2016, the Chinese government passed the "National Defense Transportation Law," updated in 2021, which determines that every government-owned organization is obligated to support security issues even outside of China, stressing that infrastructure projects (including ports) must take into account and realize military requirements.⁴⁵ Thus, the merchant navy is an integral part of China's strategic maritime capabilities. At the same time, the Chinese navy has also developed considerably; today, it is larger than the U.S. Navy in terms of the number of vessels.⁴⁶ Nonetheless, the modern Chinese navy has never fought a battle at sea, and even in its early history, it never won a serious naval battle. The construction of a modern navy seems justified if its main function is to secure the coasts and shipping lanes for commerce and to ensure that the nation's economy, so dependent on maritime trade, is never threatened by hostile parties. But based on the types of vessels included – aircraft carriers, nuclear subs, and armored vehicle and troop carriers – it seems that China also wants to project a maritime presence as a blue-water fleet and to make it possible to secure long-range shipping routes.

In addition to its standing in terms of scope of maritime trade (some 15 percent of all maritime trade is Chinese), China's investment in maritime technologies, not just port construction, is also steadily on the rise. China is the world's leader in the manufacture of port equipment and machines. It manufactures 96 percent of all containers in the world, 100 percent of refrigerated containers, and 80 percent of cranes for on- and offloading ships (especially container cranes), and in 2020, Chinese ship-builders received 48 percent of the world's orders for the construction of new ships.⁴⁷ In terms of orders, China leads the world in the construction of container ships and operates the third-largest shipping company in the world, the China Ocean Shipping Company (COSCO), which has been active since 1961 as a government-owned company. China's exports by maritime shipping contributes 39.18 percent to China's GDP. China's system of ports, which operate in all seasons, moving cargo of 242 million TEU (twenty equipment units), and its shipping lanes

⁴⁴ Franz-Stefan Gady, "[China Prepares Its 172,000 Civilian Ships for War](#)". *The Diplomat*, June 23, 2015.

⁴⁵ Ben Lowsen, "[China's Updated National Defense Law: Going for Broke](#)", *China Brier*, 21, no. 4 (February 26, 2021), The Jadestone Foundation.

⁴⁶ David Axe, "[Yes, The Chinese Navy Has More Ships Than The U.S. Navy. But It's Got Far Fewer Missiles](#)", *Forbes*, November 10, 2021. A comparison between U.S. Navy capabilities and those of China in terms of attack missiles serves as a good demonstration. The Chinese Navy has 355 forward line battleships minimally of a Corvette size and more than 400 if one also counts small coastal missile boats, while the U.S. Navy has only 305 forward line battleships.

⁴⁷ "[China strives For Global Dominance Through Seaport Control](#)", *The Print*, May 8, 2022.

are the key factors in the nation's success in the field.⁴⁸ Maritime transportation plays a key role in China's economic strategy and the policy of China's Communist Part.

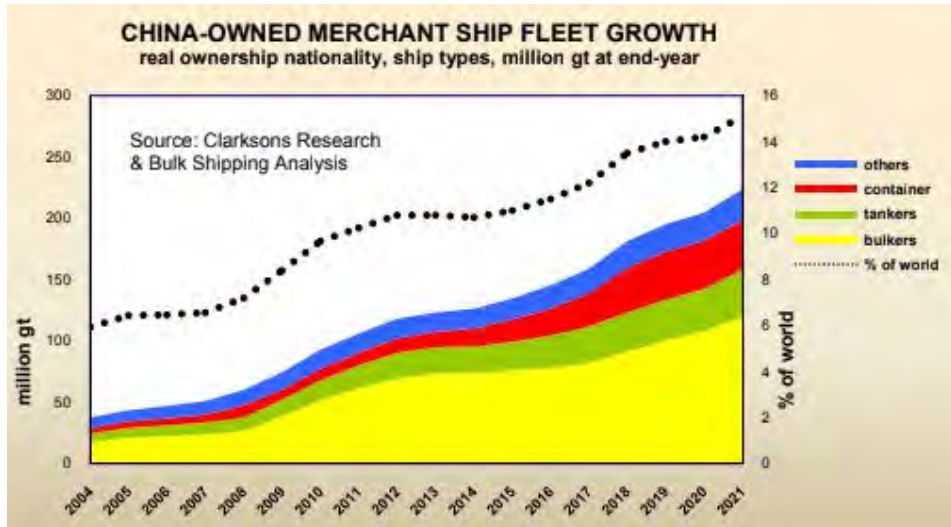


Figure 13: Growth of China's merchant marine, 2004 to 2021

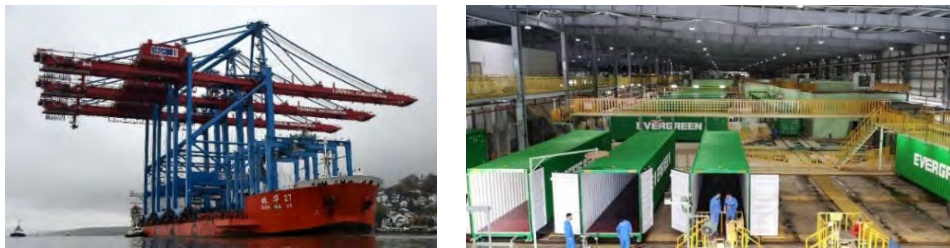


Figure 14: [Transit of container cranes from China to the port in Hamburg and the manufacturing of containers in China](#)

China's high performance in the Liner Shipping Connectivity Index (LSCI) is mainly the result of the nation's ability to handle a high output of container transportation.⁴⁹ China

⁴⁸ "[How dominant is China in the Container Port Business?](#)", *Zeymarine*, April 14, 2022.

⁴⁹ The Liner Shipping Connectivity Index examines the extent to which nations are connected to the global shipping networks. The index is computerized by the UNCTAD (the United Nations Conference on Trade and Development) on the basis of five parameters of maritime traffic: the number of ships, their carrying capacity, the maximal size of the vessels, the number of services, and the number of companies holding container ships at the nation's ports. "[Maritime Connectivity: Countries Vie for Positions](#)", *UNCTAD*, July 17, 2019.

invests heavily in improving its port infrastructures and in connecting them with the international traffic routes of the leading shipping companies. Moreover, many of China's ports are ranked among the most connected and efficient in the world.⁵⁰

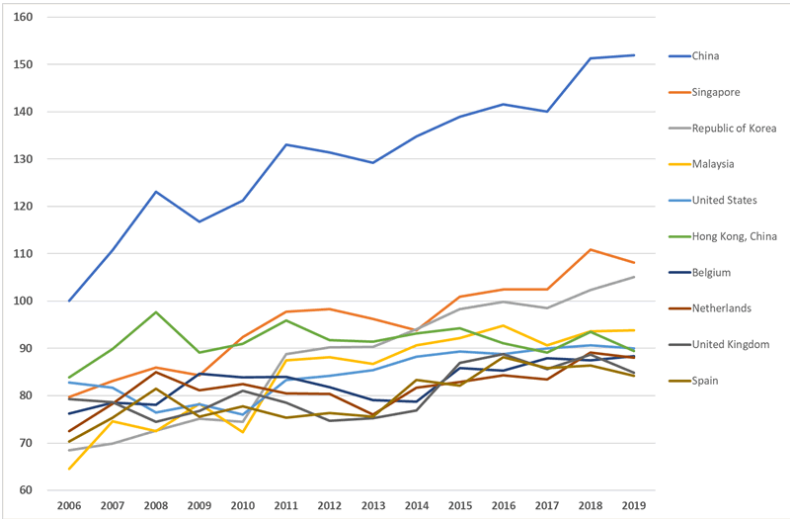


Figure 15: [LSCI 2006 to 2019](#)
 (Source: UNCTAD, based on data provided by MDS Transmodal)

To realize its commercial maritime strategy of having the largest merchant marine in the world⁵¹ to ensure its import and export ability based on China's existential and economic requirements at any time, China must be involved in and control and manage a large number of ports all over the world. In this way, it can ensure the ability to on- and offload goods and raw materials, including energy (coal, oil, and gas), so that the enormous merchant marine can function without limitations, even in economic and political crises. As of 2022, China had about 150 ports and cargo terminals, in particular container ports/ terminals (see Figures 16 and 17).⁵²

⁵⁰ Ibid.

⁵¹ In 2021, Greece held the largest share of the world's merchant marine, some 17.6 percent. China was ranked second with an 11.6 percent share. At the beginning of 2020, the world's total merchant marine comprised some 55,000 ships. [Number of Merchant Ships by Type 2022](#), Retrieved November 29, 2022.

⁵² Most of the numerical data about China's involvement in ports around the globe are based on diverse sources, and offer different number about the total of Chinese ports around the world. Some of China's activity in ports is reflected by dedicated trade agreements as part of the Belt and Road Initiative. Although there are no ownership or partnership relations, in terms of involvement in ports around the world, the number is much higher than 150.

Guided by government policy, Chinese companies are investing in international ports strategically located along the world's leading import and export shipping routes (SLOC, "sea lanes of communication"), including those linking China with raw materials, energy, and markets critical to China's economy. Investments in ports are made along three maritime trade routes known as "the blue economic passages." The main one goes from China through the Indo-Pacific region, Africa, and the Mediterranean, to Europe. The second one goes to the southern part of the Pacific Ocean and Australia, while the third is meant to connect China with Europe through an Arctic passage in the future.⁵³ Some of the ports are located at chokepoints that are important for maritime routes to and from China. The Chinese government has not issued official data on global ports with Chinese ownership or involvement.⁵⁴ The data I gathered using maps, articles, and open-source information show that China is apparently involved in more than 150 ports, terminals, and platforms in various ownership arrangements in 79 countries.

More than 80 percent of the ports and terminals in which China is involved internationally are controlled by three large Chinese companies that operate ports and shipping lines: the above-mentioned COSCO, the China Merchants Group (CMG), and CK Hutchison Holdings. The first two are government-owned, while the third is a privately owned company in Hong Kong. The rest of the companies linked to ownership of ports are in various ways connected to or supported by the Chinese government, despite ostensibly being privately owned.



Figure 16: Nations here China has invested in and is involved in major ports⁵⁵

⁵³ "[China's expanding investment in global ports](#)", *Economist Intelligence*, October 11, 2017.

⁵⁴ John Xie, "[China's Global Network of Shipping Ports Reveal Beijing's Strategy](#)", *VOA News*, September 13, 2021.

⁵⁵ *Ibid.*

The list of countries in which China is involved in or owns ports, cargo terminals, and platforms, or with which it has special trade agreements regarding ports (including within the framework of the maritime BRI and its expansion) and their numbers: Algeria (3), Angola (3), Argentina, Australia (4), Bahamas (3), Bangladesh, Belgium (4), Brazil, Cambodia, Cameroon, Canada, Cape Verde, Chile (2), Congo, Cuba, Djibouti (4, including one military port), Egypt (4), El Salvador, Equatorial Guinea, Eritrea, France (5), Gabon, Gambia, Germany, Ghana (3), Guinea Bissau, Greece (3), Guinea (2), Indonesia, Iraq, Israel (1: Haifa), Italy (2), Ivory Coast, Jamaica, Kenya (2), Korea (4) Madagascar (2), Malasia, Malta, Mauritania, Mexico (8), Morocco (2), Mozambique, Myanmar (2), Namibia, Netherlands (11), Nigeria (6); Oman, Pakistan (3), Panama (5), Papua New Guinea, Peru, Poland, Russia, Sao Tome, Saudi Arabia, Senegal, Sierra Leone (3), Singapore (2), Solomon Islands (Tulagi), South Africa, Spain (3), Sri Lanka (2), Sudan, Sweden, Taiwan (3), Tanzania (4), Thailand (3), Togo, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates (4), United Kingdom (5); United States (5: Los Angeles, Houston, Miami, Seattle, Long Beach), Uruguay, Vietnam (3), and Zambia.⁵⁶

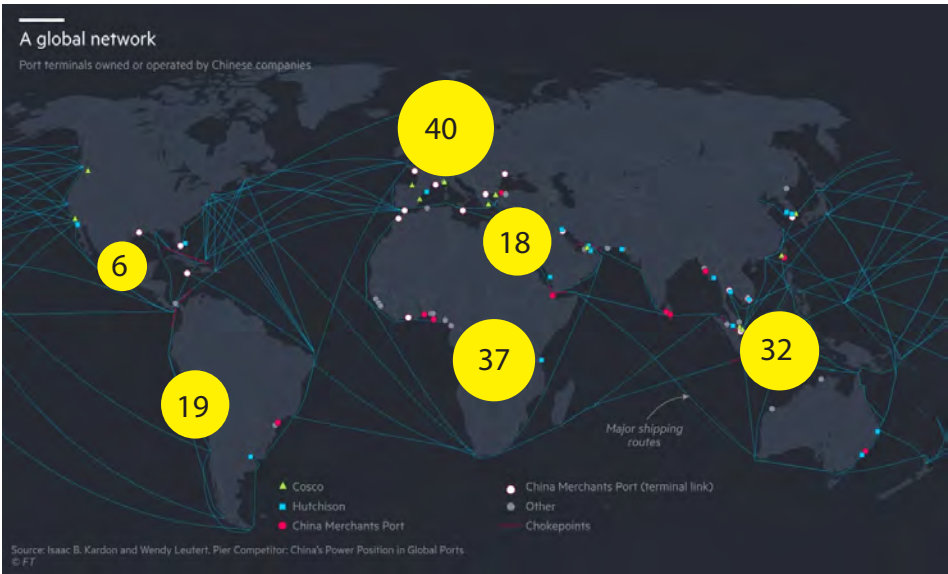


Figure 17: 152 ports where China is active around the world⁵⁷

⁵⁶ The identification of countries and ports based on a survey of maps and articles. The majority of the list of ports is based on Ehud Gonen, "Nations' Responses to Chinese Investments in Seaports" (not yet published), University of Haifa, 2022.

⁵⁷ Source of base map: "[China Denies Building Naval Bases but Fear of its Military Reach Grows](#)", *Public News Times*, June 19, 2022.



Figure 18: [Chinese ports in Europe and in the Indo-Pacific region](#)

Since 2002, China has shown interest in developing some 150 transportation infrastructure projects in Latin America and the Caribbean. Chinese construction companies work everywhere, but are especially focused on Bolivia, Brazil, and Jamaica. China has been particularly successful in acquiring and building port facilities that are considered the most advanced in the world.⁵⁸



Figure 19: [Chinese infrastructure and port projects in the Caribbean and South America](#)

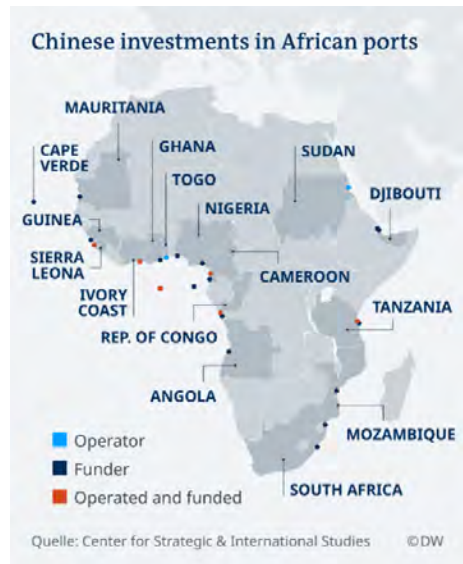


Figure 20: Chinese ports in Africa⁵⁹

⁵⁸ Margaret Myers, "[China's Transport Infrastructure Investment in LAC: Five Things to Know](#)", *The Dialogue*, November 13, 2018.

⁵⁹ Chiponda Chimbela, "[Making Chinese Investment in African Ports Work](#)", *DW*, June 21, 2019.

In 2021, the *Naval War College Review* published a study, which was presented to the U.S. Congress, on China's involvement in commercial ports around the globe. Some were defined as having the ability to provide logistical and intelligence support as well as military and diplomatic activity on military vessels (dual-use functions as strategic strongpoints). The study notes the existence of 95 Chinese-owned or -operated ports, and hundreds more with such dedicated equipment and other activities (other sources in this article and regional maps note an even larger number of ports). Chinese government companies are involved in 35 ports. All Chinese companies have full ownership of at least one terminal at 56 ports and 100 percent ownership in 23 ports. Of the 77 ports, 81 percent are controlled by the three large companies. CK Hutchinson has majority ownership of 36 out of 38 (20 of which are 100 percent owned); COSCO has majority ownership of 7 out of 19 ports; and CMP has majority ownership of 3 ports and minority ownership of 29.⁶⁰

The study notes that worldwide, 31 ports are located along the Atlantic Ocean, 25 along the Indian Ocean, 21 along the Pacific Ocean, and 16 along the Mediterranean and in North Africa. Regionally: 18 ports are on the South and North American continents, 18 in South and Southeast Asia, and 9 in Africa. Of all the ports, 50 are at chokepoints (10 in the English Channel, 9 in the Strait of Malacca, 9 near the Strait of Hormuz, 6 near the Suez Canal, and 4 each in the following areas: the Panama Canal, Gibraltar, and the Dardanelles and Bosphorus).⁶¹

Ownership Modalities

Chinese companies, whether government owned or privately owned with government support, fully or partly control ports around the globe include: China Merchants Port Holdings Company – CMPHC, COSCO (CSP), Hutchison Ports Holding – HPH, Hutchison / TMA Logistics, Terminal Link, LandBridge – DARWIN PORT, OOCL, China Overseas Port Holding Company, Shanghai, Gorgeous, SIPG, and Qingdao Port International Development. There are four major methods whereby Chinese companies gain full or partial control of ports around the world: acquisitions, joint ventures, franchises, and BOT (build, operate, transfer). Some of the projects may be classified as public-private partnerships (PPP).

Between 2004 and 2017, the government-owned COSCO was involved in investments ranging from 12.5 to 100 percent in 12 foreign ports, mostly by acquiring ownership shares: in Belgium (two ports owned at 100 and 25 percent respectively); Spain (51

⁶⁰ Isaac Kardon, "[Research & Debate, Pier Competitor: Testimony on China Global Ports](#)", *Naval War College Review*, 74, no. 1 (2021): 128–152.

⁶¹ Ibid.

percent ownership); Italy (40 percent); UAE (90 percent); the Netherlands (two ports owned at 47.5 and 12.5 respectively); Greece (100 percent); Singapore (49 percent); South Korea (20 percent); Turkey (26 percent); United States (33.33 percent); and Egypt (20 percent). In 2022, after disagreements in the German government, an agreement was approved according to which the company acquired 24.9 percent of the control of the Port of Hamburg but without the ability to affect strategic and management issues.⁶²

Between 2008 and 2017, CMP, the second government company, invested in 13 foreign ports using various ownership methods: in Brazil (90 percent control), Sri Lanka (85 percent), Turkey (26 percent), Myanmar (BOT), Australia (50 percent), and Djibouti (23.5 percent). In joint ventures with the French company Terminal Link, CMP is involved in 14 ports in 8 countries with 49 percent ownership, and in Togo (50 percent), Sri Lanka (85 percent), Nigeria (28.5 percent), and Vietnam (49 percent).

Table 2: Ownership modalities, control of international ports⁶³

| Modality Types | Main Features | Risk Transfers |
|----------------|---|---|
| Acquisition | <ul style="list-style-type: none"> A company acquires shares from either private entities or state-owned enterprises (SOEs) in host countries; SOEs can be regarded as a PPP partly or wholly, usually called a partial divestiture or total divestiture. | The company is responsible for all aspects; hence there are risks in infrastructure provision. |
| Joint venture | <ul style="list-style-type: none"> A jointly owned and independent company is set up by two or more organizations sharing resources, costs, expertise, and profits. | All risks are shared between the joint venture partners. |
| Concession | <ul style="list-style-type: none"> A brownfield lease, franchise or affermage. A government transfers operating rights to private enterprise, but still retains the ultimate ownership of assets. | No equity risk is borne by the private company, with additional exposure of maintaining certain technical standard at the facility. |
| BOT | <ul style="list-style-type: none"> A private company builds the facility and operates the facility through a concession. At the end of the concession, the facility is transferred to the government. | Private company assumes equity, construction risk and other commercial risks. |

⁶² Arne Delfs and Josefine Fokuhl, "[Hamburg Port to Sell Stake to China's COSCO After Scholz's Push](#)", *Bloomberg*, October 26, 2022.

⁶³ Shuiwang Zhang, Yu Mei, Qiang Bao, and Lingzhi Shao, "[International Port Investment of Chinese Port-Related Companies](#)", *International Journal of Shipping and Transport Logistics*, 11, no. 5 (2019): 445, Table 7. Four major modalities of international port investments.



Figure 21: The Chinese Yuan Rui Yang VLCC (very large crude carrier), launched in 2022, with a tonnage of 317,800 GT⁶⁴



Figure 22: Iron ore bulk carrier, Chinese merchant marine (Hong Kong)⁶⁵

⁶⁴ The VLCC, exclusively designed and constructed by CSSC (the China State Shipping Corporation), measured 333 meters long and 60 meters wide. It runs on LNG (liquefied natural gas) as its main fuel and is also equipped with a dual-fuel main engine of LNG, generator, and boiler. When propelled by gas, the carrier can sail a distance of 12,000 nautical miles, equivalent to a round-trip from Shanghai Port to Dubai Port with one LNG fueling. In its dual-fuel state, the carrier can sail up to 24,000 nautical miles. "[China Delivers World's First Super-Large LNG Dual-Fuel Oil Tanker](#)", *CGTN*, March 2, 2022.

⁶⁵ The *Pacific Flourish*, sailing under the Hong Kong flag, was built in China in 2018. A second generation Valemax-class bulk carrier, it belongs to the China Merchants Group, established in 1872, which owns a large fleet of ships of various types and whose routes crisscross the globe. The ship is 362 meters long by 65 meters wide, with a capacity of 203,000 tons and a GT of 399,000. The ship has a 32,400-HP engine and can reach a speed of 14 knots and above. "[10 Largest Bulk Cargo Ship in the World – 2022](#)", *Daily Logistic*, July 16, 2022.

In some ownership modalities between China and other nations for the construction, development, or management of ports, China finances the project or grants a loan to the other nations, after which it "takes advantage" of the other nations' difficulty in returning the debt to Chinese banks. The term "debt trap diplomacy" is in common use, attributing to China a policy geared at maneuvering countries (usually poor and undeveloped nations) into a trap that will force them to accept Chinese loans in exchange for strategically important physical assets given as guarantees, or the transfer of large shares of control of infrastructure projects. China faces criticism for its lending methods to poor countries and has been accused of leaving them struggling for a way to repay their debts and exposing them to pressure from Beijing. China's response was, "There is not a single nation that has been caught in a so-called 'debt trap' as a result of loans from China."⁶⁶ The best-known case is that of Hambantota International Port in Sri Lanka.⁶⁷ Various studies rule out these cases being the result of deliberate policy.⁶⁸

Concurrently with the development of major ports in China and an economic policy of construction, acquisition, or leasing of ports around the world, China, to all intents and purposes, has also been implementing a military/security policy in the Indo-Pacific region of seizing control of the South China Sea, China's port entry zone. China has been building artificial islands in the South China Sea, on which they have been building military infrastructures, including: runways for fighter jets; and detection, command, and control systems; as well as aggressive posturing on the part of its coast guard, naval militias, and navy.⁶⁹

The three major areas where China has considerable involvement in ports are the Indo-Pacific region, Africa, and Europe. In recent years, China has been expanding its port activities in South and Central America and the Pacific Ocean. Despite China's denial, attempts at involvement in Solomon Islands ports (including a military port), in southern Argentina (Strait of Magellan), and even the Panama Canal have aroused concern in the U.S. administration about China's political and strategic expansion.⁷⁰

⁶⁶ Kai Wang, "[China: Is it Burdening Poor Countries with Unsustainable Debt](#)", *BBC News*, January 6, 2022.

⁶⁷ Wale Ajetunmob, "[Like Zambia, Sri Lanka also Handed Over Port to China to Pay Off Debt](#)", *African Liberty*, September 10, 2018.

⁶⁸ Mark Leon Goldberg, "[Chinese 'Debt Trap Diplomacy' is a Myth](#)", *UN Dispatch*, May 19, 2022.

⁶⁹ For more on the South China Sea, see Ben Ari, "Strategies in the Indo-Pacific Region", pp. 89–104; "Is U.S. Strategy on China's Maritime Buildup Correct?", pp. 12–17.

⁷⁰ K. Moriyasu, "[Strategic Chokepoints: The New U.S.-China Battlegrounds](#)", *Nikkei Asia*, April 27, 2022.

China's "String of Pearls"⁷¹

China started to realize its strategy of building civilian and military ports in the Indian Ocean in 2004,⁷² and began to buy European ports for the sake of maritime commerce in 2008.⁷³ China's "String of Pearls" refers to the nation's intention to set up a network of ports in the Indian Ocean domain, surrounding India and the Indo-Pacific region as the geopolitical realization of China's aims in that part of the world. Each "pearl" refers to a port with military capabilities in a sequence along the maritime transportation routes in the region. China's presence in the Indian Ocean and Bay of Bengal is a clear threat to the security of India from the sea. India responded to the threat with the development of its own "East Policy."⁷⁴ The military-strategic significance is accompanied by an economic price tag, because the "String of Pearls" is an inseparable part of China's Belt and Road Initiative.



Figure 23: The "String of Pearls" early on (2013)

China's major achievements in the Indo-Pacific domain are a 99-year lease and expansion of Hambantota International Port in Sri Lanka; a 40-year rental agreement at Gwadar Port

⁷¹ Aarna Tiwari, "[China's String of Pearls UPSC: About, Impact on India and Measures Undertaken](#)", *BYJUS*, October 12, 2022.

⁷² Virginia Marantidoy, "[Revisiting China's 'String of Pearls' Strategy Places 'With Chinese Characteristics' and their Security Implications](#)", *Issues & Insights*, 14, no. 7. (June 2014).

⁷³ Jérôme de Ricqlès, "[European Ports: China Sets Up its Commercial 'Factories'](#)", *UPPLYYS*, October 28, 2019.

⁷⁴ [China's String of Pearls: Notes for UPSC International Relations](#), *BYJUS*, Retrieved December 13, 2022.

in Pakistan; and the investment of \$350 million in the Port of Djibouti, which is also China's first overseas military base, located near the central strategic chokepoint between the Gulf of Aden and the Red Sea.

In the decade between 2009 and 2019, China emerged as an economic superpower of strategic proportions in the Mediterranean and southeast Europe, a region where large powers have vied for influence for hundreds of years. Having established its supremacy at the Greek port of Piraeus, China has implemented a sweeping program of "Port Diplomacy" covering more than two dozen ports along the Mediterranean coastline – Europe, the Middle East, and North Africa. At the same time, China prepared plans for active involvement in central and eastern European nations, the reason why the "17+1 forum" (now called the Cooperation between China and Central and Eastern European Countries – China-CEEC) in Europe is linked to the BRI via Piraeus, the gate to the Middle East.⁷⁵ Based on these developments, China is well placed to expand its power in the Mediterranean in the future. Cargos intended for European destination are offloaded at the modernized port of Piraeus and transported by rail across the continent in a much shorter time.⁷⁶

This strategy is the foundation of China's expansion in ports and shipping lines, with the added bonus of, at least in part, using the ports for military purposes. Having established itself in ports over several decades, Liam Fox, former U.K. Defence Secretary, observed, "Some of these (ports) are at key locations for maritime trade—which also means energy trade—giving Beijing strategic dominance without having to deploy a single soldier, ship or weapon."⁷⁷

Ports in Africa

Africa is rich in minerals needed in various industries and produces a bounty of agricultural products, while having a growing consumer market. China has therefore shown economic and political interest in the continent for decades, taking advantage of the lack of modern

⁷⁵ The "17+1 forum" is a setting for cooperation between China and 17 central eastern European countries established in 2012 in Budapest to expand China's BRI. Of the 17, 12 are EU members and five are from the Balkans: Albanian, Bulgaria, Bosnia and Herzegovina, Croatia, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, and Slovenia. Pritish Gupta, "[The '17+1 Initiative': Is China Losing its Charm in Central and Eastern Europe?](#)", *ORF*, September 18, 2020.

⁷⁶ Shin Watanabe, "[China Drops \\$11bn Anchors to Expand Maritime Silk Road](#)", *Nikkei Asia*, January 5, 2020.

⁷⁷ Antonia Filmer, "[China Expanding its Ports Worldwide](#)", *Sunday Guardian*, January 1, 2022.

ports there to invest in construction and upgrades intended to provide solutions for Africa's increasing scope of imports and exports.⁷⁸

Consequently, since 2009, China has been the largest bilateral trade partner with many African countries and has provided expert solutions, including budgets, for the rising demand for modern ports, transportation infrastructures, and industrial installations. Such ports, especially in western Africa on the Atlantic Ocean (Figure 20), provide a firm foundation for China's economy and a tool for wielding political and diplomatic influence on the continent. The rise in piracy at sea in western Africa could ostensibly provide a legal justification for Chinese military activity in the region.⁷⁹ The Chinese are also building dual-purpose – civilian and military – sites for possible future use: not just for commerce with African markets, but also to promote broader foreign relations objectives, especially with regard to U.S. interests in the region.⁸⁰ However, the concern is that these investments might prove a risk should China try to control or limit port access to competing companies or companies with different priorities. Nonetheless, African nations will still profit if they can reduce the risks of that occurring.⁸¹

Still, China is not immune to local politics in Africa. One of the most ambitious projects on the continent is now on hold: Bagamoyo Port in Tanzania was supposed to have become the largest ever Chinese-built and operated port on the continent, but the current government does not agree with the terms of the \$10 billion project agreed upon by the previous government with Beijing. Tanzanian official sources now say the deal is not commercially worthwhile for the country.⁸²

Ports in Europe

China has been involved in port operations across Europe since 1982 and is currently active in 40 ports through some of the leading Chinese companies. The Port of Hamburg is a leading example. COSCO's attempt to acquire 35 percent of the port's shares was blocked in October 2022, and it had to settle for 24.9 percent due to objections from various

⁷⁸ Joel Gehrke, "['They Want to Become a Superpower': African Port Links Could Make Chinese Access to Atlantic Inevitable](#)", *Washington Examiner*, December 14, 2021.

⁷⁹ Carlota Ahrens Teixeira and Jaime Nogueira Pinto, "[Maritime Piracy in the Gulf of Guinea](#)", *GIS*, March 28, 2022.

⁸⁰ Eric A. Miller, "[More Chinese Military Bases in Africa: A Question of When, Not If](#)", *Foreign Policy*, August 16, 2022.

⁸¹ Margaret Myers, "[China's Transport Infrastructure Investment in LAC: Five Things to Know](#)", *The Dialogue*, November 13, 2018.

⁸² Prachi Mittal, "[Falling Apart – A Story of the Tanzanian Bagamoyo Port Project](#)", *ORF*, September 15, 2020.

actors in Germany. There was political opposition to the move not only for economic but also political reasons. The smaller share of the terminal was agreed upon after the Germans were "burned" by their dependence on Russian gas. The Port of Hamburg is the eastern-most port of the North Sea, making it ideal for eastern Europe. As a global center serving overseas nations, central and eastern Europe, and the entire Baltic region, Hamburg enjoys a central geographical location, and China sees gaining ownership in this port as an important economic move.⁸³ For years, China has tried to acquire and develop Lithuania's Port of Klaipeda, but its efforts have yet to succeed. According to the Lithuanian president and other high-ranking officials, a Chinese foothold would represent a threat to the country's national security and to NATO.⁸⁴ Proposals for further expansions of the Port of Piraeus (to increase China's influence) have been similarly rejected.⁸⁵

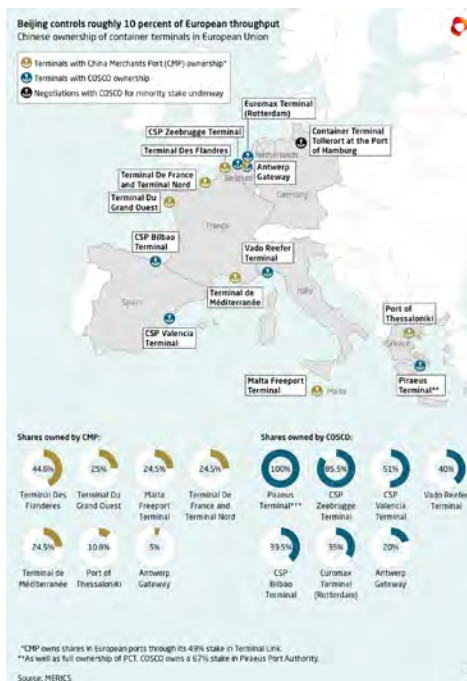


Figure 24: China's control of some 10 percent of maritime commerce in Europe⁸⁶

- ⁸³ Andreas Rinke and Sarah Marsh, "[German Coalition Divided Over Chinese Bid for Hamburg Port Terminal](#)", *Reuters*, September 14, 2022.
- ⁸⁴ "[Lithuania Puts Off Deep-Water Port Project Eyed by China 'For at Least a Decade'](#)", *LRT News*, April 2, 2021.
- ⁸⁵ Kardon, *Pier Competitor*, 2021.
- ⁸⁶ Jacob Mardel and Giovanni Giamello, "[COSCO Takes Stake in Hamburg Port Terminal](#)", *MERICs*, September 30, 2021.

China's strategy for controlling maritime transportation in Europe is also reflected in its involvement in the Port of Trieste, Italy, which is of utmost strategic importance to China, because it connects the Mediterranean with landlocked nations that represent potential markets – Austria, the Czech Republic, Hungary, Serbia, and Slovakia⁸⁷ – that can contribute to the expansion of the Maritime Silk Road (MSRI).⁸⁸

Ports in North, Central, and South America

Chinese government-owned companies own terminals in five U.S. ports. COSCO entered into joint ventures in Long Beach, Los Angeles, and Seattle, and CMPort is a minority shareholder in French-owned terminals in Miami and Houston. It would seem that investments in Chinese ports in the United States is motivated by pure commercial interests. In Canada, China is involved in the Port of Quebec, and at the time of this writing, a deal for Hutchinson to build a huge container terminal in Quebec has not yet been approved.⁸⁹

As part of the strategy to expand the BRI and increase maritime commerce, shipping lanes to South America in the Atlantic and Pacific are becoming more important than ever. Chinese companies are building and operating ports and platforms, especially for energy shipping, in Central and South America. These activities, especially in the Caribbean, rang alarm bells in the United States during the Trump administration. Continued Chinese construction in Peru and Brazil will make it possible to realize a shared Brazilian-Peruvian dream to connect their respective Atlantic and Pacific coastlines, and China can make the dream come true with economic benefits.⁹⁰ This would then provide Chinese shipping with an overland link between the Atlantic and Pacific Oceans.⁹¹

Chinese Ports: Only Commercial or Also Military?

Chinese ports around the globe are located along international shipping lanes that are mostly geared to commercial rather than "offensive" use,⁹² but it seems obvious that

⁸⁷ Nadia Helm, "[China's Influence and Operating of the Main European Ports](#)", *Modern Diplomacy*, November 10, 2021.

⁸⁸ Jean-Marc F. Blanchard, "[China's Maritime Silk Road Initiative \(MSRI\) and Southeast Asia: A Chinese 'pond' not 'lake' in the Works](#)", *Journal of Contemporary China*, 27, no. 111 (2017): 329–343.

⁸⁹ Léonce Naud, "[China Controlling \(for 60 years\) the Gateway to the Great Lakes St. Lawrence Seaway System?](#)", Québec.

⁹⁰ "[Brazil, Peru and China and the Inter-oceanic Dream](#)", *Dialogo Chino*, February 5, 2015.

⁹¹ Milton Leal, "[A Chinese Train Could Link South America's Atlantic and Pacific Coasts by Rail for the First Time](#)", *China File*, September 15, 2016.

⁹² "[The New Masters and Commanders](#)", *The Economist*, June 13, 2013.

the Chinese army, including the navy, has ambitious plans for projecting its power. In addition to preparing for the possibility of using force to resolve its territorial demands in East Asia (Taiwan and the South China Sea), the Chinese military is also charged with defending China's expanding "overseas interests." The national objectives require the navy to be able to exert clear military power beyond China's immediate maritime space. To meet these needs, organic support and logistical capabilities are in the process of being constructed, including large maritime support troops and transport planes. The National Defense Transportation Law also addresses and obligates civilian organizations, especially government owned ones, to provide for the China's maritime transportation and infrastructure needs across the globe.⁹³

While China rejects international concerns about its intentions, the Chinese army has already started preparing a network of so-called "strategic strongpoints" along its important maritime shipping lanes to protect its growing global interests. Some of the ports and terminals that are part of this growing network may serve dual-purpose functions, enabling the Chinese navy to carry out military actions far from home, which are more complex than those closer to China, and over increasingly long periods of time. This option of dual-use of ports is currently not suited to supporting actual combat, but it is mainly adapted for logistics and intelligence gathering in peacetime. China's 2019 White Paper stated that military missions also include protecting cargo carriers and ships evacuating Chinese citizens from locations abroad, and that the army and navy will open "logistical facilities abroad."⁹⁴ The Chinese Navy has visited about one-third of the ports with some Chinese involvement for the sake of maritime logistics and diplomacy. In nine ports, the navy carried out maintenance work and in 47 it made dry-dock repairs, while 69 visits were dedicated to joint exercises.⁹⁵

Signs that supposedly civilian ports are also intended for military use may be found at the Chinese ports in Djibouti (especially as support for Chinese participation in the taskforce fighting maritime piracy at the Horn of Africa),⁹⁶ and in the Solomon Islands in the Pacific Ocean.⁹⁷ This is addition to the establishment of a military port – Ream Naval Base – in

⁹³ Conor M. Kennedy, "[Civil Transport in PLA Power Projection](#)", *China Maritime Report*, No. 4, U. S. Naval War College, December 2019.

⁹⁴ K. Hille, D. Sevastopulo, and J.P. Rathbone, "[China Denies Building Naval Bases but Fear of Its Military Reach Grows](#)", *Financial Times*, June 20, 2022.

⁹⁵ Ibid.

⁹⁶ Cobus van Staden, "[Fears of a Chinese Naval Base in West Africa Are Overblown](#)", *Foreign Policy*, March 3, 2022.

⁹⁷ Tali Goldstein, "[China Enhances Its Influence – and the World Trembles](#)" (Hebrew), *Walla*, April 20, 2022.

Cambodia.⁹⁸ A Chinese military presence in the Indo-Pacific region seems rational and perhaps even justified (most of China's oil comes from the Persian Gulf). However, naval bases in the Atlantic in the near and mid-term future are neither highly probable nor justified despite the criticism, especially from the United States, of China's intention to build a naval base in Equatorial Guinea. Today, there is no doubt that placing the mission of protecting "economic investments and infrastructures" and Chinese interests all over the world in the hands of the army and navy will inevitably lead to an increase in the number of ports in which China will be involved, so as to allow them to provide combat support or increase the number of military ports to overcome the limitations of dual-purpose ports. The use of commercial ports for military purposes requires preparation and special means. At present, it still does not seem that these intentions can be realized in the near or mid-term future. Even in the Indo-Pacific region, possibly the most sensitive area for China, the ports in Pakistan and Sri Lanka are not yet ready for military use.⁹⁹

Haifa Bayport

Haifa Bayport, an infrastructure project of high economic importance to the Israeli economy and part of Israel's 2005 ports reforms, broke ground in 2015 and was completed in 2021. When it went into operation, it added vital infrastructure for Israeli commerce and opened up competition among the country's ports, which in turn led to improved efficiency and enhanced services to exporters, importers, industry, and shipping. Haifa Bayport is operated by the Shanghai International Port Group (SIPG) and serves as an additional Israeli seaport.

The new port is meant to double the capacity of Israel's seaports in response to increased commerce and the local economy's needs. In addition, the new port will be able to handle the newer, more environmentally-friendly mega-ships. Haifa Bayport will help minimize Israel's dependence on foreign ports in the region. A private container platform measuring 800 meters by 17.3 meters makes it possible for large, 400-meter-long ships, carrying up to 24,000 GT, to cast anchor.

Haifa Bayport is operated by the Shanghai-based SIPG on a 25-year lease. Does this fact open a door to Chinese espionage, providing a convenient base for cyberattacks or moves to damage U.S.-Israel relations? Many arguments against building the port were based on the fact that it would be operated by a Chinese company, but are the concerns justified?¹⁰⁰

⁹⁸ Ellen Nakashima and Cate Cadell, "[China Secretly Building Naval Facility in Cambodia, Western Officials Said](#)", *The Washington Post*, June 6, 2022.

⁹⁹ Jocelyn Wang, "[The Realities of Chinas Overseas Port Push](#)", *The Diplomat*, June 4, 2021.

¹⁰⁰ Galia Lavi and Assaf Orian, "[The Launch of the Haifa Bayport Terminal: Economic and Security Considerations](#)", *INSS Insight* 1516, September 2, 2021.

Beyond the economic benefits, the media and various forums have raised concerns about Bayport's management by a Chinese state-owned company. First, the company is subject to an authoritarian regime, which uses "debt traps" and takes control over assets, such as it did in Hambantota Port in Sri Lanka. Second, the Chinese company could allow China's military vessels to anchor in Israel as part of its "Military-Civil Fusion" strategy. Third, SIPG might disrupt the port's activity in times of emergency or leverage its economic power for China's political influence over Israel. Fourth, the port might be used for espionage and cyber operations, including against U.S. Navy ships. Finally, it is argued that even if the port does not embody special risks or create significant Israeli dependency on China, in the eyes of the United States, and certainly in Pentagon and U.S. Navy circles, it has become a provocative symbol of treacherous cooperation by a close ally, Israel, with America's arch-rival, China, and therefore also a threat to the special relationship between the United States and Israel.¹⁰¹

Claims that the port might serve as a base for Chinese espionage and that China might suspend its services during crises are unfounded. It is possible to spy on sites at the various ports in Haifa from more comfortable geographic locations. Furthermore, the fact that the port is leased rather than owned by the Chinese contractually prevents a suspension of operations in emergencies. Even having Chinese military vessels anchor at the port is not a serious security threat; it is highly improbable that China would begin a naval military confrontation within a port. In view of the economic benefits, it seems that all reasons against having the port operated by a company partly owned by China are not greatly worrisome. At most, it can be argued that a port on Haifa Bayport's scale is a critical national infrastructure and it would be appropriate for it to be owned by the State of Israel alone, or, if it were privately owned, it should at least be owned by Israeli entities.



Figure 25: Haifa Bayport¹⁰²

¹⁰¹ Ibid.

¹⁰² ["The Newest Port in the World: Haifa Bayport Makes History"](#) (Hebrew), *Walla*, September 2, 2021.

Conclusion

A nation's sea power consists of three major elements: ports, shipping lanes, and a military navy. The development of China's economy since 1979 and its status as a global superpower have led to a change in the nation's grand strategy and consequently to a change in its naval strategy. China's merchant navy is the largest in the world, and some of its vessels are already adapted for military purposes. The need for shipping lanes that begin and end at ports led China to a strategy of building, acquiring, and managing ports around the world. This model began as "a String of Pearls" and partly forms a core piece of the Belt and Road Initiative, which is expanding to new parts of the world to form what is now being called the Maritime Silk Road. It would seem that, among all the nations in the world, China – with considerable serious and ongoing work – is adopting Mahan's naval strategy with regard to commercial shipping and Corbett's naval strategy of a fighting naval force.

Shipping and ports exist mostly for economic reasons. Securing shipping routes for transporting energy and other goods is now at the top of China's military priorities. Without these enormous ports with the capacity to handle very large cargo carriers, China's commerce would not be as developed as it is. Control of ports along the shipping lanes of countries of strategic significance for China is a key component of its grand strategy. It enables China to hold another nation hostage, in a sense, thanks to Chinese prosperity, which is liable to force a weaker nation's leadership to adopt political positions convenient for the CPC. Therefore, seaports are a critical factor in China's ability to wield commercial, diplomatic, and military influence.

Enhanced maritime connectivity has created significant economic benefits to China, giving it much greater say in matters of transporting goods throughout the world. Chinese leaders are pushing to leverage the nation's resources to strengthen connectivity, especially the improvement of port infrastructures. In 2022, we saw the tremendous clout the Chinese ports have on the global shipping industry. As President Xi Jinping noted, "economic superpowers must be maritime superpowers and shipping superpowers".¹⁰³

But there are several differences between China's strategy, on the one hand, and all the other international shipping route and port operators, on the other. As a nation with a centralized communist government, Chinese companies are not constrained by nor operate on the basis of commonly accepted commercial practices, because they must meet the demands and obey the directives of their government and the CPC. To

¹⁰³ ["How Is China Influencing Global Maritime Connectivity?"](#), *China Power*, Retrieved September 17, 2022.

that end, they are willing to pay higher prices, helped, of course, by receiving special budgets to do so. Although ports are acquired or constructed on the basis of economic imperatives, a political aspect is most certainly also involved. By owning and operating a complex network of key logistical crossroads throughout Asia, Europe, and Africa, China can effectively control a huge part of its incoming supply chain for essential goods, such as energy sources from the Middle East, and control outgoing trade routes for its exports. The vast fleet sailing under its flag, control of ports, and keeping shipping lanes active provide China with a high level of independent capabilities, prevent dependence on foreign shipping lines, and reduce the amount of political and economic leverage other nations can bring to bear on it.

There is no practical way to deny China commercial entrance into most foreign markets. The United States failed to persuade Israel to revoke the concession SIPG won at Haifa Bayport. If so close a security partner of the United State like Israel is unconvinced that the security risks outweigh the economic benefits, there is a chance that other nations will likewise not deny Chinese involvement in their critical strategic infrastructures.

One may assume that only a few commercial ports, appropriately planned and equipped, will fulfill military functions in terms of logistics, maintenance, refueling, storing munitions, and so on. Their immediate capabilities are primarily focused on intelligence and communications, two capabilities that do not require the establishment of facilities and permissions. But most civilian ports are unlikely to provide the Chinese navy with support or any kind of political preference, whereupon China will probably examine the possibility of building military ports, although only in countries where China can receive political and other approvals.

In the process of constructing strategic strongpoints, China is not placing too great an emphasis on military diplomacy. Mostly, it simply denies its intentions. The speed with which China is implementing its plans has been discussed in a study: when military diplomacy is advanced, it is necessary to pay attention to method and speed. It isn't a good idea to push ahead with force or to be too keen on attaining results. Instead, it makes good sense to conduct talks with the target nation and proceed gradually.¹⁰⁴

At most ports with Chinese involvement, China holds a minority of controlling shares, and it is therefore safe to assume that it lacks the ability to control the economy or certainly to have a huge effect on the host nation. Greece, Belgium, Canada, Germany, and African and other nations are examples of countries worried about the influence of

¹⁰⁴ K. Hille et al., "[China Denies Building Naval Bases](#)".

China's investments in their ports and have taken means to shield themselves against China, which is described as a partner, economic competitor, and systematic adversary.¹⁰⁵

Undoubtedly, there are political, strategic, and economic risks to the nations where China maintains ports. The biggest challenge for Chinese companies investing in global ports is profitability. In their zeal to increase their overseas presence, these companies might be investing overblown sums or discounting the political sensitivities that could prevent the ports from generating worthwhile profits. It is therefore necessary to undertake a careful analysis of the economic potential of these projects. Decision making in a nation with a communist government – always not only economically-driven and always containing a political component – could bypass such risks.

This detailing of the facts and data reflecting China's force construction makes it possible to assess that China is concurrently operating geo-economically and geo-strategically to realize both Mahan's and Corbett's strategies in order to control shipping lanes to provide for the economic needs of a global superpower with a population of more than 1.4 billion, while also making economic profits to the extent possible. This in addition to having the ability to defend those shipping lanes and ports, perhaps not all of them, but at least those most critical for realizing China's geo-economic and geo-strategic goals.

The size of China's merchant navy is unprecedented, with 5,600 to 9,000 vessels (estimates vary by source).¹⁰⁶ It is possible that the Greek merchant navy has more vessels, about 21 percent of the entire global merchant marine fleet,¹⁰⁷ but there are no international claims that Greece is aiming for global hegemony in the field of shipping. The most strident opponent to China's strategy is the United States, whose merchant navy shrank from 485 to 178 vessels between 1996 and 2022.¹⁰⁸ Some U.S. voices are calling on the administration to expand both the merchant navy and the U.S. Navy fleet,¹⁰⁹ but it is doubtful these calls will be heeded.

¹⁰⁵ George Fujii, "[China's Emergence as a Power in the Mediterranean: Port Diplomacy and Active Engagement](#)", *H-Diplo Article, Review 1084*, January 19, 2022.

¹⁰⁶ GT staff reporters, "[China's Foreign Trade Mirrors Stable Start in Q1 Despite Omicron Outbreak, Ukraine Crisis](#)", *Global Times*, April 13, 2022.

¹⁰⁷ T. Kokkinidis, T., "[Greece Remains Top Shipping Nation in the World](#)", *Greek Reporter*, May 20, 2022.

¹⁰⁸ "[Number of Ships in the U.S.-Flag Merchant Fleet from 1996 to 2022](#)", *Statista*, Retrieved December 13, 2022.

¹⁰⁹ Xiaoshan Xue, "[As China Expands Its Fleets, US Analysts Call for Catch-up Efforts](#)", *VOA*, September 13, 2022.

Given the complexity of China's ports and shipping diplomacy, Jeffrey Bader's conclusions are notable:

China's growing and modernizing military will complicate United States strategy regionally but will not approach American force projection capabilities globally... The temptation to see China as an enemy rather than a competitor is reinforced by its internal policies of repression... The United States and China have areas of overlapping interest and issues on which they must work together.¹¹⁰

¹¹⁰ Jeffrey Bader, "[Meeting the China Challenge: A Strategic Competitor, Not an Enemy](#)", in Ryan Hass, Ryan McElveen, and Robert D. Williams (eds.), *The Future of US Policy Toward China – Recommendations for the Biden Administration* (Brookings Foreign Policy's John L. Thornton China Center and Yale Law School's Paul Tsai China Center, November 2020): 1–7.

Strategic Weapons Supplies in the Context of Special Relations: AUKUS as a Case Study

Itzhak (Itsik) Bilia

Introduction

On September 15, 2021, the leaders of three nations – the United States, the United Kingdom, and Australia – announced the formation of a trilateral security partnership named AUKUS.¹ The first and primary initiative of this new partnership is drawing up a plan within 18 months for the future delivery of eight nuclear-powered submarines to the Australian navy fleet. The emphasis is on providing nuclear propulsion technology rather than nuclear weapons, and the submarines will be equipped with conventional arms only. This new partnership also includes cooperation in other fields, such as cyberspace, artificial intelligence, quantum technology, and underwater capabilities. This is a complex and unique project involving military, scientific, and industrial cooperation.² A geostrategic analysis of this development indicates a US attempt to rebalance power relations in the Indo-Pacific region in light of China's unprecedented military buildup and its aggressive moves in the South China Sea and against Taiwan.³

This article focuses on the importance and strategic contribution of nuclear-powered submarines for Australia and examines why the United States (with UK help) decided to supply such a significant capability to its Australian ally rather than to Japan or to India, the other partners in the QUAD,⁴ or to other strategic allies in the region, such as South Korea. The explanation I offer in this article is that the three nations have a special relationship based on their being part of the Anglosphere and on their shared language, culture, and history. I contend that this special relationship is the reason for the decision to supply this unique strategic weapon to Australia rather than to other allies in the region. This premise can be proven by comparing this decision to a historical case

¹ The name is an acronym of Australia, United Kingdom, and United States.

² *The White House*, "[Remarks by President Biden, Prime Minister Morrison of Australia, and Prime Minister Johnson of the United Kingdom Announcing the Creation of AUKUS](#)". September 15, 2021.

³ For more on the topic, see Benni Ben Ari's article "Strategies in the Indo-Pacific Region", in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2022), pp. 103–121.

⁴ The Quadrilateral Security Dialogue (QUAD) is a forum of states that deals with strategic issues. Its members are Japan, Australia, India, and the United States. The forum was established in 2007. It fell apart the following year, but was reinstated in 2017. The dialogue extends to joint military exercises called Malabar, which are seen as a counter to China's buildup. "[The Quad Conducts Malabar Naval Exercise](#)". 2021. (September 18, 2022).

with similar characteristics. In the 1960s, during the Cold War with the USSR, the United States made a similar move when it supplied the Royal Navy with Polaris missiles, ballistic missiles capable of carrying a nuclear warhead fired from submerged submarines. The technology, considered strategic and unique then and today, was provided only to the British, with which the United States have a special relationship, to the exclusion of other NATO allies, such as France.

The French Connection

Today, the Australian navy operates six Collins-class submarines that run on conventional engines (diesel and electricity). Built in Australia according to designs of the Swedish company Kockums, they became operational in 2004.⁵ As an island nation, Australia recognizes the importance of the underwater domain and its submarine fleet, and therefore engaged in many discussions about the future upgrade of its submarines, examining German, Japanese, and French proposals.

In 2016, Australia signed an agreement with the French Naval Group (formerly known as DCNS), which is largely a government-owned corporation. The deal included the construction of 12 advanced, conventionally powered Shortfin Barracuda submarines at a total cost of \$37 billion.⁶ The French-Australian submarine project was launched soon thereafter, but suffered many schedule delays and cost overruns. Furthermore, the number of Australians working on the project never reached the level that Canberra had anticipated. As a result, the expected return compared to the high investment in the project came under harsh criticism.⁷

The day after the AUKUS partnership announcement was made, Australia cancelled its contract with the French company, at a cost to the Australian taxpayer of \$2.4 billion (including a \$585 million penalty) for a deal that, since its inception, had not provided any real gain.⁸ The French responded sharply to the cancellation, recalling their ambassadors

⁵ For more on the project, see: *Naval Technology*, "[SSK Collins Class \(Type 471\) Submarine](#)", May 3, 2001.

⁶ Interestingly, this model, with its conventional operation, is based on the Barracuda model, a nuclear-powered submarine being brought into operational service in the French fleet. At first glance, technologically speaking, France could have offered Australia nuclear-powered submarines just as did the Anglo-Saxon partners. Similarly, France is helping Brazil build nuclear-powered submarines as part of the strategic partnership between the two nations. "[Brazil Might Get Nuclear-Powered Submarines Even before Australia](#)", *The Economist*. September 30, 2021.

⁷ *POLITICO*, "[Why Australia Wanted out of Its French Submarine Deal](#)", September 16, 2021.

⁸ *BBC News*, "[Aukus: Australia to Pay €555m Settlement to French Firm](#)", June 11, 2022, sec. Australia.

from Washington and Canberra (the French ambassador to the United States was returned after the United States issued a statement conceding that the move should have been coordinated with the French). The French viewed the cancellation of the deal as an Australian breach of faith regarding cooperation with them. As an EU leader, France considers itself dominant in the Indo-Pacific region, given its important interests there (colonies and overseas territories), such as New Caledonia and French Polynesia, home to about two million French citizens. Those archipelago regions define a large EEZ (exclusive economic zone), which is why France maintains a military presence of some 7,000 soldiers there.⁹ In addition to the economic loss from the cancellation, France, considered a global weapons provider, including in the underwater sector, also suffered damage to its prestige.¹⁰ However, above all, France views itself as a key Western democratic partner in all moves related to China. US President Joe Biden referred to France in his statement, trying to downplay the meaning of the AUKUS partnership by declaring France an important partner in confronting developing threats in the Indo-Pacific theater.¹¹

The Collins-class submarines in current use are expected to continue to serve the Australian navy until 2030 or so, whereas the new AUKUS submarines are expected to become operational in the 2040s. As a result, there is a decade-long gap for which Australia is busy discussing possible solutions, such as the purchase of conventionally powered submarines to be used as an "intermediate" generation until the arrival of the nuclear-powered ones.¹² Senior officials in the Australian security establishments warn of a situation in which Australia might be exposed and lacking a solution in its underwater domain. The government promised to publish a plan at the beginning of 2023 that would define the model to be built, the time it would take to build the submarines, and whether an additional generation of submarine models would be needed.¹³ In addition, Australia

⁹ France has the second-largest EEZ in the world, consisting of some 11.035 million square kilometers. "[Drops in the Ocean: France's Marine Territories](#)", *The Economist*, January 13, 2016.

¹⁰ In 2005, France transferred the technology for independent manufacturing of Kalvari-class submarines, based on the French Scorpène-class submarines, to India. These are conventionally powered with a displacement of 1,550 tons. India intends to build six such submarines by 2024, part of its arms race with its neighbor and adversary Pakistan, which bought eight Yuan Type 039A-class submarines from China. Gabriel Honrada, "[France, China Fueling India, Pakistan Sub Race](#)", *Asia Times*, February 4, 2022.

¹¹ *The White House*, "[Remarks by President Biden, Prime Minister Morrison of Australia, and Prime Minister Johnson of the United Kingdom Announcing the Creation of AUKUS](#)", September 15, 2021.

¹² South Korea offered Australia conventionally powered submarines with AIP capability that increases their operational range. These can be provided within seven years of an order being placed. Colin Clark, "[South Koreans Offer Aussies New Subs in 7 Years to Close Collins Gap](#)", *Breaking Defense (blog)*, July 25, 2022.

¹³ *ABC News*, "[AUKUS Nuclear Submarine Plan to Be Revealed by March 2023](#)", June 28, 2022.

can lease submarines from its partners in the interim while using the time until the new submarines are delivered to train teams for the future operation of these submarines. The United States has authorized a comprehensive plan to train Australian crews in the United States in commanding, operating, and maintaining nuclear-powered submarines. The purpose is to create a pool of officers and sailors who will eventually serve on the advanced submarines.¹⁴

A Strategic Leap

The United States is aware of China's efforts to construct a new world order centered around itself. This involves China building a network of satellite states and subordinate nations, mainly by using economic leverage.¹⁵ Past efforts to reduce this influence, in part by establishing the QUAD partnership, have yielded few results. It seems, then, that the AUKUS agreement is a dramatic step aimed at thwarting a Chinese attempt at attaining maritime hegemony in the Indo-Pacific region.¹⁶

As noted, according to the joint declaration, there are 18 months to define the details of the plan. Still unsettled are questions such as the submarine model, its operational capabilities, the construction site, and the operational date. But a fleet of eight Australian nuclear-powered Virginia-class submarines (United States), Astute-class submarines (United Kingdom), or a new class altogether will provide the Australians with the ability to project naval power in the Indo-Pacific domain far beyond the shores of the Australian continent. The Americans and the British intend to provide the Australians with sensitive, classified technology, currently in the hands of only a handful of nations across the globe. According to the data in the "Military Balance 2021" report, the list of countries with nuclear-powered submarines includes the leading military superpowers: the United States, the United Kingdom, France, Russia, and China.¹⁷ India is another country with such capability. Having leased an Akula-class nuclear-powered submarine from Russia for a 10-

¹⁴ Megan Eckstein, "[New Bill Would Establish AUKUS Submarine Training Program](#)", *Defense News*, June 16, 2022.

¹⁵ This is the claim of Bill Hayton, author of *The South China Sea: The Struggle for Power in Asia*. To back the claim, he cites the 2016 incident when the International Court of Justice in The Hague ruled in favor of the Philippines in its maritime border dispute with China in the South China Sea. The Philippine president ignored the ruling, choosing instead to accept significant Chinese financial investment in his country. "[AUKUS Reshapes the Strategic Landscape of the Indo-Pacific](#)", *The Economist*, September 25, 2021.

¹⁶ Stephen M. Walt, "[The AUKUS Dominoes Are Just Starting to Fall](#)", *Foreign Policy* (blog), September 18, 2021.

¹⁷ [The 2021 Military Balance Chart: Submarines and Sub-Surface Warfare](#), *The Military Balance*, 121, no. 1 (2021).

year period, India is now in the midst of developing and constructing its own Arihant-class nuclear-powered submarines.¹⁸ Australia would thus become the seventh country in the world to join the exclusive club of states with nuclear-powered submarines (Table 1).

Table 1: Nations with SSNs

| NATION | SSN ¹⁹ | SSBN ²⁰ | TOTAL |
|-----------------------------|-------------------|--------------------|-------|
| United States | 54 | 14 | 68 |
| Russia | 18 | 11 | 29 |
| China | 6 | 6 | 12 |
| United Kingdom | 7 | 4 | 11 |
| France | 4 | 4 | 8 |
| India ²¹ | - | 1 | 1 |
| Australia (AUKUS) – planned | 8 | - | 8 |

Source: International Institute for Strategic Studies

Technology for nuclear-powered submarines will upgrade Australias naval capabilities in several ways. The submarine in question weighs twice as much as the submarines Australia currently operates or the ones they intended to buy from the French. While SSNs (the hull classification for fast, nuclear-powered attack submarines) are not the most suitable choice for Australias relatively shallow littoral waters and the regions north of Australia and southeast Asia, they do offer many advantages compared to SSKs (conventionally powered submarines): higher speeds, longer operational duration, and greater operational ranges. According to calculations of the Center for Strategic and Budgetary Assessments, a Washington D.C. think tank, an SSK leaving the home naval base of the Australian submarine fleet located near Perth, HMAS Stirling, can reach the South China Sea and remain there for about two weeks before being forced to return to base for refueling and maintenance. In contrast, an SSN is not constrained by fuel limitations and could therefore stay in the target region for as long as it had sufficient supplies for its crew.²² Clearly, while in the target region, the submarine carries out a series of missions, such as intelligence gathering, sending special forces teams on clandestine operations, and, of course, threatening the adversarys ships and submarines.

¹⁸ Rajeswari Pillai Rajagopalan, "[India Launches 3rd Arihant Submarine](#)", *ORF*, January 7, 2022. Additionally, with regard to India, some view the Soviet/Russian-Indian relations as special relations based on anti-colonial/anti-imperial history and values.

¹⁹ SSN is the designation for a nuclear-powered attack submarine.

²⁰ SSBN is the designation for a nuclear-powered ballistic missile submarine.

²¹ India has two other submarines, which are not currently operational and therefore undergoing processes of testing and sea trials (Rajagopalan, 2022).

²² An SSN can remain at sea for 81 consecutive days while an SSK can do so for only 23.

Regarding secrecy, submarines powered by diesel and electricity (i.e., electricity stored in batteries) must surface periodically to enable the diesel engines, which require oxygen to run, to recharge their batteries. SSNs, of course, do not need to surface and therefore can avoid detection with greater ease. However, SSNs do make noise due to the operation of cooling mechanisms for the nuclear reactor, while the diesel-electrical submarines are quieter. However, SSNs can camouflage their noise between different layers of water temperature and avoid detection thanks to their speed and range.²³

The change in the method of powering Australia's submarines is a strategic as well as a technological change. As noted, SSNs will allow the Australian navy to stay for longer periods in regions of strategic importance, such as the Strait of Malacca. Moreover, these submarines will improve the Australian navy's offensive capabilities by enabling them to launch long-range cruise missiles from east of the Philippines, for example, and strike at the Chinese mainland. But the most prominent advantage is cooperation with US and UK submarine fleets of this type. The Australian navy can place its new submarines at its naval base in Stirling at the western edge of the continent but also in the naval bases in Darwin on the northern shore and in Brisbane on the eastern shore. In addition, these ports can serve the US and UK navies as sites for preliminary formation and embarkation. Indeed, the day after the AUKUS announcement, the United States declared a significant increase in its military presence in Australia.²⁴

Similarly, there are a number of strategic missions in which Australian submarines can contribute to the strategic array the United States is consolidating to counter China. One is participating in protecting joint task forces that include aircraft carriers and other vessels cruising the region, whose objective in wartime is to deploy most of their military force against China. Another, and perhaps more significant mission is participating in anti-submarine warfare (ASW) against China's nuclear-powered submarines armed with nuclear ballistic missiles, the mainstay of China's nuclear deterrent. China's set of land-based nuclear missiles is not only subject to a first-strike threat from the United States, but it is also not immune to the missile defense systems of the United States and its regional allies. For the most part, China's deterrence is based on the second-strike capabilities of its SSBNs hiding in the deepest parts of the South China Sea or the western part of the Pacific Ocean. The AUKUS project has the potential to seriously threaten China's deterrence.²⁵

²³ "[AUKUS Reshapes the Strategic Landscape of the Indo-Pacific](#)", *The Economist*, September 25, 2021.

²⁴ Tuvia Gering, "[Why China Is Genuinely Worried about AUKUS](#)", *SupChina*, November 29, 2021.

²⁵ Romuld Gem, "[Troubled Waters: Nuclear Submarines](#)", *ICAN Australia (blog)*, July 6, 2022.

Why Only Australia?

Having examined the strategic importance of the AUKUS alliances submarine project, an important question arises: Why provide these means only to Australia and not to other regional allies? This question becomes even more acute when considering the other regional partners efforts to strengthen and improve their military capabilities in the underwater domain. South Korea, for example, requested the technology from the United States and was rebuffed, partly because the United States does not want to supply nuclear materials to non-nuclear nations, and partly because, as a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the United States has limits on its actions in this sphere.²⁶ Nevertheless, South Korea managed to develop its own ballistic missile to be launched from submarines (SLBM), thus becoming the seventh country in the world with this capability and the only one of the non-nuclear nations to have undertaken such a step.²⁷ India, as noted above, is developing its own SSBN, based on Soviet models, and Prime Minister Narendra Modi has said that India would be happy to receive help from France or from the AUKUS partners in this field.²⁸ Japan, too, is expanding its military budget and building up its naval capabilities. After the establishment of AUKUS, there was talk about the possibility of expanding the alliance to include other nations, such as Japan. At first glance, this would seem to offer many benefits for the geostrategic situation of the United States and its allies in the region. However, the rumor was denied.²⁹ If so, why only Australia and no one else? I propose an explanation based on the allies preference for nations with which they have "special relationships" as opposed to others. This preference is reflected in the exclusive supply of weapons that are strategic and unique to such partners and not to others.

²⁶ This NPT policy-in-principle on the part of the United States amplifies the understanding that the AUKUS alliance is truly extraordinary. The United States, the United Kingdom, and Australia declared that they were committed to meeting all the requirements of the International Atomic Energy Agency, but China claimed that the move had created a dangerous precedent that would lead to NPT violations. Stephen Dziedzic, "[China Launches Furious Attack on UN Nuclear Watchdog for 'lopsided AUKUS Report'](#)", *ABC News*, September, 2022. For more about South Koreas SSN ambitions and the connection to the United States, see: Choe Sang-Hun, "[South Korea Has Long Wanted Nuclear Subs. A New Reactor Could Open a Door](#)", *The New York Times*, December 13, 2021, sec. World.

²⁷ Kelsey Davenport, "[South Korea Tests Submarine-Launched Missile](#)", *Arms Control Association*, October 2021.

²⁸ "[AUKUS Reshapes the Strategic Landscape of the Indo-Pacific](#)", *The Economist*, September 25, 2021.

²⁹ "[Washington and Tokyo Deny Japan Invited to Join AUKUS Security Pact](#)", *The Japan Times*, April 14, 2022.

Special relationships represent a high level of bilateral relations, and include political, economic, and cultural connections between two states.³⁰ They involve unique features that distinguish the relationship between one pair of states from those they have with other states. Accordingly, each of the two states may maintain special relationships with a limited number of other states; otherwise, the quality of being "special" loses any meaning. Such relationships are acknowledged by the pair itself and by other states, especially those with whom there are also special relationships. These are marked by closeness, collaboration, mutual trust, and intimacy between the two states, not only at the governmental level but also in society at large. Although special relationships represent the exception rather than the rule in international relations, researchers have mapped more than 50 different special bilateral relationships, including the relationship Israel has with the United States and the one Germany has with Israel.³¹

In addition to being an important ally of the West in the Indo-Pacific region, the uniqueness of Australia lies in its being a part of the Anglosphere – the English-speaking nations – having shared history of being connected to the British Empire of the past centuries. Anglo-Saxon culture and values distinguish Australia from other allies in the region, and have served as the basis for the special relations between it and the United States and the United Kingdom.³² Australia is unique in that geographically, it lies in the Pacific/Southeast Asian domain, but its history and cultural orientation are for the most

³⁰ The "special relationship" concept was first introduced to global consciousness by Sir Winston Churchill in an address commonly known as his "Iron Curtain speech", which he gave on a visit to the United States as leader of the UK opposition in 1946.

³¹ See: Sebastian Harnisch, 2017, "[Special Relationships in Foreign Policy](#)", In *Oxford Research Encyclopedia of Politics*. Oxford University Press. Similarly, the research literature offers several other sources on the creation of special relationships between nations, e.g., those based on a historic event or on a formative national experience, such as a national trauma. For instance, the special relationships between Germany, on the one hand, and several nations that were most obviously traumatized by Nazi aggression during World War II, on the other hand. At the heart of such a relationship stands Germany's reconciliation efforts with those nations, such as France and Poland, which were occupied by the Nazi regime, and the State of Israel, representing the Jewish people, one-third of whom was eradicated in the Holocaust. See: Lily Gardner Feldman, 2012, *Germany's Foreign Policy of Reconciliation: From Enmity to Amity*, Lanham, MD: Rowman & Littlefield Publishers.

³² The Anglosphere is a commonly used term referring to the relationships among the United States, the United Kingdom, Canada, Australia, and New Zealand, i.e., nations with special relationships between one another and with the United States (as the world's economic and military superpower) on the basis of a shared historical, cultural, and linguistic background. These relationships are manifested in various alliances, such as the Five Eyes and ANZUS. For more, see: J. Dumbrell and A. Schäfer (eds.), 2009, [Americas' Special Relationships: Foreign and Domestic Aspects of the Politics of Alliance](#), Routledge.

part European. There is a kind of internal tension between these two components in the formation of the character of the Australian state. This tension affects the country's policy and the strategic direction the country takes within the international system. Following World War II, Australia shifted the core of its strategic partnership from the United Kingdom to the United States, and remained constant in its ANZUS (Australia, New Zealand and United States Security Treaty) alliance with the United States (which originally included New Zealand too³³) throughout the Cold War and the global war on terrorism.³⁴ In those years, there was domestic criticism about the necessity of the close alliance with the United States and questions about the degree to which it served Australia's national interests. Some see the expansion of the partnership with the United States and United Kingdom as a regression from the process of formulating an independent local identity and a return to the days of the establishment of the Australian state as a part of the British Empire.³⁵

In fact, the joint declaration by the nations' leaders on the establishment of the three-country AUKUS partnership included explicit reference to their deep shared heritage. US President Joe Biden mentioned the 100 years of cooperation among the three nations during which US, British, and Australian soldiers fought side by side, from the trench warfare of World War I, through the fight for control over the islands in the Pacific Ocean during World War II, the Korean War, to the warfare in Afghanistan and the Iraqi desert. Then-UK Prime Minister Boris Johnson referred to the closeness and the natural connection among the countries; similarly, then-Australian Prime Minister Scott Morrison spoke of the shared beliefs and friendship created among them over time. The joint statements of the countries' leaders reveal one of the prominent indicators of their special relationships: their resilience in the face of crises and stability over time, including the conduct of these nations when crises do arise in their relationships.

A special relationship represents a relatively fixed situation in the global political environment, rather than a temporary state created under special conditions that passes once the sides' interests or capabilities change. One can identify other features of a special relationship manifested in the interactions among the three AUKUS partners: official public expressions of one country towards the other about their special relationship; the establishment of official relations between governmental agencies at all levels (military

³³ New Zealand has not been a member of ANZUS since 1985 because of its refusal to allow nuclear-powered US vessels or vessels carrying nuclear weapons to anchor in its ports.

³⁴ M. Beeson (2009). Australia, the United States and the Unassailable Alliance. In J. Dumbrell and A. R. Schafer (eds.), *Americas' Special Relationships: Foreign and Domestic Aspects of the Politics of Alliance*, Routledge, pp. 76–92.

³⁵ Romuld Gem, "[Troubled Waters: Nuclear Submarines](#)", *ICAN Australia* (blog), July 6, 2022.

echelons and senior officialdom); expressions of support in international institutions and organizations; cooperation of institutions and organizations in social, cultural, and academic settings; a relatively high volume of economic and military commerce between them; one side in the special relationship has unique needs that only the special relationship partner can provide; a profound connection between the people and the societies beyond the political connections between the regimes and leaderships; and conduct between the leaders characterized by transparency, a lack of formality, mutuality, exclusivity, confidentiality, trust, and more. One must take into account that, while special relationships can be assessed by these criteria, beyond the value they provide in such absolute terms, they also involve a relative value measured by comparisons with relationships with other nations.³⁶

Indeed, the expression of Australia's preference in this move did not go unnoticed by other regional allies that voiced criticism that the move expressed Anglo-Saxon separatism and ignored important allies in Europe and Asia. Some claimed that the new partnership reduced the impact of the QUADs power, and there were those who even called for providing this capability to South Korea, now in a process of strengthening its naval capacity against the common threat. However, others, such as Japan, Singapore, the Philippines, and New Zealand, openly supported the move, viewing it as an important step for preserving freedom of navigation and security in the region. At the same time, some, such as Malaysia, carefully expressed reservations, particularly about the danger of a regional conflagration.³⁷

History Repeats Itself

Can a special relationship be the reason for unique strategic weapons being supplied to one country rather than to others? Unique, classified technology is exclusive to powers that generally do not want to share it with other countries. Still, there are examples of one

³⁶ For more on the characteristics of special relationships, see: Michal Ben-Josef Hirsch and Manjari Chatterjee Miller, "[Otherness and Resilience in Bilateral Relations: The Cases of Israel–Germany, India–Russia, and India–Israel](#)", *Journal of International Relations and Development* (April 2020); Alice Pannier, "[Bilateral Relations](#)", In *Global Diplomacy: An Introduction to Theory and Practice*, edited by Thierry Balzacq, Frédéric Charillon, and Frédéric Ramel, Springer International Publishing, pp. 19–33; Kai Oppermann and Mischa Hansel, "[The Ontological Security of Special Relationships: The Case of Germany's Relations with Israel](#)", *European Journal of International Security*, 4, no. 1 (2019): 79–100; Kristin Haugevik, 2018, *Special Relationships in World Politics: Inter-State Friendship and Diplomacy after the Second World War*, London: Routledge; Alex Danchev, "[On Specialness](#)", *International Affairs*, 72, no. 4 (October 1996): 737–50.

³⁷ "[AUKUS Reshapes the Strategic Landscape of the Indo-Pacific](#)", *The Economist*, September 25, 2021.

country – usually a power with significant military capabilities – providing another country with this type of capability. Again, the question arises as to why this is so. The hypothesis I suggest is that when discussing strategic capabilities of the highest level, realist theory do not provide a sufficient explanation. This makes it necessary to turn to theories based on ideational and identity-based explanations. That is, the choice of a specific country is not entirely based on strategic considerations of a balance of power and a balance of threat. There is another distinct component that could lead to the preference for one country over another – the special relationship. I make this claim by comparing the current case with a historical case from the 1960s, at the height of the Cold War, when the United States provided ballistic missiles launched from the Polaris class submarine to the United Kingdom, as well as helping it build nuclear propulsion for submarines.³⁸

The development of the Polaris missile was one of the most challenging projects the United States had ever undertaken. They were the first missiles in the world to be launched from submerged submarines. The Polaris missile played an important role in nuclear deterrence because it changed the rules of the game. Until the Polaris, the fear was that one superpower would surprise the other by launching a first strike of nuclear intercontinental ballistic missiles (ICBMs) or by attacking with strategic bombers dropping nuclear bombs on the other sides control centers, missile bases, and airports, creating an inherently unstable strategic situation. When both sides developed submarines equipped with nuclear ballistic missiles, which are very difficult to locate and identify, the superpowers suddenly had second strike capabilities. Should one side surprise the other, it cannot manage to destroy most of its nuclear arsenal with a first strike, and the attacker would come under the threat of a second strike from some unknown location in the ocean, and would therefore think twice about the first strike being able to achieve its goal in practice. This was how mutual nuclear deterrence, based on the threat of mutual assured destruction (MAD), was achieved, and fundamentally changed the Cold War reality.

³⁸ Other potential comparisons are the German-Israeli case whose special relationship is based on national trauma that affected the provision of German submarines of a unique class under unique acquisitions terms, while also promising not to provide the same submarine to Israel's adversaries without Israel's authorization. Kai Oppermann and Mischa Hansel, "[The Ontological Security of Special Relationships: The Case of Germany's Relations with Israel](#)", *European Journal of International Security*, 4, no. 1 (2019): 79–100. Another case is the US-Israeli one in which one sees a special relationship that is not based on strategic considerations alone, and which results in supply and joint development of unique strategic weapons systems, such as advanced aerial defenses based on the Arrow missile. Jeremy M. Sharp, 2020, "[U.S. Foreign Aid to Israel](#)", *Congressional Research Service*, no. RL33222 (November): 46.

To understand the connection between the Polaris missile and special relationships, one must be familiar with the background the events at that time. In the late 1950s and early 1960s, the Cold War was at its peak. Long-range bombers armed with nuclear bombs were the only nuclear weapon the United Kingdom had to deter the USSR. Given the Soviet development of sophisticated aerial defense systems, which interfered with bombers ability to reach their targets, the United Kingdom sought to upgrade its nuclear arsenal by acquiring the US ballistic Skybolt missiles, which could be launched from planes over great distances. The project suffered many delays and problems and was finally scrapped by the United States, a cancellation that led to a serious crisis in the relationship between the two nations. At the same time, the United States was developing another option for launching ballistic missiles, this time from submerged submarines (SLBMs) of the Polaris model. These missiles were considered the most complex and classified weapons system the United States was developing at that time. On December 21, 1962, British Prime Minister Harold Macmillan met with US President John Kennedy in Nassau in the Bahamas to try to resolve the crisis between their countries. Macmillan spoke to Kennedy about the moral obligation the United States had to provide the United Kingdom, its closest and most loyal ally, with a suitable alternative to the scuttled Skybolt. The US side, too, realized it had a duty to compensate the British. Kennedy suggested that the Skybolt project would continue, now as a joint project in which each country would be a full partner in its development. Although it was clear to the United States that Macmillan really wanted the Polaris, the Americans did not want to involve a foreign party, no matter how close, in its most complicated and clandestine project. Moreover, the Kennedy administration objected to the idea of providing Polaris missiles to an ally that might operate submarines equipped with these missiles independently of the United States. At that time, US policy supported the deployment of Polaris-armed submarines by multinational forces comprised of NATO members forming multinational submarine crews under US command in the context of NATO missions. The intention was to prevent any one NATO member from having this unique capability while at the same time expanding NATOs deterrence capacity in a controlled manner under US command. Macmillan, who had already stopped considering the Skybolt a reliable nuclear deterrent, insisted on the Polaris as the only possible alternative. After intensive efforts, he succeeded in convincing Kennedy.

Kennedys acquiescence struck many of his aides as a step too far, one he should not have taken. There are several possible explanations for his decision based on different levels of analysis of international relations. At the systemic level, it was necessary to strengthen the joint deterrence of western nations against the Soviet Union, and the British were the Americans closest allies. At the domestic politics/state level, the United States wanted to strengthen the Tory Party that governed the United Kingdom and thwart the rise of

the Labour Party. And, at the individual level, the relationship between the US president and the British prime minister was very close. However, beyond all of these explanations, it is clear that the relationship between two nations was unique and connected to their shared identity. President Kennedy realized that, at that time, a US refusal would result in an unprecedented crisis in the special relationship between the nations and therefore took an unusual step. It would have been impossible to reach a similar agreement with any other ally.³⁹

Ultimately, what came to be called the Nassau Agreement ended with the sale of the Polaris missile to the United Kingdom (without the nuclear warheads, which the British were able to provide on their own), on condition that the missiles would be deployed under NATO command. The British were pleased because the agreement included an article that should a threat to supreme UK interests develop, the British would be able to deploy the missile independently. While the British were now somewhat dependent on US technology to operate their own submarine-based nuclear capability,⁴⁰ Macmillan ensured his nations independent nuclear deterrence in the face of external adversaries for years to come, strengthened the kingdoms status in the international arena as a global power, and safeguarded close political and military connections with the most powerful country in the world – the United States.⁴¹

As part of the agreement, the British provided the Americans with a forward naval base in Holy Loch, Scotland, for US Polaris submarines. In February 1968, the British had their first test launch of the Polaris A-3 class missile from the British Resolution-class submarine in the Atlantic Ocean. The missile was fired to a range of thousands of kilometers and hit its intended target, marking the entrance of the Polaris into service in the Royal Navy and the shift of responsibility for UK nuclear deterrence away from the Royal Air Force and onto the Royal Navy.⁴² Later, in the 1990s, the United States provided the United Kingdom with

³⁹ Richard E. Neustadt, 2018, *Report to JFK: The Skybolt Crisis in Perspective*, Cornell University Press.

⁴⁰ In the 1970s, the British tried to independently develop alternate dividing warheads for the Polaris missile in the Chevaline project, but they were very expensive relative to the operational benefit they could provide, and so this route was abandoned.

⁴¹ Before the Polaris, the British doubted the US ability to provide a nuclear umbrella for them should the Soviets attack London, risking cities such as New York or Washington. N. J. Wheeler, "[British Nuclear Weapons and Anglo-American Relations, 1945–1954](#)", *International Affairs* 62, no. 1 (1985): 71–86.

⁴² British strategy was continuous at sea deterrence (CASD), i.e., at any given moment, there would be at least one submarine (of four in existence) equipped with nuclear ballistic missiles in strategic readiness somewhere deep in the ocean. The United Kingdom is the only nuclear power that relies exclusively on launching ballistic missiles with nuclear warheads from submarines. The other nuclear nations have other capabilities, such as ICBMs launched from sites on land and nuclear

Trident missiles, the next generation of the Polaris.⁴³ The Polaris and Trident missiles, which are top-secret, expensive, and technologically complicated, were sold only to the United Kingdom. While the Kennedy administration had plans to establish a multinational force of NATO members that would collaborate to crew the submarines equipped with the Polaris missile, these plans never came to fruition, partly because of UK opposition. There was also a suggestion to provide France with Polaris missiles, but this also came to naught.⁴⁴ Only the British were given this capability. No NATO member and no major non-NATO ally (MNNA) received it, even though making the Polaris capabilities available to other NATO members would have made a significant contribution to the United States during the Cold War by strengthening its deterrence against the Soviet threat.

Conclusion

The establishment of AUKUS is a milestone in the rivalry between the United States and China. Not long after the US withdrawal from Afghanistan, US President Joe Biden continues the Pivot to Asia strategy, choosing the strategic approach that characterized President Barack Obama (under whom President Biden served as vice president): a joint multilateral regional approach to confront the Chinese threat to the Indo-Pacific region. After Brexit, the United Kingdom is working to position itself as a dominant player on the global map, adopting a foreign affairs and security policy of Global Britain in a Competitive Age, which includes preparing for a significant military confrontation. Despite its economic

weapons aboard bombers, thus completing their nuclear triad. Strategically, the ability to launch nuclear weapons from submarines deep underwater is considered highly effective, because it is very difficult to locate submarines deep in the ocean, thus ensuring the survivability of that capability. "[The UKs Nuclear Deterrent: What You Need to Know](#)", GOV.UK, February 17, 2022.

⁴³ The US cruise missile Tomahawk BGM-109 also belongs to this category of strategic arms supplied to nations with which the United States has a special relationship.

⁴⁴ The French governments policy at that time, under the leadership of President Charles de Gaulle, was to develop European deterrence independently of the United States. Therefore, France viewed the UK move of building nuclear deterrence based and dependent on US technology as proof that the United Kingdom was not a European country and that its transatlantic connection was stronger than its affiliation with Europe. Consequently, de Gaulle vetoed the UKs entrance into the Common Market (as the EU was then known). Richard Davis, "[Why Did the General Do It? De Gaulle, Polaris and the French Veto of Britains Application to Join the Common Market](#)", *European History Quarterly*, 28, no. 3 (1998): 373–97. The US proposal to provide the Polaris missile to France and Frances rejection of it do not weaken the claim that special relationships lead to the supply of strategic weapons; on the contrary, they only strengthen it, as special relationships are mutual. The receiver of the strategic weapon develops dependence on the supplier and therefore both sides must view the relationship as deep and identity-based, beyond merely strategic considerations. While France is a close ally of the United State, it differs from the United Kingdom in this regard.

dependence on China, Australia is taking a step that makes it abundantly clear that it is in the US camp and is preparing militarily for the growing Chinese threat to the region. As expected, Chinas response has been to say this is a manifestation of a Cold War mentality and a step that only contributes to the development of a regional arms race.

The strategic significance of nuclear-powered submarines for the Australian navy is the ability to reach distant targets and remain there a long time in secret, while being armed with various weapons, including Tomahawk-type missiles capable of hitting Chinese targets with precision. The United States is already a partner in a regional alliance in Asia – the QUAD – with key nations involved, but AUKUS is a military partnership with more clearly defined objectives than simply strategic coordination among nations. AUKUS is unique because it is a military partnership among three nations with special relationships, the key axis of which is the supply of unique strategic weapons that are not being supplied to other allies. Despite its uniqueness, this sort of move occurred in the past under similar circumstances, and the common denominator is the special relationship between the strategic arms supplier and the recipient.

The comparison between AUKUS case and the Polaris case shows many recurring features. In both cases, there are: a clear threat by a revisionist power with a confrontational ideology (China and the Soviet Union, respectively); an example of international cooperation (trilateral now rather than bilateral then) in facing a regional threat; special relationships based on closeness of language, culture, and history; the technology is being provided to the country with which the supplier has a special relationship and not to other regional allies; the involvement of nuclear technologies of strategic importance (nuclear-powered submarines and ballistic missiles with nuclear warheads); and the receiving country providing a forward base of operations to the country supplying the unique technology. The AUKUS submarines emerged against a background of difficulties and problems with French submarines, while Polaris came into the world because of the Skybolt crisis, and so on. The pattern repeats itself and the level of threat in the rivalry between the leading superpowers increases. Each side will try to build itself up in different ways, including creating and strengthening alliances plus providing arms to those allies. In this context, the superpower that has a special relationship with another country will choose to supply only it with unique strategic weapons that will not be given to its other allies.

About six decades after the Polaris, we are witnessing a similar move, this time against a different power – China. On the brink of an inter-superpower rivalry or second Cold War, the United States and United Kingdom are undertaking a strategic move indicative of distinctions being made among different allies on the basis of a shared identity, culture, and values. Thus, beyond a realist analysis and considerations of creating alliances with potential partners of strategic value and strengthening them, we are witnessing

considerations aligned with constructivist understandings of identity and ideology when it comes to deciding on the supply of unique strategic weapons. Based on the historical example from the Cold War with the Soviet Union, we may presume that Australia will play a more important and integral role in the array of US alliances (just as the British stood out compared to the other European allies in the past). Such a scenario also reflects Australia's strategic location and especially its unique character in the region as a country with an Anglo-Saxon character surrounded by Oceanic and Asian peoples and cultures. Accordingly, we may expect an opportunity for Australia to upgrade its regional and global status; on the other hand, this will likely entail an economic cost in its dealings with China. The rise to power of the Labour Party in Australia, a party with more moderate positions regarding dealing with the Chinese threat than the previous ruling party, raises the question if the AUKUS initiative will be implemented and, if so, in what format. Possible changes in the US administration and the potential return of Trump to the Oval Office raise the same questions on the US side of the Pacific Ocean. Similarly, in the United Kingdom, the Tories are still in power but are suffering from political instability and an economic crisis, which might lead to a change there as well. Despite all the above, special relationships between nations are characterized by relative stability and are generally able to withstand these types of changes. Additionally, strategic projects of this magnitude are never likely to be cancelled. But only time will tell.⁴⁵

⁴⁵ This is what happened in the relationship between the United States and the United Kingdom, a classic case of special relationships. Their relationship has had its ups and downs, but joint strategic projects between the two were carried out (as demonstrated by the Polaris and the next generation Trident project). As I noted, a possible explanation is that the special relationship is not reserved to the upper echelon alone; it exists at all government and bureaucratic ranks and leaves a deep imprint affecting the entire political spectrum in both nations.